

HB

529

HFIN

FILE

HOUSE COMMITTEE REPORT

(11)

Date Referred to Committee: March 29, 1996

FURTHER REFERRALS:

Date of Committee Action: 4/17/96 pm

The FINANCE Committee considered:

HB 529

HOUSE BILL NO. 529

APPROVE CENTRALIZED PUBLIC HEALTH LAB

"An Act giving notice of and approving the entry into, and the issuance of certificates of participation in, a lease-purchase agreement for a centralized public health laboratory."

recommends it be replaced with the following committee substitute _____ [] the same title [] a new title

[] additional referral to _____ Committee
 [] attached amendment(s)

ADOPTS: _____ Letter of Intent

ATTACHES NEW FISCAL NOTE(S): (Dept) _____ APPROVES PREVIOUS: (Dept/Date) _____
 [] fiscal note(s) _____ 3 N] fiscal note(s) DHSS, DOR, DOA
3/29/96

[] zero fiscal note(s) _____ [] zero fiscal note(s) _____

SIGNING WITH RECOMMENDATIONS		DP	DNP	NR	AM
<i>Richard Foster</i>	Foster	X			
<i>Mark Hanley</i>	Hanley	X			
<i>John Mulder</i>	Mulder	X			
<i>Terry Martin</i>	Martin	X			
<i>Sean Parnell</i>	Parnell	X			
<i>Vic Kohring</i>	Kohring			X	
<i>Ben Grunwald</i>	Grunwald			X	
<i>Mike Navarre</i>	Navarre			X	
<i>Kay Brown</i>	Brown		X	X	
<i>Gene Theriault</i>	Theriault		X		
<i>Pat Kelly</i>	Kelly		X		

CHAIR'S SIGNATURE *Mark Hanley* *Richard Foster*

Revision Date: _____ Dept. Affected: See NOTE below
 Title: Approve Centralized Public Health Lab BRU: _____
 Component: _____
 Sponsor: (H)HESS
 Requestor: (H)HESS COMPONENT SERIAL NO. _____

Expenditures/Revenues: (Thousands of Dollars)

OPERATING EXPENDITURES	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
Principle and Interest payments		3,100.0	3,100.0	3,100.0	3,100.0	3,100.0
TOTAL OPERATING	0.0	3,100.0	3,100.0	3,100.0	3,100.0	3,100.0

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()						
------------------------	--	--	--	--	--	--

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF		3,100.0	3,100.0	3,100.0	3,100.0	3,100.0
1005 GF/Program Receipts						
1037 GF/Mental Health						
TOTAL	0.0	3,100.0	3,100.0	3,100.0	3,100.0	3,100.0

Estimate of any current year (FY96) cost \$ _____

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

The amounts shown are the debt financing lease purchase payments for construction of the Centralized Public Health Laboratory in Anchorage. Repayment of the COP's will require annual payments of no more than \$3,100.0 per year for the years FY98-FY2005. Depending on interest rates at the time of issuance, actual payments may be less.

NOTE: This fiscal note reflects the annual debt payments only and will not reflect a specific agency budget. The payments are included in the debt section at the front of the annual budget submitted to the legislature. The effect of this legislation on the operating budgets of HESS and Administration are reflected in separate fiscal notes.

Prepared by: Betty Martin, Comptroller Phone: 465-2350
 Division: Treasury Date: March 13, 1996
 Approved by Commissioner: Ross A. Kinney, Deputy Commissioner Date: March 13, 1996
 Agency: Department of Revenue

DEPARTMENT TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

ORIGINAL

For further distribution information call the Governor's Legislative Office

Revision Date: _____
 Title: An act giving notice of and approving the
the entry into a lease-purchased centralized PEH Lab
 Sponsor: House HESS
 Requestor: House HESS

Dept. Affected: Health and Social Services
 BRU: State Health Services
 Component: Laboratory Services
 COMPONENT SERIAL NO. 291
 See also (SN#): _____

Expenditures/Revenues:

(Thousands of Dollars)

OPERATING	FY97	FY98	FY99	FY00	FY01	FY02
PERSONAL SERVICES				(329.8)	(338.1)	(346.5)
TRAVEL				(7.5)	(7.7)	(7.9)
CONTRACTUAL				(61.0)	(62.5)	(64.1)
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	(398.3)	(408.3)	(418.5)

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGES IN REVENUES ()						
-------------------------	--	--	--	--	--	--

FUND SOURCE

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF				(398.3)	(408.3)	(418.5)
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (please specify)						
TOTAL	0.0	0.0	0.0	(398.3)	(408.3)	(418.5)

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of any current year (FY96) cost: 0.0

ANALYSIS: (Attach a separate page if necessary)

Currently the Division of Public Health operates three state public health laboratories which are inadequate in Anchorage, Juneau and Fairbanks and the Medical Examiner's laboratory temporarily located in the DPS crime lab. The centralized laboratory in Anchorage would not only save the state from having to upgrade three laboratories to meet CLIA standards but would show a savings in operating costs.

The savings would start to occur in FY00 in the following line items.

Personal Services Line 100

With the centralization of the laboratory the currently staffing level can be reduced by six positions:

PCN 06-1205 Microbiologist IV, range 20, SU, PFT, Juneau \$84.2

Prepared by: *Russell Webb for*
 Division: Peter M. Nakamura, MD, MPH
Public Health
 Approved by Commissioner: *Karen Farris*
 Agency: Karen Farris, Commissioner
Department of Health & Social Services

Phone: (907) 465-3098
 Date: 03/07/96
 Date: 3/12/96

ORIGINAL PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE
 For further distribution information, call the Governor's Legislative Office

ANALYSIS (cont.):

PCN 06-1085 Lab Technician I, range 10, GG, PFT, Juneau \$45.3
PCN 06-1210 Lab Technician II, range 12, GG, PFT, Juneau \$56.6
PCN 06-1435 Admin Clerk III, range 10, GG, PFT, Fairbanks \$48.6
PCN 06-1436 Admin Clerk II, range 8, GG, PFT, Juneau \$35.9
PCN 06-1024 Admin Clerk II, range 8, GG, PFT, Juneau \$35.9

The salaries listed above assume a 2.5% inflation factor.

In addition, \$24.3 would be saved on an annual basis for the geographical differential which is paid to the Fairbanks staff.

Travel Line 200

Travel would be reduced \$7.5 due to the staff being located in one location, rather than having the Chief travelling to each laboratory as required under CLIA.

Contractual Line 300

Janitorial Services 1.4
Federal Inspections 6.0
Subscriptions - \$2.0
Telephones - \$7.5
Public Utilities - \$10.7
Rent - 2.1
Maintenance and Repair of Equipment - \$12.6
Courier Services - \$11.7

Other savings will be realized, as the number of major equipment and appliances such as refrigerators, autoclaves, dishwashers, etc needing to be replaced are reduced due to the centralization of the laboratory.

Revision Date: _____
 Title: "An Act giving notice of and approving . . . a lease
 purchase agreement for a centralized health laboratory."
 Sponsor: (H) HESS
 Requestor: (H) HESS

Department Affected: Administration
 BRU: General Services
 Component: Leasing & Facilities

COMPONENT SERIAL NO. 81

EXPENDITURES/REVENUES:

(Thousands of Dollars)

OPERATING EXPENDITURES	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL	0.0	0.0	0.0	(312.1)	(312.1)	(312.1)
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	(312.1)	(312.1)	(312.1)

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGE IN REVENUES ()	0.0	0.0	0.0	(312.1)	(312.1)	(312.1)
------------------------	-----	-----	-----	---------	---------	---------

FUND SOURCE:

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	0.0	0.0	0.0	(312.1)	(312.1)	(312.1)
1005 GF/Program Receipts						
1037 GF/Mental Health						
OTHER * CIP receipts						
TOTAL	0.0	0.0	0.0	(312.1)	(312.1)	(312.1)

Estimate of any current year (FY 96) cost: \$0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary.)

The bill would authorize financing and construction of a new laboratory facility which would replace the three leased locations in Anchorage, Fairbanks, and Juneau. Lease savings would be expected to begin in FY 2000. The specific leases and current costs are shown on the following page. Future years estimated lease savings have been adjusted to reflect probable CPI adjustments. Payments on the new lease purchase facility are not included on this fiscal note.

Prepared by: Dugan Petty, Director *Dugan Petty*
 Division: General Services

Phone: 465-2250
 Date: _____

Approved by Commissioner: Mark Boyer *Mark Boyer*
 Agency: Department of Administration

Date: 3/28/96

PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE

COMMITTEE COPY

For distribution information, call the Governor's Legislative Office

ANALYSIS: (continued)

Current Public Health Laboratory Leases

Lease #	Location	Property	FY 96 Cost		RSA Amount	Net DOA Estimated FY00	
			Sq Ft	/Year		Reduction	Reduction
765	Juneau	CBJ - BMH	4,460	107,040	0	107,040	109,874
2353	Fairbanks	UAF	5,255	123,585	0	123,585	126,858
1517C	Anchorage	CR Lewis Bldg	5,100	73,440	0	73,440	75,385
1517D	Anchorage	CR Lewis Bldg	385	2,079	2,079	0	0
			<u>15,200</u>	<u>306,144</u>	<u>2,079</u>	<u>304,065</u>	<u>312,117</u>

STATE OF ALASKA

DEPT. OF HEALTH AND SOCIAL SERVICES

OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

P.O. BOX 110601
JUNEAU, ALASKA 99811-0601
PHONE: (907) 465-3030
FAX: (907) 465-3068

ISSUES ANALYSIS HOUSE BILL 529

"An Act giving notice of and approving the entry into, and the issuance of certificates of participation in, a lease-purchase agreement for a centralized public health laboratory."

