HB
955

Mitchell -

04-D3LH

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF REVENUE

OFFICE OF THE COMMISSIONER

POUCH S -- JUNEAU 99811

May 3, 1978

The Honorable Charles Parr
Chairman
House Health, Education &
Social Services Committee
Alaska State Legislature
State Capitol Building - Room 112
Juneau, Alaska

Re: House Bill No. 955

Dear Mr. Parr:

House Bill No. 955, an Act providing for the issuance of general obligation bonds in the amount of $48,841,900 for the purpose of paying the cost of capital improvements for constructing, repairing, equipping, and upgrading school facilities, was introduced in the House on May 1, 1978 and was referred to the House Health, Education and Social Services Committee and the House Finance Committee.

The State's Bond Counsel, Mr. C. Richard Walker of Orrick, Herrington, Rowley and Sutcliffe has advised that general obligation bonds of the State and nearly all other state and local government bonds are issued in the denomination of $5,000, the standard unit.

Using House Bill No. 955 as an example, according to Mr. Walker, this would result in issuing less than the total amount of bonds authorized or in issuing one odd bond in the denomination of $1,900 along with 9,768 bonds in the usual denomination of $5,000.

Issuing a bond in an odd denomination requires extra time, expense and confusion in connection with the preparation of the resolution, notice of sale, official statement and other documents relating to the bonds, the printing of one odd bond with all of its special coupons, and all of the accounting and paying activities.

On the other hand, it would be highly unusual to find an estimate of expenditures, used in connection with determining the principal amount of nearly a forty-nine million bond issue, that was within $5,000 of being a perfectly precise estimate. Consequently, it is respectfully recommended that your Committee round off the principal amount of the proposed bond issue to the nearest $5,000 and make an adjustment of one of the projects enumerated in the bill to conform with the adjustment.

Reference is made to Section 3 of the bill which provides in part that the amount of $17,100 or as much of that amount as is found necessary is appropriated from the general fund of the state to the state bond committee to carry out the provisions of the Act and to pay expenses incident to the sale and issuance of the bonds authorized in the Act.

It appears that either an arithmetical or typing error was made in listing the amount of $17,100 for selling expenses. The normal formula for calculating selling expenses is to use a factor of .0035 times the principal amount of the bonds to be issued.

Thus the principal of $48,841,900 X .0035 would result in the amount of $170,946 for selling expenses or rounded to $170,900.

Very truly yours,

R. D. Stevenson

R. D. Stevenson
Special Assistant

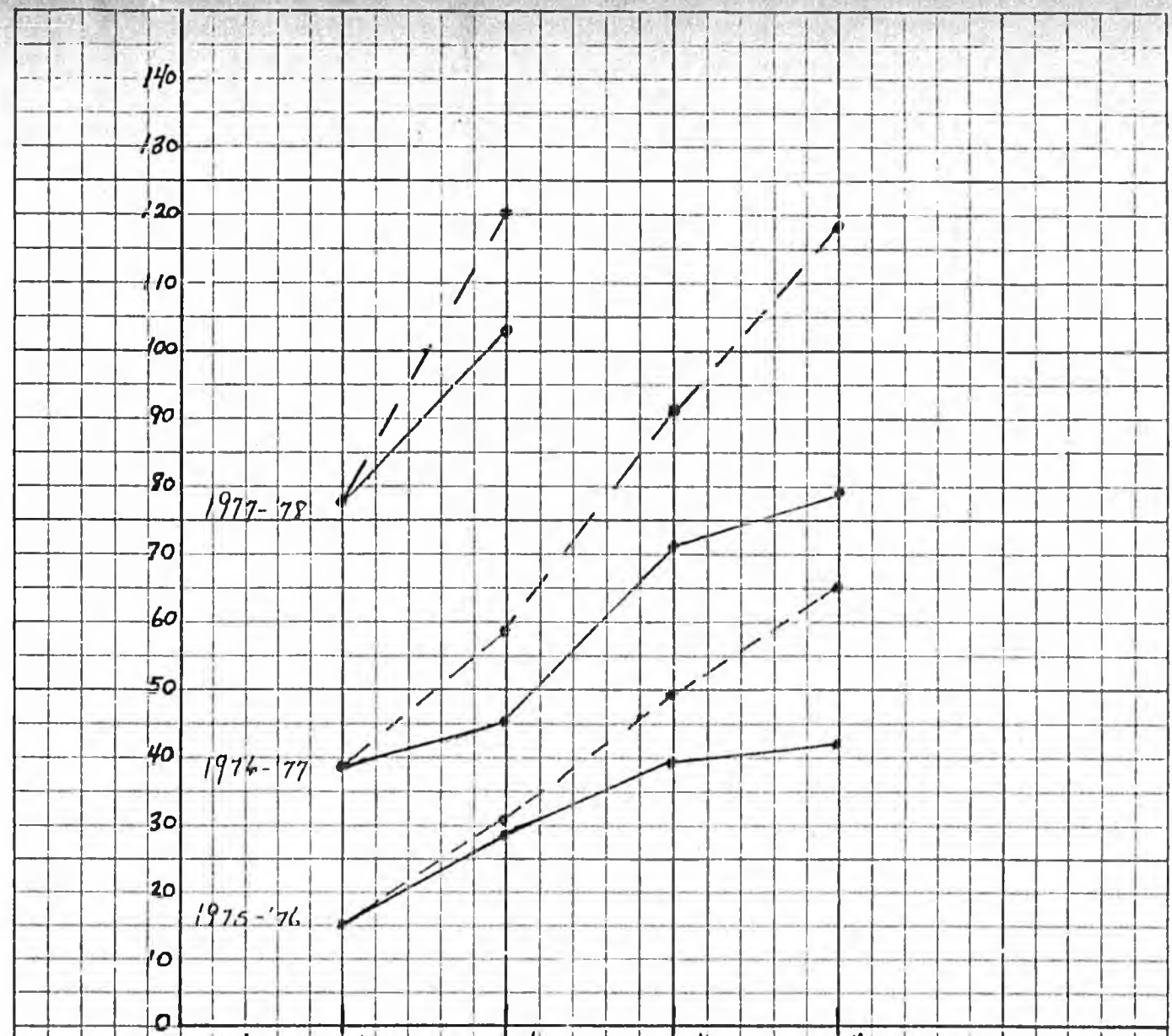
cc: The Honorable Steve Cowper
Chairman
House Finance Committee
Alaska State Legislature
State Capitol Building
Juneau, Alaska

Sterling Gallagher
Commissioner of Revenue
Secretary, State BOnd Committee

David Klemmer, Debt Manager
Treasury Division
Department of Revenue

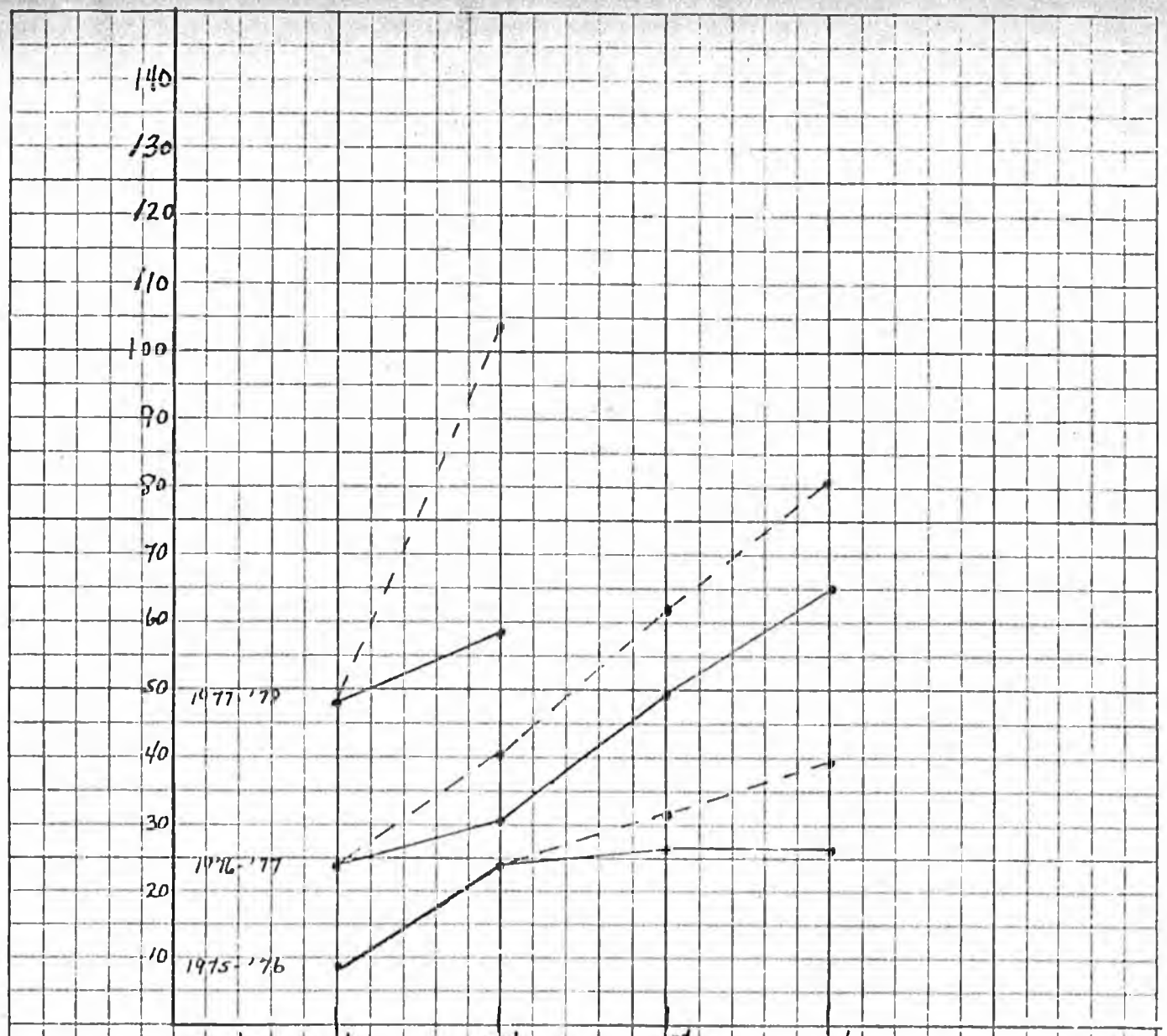
HB
973

Number of Students



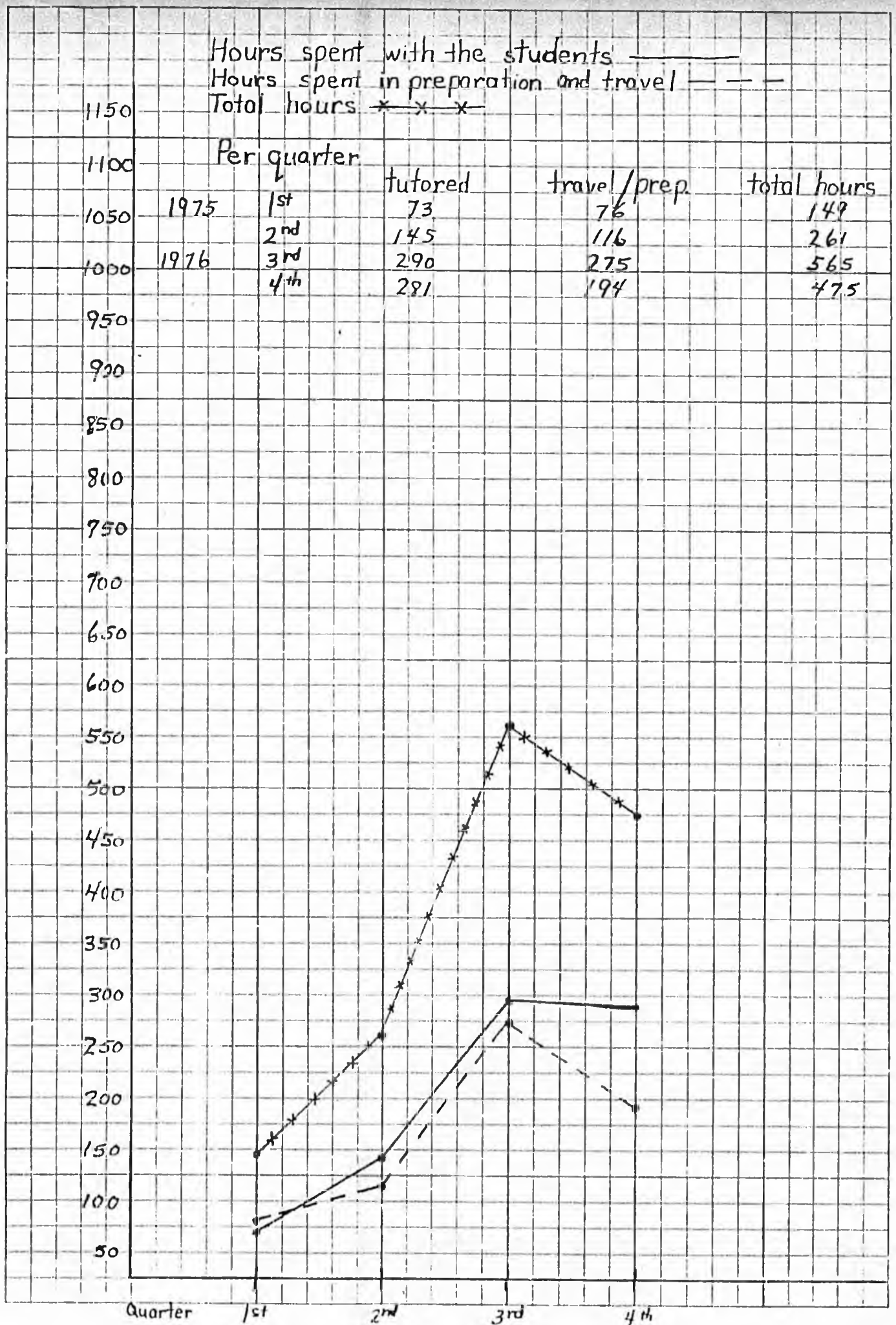
Year	Quarter	Number of Active Students Per quarter	Cumulative by year
1975	1st	15	15
1975	2nd	28	30
1976	3rd	39	49
	4th	42	65
	1st	37	37
	2nd	45	58
1977	3rd	71	91
	4th	79	118
	1st	77	77
	2nd	103	120

