1981-1982

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SB 40

SB 58

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SENATE TRANSPORTATION COMMITTEE

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SJR 12

SJR 66

SJR 67

HB 101

HB 177

HB 538

HB 651

HB 866

HJR 20

SB

34

I. REQUEST

Bill/Resolution No. SB 34

Title Special Appropriation to DOT/PF for Capital improvements at Fbks. Int'l Airport

Requested by Senator Fahrenkamp Date February 24, 198

II. FISCAL DETAIL

Agency Affected DOT/PF

Program Category Affected Aviation D & C

BRU, Program, or Subprogram(s) Affected

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
|---|---|---|---|---|---|---|---|
| 100 | PERSONAL SERVICES | | | | | | |
| 200 | TRAVEL | | | | | | |
| 300 | CONTRACTUAL | | | | | | |
| 400 | COMMODITIES | | | | | | |
| 500 | EQUIPMENT | | | | | | |
| 600 | LAND & STRUCTURES | | | | | | |
| 700 | GRANTS, CLAIMS, ETC. | | | | | | |
| | TOTAL | | 57,000. | | | | |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 57,000. | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

A. See attached list of project requirements and estimated costs, Phase I, Fairbanks Master P

B. The following should be noted:

1. Project costs shown here reflect FY83 dollars, which constitutes a 12% per year inflation cost over and above those costs estimated in the draft airport master plan for Phase I which were based on FY81 dollars.
2. FY83 dollars are used as current estimated scheduling indicates that the majority of the higher cost projects to be involved will be under contract by 1982-83.
3. Projects for Phase I and their estimated costs are based on initial draft master plan and therefore do not reflect inclusion of final comments for final study report. Thus the number and cost of various projects may differ for Phase I when the final study report is done, thereby possibly affecting the total cost for Phase I.

IV. DATE February 27, 1981 PREPARED BY Dave Truax

AGENCY DOT/PF, Div. of Planning & Programming

PHONE 479-4284

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/80

Table 7-1

SUMMARY OF PROJECT REQUIREMENTS AND ESTIMATED COSTS
Fairbanks International Airport

| PHASE I | Description | Estimated Project Costs(a) |
|---|---|---|
| 1. Acquire Land Between New & Old Airport Way | 27.5 Acres | $ 3,720,000 |
| 2. Acquire Land South of Proposed South Fairbanks Expressway | 77.9 Acres | 248,000 |
| 3. Acquire Land North of US Postal Service | 21.4 Acres | 1,488,000 |
| 4. Acquire Land North of Flood Control Levee | 155.0 Acres | 248,000 |
| 5. Acquire Land at Middle Marker | 4.8 Acres | 124,000 |
| 6. Acquire Leasehold Lots 1 & 2, Block 1 | 6.2 Acres | 1,612,000 |
| 7. Acquire Land North of Cartwright Road | 15.0 Acres | 186,000 |
| 8. Extend Runway 1L/19R & Taxiway T-1 | 1,400 L.F. | 5,580,000 |
| 9. Ove-lay Runway 1L/19R | 10,300 L.F. | 3,224,000 |
| 10. Relocate Alaska Railroad | 3,600 L.F. | 868,000 |
| 11. Extend Runway 1R/19L & Widen | 500 L.F. | 1,116,000 |
| 12. Construct Taxiway T-5 & Convert T-3 to Gravel Landing Strip | 3,700 L.F. | 2,170,000 |
| 13. Widen & Reconstruct Exit Taxiways | — | 372,000 |
| 14. Pave & Light Taxiway T-16 | 450 L.F. | 248,000 |

(a) Includes allowance of 20% to cover contingencies, architect/engineering fee and administration.
(b) Governmental transfer costs only $1.00 total value assumed.

| | | |
|---|---|---|
| 15. Construct, Pave & Light Taxiway T-13 | 2,400 L.F. | 1,612,000 |
| 16. Construct, Pave & Light Northwest Apron Taxiway (Stage I) | 2,000 L.F. | 1,240,000 |
| 17. Extend Float Pond | 4,500 ft. x 400 ft. | 5,332,000 |
| 18. Construct Float Plane Ramp | 1 Job | 248,000 |
| 19. Relocate Category II ILS Runway 1L | 1 Job | 2,480,000 |
| 20. Replace Towers on ALSF-1, Runway 19R | 1 Job | 620,000 |
| 21. Install VASI-2, Runways 1R and 19L and REIL, Runway 1R | 1 Job | 372,000 |
| 22. Upgrade Terminal Control Equipment | 1 Job | 99,200 |
| 23. Mark & Light West Helipad | 1 Job | 62,000 |
| 24. Mark & Light East Helipad | 1 Job | 62,000 |
| 25. Upgrade FSS & Other Equipment | 1 Job | 472,200 |
| 26. Expand West Apron | 40,000 S.Y. | 1,736,000 |
| 27. Expand Passenger Terminal Building (Stage I) | 40,000 S.F. | 7,440,000 |
| 28. Rehabilitate Existing Passenger Terminal Building | 30,000 S.F. | 3,100,000 |
| 29. Install Traffic Signalization in Terminal Area | 1 Job | 186,000 |
| 30. Construct Additional Curbside Lane at Passenger Terminal Building | 1,800 L.F. | 744,000 |
| 31. Relocate Airport Way | 3,800 L.F. | 1,116,000 |
| 32. Construct Front Road "A" | 4,900 L.F. | 868,000 |
| 33. Construct Gravel Service Road "I" | 4,000 L.F. | 124,000 |

| | | | |
|---|---|---|---|
| 34. | Relocate & Extend Gravel Service Road "K" | 3,400 L.F. | 124,000 |
| 35. | Construct Service Road "E" | 10,500 L.F. | 1,488,000 |
| 36. | Construct Gravel Service Road "C" | 1,600 L.F. | 124,000 |
| 37. | Construct Gravel Access Road "H" | 2,000 L.F. | 124,000 |
| 38. | Expand Public Parking at Passenger Terminal (Stage I) | 300 Spaces | 930,000 |
| 39. | Construct General Aviation Apron Auto Parking (Stage I) | 150 Spaces | 124,000 |
| 40. | Construct General Aviation Apron (Stage I) | 180 Spaces | 1,612,000 |
| 41. | Expand Float Pond to the East | 81 Slips | 4,340,000 |
| 42. | Construct East Heliport | 6 Spaces | 372,000 |
| 43. | Relocate FBO's Operating +12,500 lb. Aircraft to Northwest Apron | - - | 3,720,000 |
| 44. | Construct Two Rescue Boat Houses | 500 S.F. | 49,600 |
| 45. | Construct Sand Storage Building | 3,000 S.F. | 186,000 |
| 46. | Construct Vehicle Storage Building (Stage I) | 15,000 S.F. | 1,116,000 |
| 47. | Extend & Relocate Hydrants at Passenger Terminal | 1 Job | 248,000 |
| 48. | Extend Hydrant System to Air Cargo Apron (Stage I) | 3,500 L.F. | 868.000 |
| 49. | Construct Air Cargo Apron (Stage I) | 120,000 S.Y. | 4,464,000 |
| 50. | Electrical Service to East Side of Float Pond | 7,600 L.F. | 372,000 |
| 51. | Expand Standby Generation | 1 Job | 372,000 |
| 52. | Extend West Apron Drainage | 1 Job | 74.400 |

| | | |
|---|---|---|
| 53. Drainage System for South End of Airport | 1 Job | 620,000 |
| 54. Develop Park & Trail System | 1 Job | 248,000 |
| 55. Relocate Security Fencing along Alaska Railroad | 3,600 L.F. | 74,400 |
| 56. Relocate Security Fencing in Old Post Office Area | 1,200 L.F. | 24,800 |
| 57. Relocate Security Fencing along Airport Way & Frontage Road "A" | 8,400 L.F. | 161,200 |
| 58. Landscape Terminal Entrance Road | 1 Job | 248,000 |
| 59. Landscape University Avenue Entrance | 1 Job | 124,000 |
| TOTAL PHASE 1: | | $ |

M E M O R A N D U M

TO: Senate Transportation Committee

FROM: Senator Fahrenkamp

DATE: March 5, 1981

Senator Fahrenkamp

Testifying in support of SB 34 and SB 37 will be:

Ben Harding - Fairbanks North Star Borough

Jim Healy - North Pole, Chamber of Commerce

Dr. Jim Drew - Fairbanks Economic Development Commission

Don O'Connor - Chamber of Commerce, Aviation Committee

Bob Thomas - Chamber of Commerce, Transportation Committee and Consultant to Airport Study Committee

Brenda Moser - North Pole Refinery

Steve Thomas - Airport Operators Council

Mitch Gravo - Lobbyist, Municipality of Anchorage

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

309 RESPONDENTS

fairbanks north star borough
p.o. box 1267 520 fifth ave. fairbanks, alaska 99707 907-452-4761

TOP 10 PROJECTS SUPPORTED BY THE PUBLIC DURING PROGRAM FOR PROGRESS COMMUNITY INPUT PHASE:

1. Airport improvements 240
2. Renovation of Big Dipper 216
3. Remove barriers to the handicapped 208
4. Chena Lakes recreation project 202
5. Parks & Recreation facility improvements/beautification 151
6. Waste heat greenhouse 190
7. Solar collectors, Borough buildings 176
8. Transit maintenance center 158
9. Sports & Recreation facilities in North Pole 127
10. Civil defense equipment 124

August 18, 1980

Mr. Gerald Rafson, Project Manager
Transportation and Public Facilities
University Plaza--East, Suite 1
600 University Avenue
Fairbanks, Alaska 99701

Dear Mr. Rafson:

I am writing in regard to the public hearings held on July 29 concerning the Fairbanks International Airport Master Plan.

I am deeply disturbed at the course which the development of the Master Plan is taking. I want to express my categorical rejection of the underlying assumptions and the parameters guiding the Master Plan's development.

The assumptions embodied in the Master Plan presented in Fairbanks basically deny the airport its present international status. In effect, your projections for airport use and activity rest on the contention that the Fairbanks International Airport is a community facility designed to serve the air transportation needs of the residents of the Fairbanks North Star Borough. I find it ironic that your draft does not even define the Fairbanks International Airport as an air-service facility for such nearby interior Alaskan communities as Delta or Nenana, much less Fort Yukon, Tanana, etc.

Moreover, as I indicated earlier, your draft does not address in any detail, or give any weight to, Fairbanks' status as a transit and refueling point for international cargo flights. Nor does your draft address the prospects of any form of international passenger flights, either in transit or for tourism stovers, in the Fairbanks area.

The inadequacy of the standards imposed on the Fairbanks International Airport is clearly evident if these standards are applied to the Anchorage International facility. A large percentage, if not the bulk, of major aircraft operations in Anchorage result from international and transit flights--not from those operations which directly service the Anchorage community. Similarly, a large part of the air traffic at the Seattle/Tacoma airport and at Chicago's O'Hare--to cite only a few examples--depend on transit and international flights.

Your definition of the Fairbanks International Airport, as well as the projections of the growth of its operations to the year 2000, are valid only if you intend to relegate Fairbanks to the status of a dead-end airport facility. This relegation in turn can only be accomplished if you intend to strip the Fairbanks International Airport of its present transit and international operations and block any future requests to use the air facilities here for those purposes.

Based on these very serious objections I have, I can in no way accept the work in the Master Plan until a fundamental and far-reaching redefinition of the airport's role corrects these crippling deficiencies.

Sincerely,

JOHN A. CARLSON
Borough Mayor

JAC/sek

cc: Governor Hammond
Lieutenant Governor Miller
Transit Commissioner Robert Ward
Interior Legislative Delegation

September 26, 1980

Larry Soden
State of Alaska Department
of Transportation and Public Facilities
600 University Avenue
Fairbanks AK 99701

Dear Larry:

I appreciate the time you and Jerry Rafson took for our discussion of our concerns regarding the development to date of the master plan for the Fairbanks International Airport.

As you both noted from the course of the discussions, all of us--Senator Fahrenkamp, Mayor Wood, Bill Green, and myself--are adamant that the definition of service area for the airport is hopelessly inadequate and dangerously incorrect. We are pleased that you concur and will revise the airport's service area to include Interior Alaska, in addition to the borough, as well as specifically addressing its growth potential for trans-polar and other international flights.

We are also pleased you believe that a master plan should be viewed as a flexible document which responds to changing conditions. We would point out, however, that in times past planning documents of this sort have been treated as rigid marching orders, attempting to force conditions to comply with their provisions rather than the contrary. Consequently, we would urge you to emphasize repeatedly the need for flexible responsiveness as you put together the final draft and to underscore that infrastructural improvements at the airport are tied to <u>need</u>, not to hypothetical dates such as 1995.or 2000.

I think that we possibly had some difficulty communicating to you our point that facilities should anticipate needs, rather than attempt to play catch up after the need occurs and goes unmet. In fact, as far as international airport operations are concerned,

many potential uses will never materialize if the facilities are not already in place to handle them, or at least under construction. The flights will simply go elsewhere on long-term commitments.

Also, we hope that you will give careful consideration to our contention that growth demand for international air traffic during the 1980s and 1990s is likely to increase in sharp increments rather than in a smooth upward curve. An example of this would be the recent jet fuel shortage on the U.S. West Coast, which resulted in sudden, increased, demands for jet fuel in Alaska, and in particular from the North Pole refinery locally.

As the consultant works toward a final draft and incorporates the points we have raised, we would also feel more assured if greater attention could be given to the airport's role--present and potential--in trans-polar and other international air traffic routes, rather than being treated in semi-isolation. Finally, we would also like to see for comparative purposes what percentage of flights, fuel use, passengers, freight transfer, etc., is attributable to international and transit flights at other airports, such as Seattle-Tacoma, Anchorage, Chicago, etc. Above all, We would like to reaffirm the understanding from our meeting on September 16 of our review of the final draft before its publication.

I was encouraged by your willingness to address our concerns, and we all look forward to working with you and Jerry as these issues are embodied in a refined master plan draft. In view of the great importance this area places on the airport as our window to the world, I can assure you that we will give airport development our highest priority and attention.

Sincerely,

JOHN A. CARLSON
Borough Mayor

JAC/aek

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

fairbanks north star borough
p.o. box 1267 · 520 fifth ave. — fairbanks, alaska 99707 907-452-4761

January 14, 1981

Heinrich Springer, Director
Division of Planning and Programming
Interior/Western Region
Department of Transportation and
Public Works
University Plaza-West, Suite D
600 University Avenue
Fairbanks, AK 99701

Dear Mr. Springer:

As many others in the Fairbanks area, the Borough Economic Commission has been seriously concerned by the limited scope and approach of the first draft of the master plan which was released last summer. We feel, however, that the second draft has more closely addressed these concerns by its close attention to the role of international cargo and passenger flights in the development of the airport, as well as dealing with community and regional transportation requirements.

The Commission has identified the development and operation of the airport as one of its main priorities, and it has devoted considerable time in reviewing the master plan drafts and discussing the issue. As a result of our review, we strongly recommend the following:

1. The $101 million capital improvement program identified in the second draft be accelerated from its twenty year time-table, and the State Legislature be requested to appropriate the full amount during the 1981 session. The receipt of these funds will allow for the development of a rapid and coherent capital program to correct deficiencies in existing facilities and to construct necessary new ones in a timely manner.

2. As the consultants prepare the final version of the master plan, they incorporate provisions for the construction of a new airport terminal further south towards the Tanana River, or across the river, given the importance of a developing tourism industry to Interior and Northern Alaska. Funding should be requested from the Legislature by no later than the 1982 session to undertake the detailed examination of the feasibility of these actions.

We further recommend that the master plan examine in greater depth the technical and social dimensions of noise abatement.

3. In no manner should the final master plan be viewed as a document controlling or determining the scope or the pace of airport development regardless of existing or potential air transportation needs. The master plan should be used at all times as a flexible instrument allowing the State to respond satisfactorily to the evolution of existing local, statewide, and international air requirements and to anticipate sufficiently in advance the development of new ones.

4. Likewise, the master plan should not be viewed in itself as a final or completed document, but as one always available for revision as new circumstances or emerging new technologies warrant. If fundamental changes in air transportation patterns change--such as have occurred recently--then the State should be ready to prepare a new airport master plan to meet those needs.

The Commission would like to reemphasize the importance it attaches to the satisfactory development of the Fairbanks International Airport as one of the fundamental economic bases linking Fairbanks and Interior Alaska with the rest of the state and the rest of the world. Our sensitivity to this issue is all the greater as a result of the grievous neglect which this facility has received in past years.

We are encouraged by the most recent draft of the new master plan. We hope that it heralds a new attitude and ultimately a new commitment to the adequate support and development of this basic transportation facility.

Sincerely,

Moira Nutter

Moira Nutter, Chairman
Economic Development Commission
Fairbanks North Star Borough

/ms

cc: Governor Hammond
Lt. Governor Miller
Commissioner Ward
Senator Bettye Fahrenkamp
Larry Soden, DOT

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

Alaska State Legislature

SENATOR BETTYE FAHRENKAMP
CHAIRMAN, RESOURCES COMMITTEE

4016 EVERGREEN
FAIRBANKS ALASKA 99701

907-479-3550

Senate

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA 99811
OFFICE 907-465-3763
RESOURCES COMMITTEE
907-465-3834
HOME 907-789-9182

M E M O R A N D U M

TO: Senator Bill Ray
Chairman, Transportation Committee

FROM: Senator Bettye Fahrenkamp Bettye

RE: Background information
SB 34".....$57 million airport appropriation"

DATE: March 4, 1981

The purpose of this legislation is to fund capital improvements at the Fairbanks International Airport. The funding will cover Phase I of the short range improvements covered in the Fairbanks Airport Draft Master Plan. The Phase I project list is attached to this memorandum.

The CIP projects listed are based on forecasted aviation levels. They were prepared by DOT/PF personnel. The discrepancy between the amount sought in the bill and the amount listed in Table 7-1 are items 21 and 22 which will be funded by FAA.

There is a basic philosophical difference in attitudes where development of the airport is concerned. DOT/PF has traditionally based capital project plans on actual need; that is, building to increase capacity only where that capacity has reached its uppermost limit. Advocates for developing the airport now also base their decisions on need. But the need they foresee is for construction and design of capital projects which will have to be in place in 1986 in order to satisfy the need that is projected.

In recent years a distinct change has occurred in the nature of air traffic patterns at Fairbanks; many international flights are being scheduled for technical fuel stops at Fairbanks International. The number of these flights is expected to increase. With the successful conclusion of a diligent marketing effort now in process, Fairbanks is expected to schedule several additional international stopovers.

In order for the Fairbanks airport to provide minimum safety standards for the wide-bodied aircraft most frequently

performing these functions, the improvements described in the master plan are needed. Increase in international flights is starting its buildup. Improvements need to be made now and be completed in time for the heavier traffic patterns. Timing is absolutely essential for the growth of the airport and the economic stability of Fairbanks.

This is a project supported by the community. There are many proponents, some of whose comments are attached to this memo.

Table 7-1

SUMMARY OF PROJECT REQUIREMENTS AND ESTIMATED COSTS
Fairbanks International Airport

| PHASE I | Description | Estimated Base Year (1980) Project Costs[a] |
|---|---|---|
| 1. Acquire Land Between New & Old Airport Way | 27.5 Acres | $ 3,000,000 |
| 2. Acquire Land South of Proposed South Fairbanks Expressway | 77.9 Acres | 200,000[b] |
| 3. Acquire Land North of US Postal Service | 21.4 Acres | 1,200,000 |
| 4. Acquire Land North of Flood Control Levee | 155.0 Acres | 200,000[b] |
| 5. Acquire Land at Middle Marker | 4.8 Acres | 100,000[b] |
| 6. Acquire Leasehold Lots 1 & 2, Block 1 | 6.2 Acres | 1,300,000 |
| 7. Acquire Land North of Cartwright Road | 15.0 Acres | 150,000 |
| 8. Extend Runway 1L/19R & Taxiway T-1 | 1,400 L.F. | 4,500,000 |
| 9. Overlay Runway 1L/19R | 10,300 L.F. | 2,600,000 |
| 10. Relocate Alaska Railroad | 3,600 L.F. | 700,000 |
| 11. Extend Runway 1R/19L & Widen | 500 L.F. | 900,000 |
| 12. Construct Taxiway T-5 & Convert T-3 to Gravel Landing Strip | 3,700 L.F. | 1,750,000 |
| 13. Widen & Reconstruct Exit Taxiways | - - | 300,000 |
| 14. Pave & Light Taxiway T-16 | 450 L.F. | 200,000 |

(a) Includes allowance of 20% to cover contingencies, architect/engineering fee and administration.
(b) Governmental transfer costs only $1.00 total value assumed.

| | | |
|---|---|---|
| 15. Construct, Pave & Light Taxiway T-13 | 2,400 L.F. | 1,300,000 |
| 16. Construct, Pave & Light Northwest Apron Taxiway (Stage I) | 2,000 L.F. | 1,000,000 |
| 17. Extend Float Pond | 4,500 ft. x 400 ft. | 4,300,000 |
| 18. Construct Float Plane Ramp | 1 Job | 200,000 |
| 19. Relocate Category II ILS Runway 1L | 1 Job | 2,000,000 |
| 20. Replace Towers on ALSF-1, Runway 19R | 1 Job | 500,000 |
| 21. Install VASI-2, Runways 1R and 19L and REIL, Runway 1R | 1 Job | 300,000 |
| 22. Upgrade Terminal Control Equipment | 1 Job | 80,000 |
| 23. Mark & Light West Helipad | 1 Job | 50,000 |
| 24. Mark & Light East Helipad | 1 Job | 50,000 |
| 25. Upgrade FSS & Other Equipment | 1 Job | 380,000 |
| 26. Expand West Apron | 40,000 S.Y. | 1,400,000 |
| 27. Expand Passenger Terminal Building (Stage I) | 40,000 S.F. | 6,000,000 |
| 28. Rehabilitate Existing Passenger Terminal Building | 30,000 S.F. | 2,500,000 |
| 29. Install Traffic Signalization in Terminal Area | 1 Job | 150,000 |
| 30. Construct Additional Curbside Lane at Passenger Terminal Building | 1,800 L.F. | 600,000 |
| 31. Relocate Airport Way | 3,800 L.F. | 900,000 |
| 32. Construct Front Road "A" | 4,900 L.F. | 700,000 |
| 33. Construct Gravel Service Road "I" | 4,000 L.F. | 100,000 |

| | | |
|---|---|---|
| 34. Relocate & Extend Gravel Service Road "K" | 3,400 L.F. | 100,000 |
| 35. Construct Service Road "E" | 10,500 L.F. | 1,200,000 |
| 36. Construct Gravel Service Road "G" | 1,600 L.F. | 100,000 |
| 37. Construct Gravel Access Road "H" | 2,000 L.F. | 100,000 |
| 38. Expand Public Parking at Passenger Terminal (Stage I) | 300 Spaces | 750,000 |
| 39. Construct General Aviation Apron Auto Parking (Stage I) | 150 Spaces | 100,000 |
| 40. Construct General Aviation Apron (Stage I) | 180 Spaces | 1,300,000 |
| 41. Expand Float Pond to the East | 81 Slips | 3,500,000 |
| 42. Construct East Heliport | 6 Spaces | 300,000 |
| 43. Relocate FBO's Operating +12,500 lb. Aircraft to Northwest Apron | - - | 3,000,000 |
| 44. Construct Two Rescue Boat Houses | 500 S.F. | 40,000 |
| 45. Construct Sand Storage Building | 3,000 S.F. | 150,000 |
| 46. Construct Vehicle Storage Building (Stage I) | 15,000 S.F. | 900,000 |
| 47. Extend & Relocate Hydrants at Passenger Terminal | 1 Job | 200,000 |
| 48. Extend Hydrant System to Air Cargo Apron (Stage I) | 3,500 L.F. | 700,000 |
| 49. Construct Air Cargo Apron (Stage I) | 120,000 S.Y. | 3,600,000 |
| 50. Electrical Service to East Side of Float Pond | 7,600 L.F. | 300,000 |
| 51. Expand Standby Generation | 1 Job | 300,000 |
| 52. Extend West Apron Drainage | 1 Job | 60,000 |

| | | |
|---|---|---|
| 53. Drainage System for South End of Airport | 1 Job | 500,000 |
| 54. Develop Park & Trail System | 1 Job | 200,000 |
| 55. Relocate Security Fencing along Alaska Railroad | 3,600 L.F. | 60,000 |
| 56. Relocate Security Fencing in Old Post Office Area | 1,200 L.F. | 20,000 |
| 57. Relocate Security Fencing along Airport Way & Frontage Road "A" | 8,400 L.F. | 130,000 |
| 58. Landscape Terminal Entrance Road | 1 Job | 200,000 |
| 59. Landscape University Avenue Entrance | 1 Job | 100,000 |
| TOTAL PHASE I: | | $ 57,520,000 |

fairbanks north star borough
p.o. box 1267 520 5th ave. fairbanks alaska 99707 907-452-4761

January 23, 1981

Senator Bettye Fahrenkamp
State of Alaska Legislature
Pouch V
Juneau, Alaska 99811

Dear Senator Fahrenkamp:

At its regular meeting of January 22, 1981, the Fairbanks North Star Borough Assembly unanimously adopted Resolution No. 81-4, A Resolution In Support Of The Draft Fairbanks International Airport Master Plan And Urging Early Appropriation For Capital Facilities Development.