The Department of Health and Social Services strongly supports House Bill 529 which will allow it to develop a much needed home for its Public Health and Medical Examiner Laboratory functions. The bill would satisfy the requirements of AS 36.30.085 to notify, and obtain approval from, the legislature for lease purchase financing of a new centralized Public Health Laboratory (including Medical Examiner facilities) in Anchorage.

The Department of Health and Social Services (DHSS) currently operates four laboratories with statewide functions. These include three public health laboratories in inadequate leased space and the Medical Examiner's laboratory temporarily located at the Department of Public Safety's Crime Detection Laboratory in Anchorage. The bill would allow DHSS to centralize laboratory functions resulting in operating cost savings that would ultimately pay for the cost of the building, while improving service delivery. Annual payments and total financing costs in the bill reflect an eight year financing period (with the first payment deferred), corresponding to the period of lowest financing costs associated with relatively high levels of Prudhoe Bay oil production.

The bill would allow DHSS to construct a Centralized Laboratory in Anchorage housing the functions of the three current Public Health Laboratories and the Medical Examiner's Laboratory. The Department studied the issues extensively over the last ten years and developed a feasibility study that reviewed alternatives but clearly showed that a new centralized laboratory was the most cost effective means of providing an adequate level of laboratory services. The new laboratory would make economic sense. Moreover, it would enhance services, replace existing poor quality leased space and provide a needed permanent home for the Medical Examiner:

1. **Makes Economic Sense.** Given present financial realities, the current situation is too costly and inefficient—the Department cannot afford to operate four separate laboratories and must find a way to provide an adequate level of services at less cost. The new facility would save operating funds and avoid costs related to the current laboratories and would allow maintenance of an adequate level of services in the future. Total savings and cost avoidance have been estimated at \$26.8 million over a 35 year period (after deducting costs of construction of the new facility).

**DEPARTMENT OF HEALTH AND SOCIAL SERVICES
ISSUES ANALYSIS
HOUSE BILL 529
PAGE 2**

Looking at operating savings alone, the facility is estimated to pay for itself in about twenty-two years. Over the long term, direct operating savings will be in the neighborhood of \$1 million a year. The savings will arise primarily from lease payments that will no longer be necessary and from a reduction in staff from economies of scale at the consolidated laboratory. Other savings are expected from reduction in duplicative supply and equipment costs. Natural attrition should accommodate the reduction in staff and the Department foresees that it will be able to offer a position to every existing laboratory employee when the new Laboratory opens (although some may have to transfer to Anchorage). Because of the relatively short eight year financing period, operating savings will only partially pay for the lease purchase payments during that period. Nonetheless, those operating savings will continue to accrue through the life of the building and ultimately will exceed the total cost of the new laboratory, and the state will own a laboratory facility which will provide many years of service.

2. Enhance Services. All four existing laboratories serve statewide functions. Centralization of those functions at a new laboratory will improve overall accessibility to those services on a statewide basis. It will also increase coordination and enhance the Department's ability to support epidemiological investigations and disease surveillance and control. Centralization will also facilitate collaboration by helping to create a critical mass of specialized facilities and laboratory professionals.

3. Replace Poor Quality Leased Space. The state is currently expending over \$306,000 a year in lease payments for the three existing Public Health Laboratories. Two of the laboratories are located in offices that were not designed for the specialized needs of laboratories. The third was designed as a laboratory some time ago but is a concrete structure with an inflexible interior space that would be difficult and expensive to reconfigure for future needs. To maintain the facilities as laboratories in the future would require specialized upgrades—some needed improvements are not feasible at any reasonable cost. In any case, making major unrecoverable investments in improvements in aging leased facilities would not be a wise business decision.

4. Provide a Permanent Home for the Medical Examiner. The State Medical Examiner is located temporarily in borrowed space needed by the Department of Public Safety's Crime Detection Laboratory and State Troopers offices. Another solution must be found in the future to provide a permanent home for the Medical Examiner. The proposed Centralized Laboratory will be an ideal location and will help to increase collaboration between Medical Examiner and Public Health Laboratory functions. The Department wants to locate the facility at the Crime Detection Laboratory site to maintain the necessary close partnership between the Medical Examiner and the Crime Detection Laboratory.

**DEPARTMENT OF HEALTH AND SOCIAL SERVICES
ISSUES ANALYSIS
HOUSE BILL 529
PAGE 3**

Approved by:



Karen Perdue, Commissioner
Department of Health and Social Services

Date:

March 11, 1996

Centralized Public Health Laboratory

What is proposed?

- Construction of one centralized public health laboratory through lease financing.
- Co-location of 35 public health laboratory staff from three leased laboratory facilities (Anchorage, Fairbanks, Juneau) into a single facility in Anchorage which would also house the State Medical Examiner program.
- Total cost of \$23.2 million (\$19.2 million principle + \$4.1 million interest).
- Financed over 8 years to obtain advantageous 5% interest rate and to time payoff with declining Prudhoe Bay oil production curve - making greatest savings/cost avoidance available when they are needed most.
- Savings/cost avoidance of \$26.8 million over 35 years (after cost of construction.)

Why is it being proposed?

- Status quo cannot continue - solution to longstanding facility problems must occur to support essential public health services, avoid additional costs.
- Studies over ten years have clearly identified problems and economical solutions.
- Health and safety risks, inefficiency, limited functionality of leased public health laboratories, and lack of facility for State Medical Examiner require permanent solution.
 - * Two labs (Anchorage, Juneau) located in office space not designed to support laboratory functions and require extensive upgrades or cannot be made functional.
 - * Fairbanks facility shared with University Veterinary Lab, inflexible interior space (concrete structure), difficult/expensive to configure for current needs.
 - * Leased facility occupancy: Anchorage 34 yrs., Fairbanks 21 yrs., Juneau 24 yrs.
 - * State Medical Examiner located temporarily in space borrowed from and needed by Department of Public Safety's Crime Detection Laboratory in Anchorage.
 - * Lease costs currently \$368,796 per year (Anchorage, Fairbanks, Juneau Public Health Labs.)
- Four separate laboratories are neither necessary, efficient, nor affordable.

What are the benefits?

- Provides most economical permanent solution to longstanding facility problems.
- Avoids unrecoverable investments in leased facilities necessary to make them safe and functional to support specialized activities involving biohazards.
- Achieves efficiencies, sustains program capacity, and enhances function at reduced cost.

Centralized Public Health Laboratory

Page 2

- Enhances ability to support epidemiological investigations, disease surveillance and control activities; enhances capability of State Medical Examiner to support public health and justice systems.
- Reduces long term operating costs (\$1.3 million in operating savings and cost avoidance in typical year.)
- Savings/cost avoidance of \$26.8 million over 35 years (after cost of construction and not including expected cost of alternative space for State Medical Examiner.)

Who is directly affected and when?

- Employee impact would begin in FY 2000 when construction is complete.
- Net decrease of 6 positions statewide - expected attrition should make it possible to avoid layoffs; some staff relocated to Anchorage.
- Safety & health risks reduced for all employees.

What does a public health laboratory do?

- Public health laboratories:
 - * serve a fundamentally different purpose from private labs;
 - * provide specialized expertise and services that protect the entire state population;
 - * specialize in disease surveillance, recognition of new and re-emerging infections;
 - * provide the capacity for supporting outbreak investigation and control - processing large numbers of tests immediately in the face of an epidemic;
 - * provide services to private laboratories for:
 - ◆ analysis for unusual, exotic, rare, sporadic or hard to detect diseases,
 - ◆ confirmation of private laboratory tests with unusual results or difficulties,
 - ◆ technical assistance to laboratories with difficulties in identifying microbial agents,
 - ◆ collection of data for concentrated disease eradication efforts.

What does the State Medical Examiner do?

The State Medical Examiner provides forensic pathology services (autopsies and other post-mortem examinations) to determine cause of death in suspicious, unattended deaths supporting justice system and public health surveillance.



Public Health Laboratories Strategic Plan

A Strategic Plan to Become Cost Effective

The Alaska Department of Transportation and Public Facilities, and the Department of Health and Social Services, have been working with a team of consultants to develop a strategic plan for the effective provision of future Alaska Public Health Laboratory (APHL) services. The result of this cooperative study is a Strategic Plan that provides specific recommendations for the following:

- How to provide the most cost-effective laboratory services in support of quality public health in Alaska
- Strategies to improve operational effectiveness
- How to position the laboratories to meet current and future demands.

State of Alaska

Department
of Health and
Social Services

Division of
Public Health

New Centralized Public Health Lab

The conclusion of the Strategic Plan is that a new, centralized Public Health Laboratory Facility would be the most cost-effective and operationally effective solution to the problems the laboratories face.

Medical Examiner Co-Locate with Central Labs

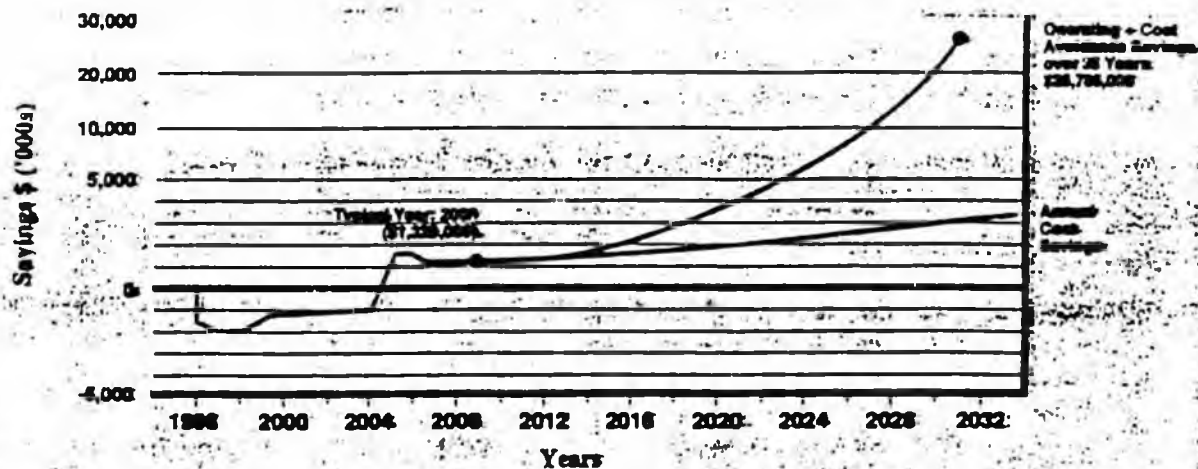
The Strategic Plan also recommends that the medical examiner program be incorporated into a new centralized Public Health Laboratory Facility to mitigate health and safety violations resulting from the current overcrowded conditions at the State Crime Detection Laboratory.