Number of Tutors



Year	Quarter	Number of Active Tutors Per quarter	Cumulative by year
1975	1st	9	9
	2nd	24	24
1976	3rd	26	32
	4th	26	39
	1st	24	24
	2nd	30	40
1977	3rd	49	62
	4th	65	81
	1st	47	47
	2nd	57	104
1978	3rd		

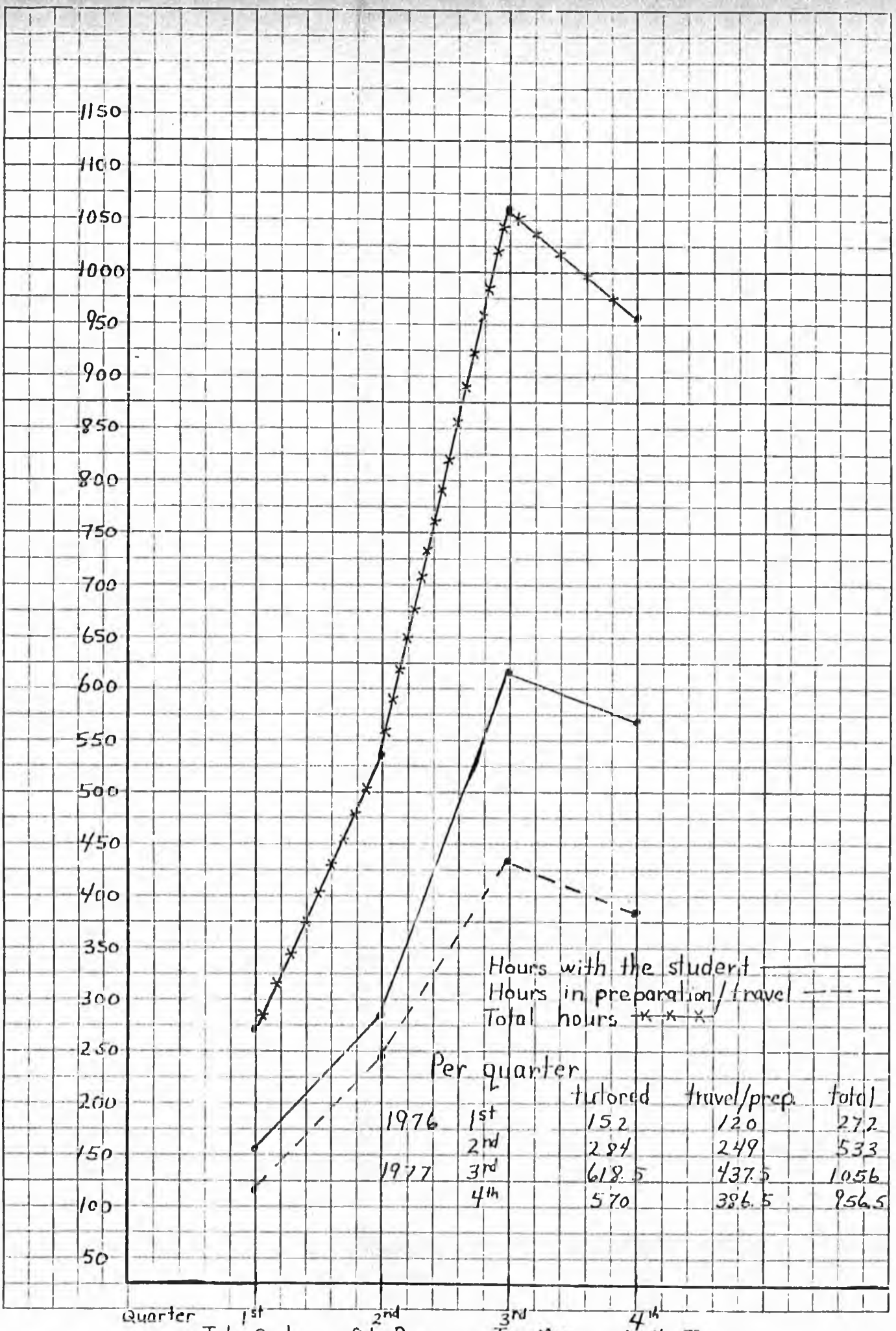
Volunteer Hours for Fiscal Year 1975-76



Per quarter

		tutored	travel/prep	total hours
1975	1st	73	76	149
	2nd	145	116	261
1976	3rd	290	275	565
	4th	281	194	475

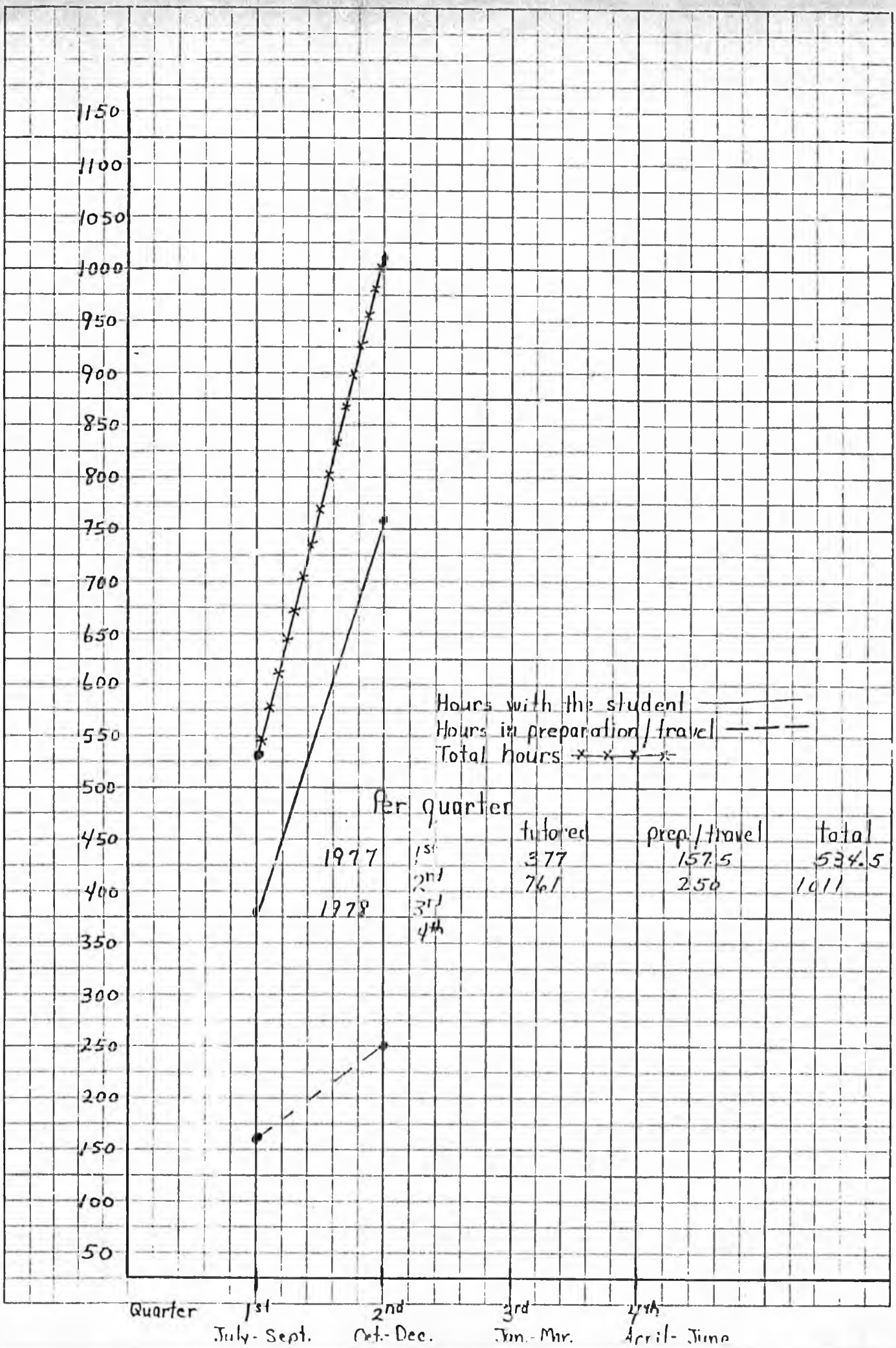
Volunteers Hours for Fiscal Year 1976 - 77



Per quarter

		tutored	travel/prep.	total
1976	1st	152	120	272
	2nd	284	249	533
1977	3rd	618.5	437.5	1056
	4th	570	386.5	956.5

Volunteer Hours for Fiscal Year 1977-'78



PROPOSED BUDGET

FOR

SENATE BILL 363

"An Act creating a state program for individualized reading instruction."

A detailed budget to implement SB 363 is presented in this document. The budget was developed with information provided by the four State Literacy Projects.

In Fairbanks alone, an estimated 200 adults would be served in one year. With a training program traveling to bush areas, students in many villages in the Interior could be reached eventually teaching as many as 500 additional students. In Bethel, a training workshop was presented in 1976. Now, 15 villages are using our methods and materials and 200 students are involved.

The proposed budget would be supported by State, local, and in-kind resources, as follows:

Source	Amount	Percent
State grant	$175,200	32%
Local funding	36,350	7%
In-kind services	309,870	56%
Other	26,400	5%
	$547,820	100%

Our hope is that anyone bearing any responsibility concerning this bill will show an interest in it and work toward the implementation of programs for this long neglected field.

For further information, please contact:

THE LITERACY COUNCIL OF ALASKA

916 Third Avenue

Fairbanks, Alaska 99701

Jean Straatmeyer, Director

456-6212

ANCHORAGE LITERACY PROJECT
3300 Wyoming Drive
Anchorage, Alaska 99503
Contact: Frances Jones, Director
278-4123

LITERACY VOLUNTEERS OF JUNEAU
Juneau-Douglas Community College
Adult Learning Center
P.O. Box 1447
Juneau, Alaska 99802
Contact: Connie Munro, Director
586-2521

KODIAK LITERACY PROJECT
Box 946
Kodiak, Alaska 99615
Contact: Beverly Horn or Carol Hagel
486-3390

BUDGET PROPOSAL

FOR

STATE FUNDING

	SERVICE AREAS				
	KODIAK	ANCHORAGE	JUNEAU	FAIRBANKS	TOTAL
Director	$ -0-	$20,000	$20,000	$20,700	$ 61,400
Secretary	-0-	13,800	6,800	6,000	26,600
Bookkeeper	-0-	-0-	-0-	4,000	4,000
Reading Specialist	-0-	-0-	9,000	-0-	9,000
Trainer-Coordinator	4,800	-0-	-0-	22,000	26,800
Outreach Assistant	-0-	-0-	-0-	8,000	8,000
Materials Developer	-0-	-0-	-0-	11,000	11,000
Training and Teaching Resources	-0-	2,500	-0-	-0-	2,500
Teacher Trainer Contractual Services	-0-	-0-	3,800	-0-	3,800
Supplies, Materials and Equipment	700	7,000	2,000	3,000	12,700
Travel	1,800	2,500	-0-	1,200	5,500
Overhead	2,800	-0-	-0-	1,100	3,900
Total	$10,100	$46,500	$41,600	$77,000	$175,200

Budget Notes:

1. Benefits are included in staff positions.
2. Required State Department of Education administrative expenses would be added to the total figure of $175,200.
3. This budget does not include funds for audio and video training as provided in Section 14.53.030.

March 1, 1978

BUDGET PROPOSAL

SHOWING

OTHER SOURCES OF SUPPORT

	SERVICE AREAS				
	KODIAK	ANCHORAGE	JUNEAU	FAIRBANKS	TOTAL
Cash:					
United Way	$ -0-	$ -0-	$ -0-	$ 5,000	$ 5,000
Materials Developed (Sales)	-0-	100	-0-	10,000	10,100
Books purchased by students/tutors	-0-	3,000	-0-	3,000	6,000
Program Service Fees	-0-	700	70	400	1,170
Membership Dues	-0-	300	30	150	480
Donations	-0-	12,000	100	1,500	13,600
Sub-total	$ -0-	$ 16,100	$ 200	$ 20,050	$ 36,350
In-Kind:					
Volunteer-					
Tutoring *	14,000	154,000	30,000	56,000	254.000
Preparation	-0-	-0-	-0-	28,000	28,000
Tutor Training	-0-	-0-	1,000	12,600	13,600
Accounting	-0-	11,000	-0-	600	11,600
Travel	-0-	1,500	-0-	1,170	2,670
Sub-total	$14,000	$166,500	$31,000	$ 98,370	$309,870
Staff Positions:					
VISTA	-0-	4,800	-0-	-0-	4,800
CETA	-0-	-0-	-0-	7,500	7,500
Sub-total	$ -0-	$ 4,800	$ -0-	$ 7,500	$ 12,300
Other:					
Student Services	-0-	6,000	-0-	1,500	7,500
Occupancy	-0-	6,600	-0-	-0-	6,600
Sub-total	$ -0-	$ 12,600	$ -0-	$ 1,500	$ 14,100
Total	$14,000	$200,000	$31,200	$127,420	$372,620

* Computed at $9.00 per hour

March 1, 1978

Statistics: Literacy Council of Alaska

1. COST PER STUDENT

FY '77 = 1,624.5 contact hours

FY '77 = $93,000 (federal Right to Read funds; this total excludes funding from United Good Neighbor, materials sold to students and tutors, and fees for developing materials)

Since approximately 75% of staff time goes into recruiting and training volunteer tutors and recruiting and testing students, the operational cost for FY '77 was $69,750 from federal Right to Read funds alone.