A copy of this resolution is enclosed.

Sincerely,

Gaye J. Patrick
Borough Clerk

CJP:rlf

Enclosure:
as stated

Adopted: 01/22/81

RESOLUTION NO. 81-4

A RESOLUTION IN SUPPORT OF THE DRAFT FAIRBANKS INTERNATIONAL AIRPORT MASTER PLAN AND URGING EARLY APPROPRIATION FOR CAPITAL FACILITIES DEVELOPMENT

WHEREAS, the Fairbanks International Airport is a key element in the economy of the Fairbanks area and of Interior Alaska by serving as a major transportation link between this area and the rest of the world; and

WHEREAS, the State of Alaska has consistently managed the Fairbanks International Airport as a secondary and back-up facility, thereby allocating to it minimal funding for new capital facilities, maintenance, and passenger service development; and

WHEREAS, the Alaska Department of Transportation is now reviewing a draft Fairbanks International Airport Master Plan which proposes a twenty-year, $101 million development plan for the airport; and

WHEREAS, Fairbanks' highly advantageous geographical position equidistant from East Asia, Western Europe, and the East Coast of the United States coupled with the recent development of locally refined jet fuel have resulted in greatly increased demand by international air carriers for stop-overs in Fairbanks:

NOW, THEREFORE, BE IT RESOLVED by the Assembly of the Fairbanks North Star Borough that the Governor of the State of Alaska and appropriate cabinet members are urged to request accelerated funding for the 1981-82 fiscal year of no less than $50 million to begin implementation of Phase I and suitable portions of Phase II of the proposed Master Plan during the present calendar year; and

BE IT FURTHER RESOLVED that the Alaska Department of Transportation, in coordination with appropriate federal, state, and borough agencies, is requested to pursue as part of the implementation of the proposed Master Plan the issues of noise abatement, ice fog and other air pollution, land use and zoning, socio-economic projections, and future airport siting to insure the optimum social as well as economic utilization of the international airport facility.

PASSED AND APPROVED THIS 22ND DAY OF JANUARY, 1981.

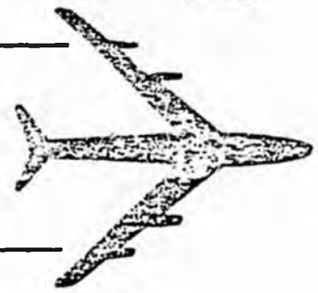
Presiding Officer

ATTEST:

Clerk of the Assembly

FILE

FAIRBANKS INTERNATIONAL AIRPORT
OPERATOR'S COUNCIL
P.O. Box 60009, Fairbanks, Alaska 99706



26 January 1981

Mr. Jerry Rafson
State of Alaska
Department of Transportation
and Public Facilities
600 University Avenue
Fairbanks, Alaska 99701

Dear Mr. Rafson:

At recent meetings of the Fairbanks International Airport Operator's Council the Draft Master Plan for the Airport has been reviewed and discussed. The AOC is in basic concurrence with the draft and hereby commends all concerned for their efforts in producing the document.

We do, however, disagree with some of the conclusions reached or recommended. In addition we are not in total agreement with the time tables proposed.

We take this opportunity to submit our comments for consideration and hopeful incorporation into the basic document.

The following singles out our areas of concern and speaks to each one individually:

Runway Extension

The Airport Operator's Council supports the concept of extending the present main runway. Our concern is that we have been unable to secure assurance that the Category II ILS can be made operational on the extended area. Our recommendation is that the present Category II ILS should not be disturbed and be operated as a displaced threshhold type if this is possible.

When the extension is completed a Category III ILS should be installed and certified. At that time, move the present Category II ILS to the other end of the runway to replace the present Category I equipment.

Under the above conditions we fully support the runway extension as the extension will result in many benefits including better noise abatement, safer operations and decreased operational costs due to shorter ground operation distances.

Cargo Aircraft Ramp

We recommend the present aircraft parking ramp (immediately south of present terminal) be expanded to include all areas bounded by the fence to the west, the terminal on the north, taxiway on the east and the CFR station on the south. The present buildings (weather and waste disposal) should be moved from the area. The expanded area should include all envisioned below ground plumbing, electrical, etc. prior to paving.

The AOC believes any additional cargo aircraft parking space should be developed at the north end. We do not agree with the proposed south end area.

Main Runway

We recommend the runway be resurfaced to accommodate the increased landing weights of aircraft now utilizing the airport. This action should be taken in conjunction with the following item.

Main Taxiway

AOC believes the present taxiway should be widened to 150 feet and resurfaced to accommodate the increased weight of present aircraft. This should be done prior to the main runway resurfacing so the taxiway can be utilized as a substitute runway during the time the main runway is out of service.

We request full consideration be given to assuring the main runway is not closed for extended periods. The work should be planned to accommodate wide body aircraft traffic during certain periods of each day. Narrow body aircraft can use the taxiway with no undue penalty.

Access/Service Roads

We recommend the service road be paved from the edge of the present parking area to the south end of the airport. Unpaved access roads between the service road and the west perimeter of the airport should also be paved. Paving is also necessary around the new hydrant fueling pump and storage buildings.

Hydrant System

Our recommendation is that the hydrant system be expanded to include an adequate number of service pits in the above noted cargo aircraft parking areas at both the south terminal area and the recommended north end of the airport area.

The hydrant system should also be expanded to include both Jet A and Jet B product capability at each hydrant service pit location. Adequate warm storage facilities should be included for required backup refuelers, along with

additional capacity for hydrant trucks. Hydrant operations personnel facilities should also be included in the plan. These facilities should include rest rooms with showers, locker/change room, lunch room and waiting room. An emergency eye wash and emergency shower should also be included.

Passenger Terminal

The AOC favors expansion of the present terminal facilities. We believe the expansion should be to the west (out over the parking area) and to the south west (along the terminal access road). We do not feel the terminal should be expanded to the south along the present building line as that will infringe on the present parking area.

We also believe there is an immediate need to relieve the congestion in the present baggage makeup area behind the ticket counters. The baggage makeup area is totally inadequate and has been for some time.

The AOC would like to see a more detailed plan of terminal expansion along the above guidelines.

An AOC special committee will be supplying the DOT/PF with a more detailed written comment on the terminal improvements deemed required.

East Ramp Area

The AOC has not evaluated the Draft Master Plan in detail as it applies to the east ramp area. We hope to have some east ramp operators supply either verbal testimony at hearings or written comments directly to DOT/PF.

In closing we again wish to convey our appreciation for the efforts of all concerned with the Draft Master Plan. We believe it is a good basic document to build from to assure orderly airport development.

The AOC also wishes to emphasize that we believe it is necessary to implement improvements on a faster basis than proposed.

If further information is desired, the AOC stands ready to help in any way practical.

Sincerely,

Ralph Brumbaugh
Chairman

mjs
cc: AOC Members

fairbanks north star borough
p.o. box 1267 -520 fifth ave.—fairbanks, alaska 99707 - 907 - 452-4761

January 14, 1981

Mr. Heinrich Springer, Director
State of Alaska Department of
Transportation and Public Facilities
Division of Planning and Programming,
Western Region
University Plaza—West, Suite D
600 University Avenue
Fairbanks AK 99701

Dear Mr. Springer:

I am writing to respond to the newly released second draft of the Fairbanks International Airport Master Plan. This letter will serve as the basis for my testimony on January 26 and constitutes the Borough Administration's position on the Master Plan draft and the issue of airport development.

Last summer, I was very concerned by the scope and approach of the first Master Plan draft. On August 18, I wrote expressing my fundamental objections to that Master Plan draft, and subsequently met with Jerry Rafson and Larry Soden in September to discuss the Borough's concerns.

The discussions were intense but productive. I am frankly very pleased by the fundamental philosophical and procedural changes which have been included in the second draft. I would like to express my deep appreciation for your open-mindedness and flexibility in incorporating our recommendations.

Your concept of a $101 million capital development program over the next 20 years for the airport marks a radical--and welcome--re-alignment for state thinking. In implementing this program, I would like to recommend the following twofold approach.

First, I believe it would be highly desirable for the State to request as a lump-sum appropriation this year an amount of no less than $50 million to initiate Phase I and parts of Phase II of the Master Plan concept as the first step in a five-year Airport Capital Facilities

Program. This would allow the Alaska Department of Transportation to develop a coherent and logically implemented program for the construction of these facilities, while also permitting the State to have the capital reserve on hand to meet what the Borough believes are likely to be sudden escalations in demands on airport facilities and services over the next five to ten years.

By having access to the large amount of surplus monies in the International Airport Fund, the Anchorage International Airport has enjoyed a similar advantage of ready funding over the past 10-15 years. This has allowed that airport to respond quickly to new demands in international traffic and develop the necessary support infrastructure in a timely fashion.

Secondly, I would urge that, concurrent with the development and funding of capital projects in Phase I, the State through its Airport Master Plan consultants investigate and assess the feasibility of relocating the main airport terminal facility southeast toward the Tanana River, as well as looking into the possibility of an airport site south of the Tanana River.

In making this recommendation, I would like to stress that this study should proceed concurrently with the development of the necessary infrastructure and facilities under Phase I at the airport's present site. In no way should this request, or this relocation concept, be used to delay implementation of the first part of the present Master Plan concept.

I do not believe that we can talk realistically about tapping the potential of Alaska and Fairbanks as geographic crossroads between the Orient, Western Europe and eastern North America without seriously evaluating the relocation of Fairbanks airport facilities by the year 2000. Such a relocation should be devised to dovetail with existing operations at the present airport site, as well as being coordinated with the growth and centralization of general aviation operations in the Fairbanks area in coming decades.

In the discussions and communications which I have had with Jerry Rafson and Larry Soden, I urged that the completed Master Plan be at all times considered a living document and open to review should new or unanticipated conditions significantly change air transportation requirements. In this respect, I would like to see the appropriate state and federal agencies work with the Borough in either correcting or refining a number of technical deficiencies and questioned areas in the Master Plan draft. In particular, these problems include:

(a) the need for additional environmental assessment of noise, carbon monoxide, ice fog pollution;

(b) the lack of socio-economic projections concerning the scope and impact of the construction of large-scale airport facilities coinciding with the possible overlapping impacts of the ANGTS, the exploration and development of the northern section of the state, and the expansion of the Interior's tourism industry.

(c) insufficient focus on land-use and zoning issues affected by airport expansion.

Technical reviews by my staff have raised these points, and I believe that they will require a significant and ongoing level of technical attention to address adequately.

I do believe, however, that these issues can be resolved satisfactorily within the framework of the Master Plan second draft, and I look forward to a close and fruitful working relationship among you, the Alaska Department of Transportation, and the appropriate offices of the Fairbanks North Star Borough.

As well as continuing my own direct interest in airport development, I have designated the following Borough personnel to serve as liaison with you in their areas of expertise and responsibility:

Ben Harding, Policy Coordinator--Overall Borough approach and direction to airport development issues.

Richard Joy, Environmental Services--Borough environmental concerns, particularly air pollution, ice fog, and noise.

Don Goggin, Planning Director--Land use planning, ground access, and zoning impacts.

Karen Fox, Community Research Director--Socio-economic concerns, particularly employment and economic impact projections for construction and operation.

Sincerely,

JOHN A. CARLSON
Borough Mayor

JAC/sek

# FAIRBANKS CENTRAL LABOR COUNCIL
## A. F. of L. - C. I. O.

FAIRBANKS, ALASKA

January 30, 1981

Hon. Bettye Fahrenkamp
4016 Evergreen
Fairbanks, AK 99701

My Dear Senator:

On Monday, January 26, 1981, the AFL-CIO Crafts Council and the Fairbanks Central Labor Council met jointly and unanimously adopted the following resolution:

> "Resolved that the AFL-CIO Crafts Council and the Fairbanks Central Labor Council unanimously endorse the adoption of the new master plan for the Fairbanks International Airport and specifically request immediate implementation of said plan."

To summarize the discussion, we felt that we are six to ten years behind in development of the airport in Fairbanks, because all the development has been going to Anchorage. In an effort to not be passed by completely, we do not feel that further study is needed and certainly feel that such would only be a delay tactic as is now being threatened by Governor Hammond and Commissioner Ward. We feel that noise pollution will continue to diminish as it has over the past ten years, and air pollution stemming from the airport is basically a nonexistent factor. We want to urge all of our legislators to work as hard as possible for this development.

If you have any questions, please feel free to call me or any labor business agent in Fairbanks.

Sincerely,

ARTHUR L. ROBSON
Secretary
ALR:LAL



FEB 19 1981

# Greater Fairbanks CHAMBER OF COMMERCE


Member
U.S. Chamber of Commerce
Alaska State Chamber of Commerce

In Association With
Fairbanks Visitor & Convention Bureau
Fairbanks Industrial Development Corporation

907 452 1105 550 First Avenue
FAIRBANKS
ALASKA 99701


February 12, 1981

Senator Bettye Fahrenkamp
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Bettye:

The Aviation Committee of the Fairbanks Chamber has studied at great length the Fairbanks International Airport Master Plan. The attached is a copy of the testimony presented at the Master Plan Hearing held at the Noel Wien Library on January 26, 1981.

In addtion to the testimony, we would like to point to several other concerns and reasons that development should begin in 1981.

1. The need to create additional employment through construction projects during this period of high unemployment.
2. The available labor force and the lack of other work in the immediate area.
3. Bidding will be much more competitive for this work if done now than if we were to wait a year or two when we anticipate the gas pipeline will start up.
4. We would like to suggest that the design work be done on a contractual basis rather than by DOT to expedite that particular phase.

In the Chamber's Program of Work for 1981 we have placed as top priority items the expansion of the Fairbanks International Airport and the development of a first class hotel. The hotel is the first step in providing addtional infrastructure to serve expanded airport facilities.

Sincerely,

Ron Davis
President

Enlosure
RAD/sh

The GOLDEN HEART City 49th

THE NEW GREATER FAIRBANKS CHAMBER OF COMMERCE
1981 Fairbanks International Airport Position on
The Airport Master Plan

The Fairbanks International Airport has grown with the added activities of international carriers and the domestic development of the oil and gas exploration on the North Slope, for which the airport is used as a major staging area.

In 1979 the Legislature passed an appropriation of $8.5 million to further develop the airport at a time when international carriers were just starting to come to Fairbanks. Of that, approximately $2.1 million remains uncommitted. Before the Legislature now is Senate Bill 34 for $57 million which covers Phase I of the Master Plan. Additionally, Senate Bill 37 has been filed, converting the $8.5 million 1979 revenue bond bill that passed to general funding.

The Master Plan as presented is broken out into three phases: Phase I covering the period 1980 through 1985; Phase II, 1986 through 1990; and Phase III, 1991-2000. These three phases cover $101,710,000 if they are to be followed using 1980 dollars. The Chamber has tried to take an objective point of view on the Master Plan and supports the Master Plan as presented in its entirety as being a fine document to allow this community, DOT, and those involved with transportation and tourism, economic development. However, we must take grave issue with the time frame associated with the three phases; therefore, the Chamber has broken out Phase I into three basic areas: Paving, Terminal, and Land.

Paving: Paving is an item that can be initiated during the 1981 construction season. Some of the items included in the 59 items of Phase I are expansion of the present south ramp apron to accommodate the increased wide body aircraft, paving of the service road in front of the fire station, paving of the main taxiway (T-1) and widening thereof and associated drainage work, filling, and road work around the airport.

The extension of the main runway by 1400 feet and the retention of the Category II or newer Category IIIC landing system should be commenced not later than the spring of 1982 with adequate planning and the previously resurfaced taxiway T-1 and widening thereof. This item is crucial for the continuation of activities and expansion thereof as presently Boeing 747/F-200 aircraft are taking weight penalties from 5000 to 40,000 pounds due to the runway length. Additionally, this will allow these large aircraft and newer generation aircraft to depart to the south over the Tanana Flats with much less noise impact upon the community.

Terminal Expansion/Renovation: Expansion of the south end of the terminal building to accommodate two wide body aircraft simultaneously, including passenger loading bridges, renovation of the main terminal building to be consistent with the expansion, and a permanent mini master plan of the terminal building from this point through the year 2000, including such items as an additional jetway for the present international holding area, automatic doors at curbside, conference room, nursery room, additional concession areas, renovation of the utilities system to allow an updated, energy-efficient heating and air conditioning system, and an expansion of the domestic ticket counter area to eliminate congestion.

Land: To allow for the orderly acquisition of land as depicted in the Master Plan, and specifically those areas under federal and state government controls where the acquisition would be a matter of land transfer to the airport reserve.

We feel that if DOTPF was given the preliminary go-ahead for preconstruction design and architectural work with the carriers and community in a positive manner, we could see implementation of the various activities outlined in the Master Plan as a positive step forward for growth in the community and future economic development of the Tanana Valley.

The above testimony was submitted to the final Master Plan hearing on the Fairbanks International Airport in the Noel Wien Memorial Library on January 26, 1981.

Respectfully,

Tom Owen, Vice Chairman
Board of Directors
Fairbanks Chamber of Commerce

Don O'Connor, Chairman
Air Commerce Committee
Fairbanks Chamber of Commerce

See page 2 #6

Alaska
STATE CHAMBER of COMMERCE
310 Second Street
Juneau, Alaska 99801
Phone 586-2323

January 5, 1981

1981 LEGISLATIVE GOALS OF THE ALASKA STATE CHAMBER OF COMMERCE

STATE SPENDING LIMIT, TAX RELIEF, BONDING

1. Limit state spending as proposed in the Alaska State Chamber of Commerce's current initiative by establishing Fiscal Year 1981 as the base year and tieing future expenditures to population and per capita income.

2. Exempt the first $250,000 in taxable corporate profits for all Alaskan corporations.

3. Eliminate future bonding and support capital improvements from the general fund as long as revenues are available. Require all projects over one million dollars to have voter approval so as to create public awareness.

4. Increase state revenue sharing to municipalities to cut or end property taxes.

5. Conduct comprehensive review of all oil and gas taxes, including a study of the windfall tax exemption for oil and gas companies.

ECONOMIC DEVELOPMENT GOALS

1. Establish a permanent power fund for statewide power projects.

2. Appropriate funds for electrical grid interties to stabalize power supplies statewide.

3. Support state encouragement for petrochemical industry development in Alaska.

4. Implement long term sales of state royalty oil and gas at prevailing rates to supply in-state refineries at maximum capacity.

5. Support full public use of the state highway from the Yukon River to Dietrich Pass (commonly called the "haul road") effective June 1, 1981. Support immediate action to provide adequate funding to bring this highway up to secondary road standards and properly maintained for the full length of the highway. Paving of this entire highway as soon as possible is in the best public interest.

(continued)

6. Recommends that integrated policy boards be established to administer the International Airport Revenue Fund composed of a majority of private business interests with the authority and responsibility to provide technical and policy direction in the development, planning, and operation of the airports to the Department of Transportation and Public Facilities. Further, that a comprehensive capital improvements program be established and funded through the general fund to support the facilities necessary for current demands as well as latent potential.

7. Endorse accelerated coal development in Alaska.

8. Propose the Department of Natural Resources rewrite state regulations to encourage timber, petroleum and mining development.

9. Request a rewrite of the U. S. Interior Department regulations to allow tourism, mineral, and oil exploration on national monuments.

10. Urge the state take a firm stand to encourage all possible domestic manufacture of forest products from public lands. Exceptions to primary manufacture should only be made when it can be clearly shown through the hearing process there are no possible domestic markets.

## LABOR LEGISLATION

Encouraged by the preliminary work of the legislature's Workers' Compensation Study Commission, we support their efforts to improve the administration of the system and make the compensation program more competitive.

The Chamber further believes that their recommendations must also encourage realistic benefit revisions necessary to restore the incentive for injured workers to return to productive employment and to remove the excesses in employers workers' compensation costs.

## GENERAL LEGISLATION

1. Institute a national campaign to improve Alaska's image and boost Alaska tourism.

2. Develop without delay a ten year capital improvement plan

3. Increase vocational training at the University of Alaska.

4. Abolish the Alaska Public Offices Commission.

5. Encourage state government to assist and support private enterprise in meeting the needs of the public. We further encourage state government to provide direct services only when it has been proven that private enterprise cannot fill the needs of the public.

6. Recommend the Alaska Renewable Resources Corporation be limited to equity or venture capital investment and grants, not loans in connection with equity capital investments. Allow not just renewable, but also non-renewable equity participation. The investment agreement should be more specific in the buy-out option (Example - Salamontof Seafood problem). ARRC should develop a banker-borrower relationship, not be both.

FEB 16 1981

North Pole Refining P.O. Box 5028, North Pole, Alaska 99705

DIVISION OF EARTH RESOURCES COMPANY OF ALASKA

907/488-2741
907/488-2742

10 February 1981

Senator Bettye Fahrenkamp
State Capitol
Pouch V
Juneau, Alaska 99811

Dear ~~Senator Fahrenkamp~~ Bettye:

Attached are two separate written testimonies submitted to the State regarding the draft Master Plan for Fairbanks International Airport. These testimonies were prepared one by myself and the other by Mr. James Healey, who is the Senior Economic Analyst here at North Pole Refining, and these comments reflect the position of North Pole Refining.

If you have any questions at all regarding information which we might supply, please contact us at any time.

Regards

Chuck

Attachment

Charles G. McConnell
Vice President General Manager

COMMENTS REGARDING FAIRBANKS INTERNATIONAL AIRPORT

DRAFT MASTER PLAN

FEBRUARY 9, 1981

My name is James F. Healey and I live at 1/2 Mile Newby Road, North Pole, Alaska. I am Senior Planning Analyst for NORTH POLE REFINING and would like to comment on two parts of the facilities development outlined in the Draft Master Plan - facilities for the handling of International wide-body aircraft and passengers, and runway conditions sufficient to handle wide-body aircraft maximum take-off payloads.

Facilities for handling international wide-body aircraft and passengers:

At the present time, passenger traffic at FAI is solely of a domestic nature. To date, no international passenger traffic of a non-diversionary nature has utilized FAI. This fact need not be the case, and strong air carrier oriented economic arguments suggest that international passenger traffic through FAI is inevitable.

Several factors have thus far prevented the initiation of such service. These are summarized as follows: (1) Prior to January 1979, non-availability of a competitively priced fuel; (2) prior to the present, the lack of any facilities to accommodate the international passenger flight stop-over; and (3) the current inadequate facilities (not all airport related) to accommodate large scale international passenger traffic.

It is evident that both the issue of competitively priced fuel and the completion of some passenger facilities have been addressed and have, or are nearing, an initial resolution.

The need to address the ability of FAI to handle large scale (that is, more than one flight at a time) international passenger traffic follows from the international air carriers considerations concerning a shift of operations from Anchorage to Fairbanks. First, most international carriers transiting Anchorage cannot accommodate two distinct operations - its either Anchorage or Fairbanks. This is a function of carrier size, frequency of service, fixed base costs and the operational advantages of each location. Second, the cost of a carriers operation is significantly reduced with the sharing of many facilities and services with other carriers. This applies to refueling, food catering, ground handling, community infrastructure, and a wide variety of other considerations. Third, in the event of a non scheduled layover, access to the flights of competing carriers is an essential ingredient to maintaining market share in the highly competitive passenger arena. The inadequacy of Fairbanks' intrastructure to accommodate a wide-body unscheduled overnighter during the height of the tourist season is considerably alleviated when flight continuation on another carrier's flight is possible.