Centralization Saves Money

Detailed financial analysis by Coopers and Lybrand demonstrates that a centralized Public Health Laboratory Facility would generate annual operating savings for a typical year of \$1,329,000 to the State of Alaska, supporting the goals of budget discipline and long term planning.

Cost Savings: Status Quo vs. Centralized Lab 8-Year Lease Financing Option, 6% Interest Rate

Savings: Operating Savings & Cost Avoidance for 35 Years = \$ 26,786,000
Annual Cost Savings for Typical Year (2009) = \$ 1,329,000



Similar projections have been prepared for G.O. financing and State direct appropriation funding of construction.

Importance of the Public Health Laboratory Accuracy and Expertise

Public health laboratories provide necessary specialized services that are otherwise not available. Easily overlooked and not often appreciated is the high level of skill, attention to detail, and technical experience required in public health laboratory programs needed to protect the public health.

While often offering benefit to a specific individual by providing diagnostic information on the cause of illness, most public health laboratory benefits accrue to the public in general. Tests performed are needed to establish targeted programs or to define groups at risk. Ability to respond to epidemics requires experience, diligence, expertise, and capacity not available outside the State laboratory system.

Public health laboratories provide essential services for disease surveillance and prevention, as well as recognition of new and re-emerging infectious disease agents that threaten the public health and welfare. Public health laboratories are a critical resource in the investigation of disease outbreaks and efforts to bring them under control.

As new public health problems arise, the demand on public health laboratories increases as occurred with HIV/AIDS, legionella, Lyme disease, tuberculosis, cholera, sexually transmitted diseases (STD), and drug resistant communicable disease agents, among others.

In addition to the daily services rendered to support state health programs, the public health laboratory must:

- maintain expertise and flexibility to investigate disease outbreaks;
- conduct special disease surveillance activities;
- determine immunity levels for a variety of vaccine preventable diseases;
- provide lab support as part of the State's disaster preparedness plan for response to emergencies.

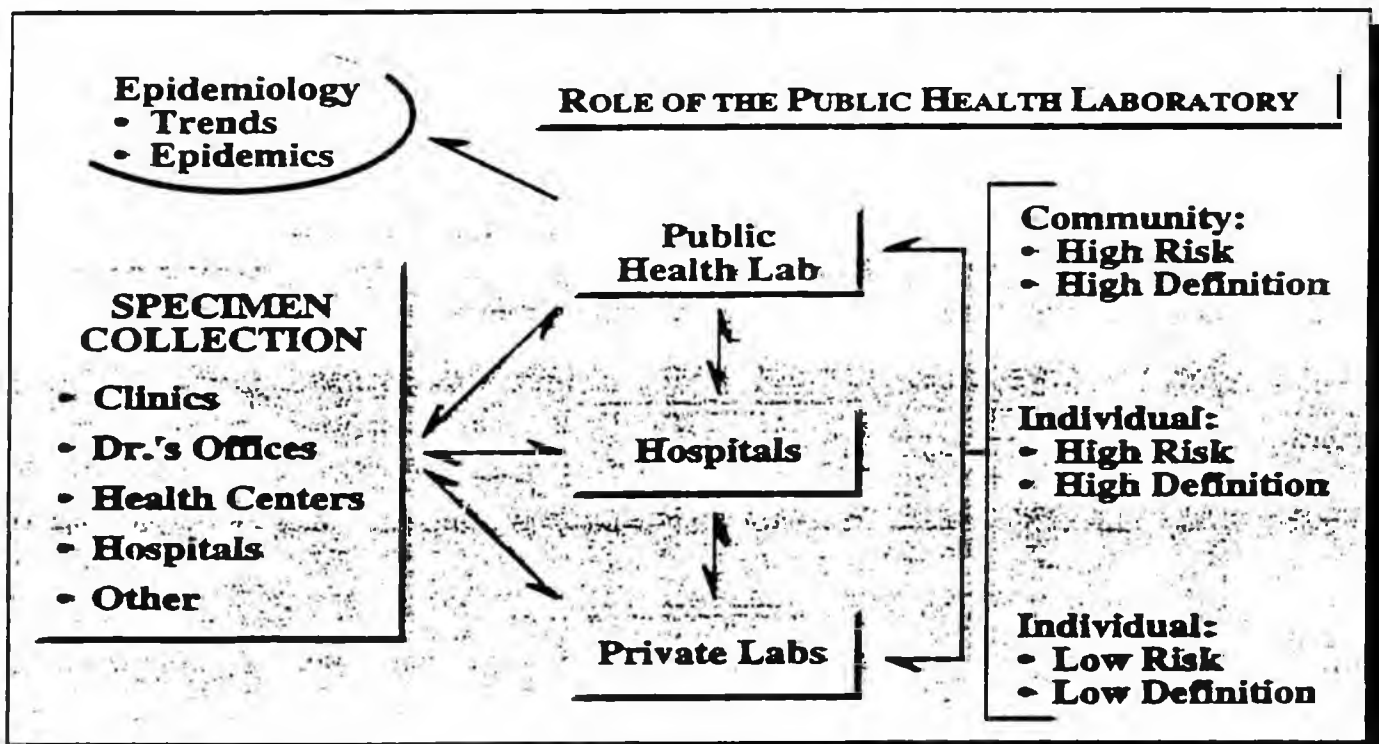
Skill and Technical Experience to Protect the Public Health

Ability to Respond to Epidemics

Recognition of New and Re-Emerging Disease

Demands on Public Health Labs are Increasing

An Essential Part of the State's Disaster Response Plan



Specific Examples of Benefits to the Public

Provided by the State Public Health Laboratories • Comments by John Middaugh, M.D. Alaska State Epidemiologist

Epidemic Gastroenteritis Tourism Industry - May 1992

A widespread outbreak of gastrointestinal illness affected tourists visiting Alaska. Initially, tourists became ill on cruise ships, bus tours, the Alaska Railroad, and in Anchorage and Fairbanks hotels. The Department of Environmental Conservation was prepared to cancel all tours involving a private tour company using the Alaska Railroad when illness was shown to be associated with exposure to contaminated water, ice, and sinks on the tour company's railroad cars.

Because an epidemiologic investigation was rapidly initiated, the cause of this highly complicated outbreak was discerned. With confidence in the epidemiologic findings, we disinfected the railroad cars and allowed continuation of all tour group activities.

Critical to the decision not to cancel the tours were results of public health laboratory findings that helped identify the agent most likely responsible for causing the illness.

The capacity to respond to these types of situations is an essential core function of public health. Collection of stool specimens from angry, ill tourists is unpleasant and an imposition to the patients. Results are needed to direct public health control measures - in this case a decision had to be made about whether to cancel all tourist groups traveling between Fairbanks, Denali, and Anchorage in the height of the tourist season. As it turned out, the labs were correct in the diagnosis of the cause of the outbreak, and the disinfection measures were effective. The State avoided a major disruption of the summer tourist season that would have resulted in huge losses of tourist revenue and good will.

Epidemic Gastroenteritis and Contamination of King Crab - Dutch Harbor 1991

In December 1991, a major epidemic of gastrointestinal illness struck the crew of a major seafood processor at the height of the crab processing season in Dutch Harbor. A field team flew to Dutch Harbor to conduct an epidemiologic investigation that rapidly established a major outbreak of illness among the processing crew. Initially, the cause of the illness was not established. At the same time, it was found that the water supply used to process the king crab was grossly contaminated. In view of the potential public health risk from the processed crab, DEC and the FDA initiated actions to seize the potentially contaminated product valued at millions. The State Public Health Laboratory was successful in identifying giardia in stool specimens of ill processing crew members, providing evidence needed to enable enforcement actions and provisions of medical treatment to crew members, many of whom had been ill for 3-5 weeks without being diagnosed. Water samples were also found to be grossly contaminated, as were environmental samples of sea water taken near the processor.

The expertise within the State Laboratory was essential to establishing the cause of the outbreak, the clinical diagnosis of illness that enabled appropriate antibiotics to be prescribed, and the extent of environmental contamination of the island's water system.

As a result, massive improvements were made in seafood processing and inspection to ensure the safety and worldwide reputation of Alaska seafood products.

Tuberculosis Outbreaks Rural Villages - 1994

Tuberculosis caused widespread outbreaks in several rural villages in 1994. Investigation of the outbreaks required a comprehensive, collaborative effort to identify individuals infected, assess presence and severity of disease, and arrange for appropriate treatment with antibiotics.

The investigations are still underway and the State has identified and begun antibiotic treatment for 38 Alaskans with active tuberculosis disease and 147 Alaskans who have been infected, but have not yet developed disease (preventive antibiotic treatment). It will be necessary to monitor closely the status of tuberculosis in the affected villages for several years.