Cost per student contact hour was $42.94.

2. SALARIES IN PROPOSED FY '78 BUDGET ($77,000)

Full-time positions:

Director	$20,700	
Trainer/Coordinator	$22,000	$42,700

Part-time positions:

1/4-time Bookkeeper	$4,000	
1/2-time Secretary	$6,000	
1/2-time Outreach Asst.	$8,000	
1/2-time Materials Dev.	$11,000	$29,000
	TOTAL	$71,700

These monies have been requested from the State Dept. of Education. The Literacy Council already receives $20,000 in revenue ($5,000 from United Good Neighbor, anticipated revenue of $10,000 from materials developed, plus donations).

THE LEGISLATURE OF THE STATE OF ALASKA
TENTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. HB-973
Title An Act creating a state program for basic literacy instruction
Requested by House HESS Date 5/16/78

II. FISCAL DETAIL
Agency Affected Education
Program Category Affected Elementary and Secondary Education
Budget Request Unit(s) Affected Program Evaluation

EXPENDITURES (Thousands of Dollars)

	FY 77	FY 78	FY 79	FY 80	FY 81	FY 82
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL			200,000	200,000		
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL			200,000	200,000		

FUNDING (Thousands of Dollars)

GENERAL FUND			200,000	200,000		
FEDERAL FUNDS						
OTHER (Specify)						

POSITIONS

FULL TIME			-0-	-0-		
PART TIME			-0-	-0-		
TEMPORARY			-0-	-0-		

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

Contracts with non-profit organizations for Secs. 010 and 030 of this act pursuant to department proposals to be developed.

IV. DATE May 18, 1978 PREPARED BY Nathaniel Cole, Deputy Commissioner
AGENCY Education
PHONE 465-2800

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)

33-001 (Rev. 10/76)

FAIR

Literacy Council of Alaska 916 Third Avenue, Fairbanks, Alaska 99701
Telephone: (907) 456-6212

March 23, 1978

The Honorable Chancy Croft
Pouch V
Juneau, Alaska 99811

Dear Senator Croft,

You requested a letter from me as per our phone conversation of March 21, 1978 listing my questions and concerns about SB363.

1. We are committed to the volunteer approach to literacy since we are affiliated with Laubach Literacy, Inc. We believe that basic training and tutoring should be done person-to-person, but could also be supplemented by audio and video means. We would also like to point out that individualized instruction is not necessarily the same as "one-to-one" volunteer tutoring. The success of our volunteer program is dependent, to a large extent upon the activities such as promotion and coordination of a small central staff.

2. Lines 15 and 16 of SB363 read "no grant may be made or contract awarded to a religious or other private educational institution." Aren't we considered a private educational institution? If not, a definition of terms is in order. Line 26, page 2, also uses this term.

3. Lines 24 and 25 read ". . . overcoming reading deficiencies suffered by person of any age." I was under the impression that this was strictly an adult reading program. If not, won't it conflict with schools? -- or will schools benefit from the passage of this bill?

4. I was advised that this bill was strictly for adult volunteer literacy programs but line 29, page 1 and lines 1 and 3, page 2 say, "(2) leadership training for local reading program administrators and instructional personnel, including volunteers. (3) provision for technical assistance and dissemination of information to local school districts and other appropriate nonprofit agencies.

Now, to me, local reading program administrators and instructional personnel means literacy project staffs. However, I was informed by Linda Hulbert on Friday, March 17, that those lines means local school administrators and teachers -- she mentioned Jr. Hi. teachers specifically.

5. There has been confusion about the fiscal notes attached to SB363. The amount you quoted to me on the phone of $245,000 is probably the dollar amount suggested by Ellen Case, who was instrumental in writing the bill. If you'll notice, #3 of the budget notes on the "Budget Proposal for State Funding" I sent you says "This budget does not include funds for audio and video training as provided in Section 14.53.030." I hope that note clears up some of the misunderstanding.

6. Lines 17 and 18 read "the preparation and distribution of information and study course material to be used in conjunction with a course or program." The word "a" could allow us the freedom to produce low level reading materials, but I have a feeling it means "the" course or program (above)" which would limit production to only audio or video materials.

The production of low reading level/high interest adult materials is an extremely important part of our program. As the bill stands, there is no provision for that.

I feel I need to address the question as to why we are needed when there are other supposedly "overlapping" programs. The Regional Adult Learning Center here in Fairbanks is an ABE program that I understand many of the Legislators feel should be doing the same thing we do. The fact is, they could do the same things we do, but they are set up to handle a completely different clientele from ours. We feel that we work together. They handle people who read on a higher level than ours. We send (or graduate our students) to the Adult Learning Center when they are ready to begin work on their GED requirements. The Adult Learning Center refers students to us who need special individual attention and are reading on a third grade level or below. ABE programs and other adult educational programs use certified teachers and/or regular class room environments for their students. The students we have in our program cannot fit into regular programs like that because of various reasons:

Some are handicapped or ill and require instruction at their homes or institutions.

Many are mothers with small children that cannot afford transportation and babysitting costs.

Our students live throughout the Borough, from North Pole to Fox.

Most do not have drivers' licenses and access to transportation.

Many have jobs during the day or at irregular hours that do not allow them to attend regular classes.

Some have failed in school many times before and cannot face the possibility of failure in a group situation. They are willing, however, to have a friend help them.

Some have family responsibilities or problems that make it necessary to cancel classes frequently.

Some do not speak English.

Some have excellent jobs which they may lose if their employers find out about their reading problems before they are taken care of.

Some have limited learning spans.

Some have been told they are not capable of learning to read.

Others have been or are in ABE classes, but are unable to keep up.

Using volunteers, our program has the ability to tutor on a one-to-one basis at any time of the day or night in any home or other location and has the flexibility to change for each student as the situation merits. If we did not use volunteers, the costs of such a program would be tremendous. It is financially more realistic to train a volunteer in North Pole to teach her neighbor down the road until the person is able to function in a small group or classroom situation.

A side benefit of the volunteer program is that hundreds of individuals in the community who have taken the time to tutor now know first-hand the problems of an illiterate adult. These volunteers help them find jobs, open checking accounts, pay taxes, and become better members of the community. They have also become an important source of referral. They realize that the reason an employee does not do a written list of

assignments is because he cannot read it or that the reason paperwork is not done is the person can't write well and they refer the employee to us instead of firing him.

While I am well aware of the problems concerning SB363, I am hopeful that these problems can be solved. We feel that volunteer literacy programs are significant in the fight against illiteracy. But to get volunteer programs working, funds are needed for the recruitment and placement of both tutors and students. Periodic testing of students is necessary for good program evaluation. New materials need to be created that are on the correct reading level and also relevant to Alaskans. Volunteers must be trained and new programs need to be implemented.

Thank you for your kind consideration of these matters. If you need any more information from me, please don't hesitate to call or write.

Thank you in advance for sending me a copy of the fiscal note. I would also be very much interested in how the passage of SB363 could take funding away from ABE.

Sincerely,

Jean Straatmeyer

Jean Straatmeyer
Director

cc: Frances Jones

ANCHORAGE LITERACY PROJECT

3300 WYOMING DRIVE
ANCHORAGE, ALASKA 99503 278-4123

"EACH ONE TEACH ONE"

Thelma Buchholdt
Pouch V
Juneau, Ak. 99811

May 1, 1978

Dear Thelma:

Thank you for your letter of April 18th and for returning the telephone call to Frances Jones on the 26th. We are interested in the progress of SB 363.

Enclosed is a copy of a letter to Senator Hackney stating our position that audio or video educational productions are suitable as supplementary educational materials, but not as core teaching materials or to replace the teacher/tutor.

Our other concern is that the term, "individualized instruction", 14.53.010 line 19, is open to interpretation. We think "one-to-one instruction" is more specific because it includes the teacher/tutor. It rules out the possibility of a student receiving "Individualized" study program such as a tape cassette with no teacher present to help with interpretation and re-inforcement.

We hope some provision will be made for travel funds for volunteer tutor training teams, or for volunteers who have to travel in order to receive training.

As for your question about Anchorage Literacy Project funding - yes, we need money. The second-language part of our program in growing rapidly and will soon equal the basic English section in members of students served and volunteers being trained. We are becoming too large to be administered by volunteers, even with the help of a part-time secretary. Unless we can find a full time 40 hour week volunteer by the end of this year, we will need to either hire a coordinator or cut back the services we offer.

Our dream budget is enclosed. The student coordinator's report shows 99 students being tutored by volunteers this month. Our dream is to be tutoring 200 students by the end of this year. Next week we will be recognizing more than 20 volunteers who have tutored 40 to 100 hours this year.

If you are in Anchorage, May 4th, we will be honored to have you come to our Annual Meeting, time, 7:30 P.M. and bring greetings.

Thank you for your interest in Anchorage Literacy Project. We are enclosing our last newsletter.

Sincerely,

Winifred Corbett

Winifred Corbett
Chairman

WC/jlc
CC: all legislators from the South Central District

ANCHORAGE LITERACY PROJECT

Proposed Cash Budget and Accumulated Operational Resources Statement
July 1, 1978 - June 30, 1979

Student Services		
1. Student Newspaper	$2,100	
2. Books & Pamphlets	750	
3. Library Services	200	
4. Book Club	500	
5. Teaching Resources	1,000	
6. Scholarships	90	
7. Special Classes	1,000	$5,640
Tutor Services		
1. N.A.L.A.	250	
2. In-service Training	4,750	
3. Scholarships	250	$5,250
New Programs and Promotions		
1. Brochures	1,000	
2. Visual Aides, Tapes, Films & Slides	3,580	
3. Newspaper, Radio & TV Ads	750	$5,330
Administrative Expenses		
1. General Office		
a. Postage	700	
b. Telephone	700	
c. Supplies	500	
	1,900	
2. Salaries		
a. Co-ordinator	20,700	
b. Secretary	13,800	
c. Insurance	500	
	35,000	
3. Public Relations	700	
4. Equipment, Repair and Maintenance	1,645	$39,245
Total Cash Requirement		$55,465

Michael - hold for SB coming over, pls.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

2301 Peger Road, Fairbanks, Alaska 99701

March 21, 1978

Jean Straatmeyer, Director
Literacy Council of Alaska
916 3rd Avenue
Fairbanks, Alaska

Copy

Dear Jean:

In an effort to give credit where credit is due, I would like to give an account of a young man I know who has received help through your organization. His name is Gary Manns, and he first came to work for what was then the Department of Highways Equipment Shop on August 19, 1975 on a rehabilitation basis through the Office of Vocational Rehabilitation. He had been badly injured in a motor cycle accident, and had had brain damage. He showed such willingness to learn, and improved so much, that he was hired on a permanent basis as a mechanic helper for the Equipment Shop in February, 1976.

When he first began, he could not make out his time book without help, and could hardly read at all. He started receiving Laubach tutoring through the Literacy Council, and little by little began blooming like a person reborn. He is now reading at high school level, and his vocabulary has improved amazingly.

I work in the office of the Equipment Shop, and have seen his growth. We are all very proud of him, and thankful to the Literacy Council for their part in his achievement.

Sincerely,

Shirley Weiler

Shirley Weiler
Dispatcher

25A-T2LH

HB
978

HB 798 file

TELEGRAM

RCA ALASKA COMMUNICATIONS, INC.
PHONE: 586-6440
JUNEAU, ALASKA 99801

#

14007 NL KODIAK ALASKA 65 05-31 1047A ADT

PMS REP CHARLIE PARR, CHAIRMAN, HESS

JUN

DEAR REPRESENTATIVE PARR REFERENCE HB978 SECTION 18.20-065--
I STRONGLY OPPOSE ANY REQUIREMANT ATTEMPTING TO LEGISLATE THE
KINDS AND FREQUENCY OF MEDICAL CARE DONE BY PHYSICIANS ON
HOSPITALIZED PATIENTS. IT IS UNREALISTIC AND TERRIBLY EXPENSIVE.
THE REQUIREMENT FOR A PHYSICIAN ON DUTY AT ALL TIMES IN THE
HOSPITAL IS UNREALISTIC AND COSTLY FOR ALASKA HOSPITALS. I
RECOMMEND YOUR OPPOSITION TO THAT PORTION OF THE BILL.

DR RUD WASSON

HB 978 file

TELEGRAM

GCA ALASKA COMMUNICATIONS, INC.
PHONE 586-6440
JUNEAU, ALASKA 99801

#

14024 NL KODIAK ALASKA 65 05-30 458P ADT

PMS CHARLIE PARR, CHAIRMAN, HESS

HOUSE OF REPRESENTATIVES

JUN

REGARDING HB 978, CAPTIONED BILL REQUIRING HOSPITALS TO HAVE A PHYSICIAN ON DUTY AT ALL TIMES WOULD GREATLY INCREASE HEALTH CARE COSTS. REQUIRING A PHYSICAL EXAMINATION AT LEAST TWICE DAILY ON EACH HOSPITAL PATIENT IS UNREALISTIC AND IMPRACTICAL. THIS WOULD TAKE THE PHYSICIANS VALUABLE TIME THAT SHOULD BE DEVOTED TO PATIENT CARE. YOUR EFFORTS TO DEFEAT THIS BILL WILL BE GREATLY APPRECIATED.

ROBERT L GROFF, HOSPITAL ADMINISTRATOR KODIAK ISLAND HOSPITAL

4/21/78

SUGGESTED MEDICAL LAWS BY CLIFF WARREN

Many Alaskans are dying needlessly because of the lack of house or resident doctors on duty at all times. Therefore, I would propose the following:

I

All hospitals or other medical facilities with a fifty bed capacity or over shall have a doctor or doctors on duty at all times. Such doctor or doctors shall check all patients in that facility at least twice daily and be on call at all times. Such doctor or doctors' duties shall be to inform the attending physician of any medical problem developing in any patient or existing in any patient.

Such doctors shall always be readily available for life or health threatening situations in the intensive care units. In all hospitals or medical facilities having under a 50 bed capacity, the emergency room doctor or doctors shall preform the above required duties required of hospitals or other medical facilities having 50 beds or over.