These issues acting to constrain the entrance of international passenger traffic through Fairbanks must be weighed against the rather substantial economic incentives for a carrier to shift operations from Anchorage. Fuel in Fairbanks is and will be competitive with Anchorage. Given simularly priced fuel, the direct operating cost advantages of a shift to Fairbanks to a carrier operating a polar route (Europe to Far East) currently amounts to over $1,500 per flight. This is equal to almost $1 million annually to a carrier operating as few as five round-trips weekly.

Further acting to encourage polar routing via Fairbanks is the expected increase in world jet fuel prices - a real

growth of at least eight percent annually based on crude cost increase projections by the OPEC Pricing Committee. This increases the benefit of transiting Fairbanks an additional 50 percent every five years, in 1981 dollars. Nominal fuel cost increases have averaged over 25% annually for the past several years, doubling the nominal savings in three years. It is obvious from the discussion above that strong incentives act to encourage international carriers to shift polar passenger traffic to Fairbanks. Currently, almost all polar cargo flights are routed through Fairbanks. 1/

The polar passenger shift will occur. NORTH POLE REFINING has had on-going discussions with the home offices of several international carriers for the past few months. These discussions have repeatedly addressed both the economic advantage of polar passenger flights through Fairbanks and the need to construct facilities to accommodate these flights. The facilities must be in place prior to the initiation of flights. In at least one case, passenger traffic will commence during the summer of 1981.

---

1/ The polar cargo flights remaining in Anchorage are those of European carriers who cannot economically justify a shift to Fairbanks for one or two weekly cargo flights while maintaining passenger flights in Anchorage. JAL also continues a NY-Far East cargo flight in Anchorage because it picks up/delivers freight to Anchorage.

Runway conditions sufficient to handle wide-body aircraft maximum take off payloads.

The length of runway 1L/19R, currently 10,300 linear feet, is sufficient to accommodate wide-body (mainly Boeing 747) maximum take-off payloads during most days of the year. However, during a significant portion of the time, due mainly to icy conditions and summer time temperatures, payloads must be reduced by as much as 40,000 pounds. Payload reductions are an economic dis-incentive to an air carrier for continued or expanded operations from Fairbanks. This is especially true for cargo flights when either freight and/or fuel load factors are high. This is the case on the polar cargo route, which has shown remarkable growth (23% in 1979 and 12% in 1980: Source IATA) and extremely high load factors (the highest of any international route).

The need exists for a runway extension sufficient to handle maximum payloads during adverse conditions if Fairbanks is to retain polar cargo flights. Lufthansa personnel have cited runway conditions as the primary reason for not shifting its cargo and passenger/cargo combination flights to Fairbanks.

Summary

The need for Fairbanks International Airport to become the major transit point for polar traffic increases daily. Economic factors and competitive pressures are acting upon carriers to optimize aircraft utilization and routing. Fairbanks is geographically positioned to benefit from this opportunity, but in order to do so, facilities development

must occur. The need for this development is not a function of historical trends, but of the economics of today, economics that will increasingly tilt the optimization of polar flight routing to Fairbanks. Alaska should, indeed, ensure that facilities are in place to provide the most efficient service possible to one of its very important world-wide and large scale revenue sources and job producing industries - the international stopover business.

We urge you to incorporate these factors into the initial phase of the Draft Master Plan, to ensure that both FAI and Fairbanks do not lose this opportunity for economic expansion.

JFH/gw

CC: All members of the Interior delegation

STATE OF ALASKA

PUBLIC HEARING ON

FAIRBANKS INTERNATIONAL AIRPORT MASTER PLAN

January 26th, 1981

My name is Charles G. McConnell. I am Vice President and General Manager of North Pole Refining, North Pole Alaska. My address is 7.7 Mile Chena Ridge Road, Fairbanks, Alaska.

The purpose of my comments at this public hearing regarding the State's Master Plan for Fairbanks International Airport development is to ensure that some of the questions that have recently been raised in the public regarding future international air traffic are answered, or at least spoken to.

One recurring question has been "If the Fairbanks International Airport is developed to be able to handle international passenger flights, will the international air carriers come to Fairbanks and will they stay in Fairbanks?" The best information and analysis now at hand indicates that the answer to both of these questions is "Yes".

There are several key elements which bear heavily on the choice of an international air carrier as to which airport, Fairbanks or Anchorage, is an acceptable location for refueling stops. The air carrier has to know that a reliable source of fuel is available at the airport's location, he has to know that this fuel is priced competitively with the fuel at the other airport; the international carrier also will look at the overall cost of operation for using either one or the other of these airports for his refueling stop, and finally, he will have to know whether the facilities are in place at the airport to accommodate his company's needs.

In the past two years several of these questions have been answered. First of all, the fuel availability from the North Pole refinery has been proven to be reliable and is adequate to meet the needs of the international air carriers for their polar and great circle route passenger flights. The price of that fuel has been, and in all likelihood will continue to be, competitive with the other refineries' jet fuel prices within the State. Regarding operating costs for the polar flights, that is the flights originating in Europe and destined to Asia or vice versa, a significant net operating cost savings results in using the Fairbanks International Airport. And finally, the question regarding facilities is one which is left, at this time, unanswered. Current international passenger facilities at the airport are adequate for only a small percentage of those flights which now utilize Alaska for a refueling stopover.

Why should the State of Alaska be concerned with having adequate facilities at Fairbanks to meet the needs of the international air carriers in the future? The answer to this question is complex but some of the elements can be described in a very simple economic sense. One of the answers to this question can be easily seen in the number of jobs which are generated by the international passenger and cargo flights which stop in Alaska. The jobs are in two forms. Direct jobs with the air lines and indirect jobs with the services that are required to support these international flights. Further, there is a great deal of revenue generated by the landing fees, fuel flowage fees, taxes and so forth that are attendant to these landings. There is also a certain amount of existent and potential tourism spin off associated with the passenger flights. Tourism is one of Alaska's greatest industries and one of Alaska's cleanest industries and with international polar passenger traffic predicted to increase at 10% per year for the next few years, this is also a growth industry.

The Airport Master Plan calls for a broad range of improvements and development at Fairbanks International Airport encompassing domestic passenger, general aviation and international air traffic. On balance, the spending indicated in the Master Plan is well divided between these three general areas and will provide benefits to all. My comments have been directed at the international portion because that is the area of the Master Plan about which I am most familiar. However, as a citizen I am firmly convinced that the domestic passenger and general aviation improvements are also well thought out and sorely needed.

I wish to indicate, in closing, my complete support for the Master Plan project proposals and to encourage the State to accelerate the time frame, particularly of Phase 1 spending, to ensure that these services, most of which have been needed for some years now, are implemented to take maximum advantage and give the greatest benefit.

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

SB

37

Alaska State Legislature

SENATOR BETTYE FAHRENKAMP
CHAIRMAN, RESOURCES COMMITTEE

4016 EVERGREEN
FAIRBANKS ALASKA 99701

907-479-3550

Senate

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA 99811
OFFICE 907-465-3763
RESOURCES COMMITTEE
907-465-3834
HOME 907-789-9182

M E M O R A N D U M

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Senator Bettye Fahrenkamp Bettye

RE: SB 37

DATE: March 5, 1981

In 1979, SB 202 and 203 were passed by the legislature. They authorized the sale of additional international airport revenue bonds in the amount of $8.5 million and construction of improvements at the Fairbanks International Airport. This legislation was needed because sufficient funds for required improvements at the airport were not available through the International Airport Revenue Fund (IARF).

Since then, two things have occurred.

1) Due to design and construction time constraints, the total monies appropriated were not spent in one or two years. At the same time, the bond market was not favorable for the sale of bonds. Monies for the airport improvements were borrowed from other sources within DOT.

2) The IARF balance has grown. Funds are now available in the IARF to cover the full $3.5 million appropriation.

Because no bonds have been sold from the additional bond sale authorized in SB 203 and because funds are available in IARF, SB 37 was submitted to allow a direct appropriation from the IARF to cover the cost of capital construction which has and will occur at Fairbanks International Airport.

It was recently brought to our attention by DOT/PF that SB 37 alone was not sufficient to complete the process. They will have the additional bill required drafted and brought to the committee as part of their testimony.

SB

40

# MEMORANDUM State of Alaska

TO: R. D. Shumway, P.E.
Deputy Commissioner
Design & Construction
DOT/PF

DATE: January 15, 1981

FILE NO: 242-2519

TELEPHONE NO: 364-2121 Ext. 111

FROM: Charles S. Matlock
Director, Highway
Design & Construction
DOT/PF

SUBJECT: Senate Bill No. 40
Local Service Roads and
Trails Act Revision

Senate Bill No. 40 coincides with the Attorney General's opinion 11/25/80 and agreed to by DOT/PF 11/28/80. (Copies attached.)

Please note minor changes in the wording which do not change the meaning.

Section 4 added. We concur.

Attachment



# MEMORANDUM

# State of Alaska

RECEIVED
HIGHWAY DESIGN & CONSTRUCTION
DIRECTOR'S OFFICE

TO: Jack McGee
Assistant Attorney General
Transportation Section
Department of Law

DATE: November 28, 1980

FILE NO: 200H-2519

TELEPHONE NO:

FROM: Jonathan W. Scribner 11/28/80
Assistant Deputy Commissioner
Design & Construction
Department of Transportation
and Public Facilities

SUBJECT: LSR&T
Legislation

The draft Local Service Roads & Trails Legislation you sent to us for review on November 25, adequately addresses our needs.

Thank you for a job well done.

cc: R. D. Shumway
Dennis Dooley, w/cc of McGee's memo & draft
Charles S. Matlock, w/cc of McGee's memo & draft

JWS/sh

# MEMORANDUM State of Alaska

TO: Jon Scribner 11/26/80
Deputy Commissioner
DOT/PF

DATE: November 25, 1980

FILE NO: J77-041-81

TELEPHONE NO: 465-3603

FROM: Jack McGee, Supervising Attorney
Assistant Attorney General
Transportation Section
Department of Law - Juneau

SUBJECT: Local Service Roads & Trails Legislation

Attached is a draft of the local service roads and trails legislation requested by DOT/PF. DOT/PF originally suggested five separate changes. The relationship between these suggested changes and the draft bill is as follows:

a) DOT/PF's suggested section (1) is incorporated into section (1) of the draft bill;

b) DOT/PF's suggested sections (2) and (3) are incorporated into section (2) of the draft bill; and

c) DOT/PF's suggested section (4) is incorporated into section (3) of the draft bill.




There are some difficulties with DOT/PF's suggested section (5). The suggested section (5) would repeal AS 19.30.221(c). However, AS 19.30.221(c) merely states that the five year spending limitation set out in AS 19.30.221(b) is applicable to AS 19.30.151(b) funds, i.e., local service roads and trails funds transferred to a local government. (AS 19.30.221(b) puts a five year spending limitation on funds allocated for local service roads and trails.) Were AS 19.30.22.(c) to be repealed, it would be unclear whether the five-year period applies only to allocated local service roads and trails funds and not to these funds after they have been transferred to a local government. Accordingly, it would not seem to be advisable to repeal AS 19.30.221(c).

A brief explanation of each of the three sections of the draft bill is as follows:

Section 1: This amendment requires local governments with road powers as well as those without road powers to use their own funds to pay for the acquisition of rights of way for local service roads and trails.

Prior to this amendment, only local governments with road powers were required to pay for rights of way out of their own funds. Right of way costs for local governments without road powers were to be charged to the local road project allocation.

Section 2: This statutory change requires local governments without road powers to enter into an agreement with DOT/PF for the construction of a specific local road project.

Prior to the change, it was unclear whether local governments without road powers could perform the project work themselves, or whether they were required to have DOT/PF do the work.

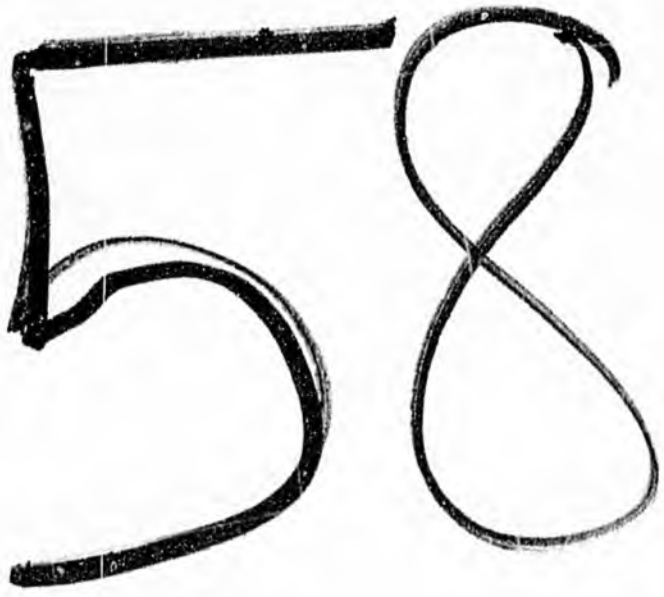
Section 3: This amendment permits a local government to request DOT/PF to discontinue maintenance of a project that was maintained by DOT/PF as of January 1, 1980.

Prior to this amendment, it was unclear whether a local government could take over maintenance of a road that was maintained by DOT/PF as of January 1, 1980.

If you have any questions or comments concerning this bill, please contact me. I would like to have the final draft form of the bill in Art Peterson's office by December 1.

JM/bt
Attachment


SB


58

COPY DANKWORTH

# H & H Trucking Company

P. O. BOX 10-777 · ANCHORAGE, ALASKA 99511 · PHONE 344-0993

February 7, 1981

Senator Bill Ray
Senate Transportation Commission
Pouch V
Juneau, Alaska 99811

Dear Senator Ray:

I would like to take this opportunity to thank you and the other members of the committee for your genuine interest of the problems facing transportation of sand and gravel in the State of Alaska. As I testified before your committee, the double standards that we must satisfy are impossible to comply with because of the strict enforcement of the Department of Transportations' unit weight policies and the State Troopers' axle weight policies. It is not that the sand and gravel truckers are trying to circumvent the law, it is just an impossibility to serve two masters with total loyalty to both.

It was exceedingly gratifying to encounter a branch of government that is genuinely interested in the problems facing its constituents.

Thank you again for my opportunity to testify. I stand ready to do anything that would help correct this problem.

Sincerely,

H & H TRUCKING

John R. Dean
Vice President

JRD/era

cc: Jean Kline
Alaska Chapter - AGC

SB 58

M-B CONTRACTING CO., INC.
7101 Debarr Rd., Anchorage, Alaska 99504 • Ph. (907) 333-5527 • Telex 26-528

January 28, 1981

Senate Transportation Committee
Juneau, Alaska

Gentlemen:

We are not satisfied with the issuance of "Overweight and Overlegnth Permits" as presently being done by the Department of Public Safety, Alaska State Troopers; nor are we satisfied with the operation of the scales by the State Troopers.

1. There seems to be different criteria used at different Permit issuing offices at different locations throught the State.

2. Some of the personnel (State Troopers) operating the scales and issuing citations were not completely familar with the Regulations and in most instances refused to check with his supervisor as to the correct interpretation.

We believe this operation could better be performed by the Department of Transportation.

Very truly yours,

M-B Contracting Co., Inc.

H. A. Leader

Harold A. Leader

WORLD EQUIPMENT

P.O. BOX 4-GG
ANCHORAGE, ALASKA 99509
PHONE (907) XXXXXXX 272-9558

January 26, 1981

Associated General Contractors
134 Frankin
Juneau, Alaska 99801

Attention: Jeanie Kline

Dear M's Kline:

First let me say we have owned and operated trucks since 1968 and have been involved in trucking industry since 1966 in Anchorage. Operating one to twenty-five trucks, primary earthmoving but have also hauled freight.

Due to the harassment of the Alaska State Troopers we have consider just quitting. The cost of equipment and men being detained unnessarily is a factor that cann't be figured in hauling cost and beable to obtain work. And the cost is an unwarranted cost, the majority of our work in some manner is paid for by the State and most of our work is performed on State Highway and Road projects.

Attached is copies of permit and ticket issued last week. We were moving our D-6 Cat. from Eagle River to Anchorage. We purchased a wide load permit as a D-6 is a legal weight load; when reaching the scales the cat was not moved forward enough to place the weight properly on the axles. The back axle is legal for 42,000 lbs. When weighted, the back axle actually weighted 46,060 lbs. There was no scales to check the placement of the cat before reaching the scales. The wide-load permit was taken from the driver. A ticket was issued for 4,080 lbs. @.05 per lb. $204.00. Another permit had to be obtained for overwidth and if we did not want to unchain and re locate the cat 8" forward approximately, we could get any overload permit, which we did and took permit to the Glenn Highway, Mile 11 scales. Time involved was over two hours.

Due to not knowing exactly the weight distribution of the D-6 on the lowboy, the cost of a driver, permits, someone to deliver is $354.00, not counting time for equipment just sitting that rents for $95.00 per hour. The total cost for moving the D-6 should have been about $210.00, labor, permits and equipment rental. Instead we have costs of over $550.00.

Troopers maintain we should know weights and distribution on lowboy of each piece of equipment. ATC, also maintains the same. They are not considering the amount of fuel in equipment, dirt and mud on frame, dirt that builts up in the belly pans, all change the weight over the 2%, if they are in a good mood and allow the 2%. A truck can be cleaned and have a tare weight of 3,000 lbs. less than before cleaned. How much experience has anyone in Troopers and ATC had with moving heavy equipment and trucking?

In 1977, I had a trooper come to our office and compliment me on our trucking operation. Good equipment, legal loads, courteous drivers. He also commented that if all truckers and trucking companies followed our example, enforcement would not be needed. Our policys and most of the drivers are the same, only we have six trucks now and had twenty then and we have more lost time due to troopers now.

The fall of 1978 we had to sell all our trucks in order to survive. We had a contract with Rogers and Babler to haul gravel from Eklutna to their plant on Tudor Road, in Anchorage. Which meant going through the Glenn Highway, Mile 11, scales with over ten trucks approximately seven times a day. We didn't anticipate any problems. The first day we were written over $4,000.00 in tickets. Rogers and Babler did not have scales at the Eklutna pit, we were weighting the trucks and material at the plant. Rogers and Babler needed the material for crushing very badly so we kept trying to haul but hauling less per load to get the axle weight. By noon the second day all work had to stop. The time at the scales inspecting and weighting just could not be absorbed and it wasn't getting better. Some trucks being inspected two and three times in one day. Just different troopers that were on duty, they had two and sometimes three in the scales. We stopped hauling, I called the troopers office and tried to make an appointment with the supervisor, he wasn't available to talk via of phone or have a meeting. I went to the troopers office and met with a sargent. It was arranged to have trucks all inspected at our yard so not to have drivers sitting two hours waiting and mechanics being sent to the scales. The inspection never took place after three days the sargent called and said they could not inspect in our yard because then they would have to inspect everyones like that if requested using Sea-Land and freight companies as an example.

Rogers and Babler put in scales at the gravel pit in Eklutna, they were platform scales but we did have gross weight and would split weight them to try and get axle weight correct. This took additional time and at a commerical scales they will not take the time to do this.

We suffered serious losses in labor cost and non-production. A truck would be held up with driver two hours, we would

not be notified till the time had been lost. We had company radio's installed to try and help. Trucks would be held at the scales till repaired, a mechanic sent 24 miles one way, we were located in Sand Lake. Reflector and clearence lights to be replaced during the day time and had happened that day. We inspected every night, lights, tires and etc. The summer was a night mare and we had good equipment, and a good reputation for having our equipment in extra good working order. We were lucky a buyer from Washington and Oregon come in and bought all our trucks savings us from bankruptsy.

The work season of 1979, we bought and operated four trucks. We hauled mostly in the Sand Lake area, we did haul on the Rabbit Creek project for Stephan and Sons and our trucks had very little trouble. There was occasions when trucks would be stopped more than one time just to pull them over, look at weight ticket and check truck over. On one occassion a truck was stopped three times with a load from Glenn Highway, Mile 11 to Rabbit Creek. The truck was not cited any of the three times.

The 1980 season we have hauled and had to cross scales only on one job in October and again a nightmare. The gross weight legal, axle weight off, and no way to check at the scales before going to State scales. We were hauling approximately 25 ton and should have been hauling 29 ton if had been able to check axle weight at the loading area. The operators at the pit become upset when they are loading the same truck two and three times to try and get the load so the driver is not afraid to go to State Scales. We were hauling from a commerical pit and do not have control of the loading.

The cost to anyone needing gravel or anything hauled that entails a truck going through the scales is going to pay extra money and I think any gravel supplies from Eagle River and that area hauling into town is going to find that no one even wants to haul if anything else he can do. I found last fall couldn't get trucks to haul due to the scales and just harassment they had to contend with.

We have a lowboy and haul our heavy equipment. I have many calls asking us to do their hauling as unable to get equipment moved at a reasonable price and due to scales, the added cost, the price is so high when they are quoted they just cann't afford to pay twice what it should cost.

Again, moving our D-6 last week my husband was stopped. driving the truck our son usually drives. The truck was pulled over by Officer Dial, he looked surprised when he saw who was driving. There was no reason to be stopped, like moving violation, he wanted to see the permit, then stated the flagging was wrong and had to be shown on the permit that

the flagging was correct, the blade was measured and equipment inspected. A pilot car and lowboy were stopped ahalf hour to move the equipment one mile. The truck was stopped on a icy narrow side street with a wide load which in my judgement was unsafe and if equipment had been stalled in such a manner would have been very concerned for the safety of others. I feel the truck was stopped just for a personal vindetta, a number of citations have been issued to our son and he has obtained an attorney which Officer Dial has made remarks about to other truckers.

I have drivers tell me while they were stopped the officer discussing what he is going to do to such and such next time. What kind of enforcement of the law is that? Officers threating what they are going to do and a guy just driving a truck for wages and afraid he will lose his license.

After three years and the problem seems to have turned into a monster. While hauling for another trucker on the Elmendorf Access project a truck was weighted by the State at the pit at approximately 95,000 and legal. State scales weight him at 125,000+, he showd the weight ticket he had and it was fortunate the owner of trucking firm that we were hauling for was there and had to sweet talk trooper into weighting the truck again, they ure wouldn't have done it for him the driver stated as he had told them something had to be wrong. Next time over the scale with the same load he weighted 112,000 by 3rd or 4th time weight at scales reflected approximately the same weight as the state project scales. The time lost was approximately two hours. After the incident the scales were closed and troopers left. I have personal knowledge of two other cases the same thing has happened and in one case the trucker was cited and went to court.

While hauling on International Airport Road project a trooper followed a truck onto the project and at the dump site stopped him for an inspection, the finding was he couldn't move the truck, the brake shoes had to be replaced they were wore out. The driver radioed and the shop, advised him the brake shoes were new just replaced. The trooper let him go back to work.

The Dept. of Transportation and Highways will not buy gravel with axle weight. A scales most be platform and all axles on the scales at one time. Yet they can ticket a truck overwight at .05¢ per lb. from axle scales. The variance in pit scales and trooper axle scales also will reflect less weight as well as overweight we have found.

I have not been able to obtain from troopers a book or whatever that they come up with some of their regulations from. ATC gave me a book saying we have adopted part of these regulations. The book is a ICC book. One item in question is to check air for braking power. The engine is shut off and brakes applied. The air pressure can't drop over so much per minute or the truck is unsafe. The pounds per minute and etc. changes with the trooper.

Our son is the one on the road and if drivers stopped and a real problem, he intercedes, he is very knowledgeable of weights, equipment mechanics and the workings of a truck. He has stated that for his own benefit he is going to carry a small tape recorder to document threats and that regulations change with the troopers.

The personnel that is being used for enforcement I feel has allot to do with the problems. It's a out to get you thing and somewhere this has to be started and I hope now Stopped.

After reciting the figures you quoted this morning on the telephone that enforcement will double as dollars are going to double my husband stated if this is going to be the case we are going to take another avenue for our business.

We have a small family business and the employees we have are Alaska residents that have lived here a number of years. The pressure of everyday business is hard and we have felt the pressure from the trooper enforcement harder than anyother problem we have had, and I feel a unnessary burden on the business, drivers and cost for state projects. and private development.

Sincerely,

WORLD EQUIPMENT, INC.

Charlotte Emerson

Charlotte Emerson
Sec/Tres.