Because low priority has been given to tuberculosis for at least a decade, institutional expertise and infrastructure to respond to these outbreaks of tuberculosis was inadequate.

The ability of the State to control tuberculosis depends on an effective, integrated program that includes a viable State Public Health Laboratory. Special technical expertise to process tuberculosis cultures is essential.

Special facilities are needed to protect laboratory workers from the biohazards of working with tuberculosis bacteria. The ability to quickly handle large numbers of specimens collected during outbreak investigations is also critical. A close partnership with medical epidemiologists and primary care providers must exist so that treatment can be targeted to identify rapidly patients who are infectious and able to transmit the disease.

? Questions & Answers

URGENCY

How urgent are the current facility conditions and life-safety issues?
Very Urgent.

All three APHLs occupy leased space that is technically or functionally inadequate to support the types of testing conducted there. Recent studies performed for the State have documented significant health and safety risks caused by improper ventilation and poor layout of lab spaces. Lease expenses and the cost of renovating leased space to meet minimal safety standards continues to strain the resources of the Department of Health and Social Services. Serious risks to the State exist if the status quo of the APHLs continues. These risks are primarily in the form of financial exposure to Worker's Compensation claims from the APHL staff and other state workers, and claims by the general public if a release of toxins occur because of faulty facility conditions.

PRIVATIZATION

Are the functions of the APHL already provided by the private laboratory industry? No.

It has been the policy of the APHL is to "shed" tests to the private laboratory providers when the assessment and assurance roles are no longer an issue and when the tests are more efficiently performed by the private labs.

The private laboratory industry provides specific tests aimed at identifying an individual's immediate health problem. The APHL provides tests that are aimed at detecting or documenting disease patterns and trends to assess a community's well-being. The APHL also assists in establishing Public Health policy development and assuring the quality of private laboratory services in the state.

Alaska Public Health Laboratories (APHL) Strategic Plan

PRIVATIZATION (Continued)

Can the APHL functions be provided by the private laboratory industry? No.

When privatization criteria are evaluated, it becomes clear that the APHL roles of assessment and assurance in policy making and epidemiological functions make APHL an essential component of the inherently public role of public health.

Frequently, and particularly in pursuing a health finding that is epidemiologically significant, the APHL will undertake tasks that go beyond what one could expect a private contractor to do. Private laboratories cannot assume the advocacy role for public health or concern for the public's welfare.

What is happening in other states with other State's Public Health Labs?

A recent poll conducted by the Colorado State Public Health Lab revealed the following:

- Over half (55%) of the state laboratories are planning a new facility.
- Another 20% are planning or have accomplished major renovation recently.
- Almost 60% need adequate physical facilities and cited health and safety as the major argument.
- 35% predict new services for labs as a reason for new facilities.
- 40% identified improving facility efficiency as a reason for planning new or renovating facilities.

CO-LOCATION

Are there opportunities to co-locate the APHL with other State laboratory operations and thus gain efficiency through economy of scale? Yes.

Based on analysis of the state agencies with compatible laboratory functions, there is an opportunity to consider co-locating the APHL at the State Crime Detection Laboratory site. Because of the current status of the medical examiner program, it is recommended that it move from its current location within the State Crime Detection Laboratory to a new centralized public health lab.

LOCATION

Where is the preferred location for the new centralized public health lab?

A threshold decision is necessary to determine the most appropriate community in the state in which to locate the new centralized public health lab. Alternative locations (Anchorage, Fairbanks and Juneau) will be evaluated based on specific criteria established to ascertain the relative advantages and disadvantages of each community. The following criteria has been developed for the evaluation:

- Ability to receive specimens same day of shipment from users.
- Opportunities to expand services or develop and market new in-state testing services.
- Opportunities for sharing facilities, infrastructure, professional expertise, equipment and data with existing labs.
- Ability to meet the support service needs of the Medical Examiner, if the ME program were to be co-located with the centralized APHL.
- Impact on existing jobs.
- Operating and maintenance implications.
- Improving administrative coordination between the APHL and the Division of Public Health within DHSS.



How much would it cost and how would the new centralized lab project be financed?

Including the Medical Examiner program, the new centralized public health lab is estimated to cost \$18,700,000. We have examined four basic financing alternatives for design and construction of a new centralized public health laboratory: 1) Pay-as-you-go; 2) General obligation financing; 3) Lease financing; and 4) Partial pay-as-you-go. The lease financing alternative provides the most advantages and is most realistic in terms of availability of State capital funds.

LEASE FINANCING

Lease financing through the issuance of "Certificates of Participation" is a frequently used technique of financing construction of facilities purchased by state agencies around the United States. Since the facility would be used for a "public purpose", the interest on such a debt would carry the same tax-exempt status as the State's general obligation debt, but at a slightly higher interest rate (0.2%–0.3% higher). The financed amount would fund both design and construction of the facility. Another State agency would lease the new laboratory to the Department of Health and Social Services. The lease payments would then be used to pay the debt service.

**Recommended Approach:
Lease Financing
for Design and
Construction**

Lease financing offers advantages to the other options considered. The pay-as-you-go option has the disadvantage of requiring a large amount of capital funds in a single year, adversely impacting the State's other capital budget priorities. General obligation financing would affect the State's credit and involves the delay and expense of a voter referendum.

Financing the facility over eight years will take advantage of currently low interest rates and time financial outlays to correspond with Prudhoe Bay oil production, making the greatest savings and cost avoidance available when needed most. Operating cost savings will partially defray debt service, but additional funds will be required during the period of financing. Over a twenty-two year period, cost savings from the new laboratory will exceed the total cost of construction and financing.

THE FINANCING PROCESS

Issuance of Certificates of Participation requires the following process:

Step 1: The legislature enacts a capital budget bill with language that designates and empowers the appropriate State agency to enter into a lease-purchase transaction, and to issue Certificates of Participation. The planned financing amount includes debt issuance costs and any capitalized construction period interest.

Step 2: The State Bond Committee, comprised of the Commissioners of the departments of Revenue, Administration, Commerce and Economic Development, takes up the matter. It authorizes the State Debt Manager to time and structure the financing (if necessary), obtain a rating from a national credit rating service, and negotiate for the placement of the debt.

Step 3: Financial Closing. The theoretical minimum time lapse between legislative approval and financial closing is approximately 3 months. Additional time may be required.

**The Legislature
Must Authorize
Issuance of
Certificates of
Participation**

**CENTRALIZED PUBLIC HEALTH LABORATORY
CAPITAL COSTS VS. OPERATING SAVINGS**
(Lease Financing—No First Year Payment—5.0% interest rate)

Operating Savings Exceed Total Debt Payments in 22 Years

January 05, 1996

Building costs have increased to \$18.7 million—5% more than previously estimated—to reflect year delay.
Loan payment schedule shown is representative and will be adjusted to fit specific needs of the project. Legislative approval is required to issue Certificates of Participation for financing.

FISCAL YEAR	INCLUDING MEDICAL EXAMINER FACILITY			OPERATING SAVINGS**	ADD. BLDG. RENEW. & REPLACEMENT COST AVOIDANCE***
	*PRINCIPAL (Bldg + Capitalized Interest)	INTEREST	TOTAL PAYMENTS		
1997	0	0	0	0	0
1998	2,167,530	935,852	3,096,182	0	563,908
1999	2,274,109	822,073	3,096,182	0	545,616
2000	2,389,236	706,946	3,096,182	739,842	558,008
2001	2,510,191	585,991	3,096,182	806,775	571,066
2002	2,637,269	458,913	3,096,182	855,917	581,806
2003	2,770,781	325,401	3,096,182	885,681	599,081
2004	2,911,052	185,130	3,096,182	905,564	613,558
2005	1,510,333	37,758	1,548,091	972,865	628,021
2006	0	0	0	1,021,438	634,325
2007	0	0	0	1,071,146	660,900
2008	0	0	0	1,122,642	675,027
2009	0	0	0	1,180,551	148,414
2010	0	0	0	1,238,533	148,800
2011	0	0	0	1,301,470	145,186
2012	0	0	0	1,369,379	141,722
2013	0	0	0	1,436,273	141,958
2014	0	0	0	1,503,162	138,500
2015	0	0	0	1,582,388	138,731
2016	0	0	0	1,661,965	135,559
2017	0	0	0	1,744,583	135,559
TOTALS	19,167,500	4,053,866	23,221,366	23,277,515	7,500,650

* Includes \$18,700,000 Building Costs + \$467,500 Capitalized Interest (to defer payment)

** Operating savings are based on the centralization of the Public Health Laboratory function, and therefore are independent of the inclusion of the Medical Examiner's Facility.

*** Additional costs to bring existing laboratories up to and maintain them at adequate functional level compared to new building. Does not include costs of providing alternate facility for Medical Examiner.

STATE OF ALASKA

DEPT. OF HEALTH AND SOCIAL SERVICES

OFFICE OF THE COMMISSIONER

TONY KNOWLES, GOVERNOR

P.O. BOX 110601
JUNEAU, ALASKA 99811-0601
PHONE: (907) 465-3030
FAX: (907) 465-3068

March 27, 1996

The Honorable Con Bunde
The Honorable Cynthia Toohey
Alaska State House of Representatives
State Capitol, Room 426
Juneau, AK 99801-1182

Dear Representatives Bunde and Toohey:

The attachments provide information about the proposed construction of a centralized public health laboratory which I understand arose as issues of concern or interest among committee members during deliberations on HB 529 last week.

I hope this information responds to the interests and concerns of committee members and will provide members with confidence in the project sufficient to move the bill. Department staff will be available tomorrow to clarify this information and answer additional questions.