II

Much of the purpose of the staff set up in the hospitals has now detoriated so that instead of disciplining the doctors, it is being used for cover-up and to interfere with the patient-doctor relationship as to treatment.

The California appeals court has recently ruled that no hospital staff can interfer with the doctor-patient relationship, and that such interference stifles medical progress. If you are not capable of praticeing medicine in a hospital, you don't deserve a medical license. No hospital or other medical facility or medical staff of such facility shall interfer with the doctor-patient relationship or the treatment of the patient agreeded upon between the doctor and patient, or refuse a licensed doctor use of the facility

Any person who observes a crime being committed who doesn't report it is guilty of a crime. So should those in the medical industry who stand by and watch malpractice or wrongfull death taking place.

III

It shall be the duty of any doctor or any other person in the medical industry to report acts of malpractice or wrongful death to the proper authorities. Refusal or failure to do so constitutes a crime. Any doctor or other medical person who through gross neglience cause the death of a patient should be charged with negligent homicide.

IV

Any doctor or medical personnel who through gross negligence cause the death of a patient shall be guilty of the crime of negligent homicide and subject to the penalties for that crime.

The state medical boards are inefficient in removing physicians' licenses because of their fear of reprisals by their peer group. The board needs to be changed to one composed of no doctors in the majority or a new board created.

V

The Alaska state medical board shall be restructured to be composed in the majority by non doctors.

A new medical board shall be created composed in the majority of non-doctors, for the purposes of reviewing charges against doctors and removing their medical licenses when the evidence warrents it.

Many times doctors and nurses stand by and watch persons being injured or life threatened without making an effort to prevent the injury. They should be relieved of the present pressures where they cannot act.

VI

Any person who within their medical knowledge who fails to act when a persons' health or life is being endangered shall have committed a crime and shall be subject to the penalties of_____.

Much needs to be done to assure the protections of patients in medical facilities. I think it is time to creat an inspector of medical facilities.

VII

There shall be created an office of medical facility inspector, whose duties shall be to inspect all medical facilities in the state of Alaska to insure that the proper life saving equipment is available in good condition; to see that adequate series of checks and double checks is used to insure the proper administrations of medicines, foods etc , and that doctors and adequate medical personnel are on duty to insure the safety of all patients, and to perform any other duties guaranteeing Alaskans of safe and adequate medical care, etc.

Please consider any other ideas you may have to improve the health and safety laws in Alaska.

Thank you for your courtesy

Cliff Warren

HCR
36

HCR 36 CSP

MINUTES OF HOUSE HESS COMMITTEE

April 4, 1977

The meeting was called to order by Chairman Parr at 3:05 p.m. Members present: Parr, Nakak, Chatterton, Ose and Phillips with Dr. Beirne and Mr. Cotten coming in later.

Absent: Bennett & Buchholdt

Committee Substitute for HB 205 was passed around for signature.

Bills before the committee today were: HCR 36, HB 360, HB 361, HB 362, BH 363 and HB 344. Chairman Parr announced that Mr. Larry Peska from Legislative Audit was present to answer any questions. Mr. Parr also announced that there were two Committee Substitutes before the committee, one that he had made up and one that Representative Miles had prepared, both regarding HB 361.

Both Committee Substitutes were gone over Section by Section and discussed. There was discussion by the members and those present as to how the federal monies for the University are presently handled. Mr. Parr felt there would be a lot of grant money the University would lose if it was run through the State. Mr. Peska stated most of the grants are being passed through the State now. Mr. Chatterton stated there were a lot of grants that were not federal and said some of the corporations etc. that make grants to the University now would not be so eager to make them to the State.

There was discussion as to the transfer of funds within the University now.

With reference to bringing the University under the State accounting guidelines, there was much discussion as to whether the word "Shall" should be used or "may". It was the feeling that the Commissioner of Administration should not run or manage the university, just maintain the accounting procedure.

HB 361 Action

With reference to HB 361,Mr. Ose moved that line 24 be amended to read after the word "Alaska' insert "and"and change the word "setting" to "set." There being no objection the motion carried.

HB 361 Action — Mr. Parr moved on line 27 to delete the word " "comptroller" and insert "Board of Regents". There being no objection the motion carried.

HB 361 Action — Mr. Chatter moved to adopt Mr. Miles Section 7 of his committee substitute in place of Mr. Parr's. There being no objection the motion carried.

HB 361 Action — Mr. Chatterton moved to pass out HB 361 as a committee substitute as amended. There being no objection, the motion carried.

HB 362 Action — Mr. Parr asked the committee' pleasure of HB 362. Mr. Ose moved to pass it out of committee. There being no objection the motion carried.

HCR 36 ACtion — Mr. Parr asked the committee's pleasure on HCR 36. Mr. Chatterton moved to table the bill. There being no objection, the bill was tabled.

HB 344 Action — Mr. Parr asked the committee's pleasure on HB 344. Mr. Chatterton moved that it be passed out with indidividual recommendations. After discussion Mr. Chatterton withdrew his motion and offered a motion to table the bill. Mr. Phillips objected. After discussion on the bill, a vote was taken and the motion to table the bill passed.

HB 360 Action — The next bills before the committee were HB 360 and HB 363. With reference to HB 360, Dr. Beirne said he was not sold on the manager team. Mr. Phillips spoke in favor of it. Mr. Chatterton then moved to table HB 360 and 363. Dr. Beirne seconded the motion. After discussion on the motion, Mr. Chatterton eliminated HB 363 from his motion. The motion to table HB 360 carried.

HB 363 Action — The next bill before the committee was HB 363. Mr. Ose moved to pass the bill out. There being no objection, the motion carried.

Mr. Parr announced to the Committee that a piece of legislation has been introduced by Lisa Rudd asking the Regents not to rehire Hiatt. He said he had heard by the grapevine that they weren't going to keep him on anyway but just wanted to alert the committee that there was the possibility of another bill regarding the University coming before the Committee.

Mr. Parr then passed a breakdown by district on a fiscal note to the committee regarding HB 212 which will be before them at the meeting tomorrow and asked the committee to look it over before the next meeting.

The meeting adjourned at 4:40 p.m.

HCR
128

STATE OF ALASKA
DEPT. OF HEALTH AND SOCIAL SERVICES
DIVISION OF PUBLIC HEALTH
COMMUNICATIVE DISORDER PROGRAM
JAY S. HAMMOND, GOVERNOR
3401 East 42nd Avenue
Anchorage, Alaska 99504

PUBLIC HEALTH AUDIOLOGY IN RURAL ALASKA

An Inter-agency Approach

David R. Canterbury, ED.D.

For many years otitis media has been recognized as a major health problem in rural Alaska. Perhaps the highest prevalence of this condition in the United States is found in the Alaskan Natives. This fact has been documented on numerous occasions and as the identification and evaluation techniques have evolved, the true scope of the problem has become increasingly evident. The Communicative Disorders Program of the Alaska Department of Health and Social Services, working cooperatively with other state and federal agencies, is attempting to establish identification, evaluation, referral and remedial programs in perhaps the most challenging geographic area in the continental United States from the health services delivery perspective.

While the State's land mass of 586,500 square miles is larger than California, Montana and Texas combined, the population only slightly exceeds 400,000 people. Most of these individuals reside in the Anchorage area but there are 150 communities with populations of less than 5,000 people and 40% of all Alaskans are located in communities of less than 1,000. Most of the rural communities are accessible only by light aircraft and in the cases of larger villages, by scheduled airline services. Road systems to rural areas are almost non-existent and distances between these villages are substantial e.g. distances from Anchorage, the largest city, to various outlying communities are; Adak 1,209 miles, Barrow 722 miles, Ketchikan 768 miles and Bethel 420 miles. The entire State west to east spans a distance equivalent to that

from California to Florida. The terrain and climate vary widely from the deep cut fjords of the Southeast Panhandle where rainfall averages exceed 150 inches per year, to the tundra of Northern and Western Alaska with predictable winter lows in excess of -50° Fahrenheit. In Northern and Western Alaska exists one of the most unique human environments known in the State as "the bush". The term refers to the predominately Native villages of the area. Although urban conveniences are being introduced to these villages, they are not modern in character nor do they share much in common with America's small towns. "In bush" telephone and television are not common and in many locations residents rely upon shortwave radio. "The bush" is not connected internally or with other portions of the State by road network. Boats in the summer, snow machines in the winter and small airplanes are the most common means of travel. Residents participate in a market economy, still substantially relying on the land and water resources near their home to meet their subsistance needs. About one sixth of the State's population is Alaskan Eskimo or Alaskan Indian. There are six major languages with over twenty significantly different dialects.

There are four organizations in the State of Alaska supplying hearing health care to residents of rural areas. These include:

1. The Community Health Aide Program.
2. The Alaska State Public Health Nurses.
3. Physicians of Federal Indian Health Service.
4. Audiologists of the Alaska State Communicative Disorders Program.

COMMUNITY HEALTH AIDE PROGRAM

Since 1968 Community Health Aides have been employed by the Regional Native Health Corporations. Health Aides are Native residents of the villages who are trained in primary health care at basic and advanced levels by accredited

programs provided through the University of Alaska. There are 205 full time Aides located in 171 villages. They operate under the medical direction provided by physicians of the Indian Health Service Hospitals and their activities are monitored by the State Board of Medical Examiners. They are often the only full time health providers in residence in smaller villages and carry much of the responsibility for intervention in cases of acute otitis media and the ongoing care of chronic otitis media conditions which are quite prevalent. They operate from an established set of standing orders and are in frequent radio/telephone contact with physicians of the Indian Health Service Hospitals. It is estimated that the Community Health Aide Programs conduct 200,000 patient encounters annually for all types of problems. Otitis media is one of the most frequent causes of referral.

ALASKA STATE PUBLIC HEALTH NURSES

Approximately 60 public health nurses supply a wide range of health care to even the most remote of the Alaskan villages. These nurses are based in larger villages and itinerate out to the less populous areas on a scheduled basis as do the physicians of the Indian Health Service. In addition to their other duties, nurses receive training from the Communicative Disorders Program audiologists to provide specific services to the hearing handicapped including pure tone and impedance screening techniques, basic threshold testing, first level counselling, making of earmold impressions for prospective hearing aid users and the fitting of ear plugs as a protection against noise induced hearing loss. Nurses may also provide medication to clients with middle ear disorders from established medical standing orders. The Communicative Disorders Program provides an audiometer for each nurse involved in direct services and the nurses are responsible for administering and/or performing hearing screening activities according to established guidelines. These activities call for all children to be screened on a scheduled basis through their

pre-school and school years. While the school systems share responsibility for the implementation of screening programs for school age children, this is often done by the public health nurse in less populous areas. Local volunteers and health aides are trained to work with the nurse in screening activities.

Screening failures receive pure tone threshold tests and sometimes tympanometry from the public health nurse during his/her village visit. All test results are sent to the Communicative Disorders Program audiologists for review, interpretation and recommendations for further management. The nurses also make earmold impressions for prospective hearing aid wearers so that custom fitted ear molds are available when an individual is seen by an audiologist for a hearing aid evaluation and possible fitting. This service provided by the public health nurse often eliminates the necessity of transporting the client out of the village more than once to see the audiologist.

INDIAN HEALTH SERVICE

Physicians of the Federal Indian Health Service program staff hospitals in six outlying areas of the State and in addition a large Indian Health Services Hospital, located in the community of Anchorage. The Anchorage facility contains a staff of two to three Ear, Nose and Throat physicians and one audiologist. They see approximately 300 patients per year for surgery and conduct an ongoing out-patient program. Most of the surgeries scheduled are tympanoplasties. One of the outlying hospitals located in the Southeast section of the State (Mt. Edgecumbe Hospital) also has the services of an Ear, Nose and Throat specialist on a philanthropic fellowship routed through an Eastern university training program. Referrals are made to the ENT programs from the health aides, public health nurses, physicians functioning out of rural hospitals and from the audiologists.

AUDIOLOGY-COMMUNICATIVE DISORDERS PROGRAM

Three levels of services are provided in audiology by the Alaska Communicative Disorders Program.

1. Regional Clinic Services (located in Anchorage, Mt. Edgecumbe, Fairbanks and Bethel).
2. Community or large village clinics.
3. Remote village services.

1. REGIONAL CLINICS

Regional clinic services are provided by a staff of eight audiologists who function out of four regional clinics. Each audiologist devotes about 50% of his or her time to providing the full range of audiology services through the clinic. Regional clinics are fully equipped diagnostic facilities including two channel audiometers, clinical impedance equipment, sound level meters, hearing aid analyzers, etc. Most regional clinics also have either double or single wall sound proof rooms. These facilities form the nucleus of audiology services and are located in, or are highly coordinated with, Indian Health Service and/or nursing facilities. Clients flown in from villages receive evaluations, are fitted with hearing aids, are counselled and are referred for medical management. These regional clinics also serve as training facilities. Before each public health nurse assumes her field station a required orientation into the management of hearing disorders is provided by the audiologist. Periodically, more extensive additional training is accomplished to further enhance the level of skills. Fifty-five nurses attended such extensive training programs in 1977.

2. COMMUNITY OR LARGE VILLAGE CLINICS

Community or large village clinics are held on a scheduled basis three to six times annually. (Presently there are fifteen sites in the State which receive this type of service. All are accessible by commercial jet

service or the limited road system.) When the audiologist leaves the regional clinics to visit these areas he customarily takes with him a portable pure tone audiometer with speech circuitry, portable impedance instrumentation and the necessary supplies for conducting a clinic. Down filled parkas and bunny boots (cold weather boots) are also standard equipment for bush travel during the winter months. The case load during these clinics is referred by physicians, community health aides and public health nurses from their activities in those communities and the surrounding more remote villages. Computer print outs from a recently developed audiology data system integrates diagnostic audiology, nursing and medical information f m all sources. This facilitates the follow up of cases seen previously. Medical referral to Indian Health Service Hospital facilities is usually possible at these sites.