Rev. 8/79

# STATE OF ALASKA
## APPLICATION & PERMIT
## TO TRANSPORT OVERSIZE OR OVERWEIGHT VEHICLES OVER THE ALASKA HIGHWAY SYSTEM AND OTHER DESIGNATED HIGHWAY

**For Permit Office Use Only**
Permit Office MACK
Date Rec'd. 1/13/81
Fee Amount 20.00
Cash ____ Check ____ Charge ✓
Cert. Weight Ticket Attached Yes ☐ No ☐
Alaska Business License No. ____

Name of Owner/lessee World Equipment, Inc.
Address P.O. Box 4-66 Anchorage, Alaska 99509
Lisc. No.: Truck 97HBAT Trailer 36734TN Vehicle Type 4-53 ATC No. B312
Make & Model: Truck Kenworth Trailer Loadking
Load Dozer w/ Blade Make & Model D-5D Cat

Dates of Move Jan 13
Time of Move daylight hrs only except per stamp
Exact Origin Soaks - Glenn Highway Exact Destination Job Sites
Via Highways Glenn Highway, Muldoon, Tudor, Lake Otis, Dewling

## VEHICLE WEIGHTS

NO MOVEMENT IF VISION IS OBSCURED BY INCLEMENT WEATHER. ORIGINAL PERMIT MUST BE CARRIED IN ABOVE VEHICLE DURING MOVE.

OVERALL WHEEL BASE EQUALS ____ FEET. from 7 to 9 A.M. & 4:30 to 6 P.M. in Anchorage Area Between Potter & Hillside Overpass; Eagle River Between Eagle River Rd. & Mile 12 East, 5 Miles East to North Pole Between Richardson Hwy. & Badger Rd. Daylight Only on Saturdays, Sundays or Holidays unless otherwise specifically stated.

| | Axle 1 | Axle 2 | Axle 3 | Axle 4 | Axle 5 |
|---|---|---|---|---|---|
| ('X' in axles by groups) | X | XX | XXX | XXXX | XXXX |
| Actual Weights | 12,000 | 42,000 | 42,000 | | |
| Tire Width (in.) | 10 | 10 | 10 | | |
| Tire Loading (No./in.) | 500 | 350 | 391 | | |

Actual Combined Vehicle Weight 99,000 Legal Combined Vehicle Weight 94,800
(Circle all values that are overweight)

## VEHICLE SIZE

Overall Height: Legal Overall Width: 12' Overall Length: 75'
Overhangs: Front ____ Rear ____ Semi Trlr. Length: 56'
Over Height ____ Over Width 41 Over Length 40'

## CONDITIONS
(For Office Use Only)

Long/wide Load Sign: ☒ Front ☒ Rear ☐ Convoy
Pilot Cars: ☒ Front ☐ Rear ☒ Rotating Beacon ☐ Communication ☒ Red Flag ☐ Police Escort

Maximum Speed: (1.) Highways 45mph (2.) Bridges (a.) Max speed ____ (b.) No gear change ☐ (c.) No braking ☐

Other Conditions ____

**CERTIFICATION:** I, Colleen Johnson (Please Print) certify that:

1. The load has been reduced to a practical minimum size and weight.
2. All vehicle regulations will be complied with.
3. The State of Alaska will be held harmless from any and all liability that may arise from the authorized movement.
4. That all arrangements have been made with Public Utilities for the protection of utilities which may interfere with the authorized move.
5. That owner/lessee will be responsible for all damages to Public Utilities or any other facility incurred as a result of the move.

Signed Colleen Johnson Title Employee Date 1-13-81

**Approval:** Permission is hereby granted to move the above described vehicle and/or load over the designated highways subjected to the conditions designated above.

Signed Deanna Montoya Title Clerk Typist III Date 1/13/81

STATE OF ALASKA
PLAINTIFF

THIRD JUDICIAL DISTRICT } ss No. C 032023

OF ALASKA
IN THE DISTRICT COURT OF ANCHORAGE

THE UNDERSIGNED, BEING DULY SWORN, UPON HIS OATH DEPOSES AND SAYS:

ON TUES THE 13 DAY OF JAN 1981 AT 1:27 A.M. P.M.

NAME DEFENDANT: NIGHTINGALE JAMES T
(LAST) (PLEASE PRINT) (FIRST) (MIDDLE)

STREET 701 SO. KLEVIN ST #2

CITY - STATE ANCHORAGE, AK PHONE 335-3101

AGE 25 BIRTH DATE 5-5-55 HAIR BLN SEX M HT. 6'5" WT 165

DMV LIC NO AK DL 475710 / SS NO 574-52-0774

VEH LIC NO 72602 MT / 307370 STATE AK/AK YR 73/74

MAKE KENWORTH STYLE T/TRK CONDO / LB CLR SILVER/GRY

UPON A PUBLIC HIGHWAY, NAMELY AT (LOCATION)
GLENN HWY 1/2 MI SOUTH

PLACE OF EMPLOYMENT (WORLD EQUIPMENT)

DID UNLAWFULLY (PARK) (OPERATE) IN THE JUDICIAL DISTRICT AND STATE AFORESAID AND DID THEN AND THERE COMMIT THE FOLLOWING OFFENSE.

In violation of Sec 17 AAC 25.060(2)
OVERWEIGHT REAR AXLE GROUP 3)
TANDEM
46,050 LBS ACTUAL
42,000 LBS LEGAL
4,050 LBS OVER

DISMISS BOUND OVER BAIL

NAME Last First Middle

☐ State Statute ☒ State Traffic Regulations ☐ Parking Violation
☐ Local Ordinance in such case made and provided ☐ Borough Ordinance

SURFACE CONDITION AT TIME OF VIOLATION: ☐ SLIPPERY PAVEMENT ☐ DARKNESS ☐ OTHER TRAFFIC PRESENT
☐ Rain ☐ Snow ☐ Ice ☐ Night ☐ Fog ☐ Snow ☐ Cross ☐ Oncoming ☐ Pedestrian ☐ Same Direction

CAUSED PERSON TO DODGE: ☐ Pedestrian ☐ Driver ☐ JUST PASSED ACCIDENT

TYPE ACCIDENT: PD ☐ PI ☐ FATAL ☐
☐ Ped ☐ Vehicle ☐ Fixed Object ☐ Right Angle ☐ Head on ☐ Sideswipe ☐ Rear end ☐ Ran off Roadway ☐ Intersection

HIGHWAY TYPE: ☐ Business ☐ Industrial ☐ School ☐ Residential ☒ Rural
☐ 2 lane ☐ 3 lane ☐ 4 lane ☒ 4 lane divided

THE UNDERSIGNED FURTHER STATES THAT HE HAS JUST AND REASONABLE GROUNDS TO BELIEVE AND DOES BELIEVE, THAT THE PERSON NAMED ABOVE COMMITTED THE OFFENCE HEREIN SET FORTH, CONTRARY TO LAW. J. THIRD

SWORN TO AND SUBSCRIBED BEFORE ME

DAY OF 19

(Name and title) WITHIN 15 DAYS (Ident No.) 6602

COURT APPEARANCE: DAY OF 19 AT M

ADDRESS OF COURT 5TH AVE. & G ST.

SIGNATURE

C 032023

# ROGERS & BABLER

A Division of Earth Resources
Company of Alaska

1301 East 64th Avenue, Anchorage, Alaska 99502
Phone:(907) 344-4547


January 26, 1981

Associated General Contractors
134 North Franklin Street
Juneau, Ak. 99801

Attn: Jean Kline

Dear Jean:

We have not had many problems obtaining trip permits from the Anchorage office. However, we can go to Palmer and obtain a permit to road a 988 Caterpillar Loader with bucket from Palmer to Chugiak. But we cannot get a like permit from the Anchorage Office. They make us remove the bucket. This is very costly to remove the bucket and some organizations do not have any lifting capabilities at the location where they would have to reinstall the bucket. Another rig would have to be hired just increasing costs to all. Some Contractors are required to remove rippers from tractor dozers. We don't think this is necessary, just an additional cost.

As far as the scales go here in Anchorage, everybody has problems. As an example: 1) We will obtain a permit to move a piece of equipment and when we get to the scale if we are off on one axle weight, but the total axles are okay, they can jerk the permit then issue a ticket for not having a permit and another ticket for being over weight. We had to go to court on this example and one of the tickets was resended. 2) Another problem is that the D.O.T. Highways require the Contractors to weigh the loads on a scale with sufficient length that the total rig is weighed at one time. Then when the rig arrives at the scale, individual axles are weighed and if one axle is over then a ticket is issued. One inspector made a driver shift 500#'s of gravel because one axle was over but the total weight was okay. We have had the same truck & trailer inspected 3 times in a single day, taking a lot of time and costing at least $60.00 to $70.00 per hour. That is $1.00 per minute.

They also require the Contractors to have indentification signs on their trucks. The letters are to be 2½" in size. If you look at the DOT, Municipality, and the ARR trucks, their letters on their trucks are not 2½" in size. They are smaller.

We are not against safety, but believe the inspections are carried too far. In fact the legislature voted out the car inspections but still all trucks have to have all glass, lights, horn, wipers, & etc. in perfect condition at all times.

Some times when it is raining heavy we loose light bulbs in marker and tail lights. A ticket is issued if they burn out during the day.

Truckers are refusing to quote the Contractors by the ton haul from Eagle River, Chugiak or Eklutna due to the harassment at the scales. Assuming that 150,000 tons of aggregate is hauled into Anchorage the price has increased at least $1.00 per ton due to the harassment. This is costing the D.O.T., Municipality and other agencies in additional dollars which we all are forced to pay our share. The trucking industry doesn't care about permits, harassment, and etc. because they pass the costs on to the consumer.

Hope this helps you.

Very truly yours,

ROGERS & BABLER

Ted R. Cadman
Operations Manager

TRC/fmc

**CATEGORY:** TRANSPORTATION **AGENCY:** PUBLIC SAFETY

**PROGRAM:** HIGHWAY AND AVIATION - MAINTENANCE AND OPERATIONS **BRU (s):** BUREAU OF VEHICLE ENFORCEMENT

The goals of the Bureau of Vehicle Enforcement BRU are to prevent damage to the State highway system from overloaded vehicles and to protect the motoring public from operation of unsafe commercial vehicles. Achievement of these goals also allows the motoring public to have safe roads and prevent unnecessary repairs to their own vehicles. The major enforcement tools are the operation of 10 weigh stations and several portable scales. Commercial vehicles are inspected for safety, size, and load limitations at these weigh stations or at other locations with portable scales. The ten permanent weigh stations are located at Haines, Soldotna, Tok, Valdez, Potter, Ester, two at Mile 11 on Glenn Highway, and two at Mile 4.5 on the Richardson Highway. This BRU also issues oversize and overweight permits, at a minimum fee, for those carriers who must transport large objects or heavy pay loads. Through this permit system, the Bureau of Vehicle Enforcement can direct this commercial traffic and assure safety considerations so that the motoring public is not needlessly endangered or inconvenienced. It should be noted that receipt of federal highway funds is dependent upon operation of this program.

In FY 81, a grant was received from the federal government which allowed the Department to hire and train 30 individuals to work in scale houses in Anchorage, Haines, Tok, Valdez, and Fairbanks. Scales on major highways are now open 24 hours a day, seven days a week. Accurate measurement of this program will determine if damage to our highways can be reduced through a consistent prevention and enforcement program.

The Governor's FY 82 recommendation includes staffing for the new weigh station to be constructed at Fox, north of Fairbanks. This will provide additional enforcement for traffic utilizing the North Slope Haul Road.



Phone Contact for more Information: Colonel T.R. Anderson 269-5511

| SERVICE MEASURES | FY 80 | | FY 81 | FY 82 | |
|---|---|---|---|---|---|
| | Plan | Actual | Plan | Continuation | Total |
| Number of trucks weighed | 31,200 | 28,241 | 40,000 | 40,000 | 40,000 |
| Number of motor carrier safety inspections | 850 | 1,526 | 2,000 | 2,000 | 2,000 |
| Issuance of oversize/overweight permits | N/A | 20,734 | 25,000 | 25,000 | 25,000 |
| Increase the number of trucks weighed | 40,000 | 28,120 | 56,000 | 62,700 | 66,000 |
| Increase the number of Motor Carrier Safety Inspections | 2,000 | 3,369 | 5,000 | 4,750 | 5,000 |
| Increase the number of oversize-overweight permits issued. | 25,000 | 18,312 | 20,000 | 23,480 | 24,720 |

STATE OF ALASKA -- BUDGET UNIT SUMMARY 11:17 1/05/81

CATEGORY: TRANSPORTATION
AGENCY: DEPARTMENT OF PUBLIC SAFETY

BRU(S): HIGHWAY & AVIATION M & O

| COMPONENT DESCRIPTION | 80 AUTH | 80 FINAL | 80 ACT | 81 AUTH | 81 SUPL | 81 RP | GOVERNOR |
|---|---|---|---|---|---|---|---|
| BUREAU OF VEHICLE ENFORCEMENT | 972.5 | 1043.1 | 913.8 | 1020.7 | | | 1271.7 |
| ** TOTAL | 972.5 | 1043.1 | 913.8 | 1020.7 | | | 1271.7 |
| ** CHANGE VERSUS 81 AUTH | | | | | | | 24.5% |
| OBJECT DESCRIPTION | | | | | | | |
| PERS. SERV. | 809.8 | 880.4 | 794.4 | 839.6 | | | 1074.4 |
| TRAVEL | 20.0 | 20.0 | 8.5 | 20.0 | | | 22.4 |
| CONTRACTUAL | 112.3 | 112.3 | 92.9 | 129.4 | | | 144.8 |
| COMMODITIES | 22.1 | 22.1 | 6.1 | 22.1 | | | 24.1 |
| EQUIPMENT | | | 3.6 | | | | 6.0 |
| LANDS/BLDGS | 8.3 | 8.3 | 8.3 | 9.6 | | | |
| FUNDING SOURCE | | | | | | | |
| GENERAL FUND | 553.5 | 624.1 | 618.2 | 582.8 | | | 1271.7 |
| PGM RECEIPTS | 419.0 | 419.0 | 295.6 | 437.9 | | | |
| ** GENERAL FUND CHANGE VS. 81 AUTH | | | | | | | 118.2% |
| POSITIONS | | | | | | | |
| FULL-TIME | 22.0 | 22.0 | 22.0 | 22.0 | | | 27.0 |
| PART-TIME | 3.0 | 3.0 | 3.0 | 7.0 | | | 7.0 |
| TEMPORARY | 9.0 | 9.0 | 9.0 | 5.0 | | | 5.0 |
| STAFF MONTHS | 341.5 | 341.5 | 341.5 | 327.8 | | | 387.8 |

SB

122

ALASKA
STATE LEGISLATURE

# MEMORANDUM

May 20, 1981

TO: Senator Bill Ray, Chairman
Transportation Committee

FROM: Senator Mike Colletta Mike Colletta

SUBJ: Whittier Access/Portage Road (SB 122, HB 535)

Please find attached for your information a petition in support of SB 122 and HB 535. I would like to request your consideration to speedy hearing on this issue.

Thank you.

WHITTIER, ALASKA 99693
BOX 727
(907) 472 2350

MAY 15 P.M.

TO WHOM IT MAY CONCERN:

FROM KAY SHEPHERD, CITIZEN

The enclosed petition portrays the feeling of most of the residents of Whittier concerning the access road from Portage Glacier Lodge to Bear Valley. The number of voters at any election in Whittier ranges from about 85 to 90.

Whittier would certainly benefit from this improved access but, beyond that fact, Anchorage and a great part of interior Alaska could have better advantage of the extensive recreation area of beautiful Prince William Sound.

The new addition to the small boat harbor, for which there is a long waiting list, and the great interest in the potential harbor for Shot Gun Cove indicate the intense interest that Alaskans have in Prince William Sound, the finest recreation spot in the State of Alaska.

Thank you for giving sincere attention to this petition from Whittier and if it is possible to move SB 122 and HB 535 through the committees and to the respective floors for vote, it our desire that you do so.

Again, thank you.

Kay Shepherd

WE, THE UNDERSIGNED, BEING RESIDENTS OF THE CITY OF WHITTIER, ALASKA, ARE IN FAVOR OF A ROAD BEING BUILT FROM PORTAGE TO BEAR VALLEY IN ORDER TO DECREASE THE EXPENSE AND TRAVEL TIME AND TO INCREASE ACCESS TO WHITTIER.

| Date | | SIGNATURE | PRINTED NAME | ADDRESS |
|---|---|---|---|---|
| | | | | 5-3-81 |
| May 3, 1981 | 1. | Judith M. Youngquist | Judith M. Youngquist | Box 741 Whittier, Ak. 99693 |
| 5-3-81 | 2. | [illegible] | [illegible] | [illegible] 5-3-81 |
| 5/3/81 | 3. | [illegible] | FRED D. JONES | Box 687 Whittier AK 99693 |
| 5/3/81 | 4. | [illegible] | Michael Livingston | Box 692 Apt 5 Whittier |
| 5/3/81 | 5. | [illegible] | DARLENE MORTON | BOX 673 SPOT 12 WHITTIER |
| 5/3/81 | 6. | [illegible] | [illegible] | Box 673 Apt 6 WHITTIER |
| 5/3/81 | 7. | [illegible] | Betty S. Chance | Spot 121 Box 651 Whittier, AK. 99693 |
| 5/3/81 | 8 | [illegible] | Rowley E Lewis | Box 633 Whittier AK 99693 |
| 5/3/81 | 9 | [illegible] | Michelle Lewis | Box 633 Whittier AK 99693 |
| 5/3/81 | 10. | [illegible] | JARED STRAUS | Box 662 WHITTIER AK |
| 5/3/81 | 11 | [illegible] | Randall G Hartman | Box 615 Whittier |
| 5/3/81 | 12. | [illegible] | P.O. Box 615 | Whittier Alaska |
| 5/3/81 | 13. | [illegible] | Robert L. Wakefield | PO Box 721 Whittier AK |
| 5-3-81 | 14. | [illegible] | [illegible] | PO Box 615 |
| | 15. | [illegible] | [illegible] | Box 686 Whittier, AK Whittier AK |
| 5/3/81 | 16. | [illegible] | [illegible] | Box 622 Whittier Alaska |
| 5/3/81 | 17. | [illegible] | [illegible] | Box 668 Whittier AK 99693 GERALD H. PROTZMAN |
| 5/3/81 | 18. | [illegible] | Glorin Protzman | Box 668 Whittier |
| 5/3/81 | 19. | [illegible] | Marcia L Paulson | Box 694 Whittier |
| 5/3/81 | 20. | [illegible] | Box 707 | Whittier Ak 99693 |
| 5/3/81 | 21. | [illegible] | RAYSON E. KNIGHT | Box 668 WHITTIER AK |
| 5-3-81 | 22. | [illegible] | [illegible] | [illegible] WHITTIER AK |
| 5-3-81 | 23. | [illegible] | LORI SIMONDS | Whittier Box 683 |
| 5/3/81 | 24. | [illegible] | [illegible] | Box 711 Whittier DORIS V. BENDER |
| 5/3/81 | 25. | [illegible] | ROSCOE HARRELL | APT 1403 BEGICH Towers |
| 5/3/81 | 26. | [illegible] | AMANDA HALE | #705 Whittier AK. |
| 5/3/81 | 27 | [illegible] | TOM HALE | #705 WHITTIER AK |
| 5-3-81 | 28. | [illegible] | Kay Shepherd | APT 111 Whittier AK |
| 5/3/81 | 29. | [illegible] | [illegible] | [illegible] |
| 5/3/81 | 30. | [illegible] | Robin A. Gelinas | APT 701 |
| 5/3/81 | 31. | [illegible] | [illegible] | APT 101 |
| 5/4/81 | 32. | [illegible] | Daniel N. Holgate | Box 121, Whittier AK 99693 |
| 5/4/81 | 33. | [illegible] | [illegible] | [illegible] |
| 5/4/81 | 34. | [illegible] | [illegible] | [illegible] |

| | | | |
|---|---|---|---|
| 36. | [illegible] | [illegible] A. Lopez | Box 644 [illegible], AK 99693 |
| 37. | Elsie S. Yeagle | ELSIE S. YEAGLE | BOX 653 WHITTIER AK 99693 |
| 38. | John D. LaBowe | JOHN LaBOWE | 903 Bejack Towers Whittier |
| 39. | [illegible] | JERRY L. LEWIS | PO Box 631 [illegible] AK 99693 |
| 40. | Gene Alvarez | GENE ALVAREZ | BOX 693 WHITTIER AK 99693 |
| 41. | Charles R. Hutchinson | Charles R. Hutchinson | P.O Box 711 Whittier 99 |
| 42. | Sharon T. Miles | Sharon T. Miles | Box 662 [illegible] 99693 |
| 43. | Steve Hartman | STEVE HARTMAN | BOX 675 WHITTIER AK 99693 |
| 44. | Marilyn Holroet | Marilyn Holroet | Box 621 Whittier AK |
| 45. | Harold Bishop | HAROLD BISHOP | BOX 701 WHITTIER AK 99693 |
| 46. | Darlene L. Deyo | Darlene L. Deyo | Box 734 Whittier AK 99693 |
| 47. | Apryle Wooden | Apryle Wooden | Box 681 WHITTIER AK 99693 5/4/0 |
| 48. | Bernadine Zeigler | Bernadine Zeigler | Box 686 Whittier AK 99693 |
| 49. | Kenneth Barker | KENNETH BARKER | BOX 607 WHITTIER, AK 99693 |
| 50. | Chas F Lepler | Chas F LEPLER | Box 614 [illegible] |
| 51. | David Clemens | DAVID CLEMENS | BOX 645 [illegible] |
| 4-8/52. | Mary Clemens | MARY CLEMENS | Box 645 [illegible] |
| 7/51 53. | Robert M. Wheelright | ROBERT M. WHEELRIGHT | BOX 667 [illegible] |
| 1/4/8/54. | Geraldine L. Wheelright | Geraldine L. Wheelright | [illegible] |
| 1/4/8/55. | [illegible] | [illegible] | [illegible] |
| 56. | Rita S. Lopez | Rita S. Lopez | Box 644 Whittier, AK 99693 |
| 57. | Willie J. Robert | Willie J. Roberts | APT-321 B.T. Whit, AK |
| 58. | Florence K. Rawhouser | Florence K. Rawhouser | Bay 3, Apt. 12 Whittier Manor |
| 59. | Stacey A. Smith | Stacey A. Smith | Apt. 1009 BTI Whittier, AK 99693 |
| 60. | Dennis P. Hutcherson | DENNIS P. HUTCHINSON | APT-712 BTI Whittier |
| 61. | Jeanne D. Heflin | JEANNE D. HEFLIN | Apt. 712 BTI Whittier 99693 |
| 62. | Jack D Coffman | JACK D COFFMAN | Apt 701 BTI Whittier |
| 63. | [illegible] | [illegible] | [illegible] |
| 64. | Jeffrey A. Jackman | Jeffrey A. Jackman | Box 685 Whittier Ak. 99693 |
| 65. | Vicki L Hartman | Vicki L HARTMAN | Box 675 Whittier Ak 99693 |
| 66. | Irma R Knight | IRMA R. Knight | Box 698 Whittier Ak. 99693 |

Rights Trans

67. Timothy W Key Timothy W Key P.O. Box 735 Apt 1107
68. Linda Key LINDA KEY P.O. BOX 735 WHITTIER, AK 99693
69. Linda D Harker Linda D Harker P.O Box 621 Whittier AK 99693
70. Peggy A Gallacher Peggy Gallacher Box 669 Whittier AK 99693
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SB

135

# STATE OF ALASKA
# THE LEGISLATURE

## LEGISLATIVE AFFAIRS AGENCY

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

M E M O R A N D U M

February 9, 1982

SUBJECT: Haul Road
(CSSB 135 (Transportation))

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Thomas A. Sofo TAS
Legislative Counsel

The attached memos are, of course, a much more concise explanation of CSSB 135. We were only prepared to discuss SB 135 since the staff had represented that the original bill was all that was to be taken up. If you will allow me to, I would like to copy Senator Bennett with these memoranda.

TAB:ljb

Enclosures

COPY BENNETT - FILE WITH BILL

# STATE OF ALASKA
# THE LEGISLATURE

## LEGISLATIVE AFFAIRS AGENCY

POUCH Y · STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

MEMORANDUM April 16, 1981

SUBJECT: Haul Road
(CSSB 135)

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Thomas A. Sofo
Legislative Counsel

Since the attached draft of CSSB 135 (Transportation) may be confusing to others who have not dealt with the bill, I am offering this memo to assist you in explaining the impact of the legislation in its present form.

Sec. 1 of the bill is merely a historical note. It does not include the statement that SCSHB 207 am S (H. failed eff. date), Eleventh Legislature, Second Session, in fact became Chapter 177, SLA 1980.