Sincerely,



Karen Perdue
Commissioner

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF HEALTH AND SOCIAL SERVICES

OFFICE OF THE COMMISSIONER

P.O. BOX 110601
JUNEAU, ALASKA 99811-0601
PHONE: (907) 465-3030
FAX: (907) 465-3068

March 27, 1996

The Honorable Tom Brice
Alaska State House of Representatives
State Capitol, Room 426
Juneau, AK 99801-1182

Dear Representative Brice,

Thank you for providing me an opportunity to respond to your questions related to HB 529. The \$19.2 million includes construction and other project costs along with the costs of setting up financing and represents the principal amount. The additional \$4.3 million you refer to are the interest costs over the eight year period of financing, for a total financed cost of \$23.5 million. (See the attached narrative and chart which reconciles the various cost estimates for the Centralized Laboratory.)

The information that was provided by the 1994 report describes many of the advantages of centralization. After the report was prepared, the Department discussed the financial, operational and scientific implications of centralization and felt that the benefits for centralization were very real and did not need additional analysis. The Department then focused on reviewing options for implementing a centralized laboratory including financing alternatives, possible inclusion of the Medical Examiner's laboratory, and optimal location. Differences in the construction costs for the centralization option versus the consolidation option without differences in financing costs can be found in the attachment, "Public Health Laboratory Centralization Versus Consolidation, Operating Cost Reductions and Capital Costs".

For convenience I have re-stated your questions and followed with responses.

1) You claim there is a difference in equipment costs in the various scenarios. Won't the people moving into a new lab require the same amount of equipment regardless of where they are located? Everyone will still need desks, chairs, microscopes or whatever and to re-purchase them for the new facility should greatly increase the costs for centralization.

Staff will, of course, need chairs, phones, and similar pieces of non-specialized equipment to support their activities, and various pieces of equipment will be moved to the new facility. However, there will be opportunities to configure operations more efficiently and to take advantage of designs that provide flexibility and reduce the amount of equipment needed. There will also be fewer staff in a centralized facility which will reduce equipment requirements.

Honorable Tom Brice

March 27, 1996

Page 2

Most importantly, however, centralization of the public health laboratory functions provides substantial opportunity for reducing the amount of equipment needed by eliminating duplication. Separate facilities require duplicate equipment to support separate operations. Sharing of equipment, such as microscopes, analytical balances, computers, walk-in incubators and walk-in refrigerators, can occur in common areas of a centralized laboratory that are simply not possible in separate facilities. A centralized facility combining all public health laboratory operations would provide many opportunities for sharing complex and expensive equipment such as gas chromatographs, HPLC (high pressure liquid chromatographs), biological safety cabinets, fume hoods and specialized space such as isolation rooms, as well as space/equipment for DNA probe technology and polymerase chain reaction technology between disciplines.

Significant savings can be achieved through efficient management of resources providing greater efficiency in a single facility compared to operating in multiple facilities. For example, specimens would be received at one point and therefore could be processed by one biological safety cabinet and stored in one set of storage refrigerators or freezers. Waste disposal would also be streamlined and require less equipment such as autoclaves. Combination of operations in a single facility also provides opportunities for achieving "economies of scale" in equipment purchases.

2) Under the consolidation scenario in the study, a number of components were added to the Fairbanks lab such as building renewal and replacement and janitorial cost and a steady annual growth in the lease and maintenance costs. Currently, under the University's lease, payments are held flat and maintenance and janitorial are included. Why are these areas double-counted against Fairbanks in the study?

Building Renewal and Replacement. In evaluating the various options for the 1994 Strategic Plan report, the consultants developed a consistent methodology for reviewing renewal and replacement costs of a variety of different buildings, including new buildings, over a very long period of time. While in the short term a specific analysis of each building's needs is the best way to compare buildings (and we did conduct a separate physical analysis of each existing building by another consultant), there is no way to know now what specific building needs will surface in the long term, say, in twenty five years. Instead, the consultants employed a widely used formula, the Sherman-Dergis formula, to compare existing and proposed buildings. The formula uses building age and replacement value to estimate annual renewal and replacement costs over a fifty year period. It assumes that older buildings will require more renovation than newer ones.

Landlords will usually make only the limited general renovations and replacements to our laboratories needed to maintain the value of the facility. Many of the improvements that laboratories need would not be useful to a new tenant, and landlords want those improvements to be either paid directly or reimbursed through long-term leases. The new roof on the building housing the State Virology Laboratory at the University of Alaska, Fairbanks for instance was needed not just for the laboratory but to maintain the use of the building for all functions housed there.

Honorable Tom Brice
March 27, 1996
Page 3

While the University appears to have made some improvements without charging the Department of Health and Social Services, that situation will not necessarily continue in the future especially if major improvements are needed. Our lease does not require the University to do so and University staff have indicated that at some point in the future, the Fairbanks laboratory building (like every older building) will require additional renovation exceeding the thresholds that now exempt the building from current codes. A major renovation and upgrade to current standards will then be required. The costs of those renovations will have to be absorbed by either the University entirely or partially by the Department. We could expect that prudent management of University property would lead University administration to distribute costs of needed maintenance to all occupants of the facility, and primarily to those occupants requiring specialized improvements. To summarize, the numbers for renewal and replacement shown in the report may not be accurate in the short term, but do reflect some long term realities and in any case they are not at all critical for the demonstration of benefits from centralization.

Building renewal and replacement costs have not been included in our estimate of the operating savings that would result from centralization. We have shown them as possible cost avoidance, as an indicator of a potential extra benefit from establishing a new laboratory. We know a new centralized facility will avoid some costs related to building renewal, but the exact amount cannot be determined with absolute precision. However, the operating savings alone will defray the cost of a new centralized facility in a reasonable length of time whereas the operating savings from the consolidated scenario would not.

Janitorial Costs. It appears that you are correct that additional janitorial costs should not have been shown for the consolidated scenario. The current lease we have with the University states that the University will provide janitorial services. Since the amount in question (\$1706) is relatively small, the apparent mistake would have made little difference in the comparison of alternatives. The fiscal notes prepared for HB-529 has more current information about the actual savings that we would experience with a Centralized Laboratory. We have summarized that revised information and comparable information for the Consolidated Scenario in the attached table.

University Lease-Payments held flat. Our records indicate the lease with the University for the Fairbanks laboratory space does have an inflationary clause calling for annual price adjustment corresponding to the Consumer Price Index. In any case, given the long term approach taken by the consultants, leases as negotiated over the long term would normally follow inflationary trends.

3) Your claim of savings in travel and personnel costs are arbitrary given it is the legislature in the budget process which establishes these funding levels. Please explain the expected savings and why we should not go ahead and realize them now?

Our estimates of travel and personnel savings are based on determinations of the travel and personnel needed to operate the laboratory program in separate facilities compared to a centralized facility. The savings cannot be realized now without significant reductions in program

Honorable Tom Brice
March 27, 1996
Page 4

capacity. We are currently operating from separate facilities and this imposes additional operating costs above what would be possible in a centralized facility.

Travel would be reduced under the Anchorage centralization option. Currently the Chief of the Section of Laboratories must travel between the three laboratories in order to inspect and participate in each laboratory's quality assurance program. This must be done in order to maintain the laboratories' license under the Clinical Laboratory Improvement Amendments. This travel would not be required under the centralization option. Additionally no travel would be required by the Chief or laboratory managers for special management meetings since they would be located in the same facility.

The reduction in personnel costs are to occur through a reduction in administrative and support staff made possible through efficiencies achievable in a centralized facility. This will enable us to reduce costs but maintain the critical expertise of professional microbiologists and the capacity for performing laboratory analysis. Centralization enables us to maintain our current expertise and capacity to perform the work of the laboratories but to reduce costs through efficiencies. Reducing personnel funding now without making changes needed to achieve efficiencies would impair program operations. Each laboratory will, as long as it operates separately, continue to have separate needs for administration, clerical support, and technical support to prepare media, reagents and glassware and to process waste materials. These tasks can be performed with fewer staff under the centralization option.

The Legislature could, of course, reduce funds appropriated to support the laboratories without providing for a means of solving our facility problems or enabling us to achieve program efficiencies through centralizing laboratory operations. However, this would reduce capacity to perform the needed laboratory analytical work and affect the functioning of Alaska's public health system.

I hope this information helps allay your concerns about this project.

Sincerely,



Karen Perdue
Commissioner

cc: Honorable Con Bunde
Honorable Cynthia Toohey

Centralized Laboratory: Comparing Project and Financing Costs

The table below compares estimates that have been developed in the last few years for the centralized laboratory project. The 1994 Strategic Plan report contained a construction cost estimate of \$13.7 million for the centralized laboratory, but that estimate was strictly for construction costs through a direct capital appropriation—the report did not address financing alternatives. Moreover, while the report discussed the potential merits of including the Medical Examiner facility, space for that laboratory was not a part of the construction cost estimates.

The 1995 Financing Report prepared the next year compared several financing alternatives for a centralized laboratory. It also addressed the costs of including the Medical Examiner facility as an option. With centralization in Anchorage, adding the Medical Examiner makes sense in terms of both costs and operations, since we must find some space for the Medical Examiner in the future. The revised construction cost estimate was \$17.8 million including the Medical Examiner, along with adjustments for two years of inflation (because of delays in the start of construction) and for costs of obtaining financing. Combined principle and interest payments to finance that facility was estimated at \$22.1 million. The project was delayed yet another year, requiring another inflation adjustment. In addition, we adjusted the numbers to accommodate a specific financing strategy leading to the numbers contained in HB 529 (\$19.2 million principal costs; \$23.5 million for combined principle and interest costs). It is important to note that the total principle and interest cost is extremely sensitive to fluctuations in interest rates.