3. REMOTE VILLAGES

Remote villages are accessible only by light aircraft flown by "bush pilots". When traveling to these villages it is necessary to also take along a down filled sleeping bag and enough food to last the duration of the trip (two to five days). Since no other accomodations are available, visitors often resort to sleeping in the school house, church or health aides office and eating food stuffs that are brought along. The audiologist works directly with the community health aide, an itinerant public health nurse or itinerant Indian Health Service physician. He performs audiological evaluations, provides counselling, fits hearing aids, and provides training for the nurse or health aide. The nurse or health aide in turn initiates medical standing orders when necessary on identified cases. Some cases are then referred into the regional or community clinics for more extensive management.

In the past a large number of remote villages were visited annually by the audiologist but as the case load in the regional community clinics has risen, so has the ability of the health aides, and public health nurses to manage and refer. Presently only about twenty remote villages are visited each year by the audiologist. Because of the small populations in these areas and travel expense, these clinics, when attended, are for everyone in the village regardless of age, referral source or hearing complaint.

The Central Office of the Communicative Disorders Program (in Anchorage) offers direct support to the audiologists and nurses by furnishing audiometers, impedance testing equipment, supplies, testing forms and calibration services. Annually and as needed all of the 90 audiometers owned by the program are calibrated. This service is also supplied to the few school-based hearing conservation programs at cost. In addition, the computer based data collection system incorporating audiological, nursing and medical information into one ongoing patient management and statistical system was implemented in 1977 and is based in the Central Office.

EXTENT OF HEARING LOSS ENCOUNTERED

Acute otitis media and its chronic sequellae, including hearing loss has been recognized as a leading cause of medical referral among Alaskan Natives for at least the last three decades. This high prevalence of otitis media has been documented by numerous publications including, the McGrath's Project (1962); Brody (1964); Brody et al (1965); Reed and Brody (1966); Reed et al (1967); Maynard (1969); and Reed and Dunn (1970). The most comprehensive study was begun in 1960 by the Arctic Health Research Center, Kaplan et al (1973). This investigation included 643 live births occuring

between October 1960 and December of 1962 in 27 Eskimo villages in the Yukon-Kuskokwim River Deltas. In addition to periodic visits of a research nurse to these villages through the initial years of study, 489 of these children were evaluated by a physician, a nurse, an audiologist and a psychologist in a follow-up done in 1969, 70, and 71. The findings of these studies revealed that perforations and scarring of the tympanic membrane were present in 41% of the children evaluated. A hearing loss of 26 decibels (PTA) or greater was present in 16% and an additional 25% had a measurable conductive hearing loss less than 25 decibels (for a total of 41% with measurable conductive hearing impairment). Children with a history of otitis media prior to age two and a hearing loss in excess of 26 decibels for the middle speech range had a statistically significant loss of verbal ability and were behind in reading, math and language development. In addition, the children who possessed a conductive component but had hearing better than 26 decibels (PTA) were also adversely affected in verbal areas. The number of otitis media episodes was related to the tympanic membrane abnormalities observed, the amount of hearing loss and low verbal ability on achievement test scores.

Use of impedance audiometery for identification and diagnosis was begun in the early 1970's and today is used extensively throughout urban and rural Alaska. The result has been the collection of a great deal of information about the prevalence of middle ear pathology in the State. Data collection during 1975 to 1978 by the Communicative Disorders Program once again, revealed the scope of the problem encountered. During that period of time, several different age groups were monitored to establish prevalence figures. Of the pre-school population seen, middle ear effusion or tympanic membrane perforations were found in 20% of the children in Southeast Alaska and 38% of the same age group in Southwestern Alaska. Statewide prevalence is about 27% for pre-schoolers. Impedance documented negative middle ear pressure exists in

roughly 20% of this group (In excess of -100mm negative pressure). Most of the problems identified are due to serous otitis media presenting at various stages. The numbers of chronic tympanic membrane perforations are being steadily reduced due to an active surgical program but bush communities of Southwestern Alaska still have an alarming number of cases (the Bethel Alaska area, population about 15,000 had approximately 200 unilateral and bilateral surgeries performed during the 1977-78 fiscal year utilizing both State and Federal resources. Most of these were tympanoplasties).

The hearing status of high school age children from Northern villages has been monitored for more than four years by the audiology facility at Mt. Edgecumbe, (Kimball (1975). Conductive hearing losses have been found in 20-39% of the cases seen each year, sensory neural loss was found in 9-17%, Kimball (1977). The latter finding is believed to be due to noise induced hearing loss from excessive exposure to snow mobiles, rifle fire, light aircraft, motor boats etc.

The amount of ear pathology in Alaska is substantial and the continued efforts of all health care providers will be needed to eventually bring the situation to a manageable level. Prevention efforts are being emphasized through early identification and health education on several programmatic fronts and as the system of management between the many parties involved continues to develop a more and more efficient client management system should result.

The Alaska Communicative Disorders Program is partially funded by Maternal Child Health Special Project Grant (10H 82000309)

BIBLIOGRAPHY

Brody, J.; Notes on Epidemiology of Draining Ears and Hearing Loss in Alaska With comments on Future Studies and Control Measures. Alaska Medicine 6(1) : 1-4 (1964)

Brody, J.; Overfield, T.; and McAlister, R.; Draining Ears and Deafness Among Alaskan Eskimos. Archives of Otolaryngology Jan. 1965.

Kaplan, G.; Fleshman, K.; Bender, T.; Baum, C.; and Clark, P.; Long-Term Effects of Otitis Media A Ten Year Cohort Study of Alaskan Eskimo Children. Pediatrics Vol. 52, 4 577-558 (1973)

Kimball, B.; Ear Pathology and Hearing Loss in an Alaskan High School. Audionews Vol. 2,3, 7 1977

Maynard, J.; Otitis Media in Alaskan Eskimo Children an Epidemiologic Review with Observations on Control. Alaska Medicine Sept. 93-97 (1969)

McGrath Project, A Documentation of the Study and Prevention of Upper Respiratory Disease. State of Alaska Department of Health and Welfare and Children's Bureau DHEW (1962)

Reed, D. and Brody, J.; Otitis Media in Urban Alaska. Alaska Medicine Sept. 64-67 (1966)

Reed, D. and Dunn, W.; Epidemiologic Studies of Otitis Media Among Eskimo Children. Public Health Reports Vol. 85, 8, 699-706 (1970)

Reed, D.; Struve, S.; and Maynard, J.; Otitis Media and Hearing Deficiency Among Eskimo Children; A Cohort Study. American Journal of Public Health Vol. 57 No. 9 (1969)

STATE of ALASKA

MEMORANDUM

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

TO: The Record

DATE: December 9, 1977

FILE NO:

TELEPHONE NO:

FROM: David A. Spence, M.D., Chief
Section of Family Health

SUBJECT: Prevalence listing of otitis media with perforation.

The attached, unduplicated prevalence listing has been compiled by Cozzi Alward, R.N., and Michelle Riccardi, R.N., from the following sources: October and November, 1977, observations of perforations by field and ENT physicians, public health nurses, and audiologists (442) ears; and previous listings of persons awaiting tympanoplasties (501 ears). This is not a listing, per se, of persons for whom a tympanoplasty has actually been recommended, but it follows that a very significant number of them will be so classified once they have been evaluated by an ENT surgeon.

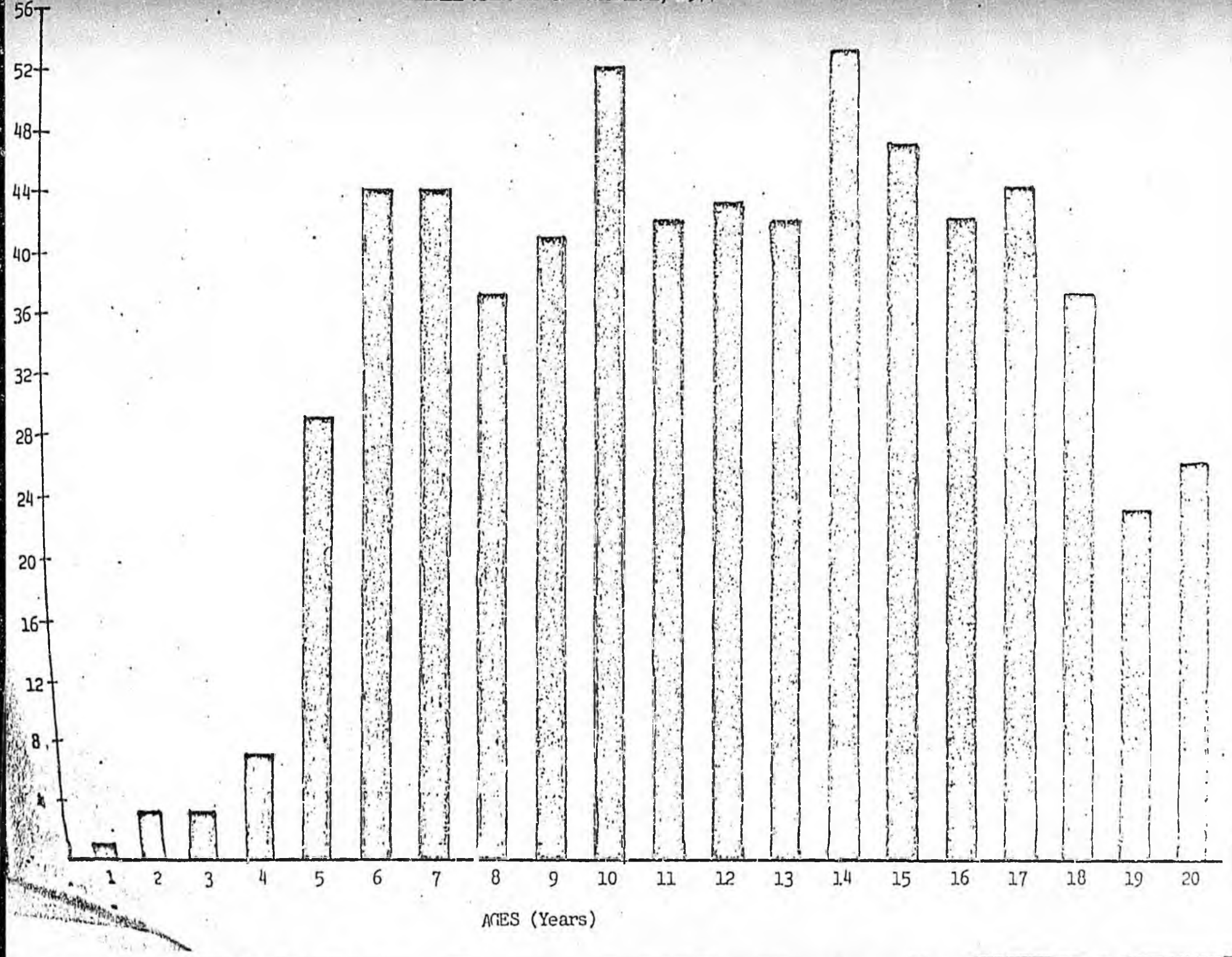
The bar chart shows the age distribution of the individuals under 21 years of age with chronic otitis media with perforation. In this disease, recurrent, closely-spaced or inadequately treated acute infections (which proceed to perforation and drainage) lead eventually to a rising prevalence of non-healing of the perforation. Below age five years there is inconsistent reporting since surgery has not been recommended for these ages. Further study and analysis will be required to reveal any changing incidence of perforation within the last five to ten years.

It must be noted that 119 persons have received tympanoplasty surgery at the Bethel Hospital within the last eight months and are thus not included in this listing.

Three conclusions seem warranted from this information: (1) consideration of an improved reporting format for otitis media, (2) a continued cooperative effort should be made to reduce this backlog of persons needing ear surgery, and (3) preventive measures should be undertaken to lower the incidence of new cases.

DISTRIBUTION:

Mr. James Armbrust
Tom Bender, M.D.
David Canterbury, PhD.
Kenneth Fleshman, M.D.
Robert Fraser, M.D.
Mr. Don Hitchcock
Robert Hurwitz, M.D.
Ms. Lois Jund
Mr. Michael Morgan
Charles Nielsen, M.D.
Ms. Pat Shea
Carl Shewmake, M.D.
Marion Talbot, M.D.
Elizabeth Tower, M.D.
David Williams, M.D.


56
52
48
44
40
36
32
28
24
20
16
12
8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
AGES (Years)

[illegible] MEDIA WITH PERFORATION IN 45 VILLAGES IN THE BETHEL AREA

	Persons with birthdates of 1/1/56 or later (under 21 years of age)		Persons with birthdates Prior to 1956 (over 21 years of age)		
	Unilateral Perforation	Bilateral Perforations	Unilateral Perforation	Bilateral Perforations	Total Ears Perforated
Alakanuk	27	12	3	0	54
Akiachuk	18	15	0	0	51
Akiak	1	1	0	0	3
Aniak	9	1	0	0	11
Anvik	0	1	0	0	2
Atmautluak	3	1	0	0	5
Bethel	69	20	14	2	127
Chauthbaluk	3	0	0	0	3
Chefornak	9	3	1	0	16
Chevak	29	2	4	0	37
Eek	0	1	0	0	2
Crooked Creek	5	0	1	0	6
Emmonak	26	5	1	0	37
Greyling	0	0	0	0	0
Holy Cross	7	3	0	0	13
Hooper Bay	30	7	3	0	47
Kasigluk	8	1	2	0	12
Kipnuk	28	15	0	0	58
Kongiganak	11	7	2	0	27
Kotlik	18	2	3	0	25
Kwethluk	28	2	4	0	36
Lower Kalskag	2	2	0	0	6
Lime Village	"Several"	"Several"			
Kwigillingok	5	1	0	0	7
Marshall	5	2	2	0	11
Nekoryuk	13	0	0	0	13
Mountain Village	42	15	4	0	76
Napakiak	7	6	3	0	22
Napaskiak	7	3	0	0	13
Newtok	5	7	1	0	20
Nightmute	7	5	1	1	19
Nunapitchuk	4	0	0	0	4
Oscarville	6	0	0	0	6
Pilot Station	19	9	0	0	37
Pitka's Point	1	0	0	0	1
Quinhagak	8	6	0	0	20
Russian Mission	5	0	0	0	5
Scammon Bay	7	0	0	0	7
Shageluk	3	0	0	0	3
Sheldon's Point	9	0	0	1	11
Sleetmute	4	1	0	0	6
Saint Mary's	12	1	0	0	14
Stony River	4	1	0	0	6
Toksook Bay	15	3	1	0	22
Tuluksak	7	0	1	1	10
Tununtuliak	2	0	0	0	2
Tununak	15	1	2	0	19
Upper Kalskag	8	1	1	0	11
45 Villages	551 Persons	163 Persons	57 Persons	5	943

STATEMENT OF PROBLEM

For many years otitis media has been recognized as the major cause of morbidity in rural Alaska. Studies done in the middle and late 1950's reported unusually high incidence & prevalence rates of this disease among the Natives, (Haymen and Koster 1957, and the McGrath Project 1962). An infant morbidity and mortality study begun in 1960 revealed that 38% of a cohort group of Alaskan Eskimo infants had at least one episode of draining ear during their first year of life (Maynard and Hammes 1970). By 1964 otitis media was recognized as the second highest cause of morbidity among Alaska Natives. In 1965, Reed, in a follow up on the Alaska Eskimo cohort group, found that 62% of the children had had one or more episodes since birth. In the same year, Reed and Dunn also found that 63% of the children examined in six Eskimo villages showed past or present evidence of otitis media.