Sec. 2 of the bill is a repeal and reenactment of AS 19.-40.100. The only change in the text of AS 19.40.100 compared to the present is the substitution of the word "traffic" for "travel" on line 25 of page 1.

Secs. 3 - 5 are merely repealing and reenacting verbatim the present law.

Secs. 6 - 7 make substantive changes in the present law, as indicated in the draft. Sec. 7 does not include AS 16.05.-789(b) since the provision contained in subsection (b) concerning misdemeanor penalties for violations of that statute was not amended in the request which we received. It would be inappropriate to include text to AS 16.05.789(b) in Sec. 7, since Sec. 7 is prefaced by the phrase "is amended to read:" and subsection (b) is not the subject of any amendment.

Sec. 8 of the bill is self-explanatory.

Sec. 9 of the bill is merely a vestige of our attempt to take into account the uncertain status of the bill from last session at the time this bill was originally drafted.

Sec. 10 of the bill is self-explanatory.

If I can be of any further assistance to you on this matter, please do not hesitate to contact me.

TAS:ljb

Enclosure

— FILE WITH BILL —

# STATE OF ALASKA
# THE LEGISLATURE

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

## LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M  April 13, 1981

SUBJECT: Operation and use of haul road (CSSB 135)

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Thomas A. Sofo TAS
Legislative Counsel

This office recently received a request for a committee substitute for SB 135 concerning the operation and use of the haul road. SB 135 was originally drafted at the time litigation was pending concerning SCSHB 207 am S (H. failed eff. date). Sec. 1 of SB 135 reflects the decision by this office as to the treatment to be accorded the bill from last session. Although certain changes were requested in the substantive law that was the subject of the earlier bill, it was felt that the appropriate mechanism to achieve the desired result involved enacting the substance of the bill from the last session (as was done in Secs. 2 - 7 of SB 135) and then making any amendments which were desired by the present legislature (Secs. 8 - 10). Sec. 11 of SB 135 keyed the effective date of the new act to be retroactive to the point in time at which the former bill (SCSHB 297 am S) was to be effective.

Since the original assignment to draft the bill for this session, the litigation on the haul road bill from last year has been concluded. Without going into all the details, the result is that Secs. 2 - 7 of SB 135 have in fact become law as Chapter 177, SLA 1980. The subject area should be reviewed with this in mind. If you still desire to delete what is now Sec. 7 of SB 135, it would involve the repeal of AS 19.40.210. This had appeared as AS 19.40.200(b) in the former bill, but was renumbered as a separate section by the revisor when it was incorporated into our statutes last year. SB 135 should be reviewed so that this office can receive an instruction as to what further changes need to be made in

light of the enactment of Chapter 177, SLA 1980. My assumption from reading notes which accompanied the present request for the committee substitute is that the committee desires to amend AS 19.40.210 as it presently appears in Sec. 9 of SB 135. Additionally, I assume the committee is interested in making the amendments contained in Sec. 8 of the bill (AS 16.05.789(a)), since that contains new subject matter not previously included in the bill from last session. I also understand that it is your desire to add a further subsection to AS 16.05.789 making a violation of that statute a misdemeanor.

Please contact me if any of the above assumptions are incorrect or if further explanation is necessary to explain the present status of this legislation.

TAS:ljb

Enclosure

# LAWS OF ALASKA

1980

| Source | Chapter No. |
|---|---|
| SCSHB 207 am S (H. failed eff. date) | 177 |

## AN ACT

Relating to state responsibility for the highway between the Yukon River and the Arctic Ocean, and to state management and control of resources affected by the highway between the Yukon River and the Arctic Ocean.

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

THE ACT FOLLOWS ON PAGE 1, LINE 12

Note: Returned by Governor to House with message asserting bill was not properly adopted.
Actual Effective Date: October 5, 1980

Chapter 177

AN ACT

Relating to state responsibility for the highway between the Yukon River and the Arctic Ocean, and to state management and control of resources affected by the highway between the Yukon River and the Arctic Ocean.

---

* Section 1. The purpose of sec. 2 of this Act is to protect wildlife which, as a result of wildlife migrations, congregates in large numbers near the highway between the Yukon River and the Arctic Ocean.

* Sec. 2. AS 16.05 is amended by adding a new section to read:

Sec. 16.05.785. PROHIBITION ON HUNTING ADJACENT TO HIGHWAY BETWEEN YUKON RIVER AND ARCTIC OCEAN. (a) Hunting with firearms is prohibited north of the Yukon River in the area within five miles on either side of the highway between the Yukon River and the Arctic Ocean.

(b) A person who violates this section is guilty of a class A misdemeanor.

* Sec. 3. AS 19.40 is amended by adding new sections to read:

ARTICLE 2. USE OF THE HIGHWAY.

Sec. 19.40.100. USE OF THE HIGHWAY BY INDUSTRIAL OR COMMERCIAL TRAFFIC. (a) The department shall maintain the highway and keep it open to industrial or commercial traffic throughout the year.

(b) "Industrial or commercial travel" means

(1) travel necessary and related to resource exploration and development or to support of those activities, if the individual

engaged in those activities has all necessary permits; or

(2) travel necessary and related to access by local residents to their property; or

(3) motor carriers engaged in commerce which are common carriers or contract carriers regulated by the Alaska Transportation Commission under AS 42.10.

Sec. 19.40.110. CLOSURE OF THE HIGHWAY TO TRAFFIC. The provisions of AS 19.10.100 apply to the closure of the highway by the department.

* Sec. 4. AS 19.40 is amended by adding a new section to read:

Sec. 19.40.120. PUBLIC USE OF A PORTION OF THE HIGHWAY. The department shall maintain the section of the highway between the Yukon River and Dietrich Camp and shall keep that section of the highway open to use by the public between June 1 and September 1 each year.

* Sec. 5. AS 19.40 is amended by adding a new section to read:

ARTICLE 3. LANDS ADJACENT TO THE HIGHWAY.

Sec. 19.40.200. PROHIBITIONS ON DISPOSAL AND USE OF LAND WITHIN FIVE MILES OF THE HIGHWAY. (a) The state may not dispose of state land under AS 38 which is within five miles of the right-of-way of the highway.

(b) Off-road vehicles are prohibited on land within five miles of the right-of-way of the highway. However, this prohibition does not apply to a person who holds a mining claim in the vicinity of the highway and who must use land within five miles of the right-of-way of the highway to gain access to his mining claim.

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

TO: MEMBERS OF SENATE TRANSPORTATION COMMITTEE SENS. RAY, GILMAN, DANKWORTH, KERTTULA, AND SACKETT

-FILE-

RE: SB135 and SB204 (for meeting 4/9/81)

TANANA CHIEFS CONFERENCE, INC.
NORTH SLOPE HAUL ROAD
RESOLUTION NO. 81-4

WHEREAS: Opening the North Slope Haul Road to unrestricted traffic has been of long-standing, vital concern to communities affected by its use; and

WHEREAS: these concerns:

- Protection of the culture of the Native people who live within the region,

- Protection of the land, water and wildlife resources of the region, and

WHEREAS: proposals are already being made for spur roads of the haul road, and

WHEREAS: State law now allows the road to be open partially to the public,

NOW THEREFORE BE IT RESOLVED that the TCC Board of Directors recommend that the North Slope Haul Road have limited public use only not beyond the bounds of current legislation, and

FURTHER BE IT RESOLVED that bans on hunting, off-road vehicle use, and disposing of state land all within 5 miles either side of the haul road be enforced with the most rigorous standards, and

FURTHER BE IT RESOLVED that potential impacts of all spur roads off the haul road be thoroughly studied, documented, and if adverse, be mitigated before construction.

CERTIFICATION

I hereby certify that this resolution was duly passed by the Tanana Chiefs Conference, Inc., Board of Directors on March 19, 1981, at Fairbanks, Alaska.

Corporate Secretary
Tanana Chiefs Conference, Inc.
Mitch Demientieff

Mail Reply to: Lisa Jaeger
Tanana Chiefs Conference, Inc.
201 First Ave.
Fairbanks, Alaska 99701 phone 452-8251

Fairbanks Subregion

RESOLUTIONS1
d5

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

SB

150

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR
(907) 465-3900

**Department of Transportation and Public Facilities**

OFFICE OF THE COMMISSIONER

Pouch Z
Juneau, Alaska, 99811
(Telex 45-328)

February 10, 1981

The Honorable Don Bennett
Senator
Pouch V
Juneau, Alaska 99811

RE: Steese Highway - Central to Circle

Dear Senator Bennett:

Per your request this date, following is the project description and need statement data for the subject project.

1. Project Description:

This project is for spot repairs along the 33.7 mile section of the Steese Highway between Central and Circle City. The rehabilitation of this route was originally requested as priority 81-21 in the 1981 Capital Budget, but was not funded.

2. Project Need Statement

This road is the highway access between Fairbanks and Circle City on the Yukon River. It is extensively used for recreational and mining access. Freight is hauled on this road for trans-shipment on the river system. The existing facility is substandard in width and alignment. In addition, the road base has seriously deteriorated becoming muddy and slick during wet weather and breakup. The road was last improved in 1953. The average daily traffic is 120 vehicles.

Sincerely,

for Robert W. Ward
Commissioner

2/10/81

SB

155

(907) 465-3900

January 30, 1981

Re: Knik Arm Crossing
Turnagain Arm Crossing

200H-3076/0803

The Honorable Vic Fischer
Senate District E
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Fischer:

In answer to Mr. Sumner Putnam's questions of Mr. Matlock, we are attaching updated estimates of cost (January 1981 dollars) for the Knik Arm and Turnagain Arm Crossings. In the case of the latter, we have updated both the bridge and causeway alternatives which were last studied in 1967 and 1968, but have not included the cost of the connecting roadway to the south.

The shortest route to the Kenai Peninsula would be on new alignment through the national forest and the national moose range (Points M to N to O on the map) although a much shorter initial connection could be made to Hope (M to L to K on the map). If you need cost estimates to include either of these connections, we will develop and furnish them.

In the case of both the Knik and Turnagain Arm Crossings, there would have to be rather extensive studies and coordination with other agencies before final design could actually begin.

We do consider both crossings to be feasible although, admittedly, expensive.

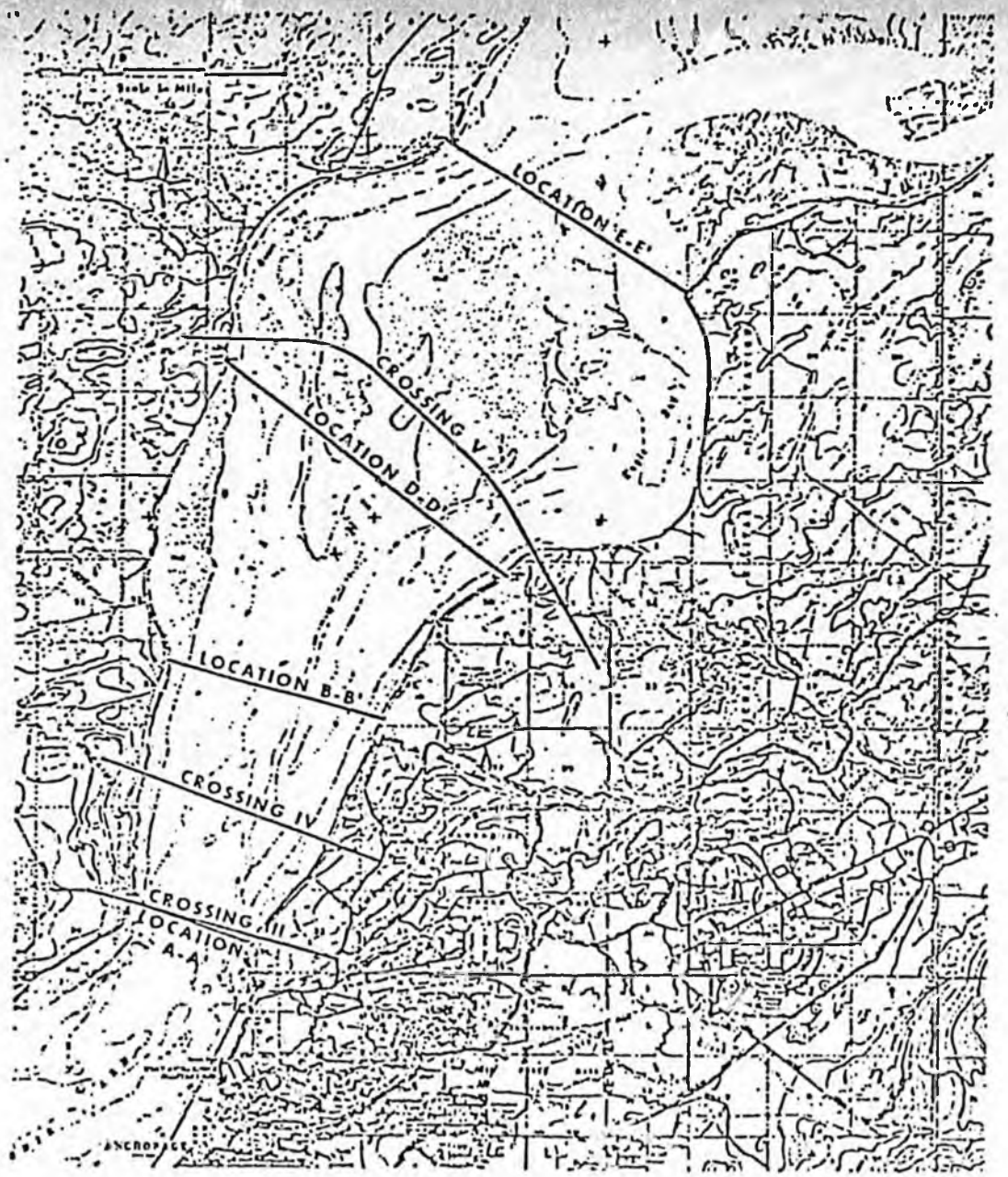
Sincerely,

R. D. Shumway, P.E.
Deputy Commissioner

Attachment

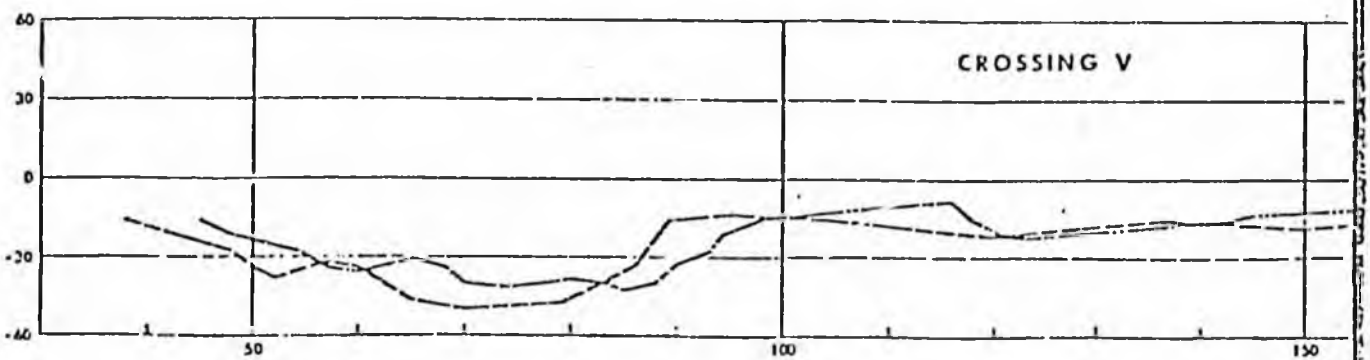
RDS/CSM/kgm

bcc: John Bates
R. D. Redick
Bridge Design
C. S. Matlock




Topographic data on this figure is from U.S.G.S. Quadrangle Maps.

LOCATION MAP



# KNIK ARM CROSSING

1/9/81

| | 1971 Estimate | | 1981 Estimate | |
|---|---|---|---|---|
| | BRIDGE CROSSING IV | CAUSEWAY DAM CROSSING V | BRIDGE CROSSING IV | CAUSEWAY DAM CROSSING V |
| Total for Crossing | $114,938,200 | $189,590,600 | $281,598,600 | $464,497,000 |
| Contingencies and Variations (10%) | 11,061,800 | 19,409,400 | 27,101,400 | 47,553,000 |
| Estimated Construction Cost | * $126,000,000 | * $209,000,000 | 308,700,000 | 512,050,000 |
| Borings and Soil Testing | ** 410,000 | ** 837,000 | ** 1,004,500 | ** 2,050,600 |
| Hydrographic and Land Surveys (0.75%) | 945,000 | 1,567,500 | 2,315,200 | 3,840,400 |
| Model Testing and/or Test Structure | 520,000 | 225,000 | 1,274,000 | 551,300 |
| Engineering and Administration | | | | |
| Basic Design (4.0%) | 5,040,000 | 8,360,000 | 12,348,000 | 20,482,000 |
| Construction Supervision (4.0%) | 5,040,000 | 8,360,000 | 12,348,000 | 20,482,000 |
| Administration (1.5%) | 1,890,000 | 3,135,000 | 4,630,500 | 7,680,800 |
| Estimated Crossing Cost | $140,000,000 | $231,000,000 | $343,000,000 | $567,000,000 |
| Estimated Approach Cost | | | 88,000,000 | 84,000,000 |
| Total Project Cost | | | $431,000,000 | $651,000,000 |

(Based on January 1981 Dollars)

* Based on 1971 start and 1975 finish
** Includes Geophysical Surveys

# 32' ROADWAY - USING LONG SPANS ONLY

## 3) SUMMARY – BRIDGE CROSSING - ISLE TO CAPE

CONSTRUCTION COSTS

A. LONG SPAN SUPERSTRUCTURE (18,500')

| | | |
|---|---|---|
| · STEEL | (175#/ft²)18500'(34') *1.75 = | $192,630,000 |
| CONCRETE | (34')9"/12(1/27)(18,500')$500 = | 8,740,000 |
| RESTEEL | (175#/c.y.)(17,500 c.y.)$.80 = | 2,450,000 |
| JOINTS | 18500/600 = 31 x $ 10000 = | 310,000 |
| RAILING | | 240,000 |
| DECK PROTECTION | 18,500'(32')1/4 x $15 = | 990,000 |
| | | $205,360,000 |

B. LONG SPAN SUBSTRUCTURE

18,500'/600' AVG. = 31 SPANS ⇨ 32 UNITS

| | | |
|---|---|---|
| SEE SHT. 5 | $4,614,000 (32) = | 147,648,000 |
| C. APPROACHES | | 7,440,000 |
| | TOTAL BASIC CONST. | $360,448,000 |
| C. MOBILIZATION @ 1% | | 3,604,000 |
| D. CONST. ENGR., ADMIN., CONTINGENCIES @ 20% | | 72,089,000 |
| | TOTAL CONST. COST | $436,141,000 |

PRE-CONST. COSTS

| | |
|---|---|
| A. R.O.W. | ? |
| B. PRE-ENGR @ 4% OF [illegible]C CONST. COST = | 14,418,000 |
| C. SPECIAL STUDIES (SE[illegible]HT. 7) | 7,000,000 |
| | $457,559,000 |

SAY $450,000,000

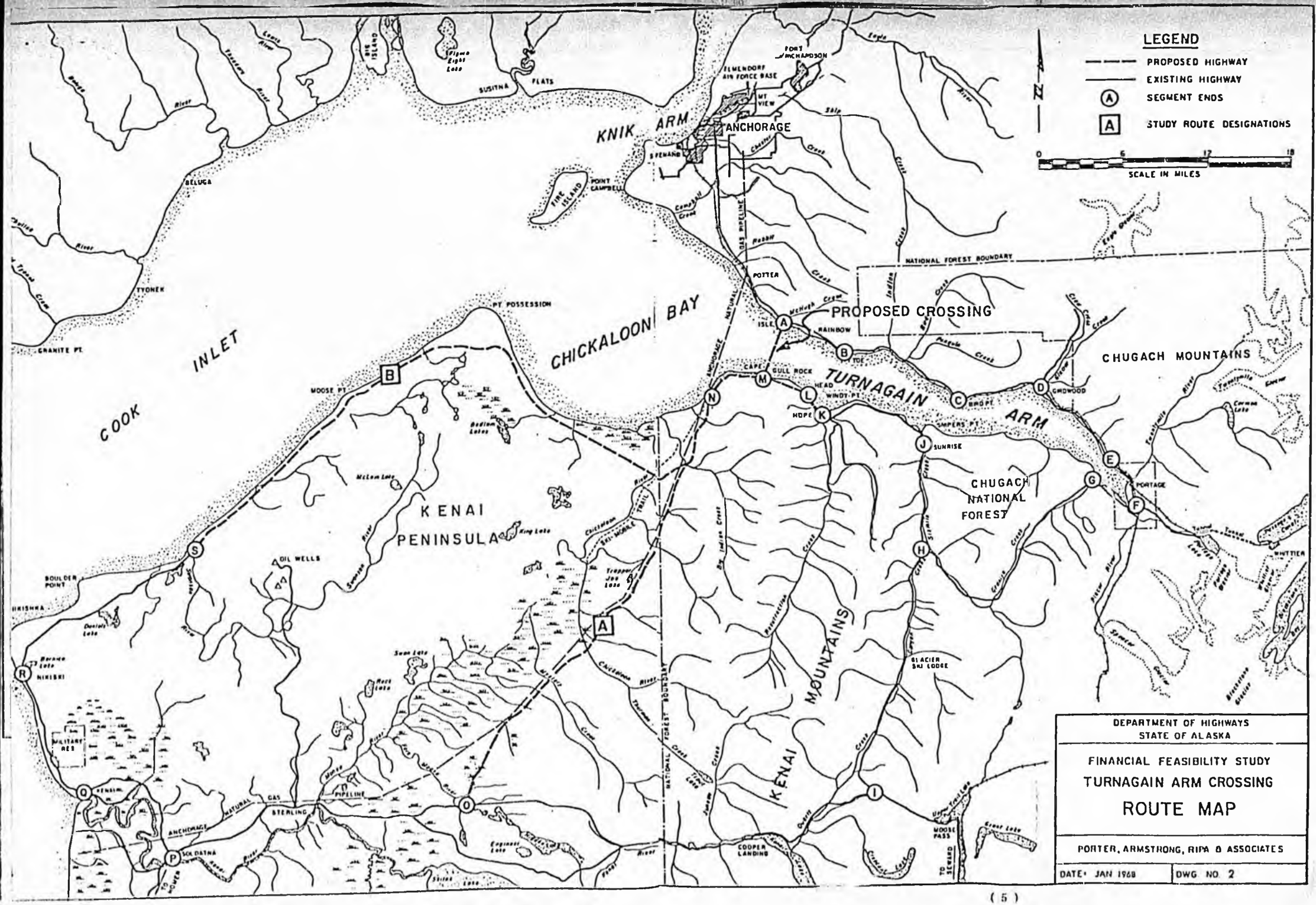
JANUARY, 1981 DOLLARS

9/0

# II. CAUSEWAY / SPILLWAY - ISLE TO CAPE

CONST. COST INDICES FROM 1967 TO 1981 GENERALLY REFLECT AN INCREASE OF 300% ± FOR THE PERIOD. ∴ EARTHWORK ITEMS, IN VOLUMES ESTIMATED, MAY NO LONGER BE AVAILABLE AS CONSULTANT ENVISIONED, SO A FACTOR SOMEWHAT HIGHER IS APPLIED.