Reconciliation of Project and Financed Cost Estimates for Centralized Laboratory

	Project/ Principal Costs	Total Principal and Interest Costs
1994 Strategic Plan Report (with Coopers & Lybrand) (Excludes Medical Examiner)	13,685.0	17,116.0 *
1995 Reports—Financing a New Public Health Laboratory and Executive Summary Brochure (with Coopers & Lybrand)		
—Excluding Medical Examiner but including some adjustments for financing costs and two years of inflation. Estimate ("Lease Financing Option") is 8.7% higher than in 1994 report.	14,878.9	18,378.5
—Addition to include Medical Examiner	2,931.2	3,697.9
Total with Medical Examiner	17,810.1	22,076.4
Adding additional year of inflation (approx. 5%)	18,700.0	22,918.4
Adding additional financing costs	19,200.0	23,500.0

* Financed cost was not actually calculated in the Strategic Plan, which did not look at financing alternatives—financed cost number shown uses same methodology as in 1995 report.

Centralized Public Health Laboratory: Construction and other Project Costs

Laboratories, especially those requiring isolation of biological hazards such as public health laboratories, are expensive spaces to build. Costs for construction of modern laboratory space are very high for a variety of reasons. Specialized and complex laboratory areas require additional space for expensive utilities and services which generally run through utility chases between walls and under floors. These areas provide for gas, vacuum, compressed air and very specialized electrical and ventilation requirements (negative air pressure). Built in fume hoods and biological safety cabinets also require specialized ventilation to the outside. Waste treatment of biological materials (in autoclaves) and chemicals has unique requirements.

Construction must be explosion proof and have specialized floor drains, fire showers and eye wash stations in order to meet modern safety codes. Additionally, un-interruptable power sources are necessary for the expensive equipment common to laboratories. Work surfaces, sinks and drainage pipes must be made of particular materials which are resistant to corrosion and storage space must be appropriately vented for combustible solvents. Cold rooms and walk-in incubators are also common to laboratories and emergency systems are necessary. Special containment construction is required for working with each group of infectious organisms depending on its biosafety level (1-4). There are also special requirements for unusual floor loading or vibration isolation and adaptability to changes or expansion.

In addition, requirements of state and federal law make public buildings more expensive than comparable buildings built for the private sector. For instance, the requirements of AS 35.05.010 to pay prevailing wages for public buildings ("little Davis-Bacon") can make construction of public buildings considerably more costly than facilities serving a private function.

Estimating Construction Costs

In 1994, construction costs for the public health laboratory were estimated by a professional estimating firm in collaboration with Livingstone Slone, Inc., an Anchorage architectural firm. Costs for construction of the building were estimated at \$384 per square foot for construction and site development alone, excluding other project costs such as design, project management, and equipment—these other project costs are described on the next page. The construction costs estimated in 1994 also need to be adjusted upwards to account for three years of inflation.

Some construction costs for similar types of buildings are shown in the table on the following page. Most of the projects listed are much larger projects than the proposed Centralized Laboratory. If everything else is equal, a smaller building is more expensive to construct on a per square foot basis. In addition, insulation and heating plant for the buildings in Los Angeles and Seattle would have to be significantly upgraded if built in Anchorage. (Also, costs shown for those projects do not include site development.) Most projects include a proportionately larger area of relatively inexpensive office or general purpose hospital room space. Probably the most comparable project in terms of size is the Controlled Disease Center at the Alaska Native Medical Center.

Project	Location	Size (sq. ft.)	Construction Costs	
			Costs (\$millions)	Per sq. ft.
Alaska Examples—Actual costs				
Alaska Native Medical Center Hospital	Anchorage	362,607	\$95.7	\$284
Controlled Disease Center		13,439	\$5.0	\$375
Elmendorf Hospital	Anchorage	444,700	\$138.7	\$312
Kotzebue Hospital	Kotzebue	90,000	\$43.0	\$478
Out of State Examples—Costs adjusted for Anchorage and 1998 (4% inflation/year)				
UCLA McDonald Building—1993 research building—Anchorage/Los Angeles geographical cost ratio=115%	Los Angeles	138,000		\$364
Fred Hutch Cancer Research Center (1994)—Anchorage/Seattle geographical cost ratio=125%	Seattle	305,000		\$293

Sources: Livingstone Stone, Inc. and McLellan & Copenhagen, Inc.

Other Project Costs

In addition to the costs of site development and construction of the facility, other costs had to be estimated in order to calculate total project cost. These additional costs include: equipment, consultants (including design), project administration and project contingency. Because the building program and design have not been completed, the estimates by necessity were based on very limited information about the project.

Equipment The construction estimate includes the basic elements of a building. In addition a laboratory requires a range of general and specialized furnishings, including cabinets, counters and sinks, fume hoods, safety equipment; complex final plumbing connections and specialized lab equipment. When appropriate, existing equipment will be reused in the new facility. Equipment costs were estimated to equal 25% of the construction costs.

Consultants Before construction, the laboratory will require a detailed architectural program, specialized consultants and architectural and engineering services leading to design. Design and associated consulting services were estimated at 17.5% of construction costs, reflecting the specialized services needed for a laboratory housing biologically hazardous materials.

Project Administration Every construction project, whether in the private or public sector, requires project administration: to prepare bid packages, award contracts, monitor performance of design and construction contracts, process payments and serve as the contact for contractors when problems need resolution. Administration costs have been estimated to equal 7% of construction costs.

Project Contingency Estimating construction costs is an art, not a science, and every construction project encounters unforeseen problems and requires changes. Standard practice for every construction project, whether it be a single family residence or a major shopping center, is to set aside a certain percentage of construction costs for contingencies. Therefore, the project budget includes an additional 7% of project cost for contingencies.

State Medical Examiner Program

The State Medical Examiner is a forensic pathologist who performs investigations, autopsies and other post-mortem examinations needed to determine the cause and manner of death in cases of violent, suspicious, or sudden and unexpected deaths, and deaths which occur without a physician in attendance. The Medical Examiner is responsible for determining the cause and manner of death, identifying the deceased if unknown, signing the death certificate, and testifying in civil and criminal cases about his findings. These activities are essential to support the criminal and civil justice systems and public health surveillance activities.

The Medical Examiner program has a total budget of \$834.7 including seven staff. Staffing consists of :

- 2 Board-certified forensic pathologists
- 3 Autopsy Assistants
- 2 Clerical staff

The Autopsy Assistants transport human remains, prepare them for autopsy, assist in the autopsies and other post-mortem examinations, prepare and sterilize the autopsy lab, and perform other duties necessary to support the forensic pathologists. Clerical staff perform medical transcription, audit and track billings for air transport and embalming and restoration services, and provide clerical support for all activities of the Medical Examiner program.

The Medical Examiner office is housed on a temporary basis in the Department of Public Safety central offices in Anchorage. Autopsies and other technical laboratory work is performed in temporary arrangements at the Scientific Crime Detection Laboratory located in the same complex of Public Safety offices but in a separate building. The Department of Public Safety needs this space and is prevented from expanding crime detection activities while the Medical Examiner occupies the space.

Medical Examiner facilities are relatively expensive compared to costs of constructing standard office space. This is because they present design and engineering considerations similar to those of hospital facilities but with additional unique considerations. Medical Examiner facilities must support scientific work requiring specialized equipment and involving biohazards and provide specialized security that can maintain a chain of custody needed for storage of evidence that will be used in criminal and civil litigation. Facilities housing a Medical Examiner must accommodate long term processing and storage of decomposed human remains and other potentially life-threatening infectious or non-biological hazards such as material from toxic chemical spills.

The presence of biohazards in the work environment requires that special environmental, public health and safety, occupational safety, and fire protection codes be met. For example the facility must be explosion and fire proof, have uninterruptible power sources and provide special isolation

and working areas (such as separate autopsy facilities for decomposed remains.) It must also provide differential cold storage areas, long term storage of tissue and fluid samples, special ventilation and air-locked entrances, on-site access to an incinerator, special physical security measures, and separation of laboratory work areas from office/public use areas. Medical Examiner facilities must provide adequate morgue capacity to accommodate mass casualty events, be able to accommodate next of kin and media when necessary, and would ideally provide potential to support tissue recovery activities.

Public Health Laboratory
 Centralization Versus Consolidation
 Operating Cost Reductions and Capital Costs
 Based on Current Information (March 1996)

*Operating cost reductions
 from existing operations*
 DOA Lease Cost
 DHSS Costs
 Personnel
 Travel
 Contractual
 Total Reductions

FY2000			FY2001			FY2002		
<i>Central- ization</i>	<i>Consol- idation</i>	<i>Differ- ence</i>	<i>Central- ization</i>	<i>Consol- idation</i>	<i>Differ- ence</i>	<i>Central- ization</i>	<i>Consol- idation</i>	<i>Differ- ence</i>
312.1	185.2	126.9	312.1	185.2	126.9	312.1	185.2	126.9
329.8	81.2	248.6	338.1	81.2	256.9	346.5	81.2	265.3
7.5	3.5	4.0	7.7	3.5	4.2	7.9	3.5	4.4
61.0	15.2	45.8	62.5	15.2	47.3	64.1	15.2	48.9
710.4	285.1	425.3	720.4	285.1	435.3	730.6	285.1	445.5

Project Costs

<i>Central- ization</i>	<i>Consol- idation</i>	<i>Differ- ence</i>
19,200.0	15,657.8	3,542.2

TONY KNOWLES, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY
OFFICE OF THE COMMISSIONER

P.O. BOX 111200
JUNEAU, ALASKA 99811-1200
PHONE: (907) 465-4322
FAX: (907) 465-4382

January 10, 1996

Ms. Karen Perdue, Commissioner
Department of Health and Social Services
P.O. Box 110601
Juneau, AK 99811-0601

Dear Commissioner Perdue:

I understand that the Department of Health and Social Services is requesting funding in the FY 97 capital budget for a new lab facility to be built adjacent to the Department of Public Safety crime lab at 5700 E. Tudor Road. I understand this new facility will house the Medical Examiner and will be the site for all state required autopsies. It is critical to law enforcement statewide that an adequate facility be built for this purpose. The vast majority of cases referred to the medical examiner are those involving the Anchorage Police Department or the Criminal Investigation Bureau of the State Troopers. Investigators from both law enforcement agencies regularly attend autopsies and consult with the Medical Examiner's staff on homicides and other death investigations involving questionable circumstances. Close physical proximity of the Medical Examiner and the autopsy facilities to both agencies creates a beneficial and efficient relationship in dealing with difficult and complex investigations

The original design and construction of the Public Safety crime lab allowed little room for growth without additional physical plant construction. At a time when fingerprint, serology and toxicology units require additional space to accomplish their tasks, the only space available for expansion is occupied by the Medical Examiner, who moved into the space on what was understood to be a temporary basis approximately two years ago.