In the most recent studies, Kaplan, Fleshman, Bender, Baum and Clark studied 489 Alaska Eskimo children who had been followed through the first ten years of life; 76% had one or more episodes of otitis media since birth. Of these, 78% had their first attack during the first two years of life. Perforation and scarring of the tympanic membrane were present in 41%. A mild hearing loss of 26 decibels or greater was present in 17% and an additional 25% were in the normal range but had measurable conductive hearing loss. Children with a history of otitis media prior to two years of age and a mild loss (26 dB or greater) had a statistically significant loss of verbal ability and

were behind in total reading, total math and language development. In addition, children who had an early onset of otitis media but now had normal hearing with a conductive component were also adversely affected in verbal areas. The number of otitis media episodes was related to the tympanic membrane abnormality, hearing loss and low verbal ability in achievement scores.

Data collection during the first half of FY 1975 by the Communicative Disorders Project once again revealed the scope of the problem encountered. During that period of time, three specific groups were studied in detail. One group consisted of twelve preschool and Head Start classes located in Southeast Alaska. Of the 328 children tested using impedance audiometric techniques, 20% showed indications of tympanic membrane perforations or middle ear effusion, and 27% showed substantial negative middle ear pressure which indicates lack of eustachian tube functioning. This negative pressure is often a prelude to middle ear difficulties and these children could be considered at high risk.

A similar study was conducted in ten villages in the Bethel area where 211 children were seen. Of these, 33% were medical referrals, and 22% showed evidence of eustachian tube malfunctions. These two preschool studies indicate that there is still a substantial incidence of early occurance of middle ear pathology. This is especially significant since if uncorrected these hearing losses will undoubtedly affect school performance, cause emotional problems, and significant deficits in language ability. Such a hearing loss occurs at an age when speech and language readiness is at its peak.

The problem of ear pathology in rural Alaska is not a transitory one as is indicated by our third FY 1975 study which included the total

Incoming population of new students to the BIA high school at Mt. Edgecumbe. A total of 256 students were evaluated with total diagnostic batteries. About 97, or 38% of those seen demonstrated a significant hearing loss. Of those 97 individuals, 63% were conductive losses, 30% were sensori-neural, and 7% mixed. The high incidence of sensori-neural losses found in this relatively young population (ages 14 through 16) indicates either that these impairments may be due to the secondary effects of otitis media, or to excessive noise exposure or perhaps both. Alaskan Natives are exposed to an inordinate amount of high intensity noise originating from snowmobiles, rifle fire, light aircraft and motor boats. This is another problem which will receive more attention during the coming year. (For more detailed breakdown of these three specific studies, please refer to the progress report for FY 1975.)

Studies accomplished in the first half of Fiscal Year 1976 also confirm earlier findings. During that period of time, 617 Head Start children located in villages throughout the state were examined by impedance and pure tone testing procedures. Of these children, ages 3-5 years, 166 (27%) had middle ear conditions which necessitated medical referral. An additional 106 children (17%) demonstrated negative middle ear pressure, a condition associated with eustachian tube malfunction which often occurs prior to the development of serous otitis media. Another 34 children could not be tested. Only 271 (43%) were found to have no indications of middle ear problems. A summary of these findings is enclosed in Appendix C.

During Fiscal Year 1975 there were 1,745 individuals (mostly children) who were referred for medical attention by the Communicative Disorders

Program. During the first half of Fiscal Year 1976, 1,115 clients were referred for medical attention. While these referrals represent the full range of pathology, a great many of these suffer from serous otitis media.

In addition to problems encountered in attempting to deliver services in a large geographic area with poor transportation availability, Alaska has multiple layers of state and federal governmental agencies operating. Many of these have services which are of value to communicatively handicapped individuals; however, fragmentation or geographic isolation has significantly reduced any impact they may have upon the state as a whole. The programs that have established services are usually restricted to relatively small geographic areas. Few attempts to reach the communicatively handicapped individual in rural Alaska have been made.

A child with a communicative disorder has been one of the most neglected of the many health and educational problems. (Otitis media is no doubt contributing to this problem significantly.) There are virtually no clinical speech pathologists who routinely serve children in rural Alaska. When such positions have been established they have been filled with inadequately trained individuals who soon become overwhelmed by the scope of the pathology with which they are confronted. Their tenure is consequently of short duration in most cases. Staff turnover in rural Alaska is a persistent problem because of the break thus created in the continuity of services. If quality personnel are acquired for programs within the state, staff retention problems persist because there is very little that can be done to obtain on going enrichment

professionally. Funds are restricted for out-of-state travel to short courses and seminars.

Examination of the scope of the problem, areas of need and possible approaches to amelioration of the situation have been discussed from various perspectives from time to time. Some fruitful activities have developed on the clinical level and efforts expended in the area of prevention and surgical management of acute and ch otitis media have been outstanding examples of productivity by the Public Health Service field hospitals and the ear, nose and throat section of the Alaska Native Medical Center.

Answers to the problem of serous otitis media, however, remain unresolved.. This condition, which is evident in a very high percentage of children in rural Alaska, has only become evident in the last several years. Whether this condition was previously overlooked in light of the presence of more severe pathology and less sensitive diagnostic tools, or whether this is a secondary effect of antibiotic treatment representing incompletely resolved bacterial infections of the middle ear is unknown. The following is an exerpt from the 10th edition of the Textbook of Pediatrics which refers to the condition of serous otitis media specifically.

> SEROUS OTITIS MEDIA. Serous effusions of the middle ear are believed to originate as a physical phenomenon secondary to blockage of the eustachian tube and negative pressure in the middle ear cavity. The inciting cause of the obstructing edema or lymphoid hyperplasia may be nasopharyngeal inflammation, allergy or barotrauma, as from rapid descent in a nonpressurized aircraft cabin. The increasing recognition of serous otitis in the antibiotic era suggests that some cases represent incompletely resolved bacterial infections of the middle ear, but proof of this hypothesis is lacking. Attempts to isolate

viruses from serous effusions have generally been unsuccessful, but viruses may play an indirect role by setting the stage for tubal dysfunction accompanying nasopharyngitis.

The serous fluid produces a sensation of fullness in the ear, decreased hearing and a popping or clicking sound with swallowing or jaw movement. The tympanic membrane is bulging and dull, with a few injected vessels or a diffuse, dusky hue, but there is much variation in the appearance, and pneumatoscopy may indicate fluid when the membrane looks almost normal. Later in the couse when the fluid becomes viscous ("glue ear") there may be retraction, with the prominence of the short process of the malleus, and the drum may acquire a blue-white coloration.

Electroacoustic impedance testing procedures are a highly sensitive method of identifying and diagnosing this problem. However, the availability of such instrumentation is presently restricted to the audiologists in the state and needs to be extended to other health care providers. Since the condition of serous otitis is very difficult to diagnose by an otoscopic examination, the health care provider who is treating the case of serous otitis and does not have impedance instrumentation has no way to tell when the condition resolves. Consequently, the effectiveness of various remedial measures is poorly documented.

There is a lack of consensus among the medical community concerning what type of management is appropriate for serous otitis. Some individuals believe that this is a highly transient phenomena which is of short duration and do very little in the area of medical treatment of the condition. (Preliminary studies by the Communicative Disorders Project on Alaskan children indicate that it is often of longer duration. More study of this factor is needed, however.) Others believe that treatment with antihistamines and decongestants is a proper approach. Still others are quite uncertain as to whether or not these medications have any effect but use them nevertheless as a precautionary measure. There is

no unanimity concerning how long such decongestants should be administered and what should be done should the child fail to respond to such treatment.

There is also some disagreement concerning the advisability and the feasibility of using polyethelene tube insertions with persistent cases of otitis. This is relatively standard practice by otolaryngologists practicing in cities. It has never been utilized to any extent in bush Alaska.

A medical, audiological and educational policy for the treatment of serous otitis media is needed at this time. Multidisciplinary course of pathology studies on representative populations could answer some of these nagging questions. For example, serial audiologic examinations using impedance and pure tone audiometry performed monthly on representative groups could for the first time give some solid indications as to what the seasonal variations of serous otitis are, how much hearing loss is involved, and what the duration of various stages of the condition are. A longer term study would be necessary to evaluate the functional impact of this disease upon language and educational abilities of the children so affected. Studies confirming the effectiveness or lack of effectiveness of various medications and surgical procedures necessitates the full cooperation of the medical community. One such study is being undertaken at this time by the Rural Alaska Community Action Program in eleven Head Start villages in the Bethel area. The Communicative Disorders Project has worked cooperatively with this agency to initiate this undertaking. It will be a demonstration project of the effectiveness of the utilization of polyethelene tubes in the treatment of serous otitis. (See Appendix C)

This outline is a description of the segments of the overall problem on which there appears to be lack of complete information that is quantifiable or lack of clearly defined and/or commonly known policy and procedure.

PHASE II

DEFINITION OF THE PROBLEM AND STATEMENT OF NEEDS

Otitis Media in Alaska

EPIDEMIOLOGY	NEEDS
age of onset projected course of pathology seasonal variation (sanitation) (housing) (nutrition)	With each of the areas of concern listed more intensive study needs to be undertaken to establish some quantifiable measures the parameters of the problem.
PREVALENCE	
by geographic area by size of village	The development of a functional and comprehensive data system should facilitate the gathering of data on specific geographic areas within the state and the grouping of high incidence areas according to village size, climate, frequency of medical care, etc.
DIAGNOSIS	
sereus acute chronic	A consensus of opinion needs to be developed among all health care providers concerning an operational definition with each type of pathology. There not only needs to be a consensus on the labels which are used with each condition but also specific observations which are necessary to classify the person in each category should be clarified to all health care providers.

MANAGEMENT CRITERIA

A. History	Documentation on representative population of health history.
B. Audiologic Evaluation	Extention of duties to PHN's and Health Aides (training and equipment needed).
C. Physical Examination	PHN and Health Aide training needed.
D. Medication	Agreement on medication needed for each condition.
E. Follow up	Use of data system for follow up. Coordination with AHEC.
F. Referral for Medical	Clarification of referral channels to all medical providers. Check at specific locale on effectiveness of referral channel.

IMPACT OF CARE

Effectiveness of medication	Course of pathology studies on the local level.
Effectiveness of surgery	Post surgical follow up results obtained via data system.

FUNCTIONAL IMPACT

Educational Speech, Language Psycho-social	Documentation of effect of otitis media on performance in each area by well controlled investigations. Coordination of efforts with: 1. Local and regional educational agencies (Regional Resource Center - Regional Educational Attendance Areas). 2. Speech pathology 3. Psychologist and social worker 4. Native Health Corporations

Otitis Media

U.S.P.H.S. - I.H.S.

Dr. Fleshman 279-6661

ext. 200 or 273

19 years service in Alaska

cannot be immune

1956 "McGrath Project"

RA18 Alaska
.C1 1962

~~earaches not treated~~ !!!!

10% → 3% Native kids

always scarred - always have abnormal ears unless surgery

geographic difference
Bristol Bay
Yukon - Kuskokwim
high prevelance of disease

Dr. Fleshman

"Otitis media"
inflamation
of the middle ear

rupture - pus runs
drum perforated - hearing loss

<u>machine</u> measures ear fluid

"serous" - fluid
otitis media

4-19-78 Dr. Gleskman
Otitis Media

Resolution

not really a problem

health of children improving in general

see where problem really is - statistics

Feds have envt $ now

more TB problems in Alaska

living conditions improve ↳ health improve

ear infections related to cold - related to general health

health aides
- knowledge doesn't always equal change -

Health - Nutrition - Anthropology

not contageous

Public Health Nurse

mothers care for children deal w/ the young family

people keep in tune w/ their bodies

damaged children → language disability

- problem is not a lack of money -
- poor communication -

Native Corps.

- no encourage breast feeding -

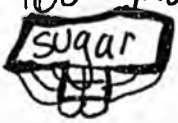
Wainwright

10,000 soda pop
214,000 soda pop

no increase in pupulation

Canadian Arctic high incidence of ear infection

diet was too much carbo.



many damaged people

need good health screening program -

possibly mandated by law -
done in Washington

drain fluid

get copy of Rural cwp contract -

HCR → wipe out Otitis Media

plan done by H&SS

complete w/ $ & time

get facts!!