| ESTIMATED CONSTRUCTION COST | | | 1968 | ADJ. FACTOR | 1981 |
|---|---|---|---|---|---|
| **End-Dumping Section of Causeway to Elev. 25 — Material in Place** | | | | | |
| Quarry-run rock | 2,133,000 CY @ | $3.65 | $ 7,785,500 | | |
| Random material | 1,510,000 CY @ | 1.65 | 2,491,500 | | |
| Armor Rock | 501,000 CY @ | 11.00 | 5,511,000 | | |
| Select Grading Rock | 332,000 CY @ | 4.00 | 1,328,000 | | |
| Seepage Provisions | 550,000 CY @ | 2.00 | 1,100,000 | | |
| | | Subtotal | $18,216,000 | x 5.0 = | $ 91,080,000 |
| **Barge-placed Material (including Island) — Material in Place** | | | | | |
| Selected sand and gravel, talus, or quarry fines | 880,000 CY @ | $4.30 | $ 3,784,000 | | |
| Quarry-run rock | 2,500,000 CY @ | 5.30 | 13,287,000 | | |
| Random material | 1,740,000 CY @ | 3.30 | 5,765,000 | | |
| | | Subtotal | $22,836,000 | x 5.0 = | 114,180,000 |
| **Cableway Placed Closure Section — Material in Place** | | | | | |
| Select Quarry Rock | 1,400,000 @ | $5.50 | $ 7,700,000 | | |
| Quarry medium to fine | 1,400,000 @ | 4.20 | 5,880,000 | | |
| | | Subtotal | $13,580,000 | x 5.0 = | 67,900,000 |
| **Completion of Causeway — Above Elev. 25 — Material in Place** | | | | | |
| Random material | 600,000 CY @ | $1.65 | $ 990,000 | | |
| Armor riprap | 262,000 CY @ | 11.00 | 2,882,000 | | |
| Select filter material | 98,000 CY @ | 4.00 | 392,000 | | |
| | | Subtotal | $ 4,264,000 | x 5.0 = | 21,320,000 |
| **Roadway Across Causeway** | | | | | |
| Pavement, including sublease | 19,500 Lin. Ft. @ | $22.80 | $ 445,000 | | |
| Guard rail — in place | 40,000 Lin. Ft. @ | 9.50 | 380,000 | | |
| | | Subtotal | $ 825,000 | x 3.0 = | 2,475,000 |
| **Spillway** | | | | | |
| Concrete Control Wall — | | | | | |
| Excavation | 1,000 CY @ | $20.00 | $ 20,000 | | |
| Concrete in Place | 1,000 CY @ | 100.00 | 100,000 | | |
| Special Shaping | Lump Sum | | 100,000 | | |
| Fish Ladder | Lump Sum | | 700,000 | | |
| Highway Bridge — | | | | | |
| Structural Steel | 1,550,000 lb. @ | $ 0.40 | 520,000 | | |
| Concrete | 1,762 CY @ | 200.00 | 352,000 | | |
| Re-steel | 283,000 lb. @ | 0.20 | 57,000 | | |
| Bridge rail | 2,180 ft. @ | 8.00 | 17,000 | | |
| Caissons | Lump Sum | | 51,000 | | |
| | | Subtotal | $ 1,917,000 | x 3.0 = | 5,751,000 |
| Estimated Construction Cost — Causeway, Roadway & Bridge (without RR bridge) | | | 61,638,000 | | $ 302,706,000 |
| Contingencies — 20% | | | 12,328,000 | +20% | 60,541,000 |
| | | | $73,966,000 | | $ 363,301,000 |
| Engineering & Administration — 15% | | | 11,094,000 | +15% | 54,495,000 |
| TOTAL ESTIMATED COST — | | | 85,060,000 | | $ 417,796,000 |
| | | Say | $85,000,000 | SAY | $ 420,000,000 |


LEGEND
PROPOSED HIGHWAY
EXISTING HIGHWAY
SEGMENT ENDS
STUDY ROUTE DESIGNATIONS
SCALE IN MILES
N
ANCHORAGE
KNIK ARM
TURNAGAIN ARM
CHICKALOON BAY
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PROPOSED CROSSING
NATIONAL FOREST BOUNDARY
CHUGACH MOUNTAINS
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KENAI PENINSULA
KENAI MOUNTAINS
PT POSSESSION
POINT CAMPBELL
FORT RICHARDSON
ELMENDORF AIR FORCE BASE
MT VIEW
EKLUTNA
PALMER
WASILLA
BIG LAKE
BIG ISLAND
SUSITNA FLATS
BELUGA
TYONEK
GRANITE PT
MOOSE PT
TIDE
RAINBOW
CAPE
GULL ROCK
HEAD
WINDY PT
HOPE
GIRDWOOD
BROPE
JUNEAU
SUNRISE
PORTAGE
WHITTIER
GLACIER BAY LODGE
OIL WELLS
BOULDER POINT
NIKISKI
KENAI
SOLDOTNA
STERLING
COOPER LANDING
MOOSE PASS
TO SEWARD
TO HOMER
NATURAL GAS PIPELINE
MILITARY RES
DEPARTMENT OF HIGHWAYS
STATE OF ALASKA
FINANCIAL FEASIBILITY STUDY
TURNAGAIN ARM CROSSING
ROUTE MAP
PORTER, ARMSTRONG, RIPA & ASSOCIATES
DATE: JAN 1968
DWG NO. 2

# Alaska State Legislature

Senator Vic Fischer • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

M E M O R A N D U M

TO: Sen. Bill Ray, Chair
Senate Transportation Committee

FROM: Sen. Vic Fischer

DATE: March 12, 1982

RE: SB 155, Turnagain Arm Crossing

I am extremely interested in having at least some funds allocated to DoTPF to do at least a minimal reconnaissance study of a Turnagain Arm Crossing as soon as possible. I truly believe this can be a most important project for the Railbelt's economic development.

North Kenai, on the western side of the peninsula, already has a number of major industrial facilities. It is the logical area for industrial development in the whole region around Anchorage. A proper highway connection and rail access are crucial to realizing both the potentials of industrial development on the Kenai and relieving pressure on industrial development in Anchorage itself.

Recreation is another major factor. Many urban Anchorageites use the Kenai Peninsula for recreation, especially the Kenai River area and Kachemak Bay. The need for decent access to these areas is tremendous. The existing Seward Highway simply cannot accomodate the regular traffic on summer weekends, and situation will simply get worse in the future. I'm sure it will cost us many times more to improve road access via the circuitous route around Turnagain Arm and the mountainous road over the peninsula than it would to provide a virtually sea level route across Turnagain Arm and an alignment across the Kenai generally following the existing gas pipeline.

While I certainly don't want to take anything away from Seward, I'm sure that the long-term development of the state would be tremendously served by having a railroad and road providing direct access to the western Kenai Peninsula. Moving SB 155 might be a small step in that direction.

Thanks for your consideration.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

MEMORANDUM

TO: Senator Vic Fischer

FROM: Senator Bill Ray, Chairman
Committee on Transportation

DATE: March 11, 1981

RE: SB 155, Turnagain Arm Crossing

I am in receipt of your correspondence of March 5 and enclosed letter from Harold Pomeroy concerning the above mentioned subject.

Thank you for providing me with this information.

# Alaska State Legislature

## Senate

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

M E M O R A N D U M

TO: SENATOR BILL RAY, CHAIRMAN
SENATE TRANSPORTATION COMMITTEE

FROM: SENATOR VIC FISCHER VF

DATE: MARCH 5, 1981

RE: SB 155, Turnagain Arm Crossing

Attached is copy of a letter from Harold Pomeroy. Among other things, he suggests that a preliminary reconnaisance should precede the proposed $2 million study that I proposed.

While I'm extremely interested in seeing some progress on this project, I will leave it to you how intensive a program should be initiated.

Thanks for your consideration of this project.

**HAROLD E. POMEROY**

*Swift Water*

~~BOX 737 -- SOLDOTNA, ALASKA 99669 --~~
4048 Wright St., Anchorage 99504

Senator Vic Fischer
Pouch V
Juneau, Alaska 99811

February 11, 1981

Dear Vic

This refers to an article in the Anchorage Daily News, 2/5/81, quoting you.

It seems to me that there is not an adequate justification for another Turnagain Crossing study. The engineering data from past studies is not obsolete. There was also an economic feasibility study about 1965.

A little preliminary inquiring might confirm that the $2,000,000 proposed cost would be a wasted expenditure. Would it not be good sense to spend a few thousand dollars, maybe only three or four, to review all the data on the crossing and study a digest of this information before going further?

It could be quite worthwhile to consult with three or four of the most knowledgeable executives of the petroleum industry; they might have very valuable observations. Consultations in other directions might also be useful.

As a general proposition I believe preliminary reconnaisance is an inexpensive tool that can frequently be used to indicate a subject should be pursued no further or that it merits exhaustive investigation - or some third course.

Of this I am convinced: We are shortchanging ourselves by not taking advantage of the great amount of information and experience that "practicing Alaskans" have to contribute on many subjects.

To illustrate: A $50,000 or $60,000 study of a proposal to settle Cambodian refugees in "self-contained" agricultural settlements was being enacted by the Legislature. I suggested to Mike Miller the idea that consulting a few veteran Alaskans might be useful and save money. He was enthusiastic. I gave him the names of five veteran Alaskans, who had homesteaded, done agriculture and were presently active in Alaskan affairs - and had no axe to grind. These people had a combined residence in Alaska of 127 years. They would have come to Juneau - or Anchorage - at no cost except actual expenses, and spent two or three days to compare experiences and draft their estimate of the feasibility of the refugee settlement idea.

This must have been too simple. The next I heard, a girl from Juneau was being sent to Ohio to see how some refugees were doing there!

Your reference to a railroad recalls a speech before the Chamber of Commerce here in which David Reaume said we should modernize transportation to the Kenai Peninsula, including a railroad. But there wasn't a word about the economic development to follow which would justify the railroad. You could ask a half dozen persons knowledgeable about the Anchorage - Kenai Peninsula area, plus a railroad person, to lunch and learn in two hours that there isn't any - and why.

As to agriculture: There are tens of thousands of vacant acres on the Kenai Peninsula once occupied by hopeful homesteaders in the 50's and 60's. Agriculture on the Kenai Peninsula is negligible due to major competitive disadvantages we can do very little about.

The proposed $2,000,000 crossing study is a good example from which to urge that we draw on what we do know - that we take advantage of a lot of solid knowledge in various fields among "practicing Alaskans", and look in the files, too. It might surprise us to find the number of times we don't have to re-invent the wheel.

Warm personal regards,

Harold

HEP/rsp

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

February 3, 1981

SB 155

MEMORANDUM

TO: Interested Parties

FROM: Sen. Vic Fischer

RE: Turnagain Causeway crossing and hydroelectric facility

The proposed Turnagain Causeway crossing and hydroelectric project has not been determined to be feasible, and this appropriation is for the study and sample piling test to enable design engineers to make that determination. The route of the crossing, construction materials, hydroelectric potential and cost of the project are as yet unknown and will be determined by the study authorized by this bill.

DOTPF estimates 2 to 4 years to complete this study.

Some advantages of such a crossing are:

1) Shortened mileage between Anchorage and Kenai by approximately one hundred miles.
2) Enormous hydroelectric generation potential.
3) Relief for the dangerous traffic situation on the Seward Highway.
4) Access to prime recreational, residential and agricultural land in the Pt. Possession area.
5) Provide a roadbed for possible extension of the Alaska Railroad down the west side of the Kenai Peninsula.

# Alaska State Legislature

## Senate

### Committee on State Affairs

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

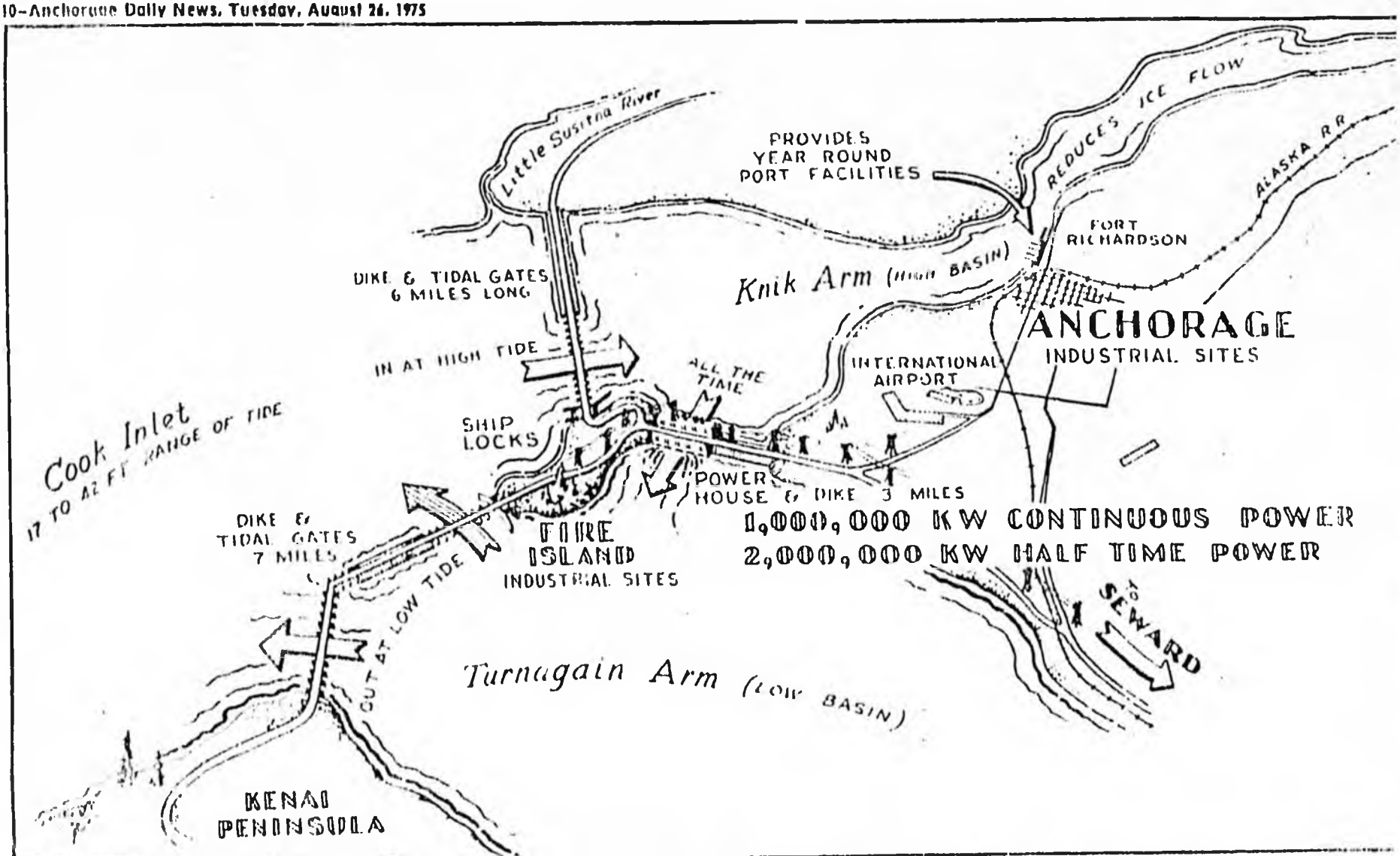
M E M O R A N D U M

TO:

FROM: Sen. Fischer

RE: Cook Inlet Tidal Power and Transportation Links

Attached is an Anchorage News clipping of August 26, 1975, that gives us all the answers to providing Turnagain Arm and Knik Arm crossings from Anchorage, harnessing Cook Inlet tides, etc. The proposal looks like it would solve many of our problems: power, highway access, port, etc.




*A plan to build dikes across Knik and Turnagain Arms to harness the tidal power of Cook Inlet was first proposed more than 20 years ago by a Seattle consulting engineer, Roy Johnson. The proposal is gaining new attention as natural gas and oil prices climb the nation searches for alternative sources of ene*

# Electricity from steam, winds, tides

By ROSEMARY SHINOHARA
Daily News Staff Writer

By 1980, Alaska may be getting about 90 per cent of its electrical energy from oil and natural gas, says R. J. Cross, chief of the project development division for the Alaska Power Administration.

"This is a matter of no small concern," Cross says. "There are good reasons to try to reverse the trend."

ROY W. JOHNSON, a Seattle consulting engineer, and Dr. William Ogle, an energy consultant, agree. But each has different ideas on how Alaska's power needs can be met, ranging from a proposal to harness the tides in Cook Inlet to prospects for supplying power for the village of Elim with a hot springs about seven miles away.

All three men made presentations on alternative energy sources before delegates to the Construction Specifications Institute regional convention, which ended in Anchorage Sunday.

### HYDRO POWER

Cross says there's a good chance that Alaska's major power systems may be placed entirely on coal and a hydro energy basis by the middle or late 1980s.

THE CONVERSION to hydro and coal power is "A very real option," but it would require huge investments, Cross says.

"Building Devil Canyon and the other units of the Upper Susitna River Project would be a major step," he believes. The Devil Canyon project alone would provide roughly one-fourth of the total estimated Alaska energy requirements in the year 2000. The U.S. Corps of Engineers is now completing field studies, with plans to have the first power on line in 1985 and annual firm energy of more than six billion kilowatt hours when the project is totally developed.

The Alaska Power Administration, part of the Interior Department, primarily plans for water and power development and operates federal hydroelectric projects in the state, but has also made some studies of coal, Cross says.

PLANS to export coal from the Cook Inlet area to the South 48 have been under active consideration for several years, he notes. "Huge increases in coal prices over the past two years have certainly enhanced chances for such development."

### GEOTHERMAL ENERGY

Dr. William Ogle, a physicist, has studied both geothermal energy and wind power, and says Alaska apparently has very large geothermal resources, but little is known about them.

There are generally three types of geothermal energy, dry steam, hot water, and hot, dry rock, Ogle says. For dry steam, the steam can be piped out of the earth and run through a turbine to create cheap electricity. With a hot water resource, steam and water will come to the surface if a hole is drilled down to the hot water. The experts are still studying how to produce energy from hot rock, where no water exists.

Ralph Stefano, an Anchorage engineer, studied the feasibility of heating Nome with a piping system from the Pilgrim Hot Springs some 70 miles away. The piping system is estimated to cost $35 million. But another possibility might be to drill directly under Nome in search of a geothermal resource similar to the system used to furnish utilities for large apartment complexes in Paris, Ogle says.

The University of Alaska is looking at another potential geothermal project – a power system for the village of Elim east of Nome, with a hot spring about seven miles away.

### TIDAL POWER

Roy Johnson, a consulting engineer, first presented his proposal to provide power for the Cook Inlet area in 1954 — and with electricity needs rising along with costs, his plan to harness the tidal energy in Cook Inlet may be reasonable and competitive in 1975, Johnson believes.

Johnson's plan calls for damming Knik and Turnagain arms, enabling power to be produced because of the difference in water surface elevation on either side of the dike.

THE PROJECT would include vehicle access from Anchorage across Turnagain Arm to the Kenai Peninsula and across Knik Arm to the Susitna River delta. Other possible benefits would be the potential for establishment of a complex of electro-metallurgical and electro-chemical industries to process minerals with the tidal power, Johnson says.

An extensive program of investigation would have to be pursued to authoritatively determine the feasibility of the idea, he says. He suggested the cost of tidal barriers and gates might be $560 million, and the cost of a power plant might be $580 million for a 1,000 megawatt plant.

Even with those figures, the cost to benefit ration for the project would be high, Johnson says. Direct highway routes on the barriers, improvements to shipping, and the non-polluting nature of the project are among its benefits.





## the draft comprehensive plan

Quote; Page 10
"Citizens throughout the Borough have repeatedly voiced a concern over inadequacies in the design of many residential subdivisions . . . The mixing of single family homes with apartment units, however, did not receive much support."
Page 21, Policy # 2
"The housing industry should be encouraged to provide greater [illegible]

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

M E M O R A N D U M

TO: SENATOR BILL RAY, CHAIRMAN
SENATE TRANSPORTATION COMMITTEE

FROM: SENATOR VIC FISCHER

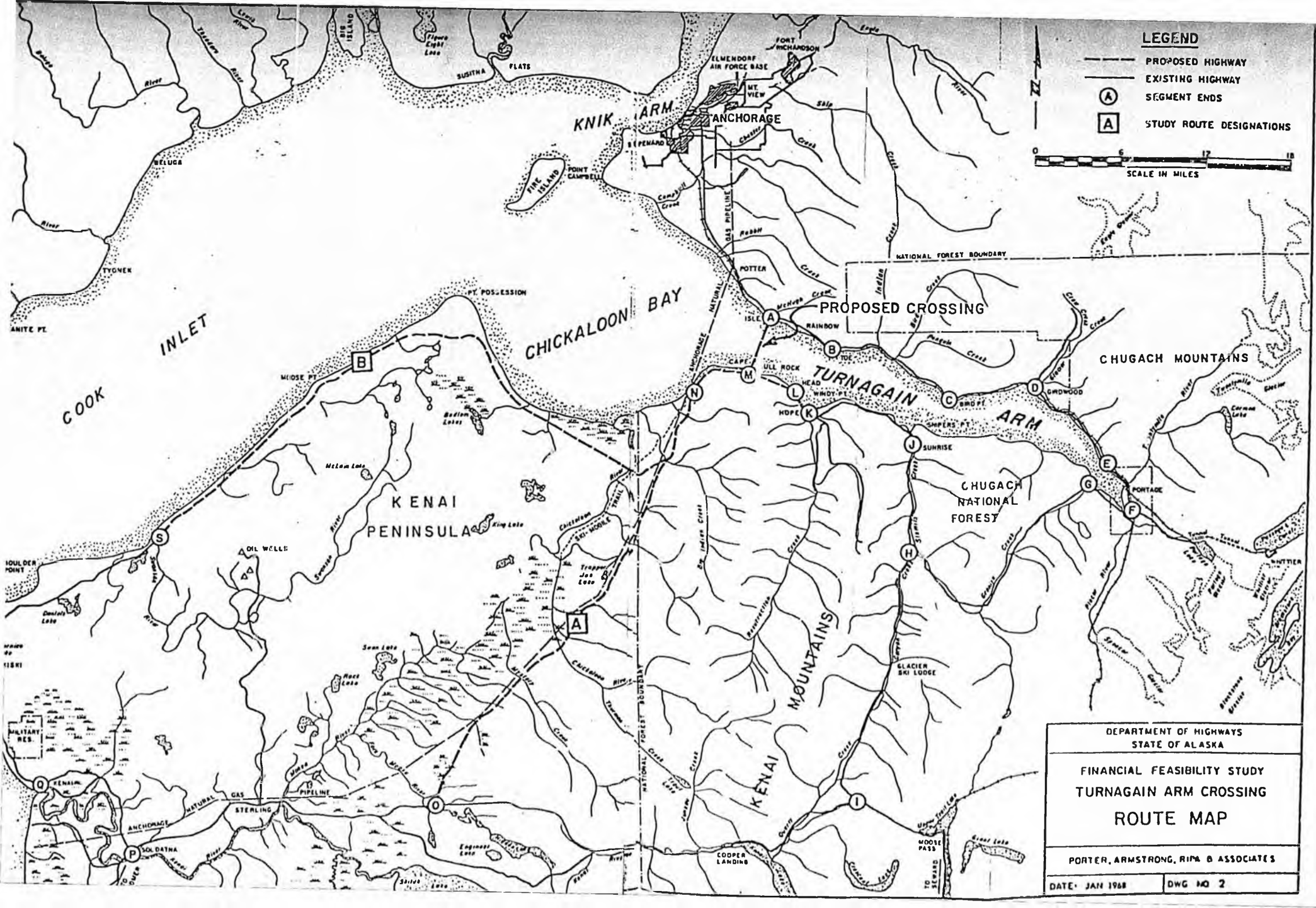
DATE: MARCH 5, 1981

RE: SB 155, Turnagain Arm Crossing

Attached is copy of a letter from Harold Pomeroy. Among other things, he suggests that a preliminary reconnaissance should precede the proposed $2 million study that I proposed.

While I'm extremely interested in seeing some progress on this project, I will leave it to you how intensive a program should be initiated.

Thanks for your consideration of this project.