Handwritten note: H + ... / Juneau ...

Commissioner Karen Perdue
January 10, 1996
Page 2

I want you to know that I support construction of this facility as it will relieve the present overcrowding of the crime lab and also promote more efficient handling of serious investigations.

Sincerely,

Ronald L. Otte
Commissioner



ALASKA STATE MEDICAL ASSOCIATION

4107 Laurel Street • Anchorage, Alaska 99508-5334 • (907) 562-2662 • FAX (907) 561-2063

March 8, 1996

Representative Mark Hanley
Alaska State Legislature
State Capitol (MS 3100)
Juneau, Alaska 99801-1182

Subject: Central Public Health Laboratory (HB 529)

Dear Representative Hanley:

The ability to detect, measure, and combat threats to the health of a populace is a basic duty of government and is no less important than maintaining law and order.

An essential tool in executing this responsibility is a public health laboratory. Every state health department has one. Some have more than one.

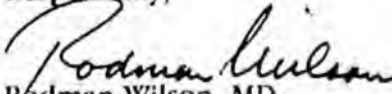
Alaska has three - in Fairbanks, Anchorage, and Juneau - but they are all in need of extensive upgrade or replacement. Each is costly. Leasing of space for them alone totals \$370,000 annually.

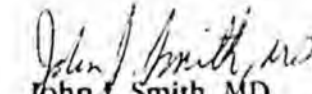
In these days of rapid, safe transportation of biologic and chemical specimens and electronic dispatching of results of testing, there is no need for Alaska to have more than one laboratory. Although a new lab could be located in any city, it would be best for it to be centrally located, thoroughly modern, versatile, and supervised ideally by a biologist or chemist.

At its Annual Meeting on February 10, the Alaska State Medical Association considered the longstanding proposal of DHSS for a new public health laboratory in Anchorage on E Tudor Road adjacent to the Scientific Crime Detection Laboratory and the State Medical Examiner's Office. Some equipment and talent might be shared. Creating a new lab and abandoning the costly old ones would save millions of dollars over a period of years. The Association unanimously endorsed the proposal for a centralized public health laboratory in Anchorage.

We urge you to initiate this project through HB 529. It will take several years to complete plans and construction. It has been put off much too long. The health of all of us is at stake.

Respectfully,


Rodman Wilson, MD
Acting Executive Director


John J. Smith, MD
President

By: Mayor Jim Sampson
Introduced: 03/14/96
Adopted: 03/14/96

RESOLUTION NO. 96-023

**A RESOLUTION IN SUPPORT OF THE ALASKA STATE
VIROLOGY LABORATORY REMAINING IN FAIRBANKS**

WHEREAS, the Alaska State Virology Laboratory (ASVL) has been an integral part of the research community on the University of Alaska Fairbanks campus; and


WHEREAS, over the years ASVL has interacted with research institutes and other facilities, including the UAF Health Center and various medical facilities in Fairbanks, as well as providing services to state, federal and Alaska Native agencies; and

WHEREAS, if ASVL is moved to Anchorage, as proposed by the Commissioner of the Alaska Department of Health and Social Services, fifteen staff positions will be lost, and the economy of the Fairbanks North Star Borough will be affected not only by the loss of their salaries but also by the loss of state and federal funds that currently support the operation of ASVL, amounting to more than a million dollars annually; and

WHEREAS, over the past twenty years Fairbanks has lost eleven laboratories and offices dealing with science and natural resources as a result of permanent closure or relocation of the program to other offices and organizations:

NOW, THEREFORE, BE IT RESOLVED that the Fairbanks North Star Borough Assembly and Mayor Jim Sampson urge that the State of Alaska leave the Alaska State Virology Laboratory in Fairbanks, or, if centralization is necessary, that the proposed new health lab be built in Fairbanks.

PASSED AND APPROVED THIS 14TH DAY OF MARCH, 1996.



Cheryl Kilgore
Presiding Officer

ATTEST:



Mona Lisa Drexler, CMCAAE
Municipal Borough Clerk

Ayes: McBride, Logan, Bartos, St. John, Hackenmiller, LaSota, Parr, Quakenbush,
Chizmar and Kilgore

Noes: None

Gregory V. Hayes, Dr.P.H.
Chief, Section of Laboratories
Division of Public Health
Dept. of Health & Social Services
Phone: 907-465-3019

HOUSE BILL #529

**PRESENTATION TO HOUSE FINANCE
TUESDAY, APRIL 9, 1:30 PM**

ACKNOWLEDGMENT TO THE COMMITTEE

My name is Greg Hayes and I am the Chief, of the Section of Public Health Laboratories.

I have been in the State of Alaska for two years, formerly, I was the Director of Public Health Laboratories for the State of Indiana.

REASON FOR APPEARING BEFORE THE COMMITTEE

I want to thank you for this opportunity to address the current status, of the States' Public Health Laboratories and our efforts, to centralize the laboratories in Anchorage.

I would first of all like to briefly review the role the laboratories play in protecting Public Health.

BACKGROUND OR SERIES OF EVENTS THAT HAVE BROUGHT THIS PARTICULAR ISSUE BEFORE THE COMMITTEE

The services of the State Public Health Laboratory, are directed towards prevention and control of disease, in the community, and therefore differ from the services of clinical laboratories directed at individual patient care. We fulfill an assessment, policy development, and assurance role. Testing that no longer meets this role is left for the private sector to perform.

For example, we do not perform beta-strep testing and many other tests which are currently performed in private clinical laboratories. We also do not perform routine clinical chemistry testing, but are focused on communicable disease testing.

Our core functions include:

1. Support of disease control and prevention programs, maternal child and family health programs and epidemiological programs
2. We support surveillance activities, outbreak investigations and monitor for, the emergence of new infectious agents or the re-emergence of infectious agents, of public health importance.
3. We also focus on the development, of methods for testing when those methods, are not readily available, and transfer this technology to the private sector.
4. We perform diagnostic product evaluation
5. Data collection
6. Testing of high quality at a reasonable cost
7. We also provide; training, laboratory expertise and reference services to the private laboratory community in the laboratory diagnosis of diseases of public health significance.
8. And we provide for a national surveillance link.

These functions are very different from the role of a private clinical laboratory

The State's Public Health Laboratories must maintain flexibility in their organization equal to the rate of change in the community, meeting new situations, and solving emerging problems. Therefore, the services offered by the State's Laboratories do not remain static but change periodically (new testing offered - old testing eliminated.)

It is my job, as Chief of the Section of Laboratories, to utilize the available resources:

- personnel,
- instrumentation,
- and finances

in the most efficient, productive, and cost effective manner possible. And to protect the health and safety of my staff.

This is proving to be an extremely difficult task under our current structure.

BACKGROUND

The Section of Laboratories has a staff of 41 located in four different locations. We process approximately 100 to 120 thousand specimens per year:

There is the Chief's Office in Juneau
A lab in Juneau
One in Fairbanks
And one in Anchorage which performs 60% of the total testing.

The Juneau and Anchorage laboratories perform primarily microbiological testing. Juneau specializes in Mycology and Water Bacteriology while Anchorage's specialty is Tuberculosis testing. The Fairbanks Laboratory performs almost exclusively Virology testing.

We have a very dedicated and professional staff, in all three of our laboratories. It takes years of training and on the job experience to develop the level of expertise they possess. Due to the stringent education and experience requirements for laboratory personnel, under Federal Law, recruitment is difficult.

HEALTH & SAFETY

The facilities are in urgent need of repair, having mechanical and structural inadequacies for conducting laboratory testing. Our Juneau and Anchorage Laboratories were constructed as office space and currently have major health and safety concerns. Our Fairbanks Laboratory was constructed as a laboratory facility and therefore does not have the major health and safety concerns of the other two laboratories. Although, the facility is dated, having been constructed in 1967. All three laboratories have poor facility layouts and have space limitations for future growth.

As I have mentioned, in order to operate, we must meet Federal Regulations, under the Clinical Laboratory Improvement Amendments. During our last survey, we were found out-of-compliance and given 90 days to correct some major ventilation deficiencies or face the loss of our license.

We stopped doing TB testing in Juneau and did some Band-Aid emergency renovation in Anchorage, to maintain our license.

We are up to be re-surveyed in August of this year. The surveyors will be looking for resolution, of our long range plan to address the laboratories health and safety concerns.

TRANSPORTATION AND ORGANIZATIONAL CONSIDERATIONS

Efficient transportation, reliable communications, and advances in laboratory technology, now enable the State to reconsider the need for three separate laboratories.

Currently, in many instances specimens received in one laboratory must be split, and sent to one or both of the other laboratories, dramatically increasing turn-around-time.