McCabe

3100
Spence

ALASKA
STATE LEGISLATURE

MEMORANDUM

Dr. McCabe
-early treatment best -
not preventable
virus
bacteria

call I.H.S.
ask docs
where needs are -
Prompt diag & treatment

4500

common organism

X533-021864

6-1600

STATEMENT OF PROBLEM

For many years otitis media has been recognized as the major cause of morbidity in rural Alaska. Studies done in the middle and late 1950's reported unusually high incidence & prevalence rates of this disease among the Natives, (Haymen and Kaster 1957, and the McGrath Project 1962). An infant mortidity and mortality study begun in 1960 revealed that 38% of a cohort group of Alaskan Eskimo infants had at least one episode of draining ear during their first year of life (Maynard and Hammes 1970). By 1964 otitis media was recognized as the second highest cause of morbidity among Alaska Natives. In 1965, Reed, in a follow up on the Alaska Eskimo cohort group, found that 62% of the children had had one or more episodes since birth. In the same year, Reed and Dunn also found that 63% of the children examined in six Eskimo villages showed past or present evidence of otitis media.

In the most recent studies (1973), Kaplan, Fleshman, Bender, Baum and Clark studied 480 Alaska Eskimo children who had been followed through the first ten years of life; 76% had one or more episodes of otitis media since birth. Of these, 78% had their first attack during the first two years of life. Perforation and scarring of the tympanic membrane were present in 41%. A mild hearing loss of 26 decibels or greater was present in 16% and an additional 25% were in the normal range but had measurable conductive hearing loss. Children with a history of otitis media prior to two years of age and a mild loss (26 dB or greater) had a statistically significant loss of verbal ability and

were behind in total reading, total math and language development. In addition, children who had an early onset of otitis media but now had normal hearing with a conductive component were also adversely affected in verbal areas. The number of otitis media episodes was related to the tympanic membrane abnormality, hearing loss and low verbal ability in achievement scores.

Data collection during the first half of FY 1975 by the Communicative Disorders Project once again revealed the scope of the problem encountered. During that period of time, three specific groups were studied in detail. One group consisted of twelve preschool and Head Start classes located in Southeast Alaska. Of the 328 children tested using impedance audiometric techniques, 20% showed indications of tympanic membrane perforations or middle ear effusion, and 27% showed substantial negative middle ear pressure which indicates lack of eustacian tube functioning. This negative pressure is often a prelude to middle ear difficulties and these children could be considered at high risk.

A similar study was conducted in ten villages in the Bethel area where 211 children were seen. Of these, 33% were medical referrals, and 22% showed evidence of eustachian tube malfunctions. These two preschool studies indicate that there is still a substantial incidence of early occurance of middle ear pathology. This is especially significant since if uncorrected these hearing losses will undoubtedly affect school performance, cause emotional problems, and significant deficits in language ability. Such a hearing loss occurs at an age when speech and language readiness is at its peak.

The problem of ear pathology in rural Alaska is not a transitory one as is indicated by our third FY 197- study which included the total

Incoming population of new students to the BIA high school at Mt. Edgecumbe. A total of 256 students were evaluated with total diagnostic batteries. About 97, or 38% of those seen demonstrated a significant hearing loss. Of those 97 individuals, 63% were conductive losses, 30% were sensori-neural, and 7% mixed. The high incidence of sensori-neural losses found in this relatively young population (ages 14 through 16) indicates either that these impairments may be due to the secondary effects of otitis media, or to excessive noise exposure or perhaps both. Alaskan Natives are exposed to an incrdinate amount of high intensity noise originating from snowmobiles, rifle fire, light aircraft and motor boats. This is another problem which will receive more attention during the coming year. (For more detailed breakdown of these three specific studies, please refer to the progress report for FY 1975.)

Studies accomplished in the first half of Fiscal Year 1976 also confirm earlier findings. During that period of time, 617 Head Start children located in villages throughout the state were examined by impedance and pure tone testing procedures. Of these children, ages 3-5 years, 166 (27%) had middle ear conditions which necessitated medical referral. An additional 106 children (17%) demonstrated negative middle ear pressure, a condition associated with eustachian tube malfunction which often occurs prior to the development of serous otitis media. Another 34 children could not be tested. Only 311 (50%) were found to have no indications of middle ear problems. A summary of these findings is enclosed in Appendix C.

During Fiscal Year 1975 there were 1,745 individuals (mostly children) who were referred for medical attention by the Communicative Disorders

Program. During the first half of Fiscal Year 1976, 1,115 clients were referred for medical attention. While these referrals represent the full range of pathology, a great many of these suffer from serous otitis media. But a very large % of Chronic otitis with perforations also. (Dr. Allaska info.)
In addition to problems encountered in attempting to deliver services in a large geographic area with poor transportation availability, Alaska has multiple layers of state and federal governmental agencies operating. Many of these have services which are of value to communicatively handicapped individuals; however, fragmentation or geographic isolation has significantly reduced any impact they may have upon the state as a whole. The programs that have established services are usually restricted to relatively small geographic areas. Few attempts to reach the communicatively handicapped individual in rural Alaska have been made.

A child with a communicative disorder has been one of the most neglected of the many health and educational problems. (Otitis media is no doubt contributing to this problem significantly.) There are virtually no clinical speech pathologists who routinely serve children in rural Alaska. When such positions have been established they have been filled with inadequately trained individuals who soon become overwhelmed by the scope of the pathology with which they are confronted. Their tenure is consequently of short duration in most cases. Staff turnover in rural Alaska is a persistent problem because of the break thus created in the continuity of services. If quality personnel are acquired for programs within the state, staff retention problems persist because there is very little that can be done to obtain on going enrichment

professionally. Funds are restricted for out-of-state travel to short courses and seminars.

Examination of the scope of the problem, areas of need and possible approaches to amelioration of the situation have been discussed from various perspectives from time to time. Some fruitful activities have developed on the clinical level and efforts expended in the area of prevention and surgical management of acute and chronic otitis media have been outstanding examples of productivity by the Public Health Service field hospitals and the ear, nose and throat section of the Alaska Native Medical Center.

NEW INFO INDICATES THERE IS STILL A GREAT NEED IN THIS ESPECIALLY PREVENT

Answers to the problem of serous otitis media, however, remain unresolved. This condition, which is evident in a very high percentage of children in rural Alaska, has only become evident in the last several years. Whether this condition was previously overlooked in light of the presence of more severe pathology and less sensitive diagnostic tools, or whether this is a secondary effect of antibiotic treatment representing incompletely resolved bacterial infections of the middle ear is unknown. The following is an exerpt from the 10th edition of the Textbook of Pediatrics which refers to the condition of serous otitis media specifically.

> SEROUS OTITIS MEDIA. Serous effusions of the middle ear are believed to originate as a physical phenomenon secondary to blockage of the eustachian tube and negative pressure in the middle ear cavity. The inciting cause of the obstructing edema or lymphoid hyperplasia may be nasopharyngeal inflammation, allergy or barotrauma, as from rapid descent in a nonpressurized aircraft cabin. The increasing recognition of serous otitis in the antibiotic era suggests that some cases represent incompletely resolved bacterial infections of the middle ear, but proof of this hypothesis is lacking. Attempts to isolate

viruses from serous effusions have generally been unsuccessful, but viruses may play an indirect role by setting the stage for tubal dysfunction accompanying nasopharyngitis.

The serous fluid produces a sensation of fullness in the ear, decreased hearing and a popping or clicking sound with swallowing or jaw movement. The tympanic membrane is bulging and dull, with a few injected vessels or a diffuse, dusky hue, but there is much variation in the appearance, and pneumatoscopy may indicate fluid when the membrane looks almost normal. Later in the course when the fluid becomes viscous ("glue ear") there may be retraction, with the prominence of the short process of the malleus, and the drum may acquire a blue-white coloration.

Electroacoustic impedance testing procedures are a highly sensitive method of identifying and diagnosing this problem. However, the availability of such instrumentation is presently restricted to the audiologists in the state and needs to be extended to other health care providers. Since the condition of serous otitis is very difficult to diagnose by an otoscopic examination, the health care provider who is treating the case of serous otitis and does not have impedance instrumentation has no way to tell when the condition resolves. Consequently, the effectiveness of various remedial measures is poorly documented.

There is a lack of consensus among the medical community concerning what type of management is appropriate for serous otitis. Some individuals believe that this is a highly transient phenomena which is of short duration and do very little in the area of medical treatment of the condition. (Preliminary studies by the Communicative Disorders Project on Alaskan children indicate that it is often of longer duration. More study of this factor is needed, however.) Others believe that treatment with antihistamines and decongestants is a proper approach. Still others are quite uncertain as to whether or not these medications have any effect but use them nevertheless as a precautionary measure. There is

no unanimity concerning how long such decongestants should be administered and what should be done should the child fail to respond to such treatment.

There is also some disagreement concerning the advisability and the feasibility of using polyethelene tube insertions with persistent cases of otitis. This is relatively standard practice by otolaryngologists practicing in cities. It has never been utilized to any extent in bush Alaska.

MAY NOT BE FEASIBLE IN RURAL ALASKA USING LOWER 48 STDS.

A medical, audiological and educational policy for the treatment of serous otitis media is needed at this time. Multidisciplinary course of pathology studies on representative populations could answer some of these nagging questions. For example, serial audiologic examinations using impedance and pure tone audiometry performed monthly on representative groups could for the first time give some solid indications as to what the seasonal variations of serous otitis are, how much hearing loss is involved, and what the duration of various stages of the condition are. A longer term study would be necessary to evaluate the functional impact of this disease upon language and educational abilities of the children so affected. Studies confirming the effectiveness or lack of effectiveness of various medications and surgical procedures necessitates the full cooperation of the medical community. One such study is being undertaken at this time by the Rural Alaska Community Action Program in eleven Head Start villages in the Bethel area. The Communicative Disorders Project has worked cooperatively with this agency to initiate this undertaking. It will be a demonstration project of the effectiveness of the utilization of polyethelene tubes in the treatment of serous otitis. (See Appendix C)

FY 76-77 study nearly completed.

This outline is a description of the segments of the overall problem on which there appears to be lack of complete information that is quantifiable or lack of clearly defined and/or commonly known policy and procedure.

PHASE II

DEFINITION OF THE PROBLEM AND STATEMENT OF NEEDS

Otitis Media in Alaska

EPIDEMIOLOGY	NEEDS
age of onset projected course of pathology seasonal variation (sanitation) (housing) (nutrition)	With each of the areas of concern listed more intensive study needs to be undertaken to establish some quantifiable ~~baseline~~ parameters of the problem.
PREVALENCE	
by geographic area by size of village	THIS DATA SYSTEM HAS NOW BEEN DEVELOPED & IMPLEMENTED BY COMM. DIS. PROGRAM The development of a functional and comprehensive data system should facilitate the gathering of data on specific geographic areas within the state and the grouping of high incidence areas according to village size, climate, frequency of medical care, etc.
DIAGNOSIS	
serous acute chronic	IN PROCESS OF DEVELOPMENT A consensus of opinion needs to be developed among all health care providers concerning an operational definition with each type of pathology. There not only needs to be a consensus on the labels which are used with each condition but also specific observations which are necessary to classify the person in each category should be clarified to all health care providers.

MANAGEMENT CRITERIA

A. History	Documentation on representative population of health history.
B. Audiologic Evaluation	Extention of duties to PHN's and Health Aides (training and equipment needed). DONE
C. Physical Examination	PHN and Health Aide training needed.
D. Medication	Agreement on medication needed for each condition.
E. Follow up	Use of data system for follow up. Coordination with AIHC. DONE
F. Referral for Medical	Clarification of referral channels to all medical providers. Check at specific locale on effectiveness of referral channel. REF. CHANNELS CLARIFIED. BUT EFFECTIVENESS HASN'T BEEN CHECKED.

IMPACT OF CARE

Effectiveness of medication	Course of pathology studies on the local level.
Effectiveness of surgery	Post surgical follow up results obtained via data system.

FUNCTIONAL IMPACT

Educational Speech, Language Psycho-social	Documentation of effect of otitis media on performance in each area by well controlled investigations. Coordination of efforts with: 1. Local and regional educational agencies (Regional Resource Center - Regional Educational Attendance Areas). 2. Speech pathology 3. Psychologist and social worker 4. Native Health Corporations

of ALASKA

MEMORANDUM

DEPARTMENT OF HEALTH AND SOCIAL SERVICES

TO: The Record

DATE: December 9, 1977

FILE NO:

TELEPHONE NO:

FROM: David A. Spence, M.D., Chief
Section of Family Health

SUBJECT: Prevalence listing of otitis media with perforation.

The attached, unduplicated prevalence listing has been compiled by Cozzi Alward, R.N., and Michelle Riccardi, R.N., from the following sources: October and November, 1977, observations of perforations by field and ENT physicians, public health nurses, and audiologists (442) ears; and previous listings of persons awaiting tympanoplasties (501 ears). This is not a listing, per se, of persons for whom a tympanoplasty has actually been recommended, but it follows that a very significant number of them will be so classified once they have been evaluated by an ENT surgeon.

The bar chart shows the age distribution of the individuals under 21 years of age with chronic otitis media with perforation. In this disease, recurrent, closely-spaced or inadequately treated acute infections (which proceed to perforation and drainage) lead eventually to a rising prevalence of non-healing of the perforation. Below age five years there is inconsistent reporting since surgery has not been recommended for these ages. Further study and analysis will be required to reveal any changing incidence of perforation within the last five to ten years.