LEGEND
PROPOSED HIGHWAY
EXISTING HIGHWAY
SEGMENT ENDS
STUDY ROUTE DESIGNATIONS
SCALE IN MILES
PROPOSED CROSSING
NATIONAL FOREST BOUNDARY
COOK INLET
CHICKALOON BAY
KNIK ARM
TURNAGAIN ARM
CHUGACH MOUNTAINS
CHUGACH NATIONAL FOREST
KENAI PENINSULA
KENAI MOUNTAINS
ANCHORAGE
ELMENDORF AIR FORCE BASE
FORT RICHARDSON
BELUGA
TYONEK
POINT POSSESSION
MOOSE PT.
CAPE ROMANZOF
HOPE
SUNRISE
GIRDWOOD
PORTAGE
WHITTIER
SEWARD
KENAI
SOLDOTNA
STERLING
OIL WELLS
MILITARY RES.
GLACIER SKI LODGE
COPPER LANDING
MOOSE PASS
TO SEWARD
TO HOMER
NATURAL GAS PIPELINE
ANCHORAGE NATURAL GAS PIPELINE
SUSITNA FLATS
FIRE ISLAND
POINT CAMPBELL
BIG ISLAND
DEPARTMENT OF HIGHWAYS
STATE OF ALASKA
FINANCIAL FEASIBILITY STUDY
TURNAGAIN ARM CROSSING
ROUTE MAP
PORTER, ARMSTRONG, RIPA & ASSOCIATES
DATE: JAN 1968
DWG NO 2

# FINANCIAL FEASIBILITY STUDY
# TURNAGAIN ARM CROSSING
# ROUTE MAP

DEPARTMENT OF HIGHWAYS
STATE OF ALASKA

PORTER, ARMSTRONG, RIPS & ASSOCIATES

DATE: JAN 1968

DWG NO 2

LEGEND

- PROPOSED HIGHWAY
- EXISTING HIGHWAY
- (A) SEGMENT ENDS
- [A] STUDY ROUTE DESIGNATIONS

SCALE IN MILES 0 6 12 18

COOK INLET
CHICKALOON BAY
KNIK ARM
TURNAGAIN ARM
KENAI PENINSULA
CHUGACH MOUNTAINS
CHUGACH NATIONAL FOREST
KENAI MOUNTAINS
ANCHORAGE
PROPOSED CROSSING
NATIONAL FOREST BOUNDARY
ANCHORAGE NATURAL GAS PIPELINE
MOOSE PASS
GLACIER SKI LODGE
COOPER LANDING
TO SEWARD
TO HOMER

SB

156

ALASKA RAILROAD
file
PAPER

A-T 3/29/79 RR.

# Barrett Takes Rail Idea To Washington Legislator

SEATTLE (AP) — A railroad linking Alaska with the Yukon, British Columbia and Washington state would mean benefits in exploiting natural resources and attracting the tourist dollar, says Dave Barrett, leader of the New Democratic Party in British Columbia and former premier of that province.

Barrett and Washington state Sen. King Lysen met with federal officials Wednesday to promote the idea of the regional railroad, then told a news conference of the benefits it could provide.

Lysen said the proposed 3,000 mile rail line, which would cost an estimated $2 billion, would be beneficial in moving defense materials to Alaska. He said Washington state, through its members in Congress, has enough political clout to get the project onto the drawing board.

Barrett, who is proposing a $800,000 study as a first step in the project, said the idea for such a railroad has been kicking around 30 years. He said he has met with Transportation Secretary Brock Adams and members of the Washington and Alaska delegations to Congress, and that Sen. Warren Magnuson has supported such a rail lines for many years.

The railroad, said Barrett, would be built by the states and provinces and could result in many joint ventures involving the United States and Canada.

Barrett denied a news report which quoted him as saying on Monday that his party, if in power, would increase the price of natural gas exports to finance the British Columbia portion of the rail line.

The pricing of Canada's natural gas "has nothing to do with the financing of a railroad," he said.

He said the line could open the north country to development while protecting the environment by limited entry, and at the same time prevent "boomism and hucksterism."

"It would be an access for goods and services in and goods and services out," he said.

The line also would spur tourism and provide another mode of travel within the region, he said.

A resolution to build the line is now before the Washington state Senate. It says the line would benefit the shipment of agricultural products, timber and minerals.

Barrett said he would visit Juneau April 3 to meet with state legislators to promote the idea.

## *Carter Proclaims Memorial Day*

WASHINGTON (AP) — President Carter today designated Memorial Day as "a day of prayer for permanent peace," and set 11 a.m. as a time to "unite in prayer."

In a proclamation, the president urged the news media "to join in suitable observances" on May 28, and directed that the flag be flown at half-staff until noon on all government buildings.

ALASKA RAILROAD FILE PAPER RR



# Peper Explains Hiring Policy For District

While a background check before hiring school district employees is desirable, Superintendent John Peper said, "the extent of the check is a practical problem."

"Many times we need the school swept, and we have to employ someone without a full investigation," he said.

The school district employed janitor Tommy Patterson eight months ago without knowledge of his criminal record. Another janitor, a woman, was last employed as a topless dancer at the Wild Cherry on Fourth Avenue. School personnel officer Bill Tanner said his office did not know of her last employment.

Peper said personnel officials spent the greatest amount of time researching the backgrounds of certificated employees, since they work directly with pupils.

"We quite often call or write the previous district" of the teacher, Peper said.

He said "the degree to which we know the past district" sometimes determines whether the past employer is called, with less familiar districts more likely to be contacted.

Police records are rarely, if ever, checked.

A fingerprinting system such as Nevada's, in which applicants for a teaching certificate must submit a set of fingerprints to be checked by the Federal Bureau of Investigation, "would be a good idea," Peper said.

# Hopkins Says Leasing Plan Is Inadequate

The Interior Department's proposed five-year outer continental shelf leasing schedule will not succeed in its goal of developing secure supplies of oil and gas for the nation, says the Alaska Oil and Gas Association's executive director, William Hopkins.

He said the plan "largely ignores industry's suggestions," not only in regard to prime Alaska areas but also in the order in which Alaska's offshore areas should be leased.

The Interior Department's 1980-85 leasing schedule, announced earlier this month, includes a possible nine sales off Alaska's shores.

At the Interior secretary's re-

# Canada's Opposition Studies Railroad Link

VICTORIA, British Columbia (AP) — Opposition leader Dave Barrett said Monday a New Democratic Party government would increase the price of natural gas to finance the British Columbia portion of a $2 billion rail line he is advocating to link Alaska and Washington state.

Barrett said an NDP government would raise the price of natural gas sold to the United States to at least $3.20 a thousand cubic feet — the same price charged by Mexico.

British Columbia currently charges $2.16 a thousand cubic feet, and as a result has lost $159 million during the past year, Barrett said in an interview.

Earlier, Barrett told a news conference he has been invited to outline his proposal before a special joint session of the Alaska House of Representatives and the Alaska State Senate on April 3.

In February, the former premier met in Washington, D.C., with Brock Adams, U.S. secretary of transportation, to outline his proposal which calls for the extension of the stalled British Columbia Railway's Dease Lake branch line north to Lower Post on the British Columbia-Yukon border.

New rail links then would be constructed in a northwesterly direction through the Yukon to link with the federally owned Alaska Railroad.

Oil from the trans-Alaska pipeline system would be loaded on rail tank cars near Fairbanks, Alaska, and hauled through Yukon to connections with the Canadian National Railways at Prince George and the Canadian Pacific Railway and Burlington-Northern Railway in Vancouver.

Premier Bill Bennett suspended construction of the partly completed Dease Lake extension in April 1977, after the federal government agreed to pay as much as $81 million of the cost.

The more than 400-mile extension originally was to have been built from Fort St. James, in central British Columbia, to Dease Lake in northwest British Columbia. It was two-thirds completed when the suspension was announced.

Former Premier W.A.C. Bennett estimated in 1971 that the line would cost $68 million to build. In 1977, when construction was ended, $191 million had been spent, and it was estimated an additional $311 million would be needed to complete the extension.

A royal commission into the British Columbia Railway concurred with the decision to abandon the line and said it was unlikely to be justified economically.

It said the line might be completed to the Yukon and Alaska by the federal or United States governments, but the BCR "should not participate in such a scheme without guarantees from the governments involved against operating losses on the line, as well as payment by those governments of capital costs to be incurred."

Barrett said U.S. officials are interested in renewing discussion about the link but was unable to say why they were speaking with the opposition leader instead of with the premier.

# Barrett Plans Visit In Juneau

JUNEAU (AP) — David Barrett, parliament opposition leader and former premier of British Columbia, will address a joint session of the Legislature next month on a pro-

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

OFFICE OF THE COMMISSIONER

POUCH Z
JUNEAU, ALASKA 99811
(TELEX 45-328)

January 29, 1981

Honorable Charles H. Parr
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Parr:

Attached is an updated fiscal note for the Alaska-Canada extension route. Also attached for your review are two copies of the consultants report of the rail facilities in Alaska.

If you have any comments, please contact Dennis Dooley at 465-2470.

Sincerely,

Robert W. Ward
Commissioner

25A-T1LH

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

# FISCAL NOTE

I. REQUEST
Bill/Resolution No. CSSB 440: Relating to a utility corridor for the ARR and a report
Title evaluating the affect of extension of the ARR.
Requested by Legislative Finance (Jay Hogan) Date 1-28-81

II. FISCAL DETAIL
Agency Affected DOTPF
Program Category Affected Design and Construction: Planning and Programming
BRU, Program, or Subprogram(s) Affected Transportation
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | | 235.0 | 350.0 | 110.0 | | |
| 200 TRAVEL | | 30.0 | 28.0 | | | |
| 300 CONTRACTUAL | | 300.0 | 2220.0 | 2200.0 | | |
| 400 COMMODITIES | | 5.0 | 4.0 | | | |
| 500 EQUIPMENT | | | | | | |
| 600 LAND & STRUCTURES | | | | | | |
| 700 GRANTS, CLAIMS, ETC. | | | | | | |
| | | | | | | |
| TOTAL | | 570.0 | 2602.0 | 2310.0 | | |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 570.0 | 2602.0 | 2310.0 | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

Work Covered:
FY82: 1) Short sections of additional route study work in potential problem areas: $70,000 (Design and Construction, Interior Region).

2) Ties between railroad center line and property corners (field survey and office calculations): $75,000 (some of this work completed).

3) Right-of-way inventory and description and computation of acreage of parcels to be acquired: $125,000 (Design and Construction, Interior)

4) Environmental Imapct Statement (EIS): $300,000.

IV. DATE 1-28-81 PREPARED BY Dennis Dooley
AGENCY DOTPF, Planning and Programming
PHONE 465-2470

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

33-001 (Rev. 12/80

I. REQUEST CSSB #440 - An Act relating to the withdrawal of land for a utility corrido
Bill/Resolution No. for extension of the ARR and the preparation of a report evaluating th
Title effect of construction of an extension of the ARR; and providing for an effective
Requested by Legislative Finance (Jay Hogan) Date 3/17/80

II. FISCAL DETAIL

Agency Affected DOT/PF

Program Category Affected Design and Construction; Planning and Research

BRU, Program, or Subprogram(s) Affected Transportation

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | | FY 80 | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 |
|---|---|---|---|---|---|---|---|
| 100 | PERSONAL SERVICES | | 235.0 | 327.0 | 100.0 | | |
| 200 | TRAVEL | | 28.0 | 25.0 | | | |
| 300 | CONTRACTUAL | | 273.0 | 2,020.0 | 2,000.0 | | |
| 400 | COMMODITIES | | 4.0 | 3.0 | | | |
| 500 | EQUIPMENT | | | | | | |
| 600 | LAND & STRUCTURES | | | | | | |
| 700 | GRANTS, CLAIMS, ETC. | | | | | | |
| | TOTAL | | 540.0 | 2,375.0 | 2,100.0 | | |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 540.0 | 2,375.0 | 2,100.0 | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | 1 | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

WORK COVERED:

FY 81

1) Short sections of additional route study work in possible problem areas - $60,000 (Design and Construction, Interior Region)

2) Ties between railroad centerline and property corners (field survey and office calculations) - $100,000 (Design and Construction, Interior Region)

3) Right-of-way work necessary to describe right-of-way, develop a complete set of right-of-way plans, and compute acreage of parcels to be acquired - $125,000 (Design and Construction, Interior Region, 1 new position)

IV. DATE 3/21/80 PREPARED BY Mark S. Hickey

AGENCY DOT/PF - S.E. Planning and Research

PHONE 465-2470

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

33-031 (Rev. 12/79)

SB

157

– FILE – WITH SIS

# Alaska State Legislature

## Senate

### Committee on State Affairs

Pouch V
State Capitol
Juneau, Alaska 99811

Official Business

M E M O R A N D U M

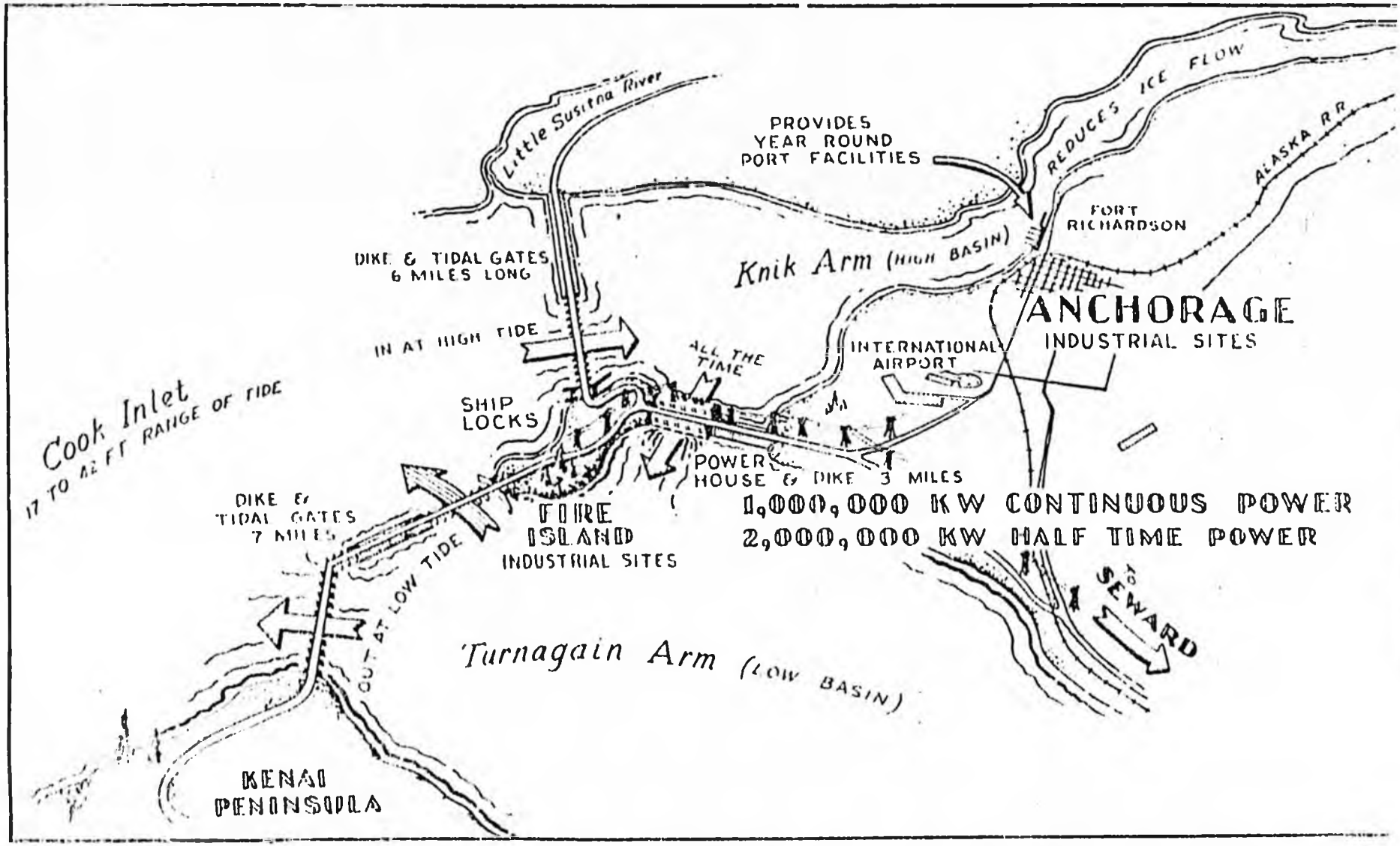
TO: Senator Bill Ray, Chair, Committee on Transportation

FROM: Sen. Fischer

RE: Cook Inlet Tidal Power and Transportation Links

Attached is an Anchorage News clipping of August 26, 1975, that gives us all the answers to providing Turnagain Arm and Knik Arm crossings from Anchorage, harnessing Cook Inlet tides, etc. The proposal looks like it would solve many of our problems: power, highway access, port, etc.

Vic




*A plan to build dikes across Knik and Turnagain Arms to harness the tidal power of Cook Inlet was first proposed more than 20 years ago by a Seattle consulting engineer, Ray Johnson. The proposal is gaining new attention as natural gas and oil prices climb the nation searches for alternative sources of ene*

# Electricity from steam, winds, tides

By ROSEMARY SHINOHARA
Daily News Staff Writer

By 1980, Alaska may be getting about 90 per cent of its electrical energy from oil and natural gas, says R. J. Cross, chief of the project development division for the Alaska Power Administration.

"This is a matter of no small concern," Cross says. "There are good reasons to try to reverse the trend."

ROY W. JOHNSON, a Seattle consulting engineer, and Dr. William Ogle, an energy consultant, agree. But each has different ideas on how Alaska's power needs can be met, ranging from a proposal to harness the tides in Cook Inlet to prospects for supplying power for the village of Elim with a hot springs about seven miles away.

All three men made presentations on alternative energy sources before delegates to the Construction Specifications Institute regional convention, which ended in Anchorage Sunday.

HYDRO POWER

Cross says there's a good chance that Alaska's major power systems may be placed entirely on coal and a hydro energy basis by the middle or late 1980s.

THE CONVERSION to hydro and coal power is "A very real option," but it would require huge investments, Cross says.

"Building Devil Canyon and the other units of the Upper Susitna River Project would be a major step," he believes. The Devil Canyon project alone would provide roughly one-fourth of the total estimated Alaska energy requirements in the year 2000. The U.S. Corps of Engineers is now completing field studies, with plans to have the first power on line in 1985 and annual firm energy of more than six billion kilowatt hours when the project is totally developed.

The Alaska Power Administration, part of the Interior Department, primarily plans for water and power development and operates federal hydroelectric projects in the state, but has also made some studies of coal, Cross says.

PLANS to export coal from the Cook Inlet area to the South 48 have been under active consideration for several years, he notes. "Huge increases in coal prices over the past two years have certainly enhanced chances for such development."

GEOTHERMAL ENERGY

Dr. William Ogle, a physicist, has studied both geothermal energy and wind power, and says Alaska apparently has very large geothermal resources, but little is known about them.

There are generally three types of geothermal energy, dry steam, hot water, and hot, dry rock, Ogle says. For dry steam, the steam can be piped out of the earth and run through a turbine to create cheap electricity. With a hot water resource, steam and water will come to the surface if a hole is drilled down to the hot water. The experts are still studying how to produce energy from hot rock, where no water exists.

Ralph Stefano, an Anchorage engineer, studied the feasibility of heating Nome with a piping system from the Pilgrim Hot Springs some 70 miles away. The piping system is estimated to cost $35 million. But another possibility might be to drill directly under Nome in search of a geothermal resource similar to the system used to furnish utilities for large apartment complexes in Paris, Ogle says.

The University of Alaska is looking at another potential geothermal project — a power system for the village of Elim east of Nome, with a hot spring about seven miles away.

TIDAL POWER

Roy Johnson, a consulting engineer, first presented his proposal to provide power for the Cook Inlet area in 1954 and with electricity needs rising along with costs, his plan to harness the tidal energy in Cook Inlet may be reasonable and competitive in 1975, Johnson believes.

Johnson's plan calls for damming Knik and Turnagain arms, enabling power to be produced because of the difference in water surface elevation on either side of the dike.

THE PROJECT would include vehicle access from Anchorage across Turnagain Arm to the Kenai Peninsula and across Knik Arm to the Susitna River delta. Other possible benefits would be the potential for establishment of a complex of electro-metallurgical and electro chemical industries to process minerals with the tidal power, Johnson says.

An extensive program of investigation would have to be pursued to authoritatively determine the feasibility of the idea, he says. He suggested the cost of tidal barriers and gates might be $600 million, and the cost of a power plant might be $500 million for a 1,000 megawatt plant.

Even with those figures, the cost to benefit ration for the project would be high, Johnson says. Direct highway routes on the barriers, improvements to shipping, and the non-polluting nature of the project are among its benefits.






## the draft comprehensive plan

Quote; Page 10
"Citizens throughout the Borough have repeatedly voiced a concern over inadequacies in the design of many residential subdivisions . . . The mixing of single family homes with apartment units, however, did not receive much support."
Page 21, Policy # 2
"The housing industry should be encouraged to provide greater mix[illegible]


SB


160

(907) 465-3900

January 30, 1981

Re: Knik Arm Crossing
Turnagain Arm Crossing

200H-3076/0803

The Honorable Vic Fischer
Senate District E
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Fischer:

In answer to Mr. Sumner Putnam's questions of Mr. Matlock, we are attaching updated estimates of cost (January 1981 dollars) for the Knik Arm and Turnagain Arm Crossings. In the case of the latter, we have updated both the bridge and causeway alternatives which were last studied in 1967 and 1968, but have not included the cost of the connecting roadway to the south.

The shortest route to the Kenai Peninsula would be on new alignment through the national forest and the national moose range (Points M to N to O on the map) although a much shorter initial connection could be made to Hope (M to L to K on the map). If you need cost estimates to include either of these connections, we will develop and furnish them.

In the case of both the Knik and Turnagain Arm Crossings, there would have to be rather extensive studies and coordination with other agencies before final design could actually begin.

We do consider both crossings to be feasible although, admittedly, expensive.

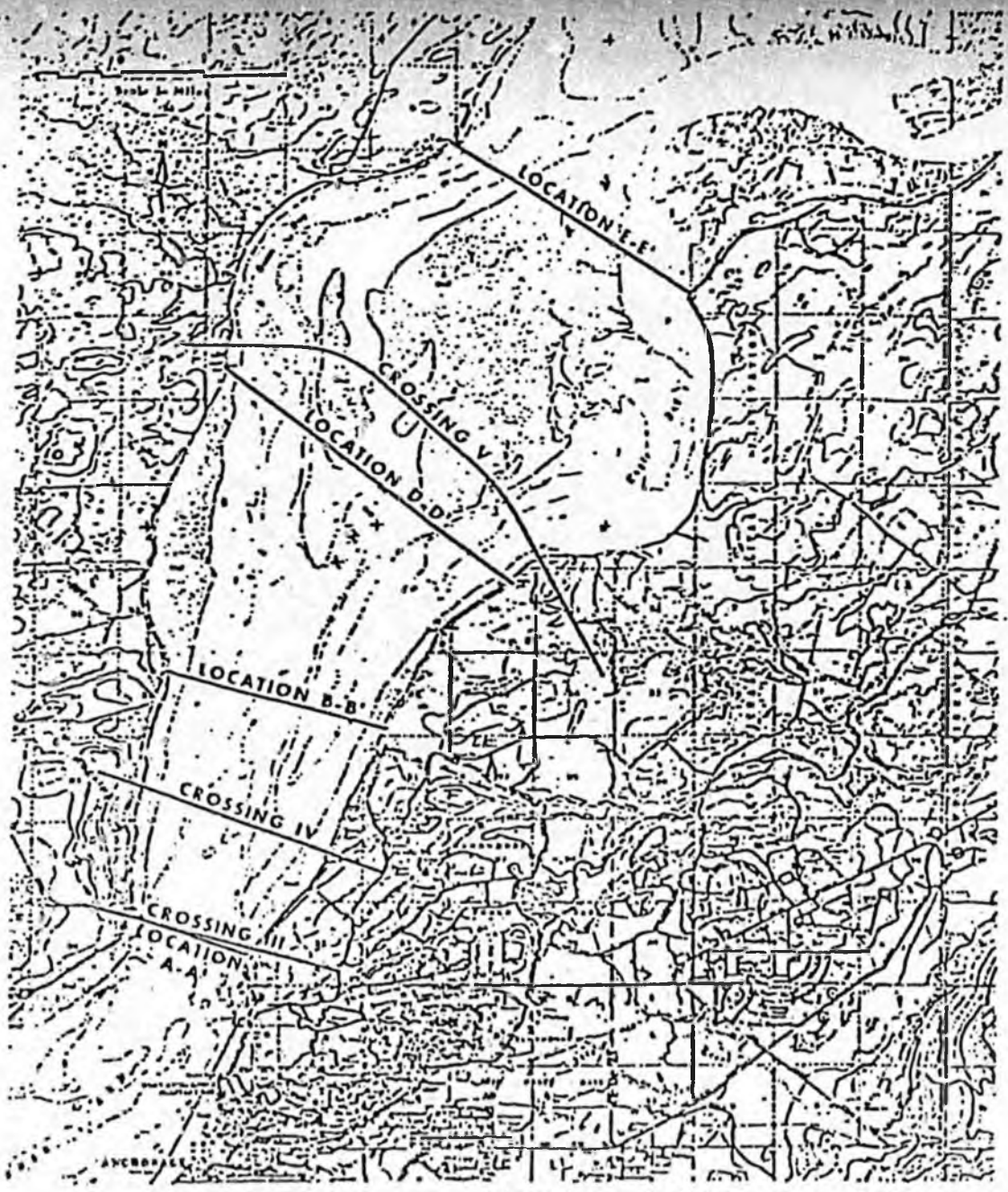
Sincerely,

R. D. Shumway, P.E.
Deputy Commissioner

Attachment

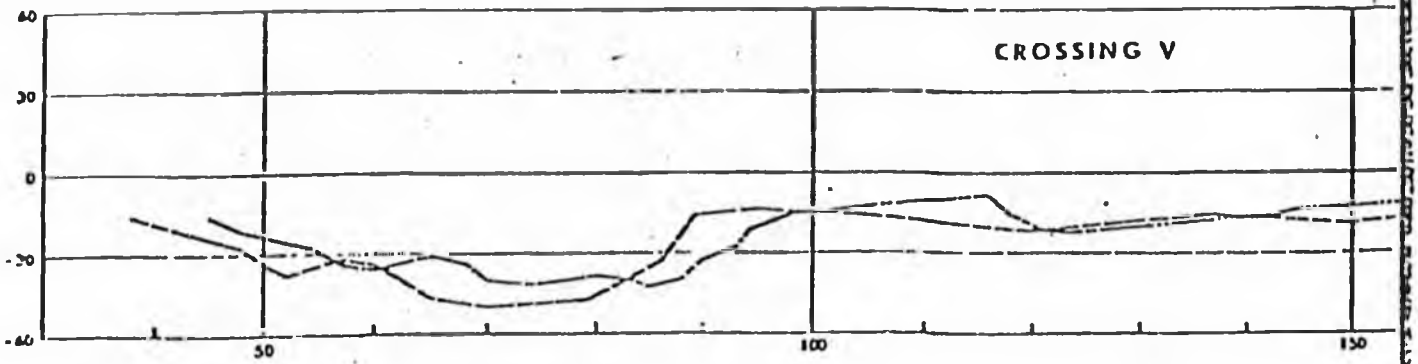
RDS/CSM/kgm

bcc: John Bates
R. D. Redick
Bridge Design
C. S. Matlock




Topographic data on this figure is from U.S.G.S. Quadrangle Maps.