New technology, that tests at the molecular level such as DNA probes and Polymerase Chain Reaction are very expensive technologies and do not care if the organism in question is a bacterium or a virus. Therefore, it does not make sense to establish this technology in two or three different locations. It also makes little sense to have three sets of similar equipment: autoclaves, microscopes, specialized ventilation systems, biological safety cabinets, isolation rooms, and triplicate supply orders

Additionally the laboratory with its varied disciplines must work together as a team and work together with the State's epidemiologists as a team. This would be greatly enhanced, if all of the laboratories were physically located together.

When an outbreak occurs of unknown origin, it would be extremely helpful, to have all of our laboratory professionals, with their expertise together. An example would be a food-borne outbreak. The cause could be bacterium, a virus, a parasite or something in-between. Currently we have to ship samples to two or three different locations for analysis, dramatically slowing resolution of the outbreak.

CONCLUSIONS

In conclusion: I would simply like to state that:

- * We have identified the problems the laboratories face.
- * We know how to solve them.
- * We have engaged in long-range planning and developed a comprehensive workable solution.
- * Centralization of State's Public Health Laboratories in a new facility maintains an essential public health service more cheaply, more effectively, and more efficiently.
- * It solves health and safety problems.
- * And provides for the future growth.

Thank you for your time.

I would be happy to answer any questions.



NORTON SOUND
HEALTH CORPORATION

P.O. BOX 966
NOME, ALASKA 99762
(907) 443-3311

April 2, 1996

Honorable Richard Foster, State Representative
Room 611 Court
State Capitol
Juneau, Alaska 99801-1182

Dear Representative Foster:

Dr. Nakamura has asked us to contact you and request support for HB 529 - regarding the construction of a centralized laboratory. The concern is that support for epidemiological services will not be sufficient to meet future epidemic situations.

There was discussion of this issue during the Mega-meeting earlier this spring and the benefits gained by centralization, modernization, and economies of scale that the centralized laboratory would produce appear to outweigh the objections about the loss of the facility in Fairbanks.

Sincerely,

Maurice Ninham
Sr. VP-Chief Operating Officer

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF HEALTH AND SOCIAL SERVICES

OFFICE OF THE COMMISSIONER

P.O. BOX 110601
JUNEAU, ALASKA 99811-0601
PHONE: (907) 465-3030
FAX: (907) 465-3068

April 12, 1996

The Honorable Vic Kohring
Alaska House of Representatives
State Capitol Building
Juneau, Alaska 99801-1182

Dear Representative Kohring:

I am writing to clarify some of the issues concerning the Centralized Public Health Laboratory that you discussed with my staff: why a new laboratory is so expensive and why new construction, rather than remodeling, makes the most sense.

Construction Costs: Some reasons for the high cost of biological laboratories are:

- Specialized utilities requiring elaborate utility corridors or chases. Besides plumbing, waste, ventilation, and electrical lines, these house deionized/distilled water, compressed air, vacuum, natural gas, specialized gas, and lab waste disposal lines.
- Ventilation requirements: stringent humidity control; directional airflow using elaborate systems of negative pressure, (building air flows towards hazardous areas), with built in fume hoods and biological safety cabinets. (Air cannot be recirculated, must be filtered, decontaminated, and vented from building).
- Special containment of each group of infectious organisms; self closing doors; containment areas for hazardous materials (appropriately vented); explosion proof construction.
- Water resistant floors and walls; tightly sealed penetrations; corrosion resistant work surfaces, sinks, drainage pipes.
- Laboratory waste streams separately stored for treatment and disposal. Special treatment of biological waste and chemicals; incineration.
- Extensive plumbing requirements for fire/decontamination showers, handwashing sinks, equipment washing sinks, specialized floor drains, eye wash stations.
- Emergency and un-interruptable power sources.
- Morgue areas (including cadaver storage); other cold rooms; walk-in incubators.
- Security access control from public areas; high floor loading, vibration isolation.

Remodeling vs. New Construction No existing Public Health Laboratory is appropriate for expansion. The Juneau and Anchorage laboratories are poor quality converted office spaces. The Fairbanks laboratory, while adequate for current usage, would require significant upgrades to meet current codes and standards and would require more space than is currently available.

The Honorable Vic Kohring

April 12, 1996

Page 2

Moreover, major unrecoverable state investments in leased facilities would not make good business sense. In any case, the Medical Examiner laboratory must be located in Anchorage because of its relationship with the Public Safety Crime Detection Laboratory—and we need to find new space for that laboratory. The new Centralized Public Health facility would essentially represent an expansion of the existing Public Safety facility in Anchorage.

A suitable existing building is difficult to find. Even if available, renovation and conversion to a public laboratory would be expensive. The State of Colorado was recently given a building to convert to a Public Health Laboratory. The costs of conversion, for construction alone, when converted to Anchorage costs (using standard location cost multipliers developed by R.S. Means Co. for an identical building) equals \$207 per square foot, roughly half of what we expect for new construction. (The Alaska cost is understated, since seismic hazards and other local conditions would require additional expenditures for an equivalent function. The proposed laboratory would also be smaller than the Colorado example, costing more on a square foot basis.) Costs to procure an existing building would have to be added, as would costs for design, equipment, administration (just as for a new building). Problems always occur in adapting an existing building to a new specialized use. When the costs of new construction for such a specialized facility are comparable to that of buying and remodeling an existing building (as we believe they are in this case) a new facility is worth the investment.

Sincerely,



Karen Perdue
Commissioner

Enclosures

cc: The Honorable Richard Foster, Co-Chair, House Finance Committee
The Honorable Mark Hanley, Co-Chair, House Finance Committee



April 12, 1996

Honorable Vic Kohring
 House of Representatives
 State Capitol, Room 428
 Juneau, Alaska 99801-1182

Subj.: House Bill No. 529
 Centralized Public Health Facility

Dear Representative Kohring:

We understand that in discussions with staff at the Department of Health and Social Services you expressed concerns about the construction cost for the centralized public health facility currently under consideration in HB 529. I am writing to you to offer information useful in understanding the basis for the anticipated cost.

We too, are concerned about the cost and take it as a professional charge to develop a project that is most cost-effective in delivering a facility that meets public needs.

Our anticipated construction cost was developed in 1994 in consultation with professional cost estimators and laboratory specialists experienced in similar project types. The resulting cost, when viewed as an equivalent unit cost of \$384/sf, can be misleading when compared to other non-similar building types.

The equivalent \$384/sf figure for the combined public health facility includes full site development costs even though they are not usually not applicable to the unit *building* cost. Also, the ratios of total building areas to usable areas (gross-to-net ratios) are much higher for laboratories than for conventional building. To accommodate special systems and flexibility for future changes, greater floor-to-floor heights (and therefore building volumes) are needed. These two factors have the effect of increasing the apparent equivalent unit square foot cost for this project.

Also, laboratory buildings, in general, are more expensive to build. As a point of comparison, the federal government has budgeted \$433/sf for NOAA's planned marine laboratory in Juneau exclusive of land, utility and site improvement costs.

Even in the broad category of laboratory buildings, this centralized public health facility will be more expensive. The performance demands placed on this facility require that its systems be well planned and flexible.

- Because the facility will be handling infectious material, the spaces and systems must be designed to assure safe use by staff. To accommodate

Post-It® Fax Note	7671	Date	# of pages ▶
To	REP MARK HANLEY	From	D. Stone
Co./Dept.	HANLEY	Co.	
Phone #	465-2418	Phone #	562-2058
Fax #		Fax #	

TOM LIVINGSTON AIA
 DONALD E. SLOVE PE
 LIVINGSTON SLOVE INC
 1100 ARCTIC BOULEVARD
 SUITE 301
 ANCHORAGE, ALASKA 99501-4700
 907-561-2058 FAX 907-561-4528

Representative Vic Kohring
4/13/96
Page 2

these needs, additional isolation and other specialized systems need to be incorporated into the building.

- For optimum value, the building will be designed for an extended 50 year useful life. This requires a building with enough built-in flexibility to accommodate the ever-changing medical technology needed.
- Its status as an emergency facility also places demands on the cost of construction. For instance, the structure will have an importance factor applied as required by code for emergency facilities. It will require the building to resist 25% greater wind, snow, and earthquake loads than buildings in the same community. An emergency generator is also required so that the building can function in times of disaster.

The result is that more quality, features, and volume are needed to support the net usable areas, thus increasing the total cost per square foot.

We also considered the option of renovating an existing facility. We concluded that operational functions, building organization (the relationship of the internal spaces and system) and the need for future flexibility would make it extremely difficult to find and modify an existing space. These needs require greater than normal floor-to-floor heights and structural considerations not usually incorporated into existing buildings. To function properly, this facility must be designed around its internal needs. To fit these needs into an existing building would require compromises in function and efficiency. Even if an existing facility of suitable size could be found, it would probably not be able to meet the increased structural requirements necessary to qualify as an emergency facility. Further, a benefit of this project is the use of state-owned land on which to construct it, a cost that must be borne by an existing building (unless it is state-owned). Given these combined factors, it was not reasonable to anticipate that an existing structure would satisfy the project needs. This option could be further explored during later stages of the project but should not be relied upon for its success.

In the end, through the design process, the building will be designed as efficiently and economically as feasible given its requirements. While the final unit cost may vary, the total construction budget will be held. Prudence requires that an adequate amount be planned now.

If you have specific questions about the project, please feel free to call Tom Livingston or myself. We will do our best to provide you the information you need.

Sincerely,

LIVINGSTON SLOANE, INC.



Donald E. Slone, PE
President

cc: Representative Mark Hanley, Co-Chair, House Finance Committee
Mr. Greg Hayes, Dr. P. H., DHSS
Mr. Tom Lane, DHSS