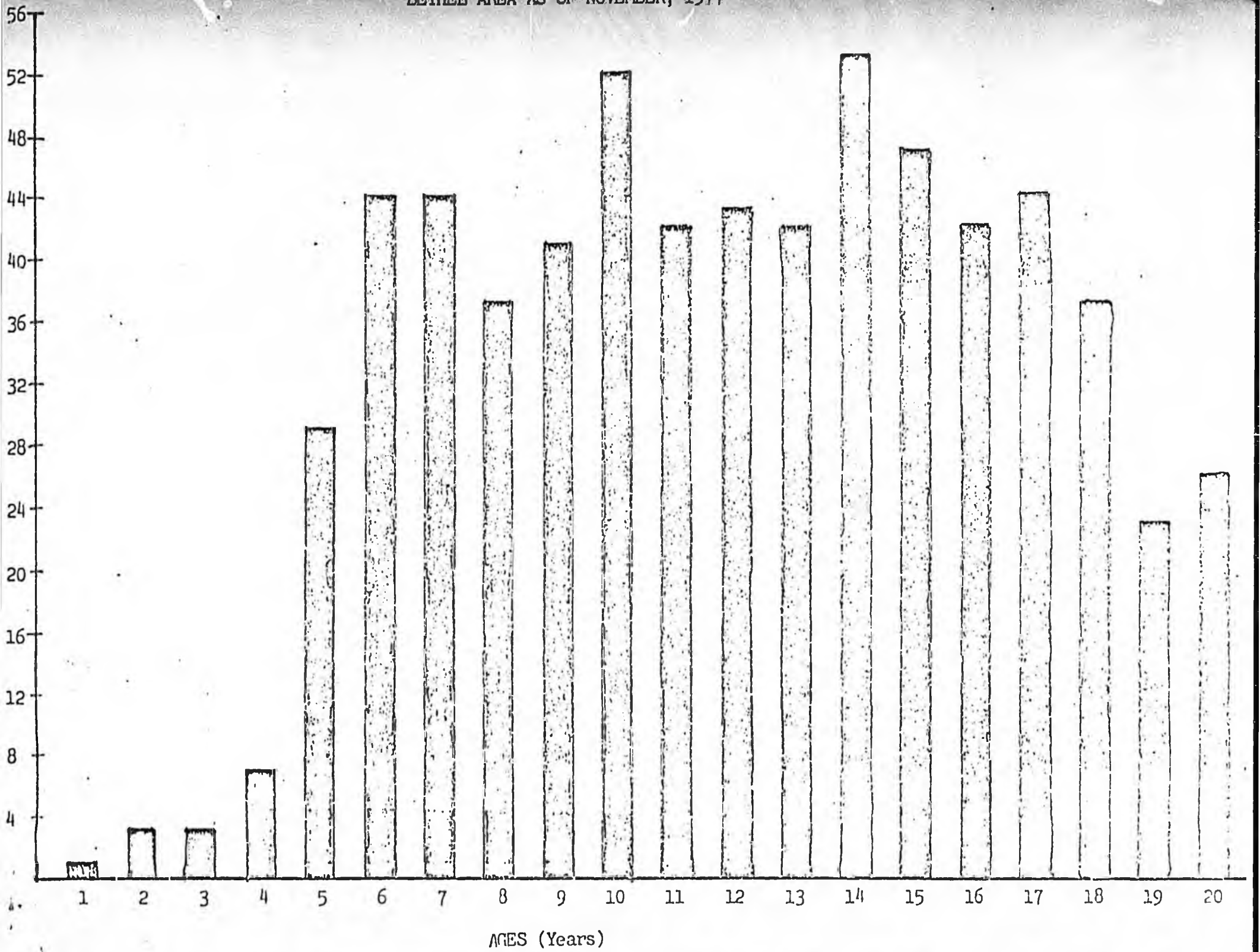
It must be noted that 119 persons have received tympanoplasty surgery at the Bethel Hospital within the last eight months and are thus not included in this listing.

Three conclusions seem warranted from this information: (1) consideration of an improved reporting format for otitis media, (2) a continued cooperative effort should be made to reduce this backlog of persons needing ear surgery, and (3) preventive measures should be undertaken to lower the incidence of new cases.

DISTRIBUTION:

Mr. James Armbrust
Tom Bender, M.D.
David Canterbury, PhD.
Kenneth Fleshman, M.D.
Robert Fraser, M.D.
Mr. Don Hitchcock
Robert Hurwitz, M.D.
Ms. Lois Jund
Mr. Michael Morgan
Charles Nielsen, M.D.
Ms. Pat Shea
Carl Shewmake, M.D.
Marion Talbot, M.D.
Elizabeth Tower, M.D.
David Williams, M.D.

BETHEL AREA AS OF NOVEMBER, 1977



	Persons with birthdates of 1/1/56 or later (under 21 years of age)		Persons with birthdates Prior to 1956 (over 21 years of age)		
	Unilateral Perforation	Bilateral Perforations	Unilateral Perforation	Bilateral Perforations	Total Ears Perforated
Alakanuk	27	12	3	0	54
Akiachuk	18	15	0	0	51
Akiak	1	1	0	0	3
Aniak	9	1	0	0	11
Anvik	0	1	0	0	2
Atmautluak	3	1	0	0	5
Bethel	69	20	14	2	127
Chauthbaluk	3	0	0	0	3
Chefornak	9	3	1	0	16
Chevak	29	2	4	0	37
Eek	0	1	0	0	2
Crooked Creek	5	0	1	0	6
Emmonak	26	5	1	0	37
Greyling	0	0	0	0	0
Holy Cross	7	3	0	0	13
Hooper Bay	30	7	3	0	47
Kasigluk	8	1	2	0	12
Kipnuk	28	15	0	0	58
Kongiganak	11	7	2	0	27
Kotlik	18	2	3	0	25
Kwethluk	28	2	4	0	36
Lower Kalskag	2	2	0	0	6
Lime Village	"Several"	"Several"			
Kwigillingok	5	1	0	0	7
Marshall	5	2	2	0	11
Mekoryuk	13	0	0	0	13
Mountain Village	42	15	4	0	76
Napakiak	7	6	3	0	22
Napaskiak	7	3	0	0	13
Newtok	5	7	1	0	20
Nightmute	7	5	1	1	19
Nunapitchuk	4	0	0	0	4
Oscarville	6	0	0	0	6
Pilot Station	19	9	0	0	37
Pitka's Point	1	0	0	0	1
Quinhagak	8	6	0	0	20
Russian Mission	5	0	0	0	5
Scammon Bay	7	0	0	0	7
Shageluk	3	0	0	0	3
Sheldon's Point	9	0	0	1	11
Sleetmute	4	1	0	0	6
Saint Mary's	12	1	0	0	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

STATE OF ALASKA
ALASKA COMMISSION ON POSTSECONDARY EDUCATION

JAY S. HAMMOND, GOVERNOR

907-465-2855
Pouch F — State Office Building
Juneau 99811

M E M O R A N D U M

TO: Representative Charles Parr

FROM: Jane Byers Maynard, State Administrator for Title I-A, HEA
Alaska Commission on Postsecondary Education

SUBJECT: Otitis Media Proposal

DATE: April 17, 1978

Enclosed for your information is a copy of Kuskokwim Community College's Otitis Media proposal which was discussed at our Commission meeting last Friday. This proposal was approved for funding at a Federal level of $47,818.

If you have any questions regarding the proposed activities, please give me a call at 465-2855.

Enclosure

KUSKOKWIM COMMUNITY COLLEGE
P. O. BOX 368
BETHEL, ALASKA 99559

COMPARISON OF HEALTH EDUCATION APPROACHES TO THE REDUCTION OF COMPLICATIONS OF OTITIS MEDIA IN RURAL ALASKA

DRAFT
PROPOSAL

COMPARISON OF HEALTH EDUCATION APPROACHES TO THE REDUCTION OF THE COMPLICATIONS OF OTITIS MEDIA IN RURAL ALASKA

TABLE OF CONTENTS

1.0 BASIC PROGRAM DATA

1.1 Program Title

The program shall be entitled:

"Comparison of Health Education approaches to the reduction of the complications of Otitis Media in Rural Alaska."

1.2 Primary Higher education Institution involved:

Kuskokwim Community College
University of Alaska
P.O. Box 368
Bethel, Alaska, 99559

1.3 Cooperating institutions and/or agencies:

Yukon-Kuskokwim Health Corporation
RuralCAP
Alaska State Division of Public Health
Bureau of Indian Affairs
Lower Kuskokwim School District
Alaska Native Health Service (Indian Health Service)
Rural Education Affairs, University of Alaska

1.4 Program Director

John Rich
Director, Division of Health Sciences
Kuskokwim Community College

(907) 543- 2621

Kuskokwim Community College
University of Alaska
P.O. Box 368
Bethel, Alaska, 99559

1.5 Budgetary requirements:

Federal funds required	$50,000
Matching funds	$25,000
Total	$75,000

1.6 Source of Matching funds

Fees
Donations
Contributed time
Institutional funds
Indirect costs
Other

RuralCAP	$15,000
DPH	$ 5,000
YKHC	$ 5,000
Total	$25,000

2.0 GOALS AND OBJECTIVES

2.1 Identification of the priority area and community need:

This program is designed so as to respond to priority areas 2.1 (e) and 2.2 (e) of the Guide.

The plan is to design and implement various means of influencing community attitudes with regard to otitis media, with the aim of reducing widespread neglect of this health problem. In implementing the proposed plan, the relative effectiveness of methodologies used to influence community attitudes will be determined through the use of various evaluative methods.

Those methods found most effective will thus be identified and it is expected that such methods, singly or in combination can be:

1. Extended to other villages in the State with a view to reduction of the complications of otitis media.

2. Applied to other health education issues.

Otitis media was selected as a vehicle of testing methodologies for delivery of health education since:

1. It is a significatnt health problem, identified by both the Alaska State Division of Public Health and the Indian Health Service as being one of the major concerns in rural Alaska. In FY 1977, it was the third leading cause of ambulatory treatments in hospitals of the Indian Health Service.

   For example, in villages of the Bethel Service Unit, in October 1977, the incidence of ear problems identified and treated ranged as high as 30 per hundred population, with an overall incidence of 816 cases in the region. In addition, respiratory problems identified and treated - possible predisposing factors of otitis media, accounted for a further 12 per hundred population, with an overall total of 1347 cases.

   High those these figures are, they certainly represent only a part of the cases of otitis media that exist in the villages, since many cases go unidentified

   While great strides have been made in the last two decades in reducing the incidence of otitis media, the residual problem remains of prime concern.

2. Otitis media is the focus of attention for a number of agencies at the present time. Resources available currently for programs designed to approach the problem may not be available at some future date. It therefore seems opportune to harness present concern in an effort to improve communication channels between agencies involved in preventive and therapeutic work, in the hope and expectation that, in future, cooperative effort can solve other health problems.

3. Otitis media lends itself admirably to empirical methods of evaluation, since the scope and effects of treatment and prevention can be measured with relative ease.

Otitis media is a problem in rural Alaska, for the most part because much of the population does not as yet perceive it as a dangerous condition. Early symptoms of the disease are commonly ignored or considered as an inevitable part of growth and development, with the consequence that they are not brought to the attention of the primary care agent, even though early treatment is usually simple. The lack of timely intervention can result in hearing-loss that cannot be corrected by surgery or in other severe illnesses such as menigitis.

Since the primary health care of village communities is the responsibility of Community Health Aides, an essential prerequisite for the success of the program is that they be able to respond knowledgably and competently to any increased demand for care of ear problems. It is for this reason that the program includes credit courses for Community Health Aides. These courses, to be delivered by the Health Sciences Division of Kuskokwim Community College, fulfil the priority described in section 1 of the Guide and enhance the health aides' ability to detect otitis media in the early stages and to provide prompt and effective treatment.

Inter-agency efforts have already been applied in the initial planning phase of the project which is designed on a cooperative, resource-sharing basis between the college and other agencies involved in community education and service. As the program evolves, evidence will be forthcoming of the interaction and interdependency of the college with private and public service-oriented agnecies. Each agency will be contributing special expertise and resources and the ensemble of such efforts will provide a convincing model of cooperation which will accord with the emphasis given in Section 3 of the Guide.

2.2 Statement of goals and objectives

1. Overall program goal

To develop, implement and evaluate cost-effective health education approaches designed to reduce the complications of otitis media in rural Alaska through the promotion of early detection and improved care.

2. Overall program objective

To determine the relative cost-effectiveness and efficacy of three different health education approaches in obtaining a significant reduction in the ratio of late to early detection of otitis media in eight villages of rural Alaska.

3. Component objectives

Of the factors that influence early detection and improved care of cases of otitis media, some have been identified as being predisposing factors, some as being enabling factors and some as being reinforcing factors.

A. Predisposing factors are seen as those that affect the willingness and readiness of individuals to seek early treatment for otitis media on their own or their dependants' behalf.

B. Enabling factors are considered those that concern improvements of conditions and facilities for care of otitis media in the villages.

C. Reinforcing factors are those that confirm good attitudes and practices and strengthen predisposing and enabling factors.

Objectives in each of these categories are listed as follows:

A. On completion of the program, 75% of members of target groups will:

a) Demonstrate familiarity with the early signs and symtpoms of otitis media (i.e. URI, earache, fever, otorrhea)

b) Indicate willingness to seek care for themselves or children in their care, in the early stages of otitis media,

c) Regard otitis media NOT as an inevitable part of childhood development but as a condition that is dangerous and potentially disabling.

d) Shall know that:

- middle-ear infection can result in hearing-loss,
- a number of serious diseases can result from untreated otitis media,
- complications of otitis media are preventable through early detection and efficient treatment,
- treatment of otitis media is free, safe, effective, easily available and relatively pleasant,
- upper respiratory diseases predispose towards otitis media.

B. By the end of the program:

a) The Community Health Aide in each selected village shall have received basic training in primary health care and in addition shall have demonstrated at least 80% proficiency in written and practical tests given subsequent to advanced didactic and clinical instruction in the detection and care of otitis media.

b) The community Health Aides in each selected village shall have demonstrated satisfactory performance in the detection, assessment management and recording of cases of otitis media occurring in the village during the program period.

c) The clinic in each selected village shall have been so equipped as to permit the Community Health Aide to deal effectively with early detection and treatment of otitis media.

d) Documentary evidence will attest to the fact that in each selected village, otological examination has been routinely performed on ALL children attending the clinic for any cause, including well-baby clinic.

e) Patient records shall show that in each of the selected villages, appropriate treatment and follow-up care has been provided for at least 80% of patients attending for ear problems.

f) Village officials and the Yukon-Kuskokwim Health Corp.