LOCATION MAP



# KNIK ARM CROSSING

1/9/81

| | 1971 Estimate | | 1981 Estimate | |
|---|---|---|---|---|
| | BRIDGE CROSSING IV | CAUSEWAY DAM CROSSING V | BRIDGE CROSSING IV | CAUSEWAY DAM CROSSING V |
| Total for Crossing | $114,938,200 | $189,590,600 | $281,598,600 | $464,497,000 |
| Contingencies and Variations (10%) | 11,061,800 | 19,409,400 | 27,101,400 | 47,553,000 |
| Estimated Construction Cost | * $126,000,000 | * $209,000,000 | 308,700,000 | 512,050,000 |
| Borings and Soil Testing | ** 410,000 | ** 837,000 | ** 1,004,500 | ** 2,050,600 |
| Hydrographic and Land Surveys (0.75%) | 945,000 | 1,567,500 | 2,315,200 | 3,840,400 |
| Model Testing and/or Test Structure | 520,000 | 225,000 | 1,274,000 | 551,300 |
| Engineering and Administration | | | | |
| Basic Design (4.0%) | 5,040,000 | 8,360,000 | 12,348,000 | 20,482,000 |
| Construction Supervision (4.0%) | 5,040,000 | 8,360,000 | 12,348,000 | 20,482,000 |
| Administration (1.5%) | 1,890,000 | 3,135,000 | 4,630,500 | 7,680,800 |
| Estimated Crossing Cost | $140,000,000 | $231,000,000 | $343,000,000 | $567,000,000 |
| Estimated Approach Cost | | | 88,000,000 | 84,000,000 |
| Total Project Cost | | | $431,000,000 | $651,000,000 |

(Based on January 1981 Dollars)

* Based on 1971 start and 1975 finish
** Includes Geophysical Surveys

# 32' Roadway - Using Long Spans Only

## (B) Summary — Bridge Crossing - Isle to Cape

### Construction Costs

A. Long Span Superstructure (18,500')

| | | |
|---|---|---|
| Steel | (175#/ft²)(18500')(34') $1.75 = | $192,630,000 |
| Concrete | (34')(9"/12)(1/27)(18,500')$500 = | 8,740,000 |
| Resteel | (175#/c.y.)(17,500 c.y.) $.80 = | 2,450,000 |
| Joints | 18500/600 = 31 x $ 10000 = | 310,000 |
| Railing | | 240,000 |
| Deck Protection | 18,500'(32')1/4 x $15 = | 990,000 |
| | | $205,360,000 |

B. Long Span Substructure

18,500'/600' avg = 31 spans ⇨ 32 units

| | |
|---|---|
| See sht 5 $4,614,000 (32) = | 147,648,000 |
| C. Approaches | 7,440,000 |
| Total Basic Const. | $360,448,000 |
| C. Mobilization @ 1% | 3,604,000 |
| D. Const. Engr., Admin., Contingencies @ 20% | 72,089,000 |
| Total Const. Cost | $436,141,000 |

Pre-Const. Costs

| | |
|---|---|
| A. R.O.W. | ? |
| B. Pre-Engr @ 4% of basic const. cost = | 14,418,000 |
| C. Special Studies (see sht. 7) | 7,000,000 |
| | $457,559,000 |
| Say | $450,000,000 |

January, 1981 Dollars

9/

# II. CAUSEWAY / SPILLWAY - ISLE TO CAPE

CONST. COST INDICES FROM 1967 TO 1981 GENERALLY REFLEC
AN INCREASE OF 300% I FOR THE PERIOD. i. EARTH
ITEMS, IN VOLUMES ESTIMATED, MAY NO LONGER BE AVAILABLE AS
CONSULTANT ENVISIONED, SO A FACTOR SOMEWHAT HIGHER IS APPLIED

| ESTIMATED CONSTRUCTION COST | | 1968 | ADJ. FACTOR | 1981 |
|---|---|---|---|---|
| **End-Dumping Section of Causeway to Elev. 25 — Material in Place** | | | | |
| Quarry-run rock | 2,133,000 CY @ $3.65 | $ 7,785,500 | | |
| Random material | 1,510,000 CY @ 1.65 | 2,491,500 | | |
| Armor Rock | 501,000 CY @ 11.00 | 5,511,000 | | |
| Select Grading Rock | 332,000 CY @ 4.00 | 1,328,000 | | |
| Seepage Provisions | 550,000 CY @ 2.00 | 1,100,000 | | |
| | Subtotal | $18,216,000 | x 5.0 = | $ 91,080, |
| **Barge-placed Material (including Island) — Material in Place** | | | | |
| Selected sand and gravel, talus, or quarry fines | 880,000 CY @ $4.30 | $ 3,784,000 | | |
| Quarry-run rock | 2,507,000 CY @ 5.30 | 13,287,000 | | |
| Random material | 1,747,000 CY @ 3.30 | 5,765,000 | | |
| | Subtotal | $22,836,000 | x 5.0 = | 114,180, |
| **Cableway Placed Closure Section — Material in Place** | | | | |
| Select Quarry Rock | 1,400,000 @ $5.50 | $ 7,700,000 | | |
| Quarry medium to fine | 1,400,000 @ 4.20 | 5,880,000 | | |
| | Subtotal | $13,580,000 | x 5.0 = | 67,900 |
| **Completion of Causeway — Above Elev. 25 — Material in Place** | | | | |
| Random material | 600,000 CY @ $1.65 | $ 990,000 | | |
| Armor riprap | 262,000 CY @ 11.00 | 2,882,000 | | |
| Select filter material | 98,000 CY @ 4.00 | 392,000 | | |
| | Subtotal | $ 4,264,000 | x 5.0 = | 21,320 |
| **Roadway Across Causeway** | | | | |
| Pavement, including sublease | 19,500 Lin. Ft. @ $22.80 | $ 445,000 | | |
| Guard rail — in place | 40,000 Lin. Ft. @ 9.50 | 380,000 | | |
| | Subtotal | $ 825,000 | x 3.0 = | 2,475 |
| **Spillway** | | | | |
| Concrete Control Wall — | | | | |
| Excavation | 1,000 CY @ $20.00 | $ 20,000 | | |
| Concrete in Place | 1,000 CY @ 100.00 | 100,000 | | |
| Special Shaping | Lump Sum | 100,000 | | |
| Fish Ladder | Lump Sum | 700,000 | | |
| Highway Bridge — | | | | |
| Structural Steel | 1,550,000 lb. @ $ 0.40 | 520,000 | | |
| Concrete | 1,762 CY @ 200.00 | 352,000 | | |
| Re-steel | 283,000 lb. @ 0.20 | 57,000 | | |
| Bridge rail | 2,180 ft. @ 8.00 | 17,000 | | |
| Caissons | Lump Sum | 51,000 | | |
| | Subtotal | $ 1,917,000 | x 3.0 = | 5,751, |
| **Estimated Construction Cost — Causeway, Roadway & Bridge (without RR bridge)** | | 61,638,000 | | $ 302,706 |
| Contingencies — 20% | | 12,328,000 | +20% | 60,541 |
| | | $73,966,000 | | $363,301, |
| Engineering & Administration — 15% | | 11,094,000 | +15% | 54,495 |
| TOTAL ESTIMATED COST — | | 85,060,000 | | $ 417,796. |
| | Say | $85,000,000 | SAY | $ 420,000 |

SB

178

FILE WITH BILL

# STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

**OFFICE OF THE GOVERNOR**

BUDGET & MANAGEMENT
POUCH AM — JUNEAU 99811
PHONE 465-2213

March 18, 1981

The Honorable Don Bennett and Ed Dankworth
Co-Chairmen, Senate Finance Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

Re: Amendment to SB178
Increase of $245,300
Departments of Transportation
& Public Facilities and
Administration

Dear Senators Bennett and Dankworth:

Your committee will soon be reviewing SB178 which makes a supplemental appropriation to pay for the FY 81 costs of the Inland Boatman's Union contract. This bill is currently in the Transportation Committee. The Administration has recently concluded negotiations with the Masters, Mates and Pilots bargaining unit. We request that SB178 be amended to add the funding necessary to pay the FY 81 costs of the agreement between the Masters, Mates and Pilots and the State. The FY 82 costs of this agreement will be requested by a budget amendment (#B100111).

The Masters, Mates and Pilots contract is retroactive to July 1, 1980 and expires on June 30, 1981. The total increased payroll costs for FY 81 required by this agreement are $240,300. This represents a 6.3% increase over the total MMP payroll prior to the increase. In addition, the agreement also requires the Department of Administration to pay $5,000 toward a jointly commissioned wage study.

An attachment to this letter proposes language to amend SB178 so that the necessary costs will be funded. Your assistance in amending the bill would be appreciated.

Sincerely,

Ron Lehr

Dr. Ronald D. Lehr
Director

cc: Senator Ray, Chairman, Senate Transportation Committee
Representative Sam Cotten, Chairman, House Finance Committee
Commissioner Hudson, Administration
Jay Hogan
Keith Specking

01-A21LH

Attachment to Senators Bennett and Dankworth

Suggested Amendments to SB 178 (S101409)

1. Change title to: "An act making supplemental appropriations to the Department of Administration and the Department of Transportation and Public Facilities to fund the Inland Boatman's Union and Masters, Mates and Pilots contracts; and providing for an effective date."

2. Renumber section 2 to section 4.

3. Add a new section 2 to read: "The sum of $240,300 is appropriated from the general fund to the Department of Transportation and Public Facilities to fund the FY 81 costs of the Masters, Mates and Pilots contract which was signed in February 1981."

4. Add a new section 3 to read: "The sum of $5,000 is appropriated from the general fund to the Department of Administration to fund the FY 81 costs of the Masters, Mates and Pilots contract which was signed in February 1981."

# MM&P AGREEMENT - FY '81 COST

| | |
|---|---|
| Across the Board Increases | |
| ($100/mo. x 12 mos. x 65 Deck Officers) | $ 78,000.00 |
| "Master's Pay" Increases | |
| SE: ($140/mo. x 12 mos. x 17 De k Officers) | 28,560.00 |
| Tustumena: [$75/mo.] x 12 mos. x 2 Deck Officers) | [1,800.00] |
| Non-Watch Pay, In Lieu of Overtime, Increases | |
| Masters - SE (including Chilkat): | |
| $260/mo. x 12 mos. x 19 Deck Officers | 59,280.00 |
| Masters - SW: $260/mo. x 12 mos. x 4 Deck Officers | 12,480.00 |
| Chief Mates - SE: $95/mo. x 12 mos. x 10 Deck Officers | 11,400.00 |
| Equalization of SE 2nd and 3rd Mates: | |
| $126.95 x 12 mos. x 6 Deck Officers | 9,140.40 |
| Taku Upgrade | |
| Masters: $162.95/mo. x 12 mos. x 2 Deck Officers | 3,903.60 |
| Chief Mate: $142.82/mo. x 12 mos. x 2 Deck Officers | 3,427.68 |
| Overtime Rate Increases - SE | 34,558.63 |
| Overtime Savings - SE Chief Mates | [8,991.45] |
| Maintenance and Cure Improvement | 3,000.00 |
| Uniform Allowance Increase | |
| $1/pay period x 26 pay periods x 65 Deck Officers | 1,690.00 |
| Subtotal | $234,648.86 |
| UI Increased Cost - 7% gross wages | 1,609.71 |
| License Insurance Increase | 4,037.39 |
| SUBTOTAL | $240,295.96 |
| Jointly Commissioned Wage Study. These funds to be allocated to the Commissioner of Administration to pay the State share of study costs. | $ 5,000.00 |
| TOTAL | $245,295.96 |

MM&P Projected Payroll, CY 1981
(Absent new Agreement) $ 3,868,816.70

Package represents approximately 6.3% increase to total projected payroll.

8/LRI/A

JAY S. HAMMOND
GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

March 6, 1981

The Honorable Bill Ray
Chairman
Senate Transportation Committee
Alaska State Legislature
Juneau, AK 99811

Dear ~~Senator~~ Ray:

I would appreciate your help with Senate Bill 178, An act making a supplemental appropriation to the Department of Transportation and Public Facilities to fund the Inland Boatmen's Union contract; and providing for an effective date. The enactment of this legislation would probably help us in our negotiations with the Inland Boatmen's Union.

Sincerely,

Keith

Keith W. Specking
Legislative Assistant
to the Governor

SB

182

: : 182

Alaska State Legislature

SENATOR
BOB MULCAHY

REPRESENTING
THE ALEUTIAN CHAIN,
KODIAK ISLAND
AND THE PRIBILOF ISLANDS

HOME ADDRESS
P.O. BOX 246
KODIAK, ALASKA 99615
(907) 486-3561

DURING SESSION
POUCH V
JUNEAU, ALASKA 99811

State Senate

# SECTIONAL ANALYSIS
## SB 101 - Repeal Marine Fuel Tax

Sec. 1. Repeals tax on dealer who sells or transfers marine fuel

Sec. 2. Repeals tax on consumer

Sec. 3. Technical amendments

Sec. 4. Technical amendments

Sec. 5. This excludes fuel used by watercraft from the definition of "motor fuel".

Sec. 6. Repeals watercraft fuel tax account from the general fund.

Sec. 7. Effective date clause of July 1, 1981

Alaska State Legislature

SENATOR
BOB MULCAHY

REPRESENTING
THE ALEUTIAN CHAIN,
KODIAK ISLAND
AND THE PRIBILOF ISLANDS

HOME ADDRESS
P.O. BOX 246
KODIAK, ALASKA 99615
(907) 486-3561

DURING SESSION
POUCH V
JUNEAU, ALASKA 99811

State Senate

A recap of the following pages from the Department of Revenue's Source Book publications shows the amount of Marine Fuel Tax collected for the past few years and the estimated tax for FY 81 and FY 82.

| Fiscal Year | Actual | Estimate |
|---|---|---|
| 1977 | 1,400 | |
| 1978 | 2,100 | |
| 1979 | 2,600 | |
| 1980 | 3,200 | |
| 1981 | | 3,400 |
| 1982 | | 3,600 |

The proceeds from the Marine Fuel Tax are deposited in the Watercraft Fuel Tax Account in the general fund and may be appropriated for water and harbor facilities. However, this account is not tracked by municipalities, so it is impossible to compare the amount paid into the account by a municipality to what that municipality receives back for their water and harbor facilities.

# General Fund Unrestricted Revenues

## In Thousands of Current Dollars

| | FY 1980 Actual | FY 1981 Revised Estimate | FY 1982 Estimate |
|---|---|---|---|
| **Taxes** | | | |
| Income | | | |
| Corporate - General | 17,900 | 35,000 | 36,000 |
| Corporate - Petroleum | 547,500 | 770,000 | 882,900 |
| Fiduciary[1] | 100 | -0- | -0- |
| Individual[1] | 100,500 | -0- | -0- |
| Gross Receipts | | | |
| Alaska Business License | 4,200 | 5,300 | 3,200 |
| Fish - Canned Salmon[2] | 4,300 | 12,100[3] | 6,600 |
| Fish - Shorebased[2] | 7,600 | 10,400[3] | 7,800 |
| Fish - Floating[2] | 2,700 | 4,000[3] | 3,100 |
| Salmon Enhancement[4] | -0- | -0- | 1,500 |
| Insurance Companies | 10,400 | 11,300 | 12,500 |
| Other | 2,100 | 2,600 | 2,900 |
| Severance | | | |
| Gravel, Timber, etc. | 1,600 | 1,300 | 3,000 |
| Oil & Gas Production[5] | 506,200 | 1,178,200 | 1,747,100 |
| Oil & Gas Conservation | 300 | 600 | 600 |
| Property | | | |
| Oil & Gas | 168,900 | 170,000 | 170,000 |
| Vehicle Registration | 100 | 200 | 200 |
| Sale/Use | | | |
| Alcoholic Beverages | 7,400 | 7,900 | 8,200 |
| Fuel Taxes - Aviation | 4,000 | 4,100 | 4,300 |
| Fuel Taxes - Highway | 18,900 | 18,500 | 20,900 |
| Fuel Taxes - Marine | 3,200 ✓ | 3,400 | 3,600 |
| Tobacco Products | 1,600 | 1,700 | 1,800 |
| Other | | | |
| Estate | 200 | 200 | 200 |
| School[6] | 2,600 | -0- | -0- |
| Total Taxes | 1,412,300 | 2,236,800 | 2,916,400 |
| **Licenses & Permits** | | | |
| Business | 8,100 | 8,300 | 9,700 |
| Non-Business | 10,700 | 12,000 | 12,500 |
| Total Licenses & Permits | 18,800 | 20,300 | 22,200 |
| **Intergovernmental Receipts** | | | |
| Federal Shared Revenues[5] [7] | 4,800 | 19,400[8] | 8,000 |
| **State Resource Revenue** | | | |
| Sale/Use | | | |
| Bonus Sales | 342,400[7] [9] | 6,400[10] [11] [12] | -0-[11] |

# Unrestricted Revenues

In Thousands of Current Dollars

| TAXES | FY 79 ACTUAL | FY 80 REVISED ESTIMATE | FY 81 ESTIMATE |
|---|---|---|---|
| INCOME | | | |
| Corporate - General | 24,800 | 15,000 | 28,000 |
| Corporate - Petroleum(1) | 232,600(2) | 402,000 | 558,000 |
| Fiduciary | 100 | 100 | 100 |
| Individual | 117,200 | 122,000 | 161,000 |
| GROSS RECEIPTS | | | |
| Alaska Business License(3) | 28,200 | 4,000 | 3,000 |
| Raw Fish(4) | 6,700 | 8,600 | 13,800 |
| Cold Storage(4) | 3,300 | 8,700 | 12,600 |
| Freezer Ship(4) | 1,900 | 3,600 | 4,900 |
| Insurance Companies | 10,800 | 12,400 | 14,300 |
| Other | 1,900 | 2,000 | 2,300 |
| SEVERANCE | | | |
| Gravel, Timber, etc. | 1,700 | 1,500 | 1,200 |
| Oil and Gas Production(5) | 173,800 | 432,900 | 1,045,200 |
| PROPERTY | | | |
| Oil and Gas | 163,400 | 175,000 | 178,000 |
| Vehicle Registration | 200 | 100 | 200 |
| SALE/USE | | | |
| Alcoholic Beverages | 7,400 | 7,700 | 8,000 |
| Fuel Taxes-Aviation | 3,400 | 3,600 | 3,700 |
| Fuel Taxes-Highway | 16,300 | 18,400 | 19,000 |
| Fuel Taxes-Marine | 2,600 | 3,100 | 3,200 |
| Tobacco Products | 1,700 | 1,700 | 1,800 |
| OTHER | | | |
| Estate | 100 | 200 | 200 |
| School | 2,500 | 2,500 | 2,700 |
| TOTAL TAXES | 800,600 | 1,225,100 | 2,061,200 |
| LICENSES AND PERMITS | | | |
| BUSINESS | 7,500 | 8,500 | 8,500 |
| NON-BUSINESS | 12,300 | 11,300 | 12,400 |
| TOTAL LICENSES & PERMITS | 19,800 | 19,800 | 20,900 |
| INTERGOVERNMENTAL RECEIPTS | | | |
| FEDERAL SHARED REVENUES(6) | 4,100 | 4,000 | 4,000 |

## STATE RESOURCES REVENUE

| | | | |
|---|---|---|---|
| SALE/USE | | | |
| Bonus Sales (6) | -0- | -0- | -0- |
| Investment Earnings (6) | 44,200 | 42,000 | 45,000 |
| Rents (6) | 2,300 | 2,800 | 2,500 |
| Royalties | 149,600 | 223,200 | 270,200 |
| Sale of State Property | 1,900 | 1,800 | 4,200 |
| FACILITIES RELATED CHARGES | | | |
| Airports | 800 | 400 | 500 |
| Ferry System (7) | 15,600 | 19,600 | 23,100 |
| All Other | 4,000 | 3,600 | 4,000 |
| SERVICE RELATED CHARGES | | | |
| Court System | 2,800 | 2,900 | 3,100 |
| All Other | 1,700 | 1,600 | 300 |
| TOTAL STATE RESOURCES REVENUE | 222,900 | 297,900 | 352,900 |
| MISCELLANEOUS REVENUE | | | |
| Returns, etc. | 3,900 | 3,900 | 3,900 |
| TOTAL UNRESTRICTED REVENUES | 787,300 | 1,071,700 | 1,134,400 |
| Less: Native Claims Payments | 22,400 | 41,600 | 50,800 |
| TOTAL TO THE STATE | 764,900 | 1,030,100 | 1,083,600 |

(1) Ch. 110 SLA 1978 Effective July 9, 1978.

(2) Sec. 3 of Ch. 144 SLA 1978 Effective January 1, 1979 amended AS 43.60.030 to remove the gross receipts levy on all businesses with the exception of the net income tax for banks, trust companies and savings and loan associations and the business license fee itself.

(3)

| COMMERCIAL FISH TAXES | 1978 | 1979 | 1980 |
|---|---|---|---|
| Raw Fish | 5,500 | 6,800 | 6,700 |
| Cold Storage | 2,300 | 2,700 | 2,700 |
| Freezer Ship | 500 | 1,000 | 800 |
| TOTAL | 8,300 | 10,500 | 10,200 |

(4) Reserves tax credit applied.

(5)

| FUEL TAXES | 1978 | 79 | 1980 |
|---|---|---|---|
| Aviation | 3,300 | 3,400 | 3,500 |
| Highway | 17,900 | 22,100 | 23,400 |
| Marine | 2,100 ✓ | 2,300 | 2,400 |
| TOTAL | 23,300 | 27,800 | 29,300 |

(6) Net of 25% Permanent Fund contribution.

(7)

| FERRY SYSTEM | 1978 | 1979 | 1980 |
|---|---|---|---|
| Southeast | 14,000 | 17,500 | 20,900 |
| Southwest | 1,600 | 2,100 | 2,200 |
| TOTAL | 15,600 | 19,600 | 23,100 |

| | 1977 | 1978 | | 1979 |
|---|---|---|---|---|
| | ACTUAL | BUDGET ESTIMATE | REVISED ESTIMATE | ESTIMATE |
| TAXES | | | | |
| INCOME | | | | |
| Corporate | 35,772.1 | 53,440.0 | 44,600.0 | 65,600.0 |
| Fiduciary | 92.4 | 55.0 | 101.6 | 111.7 |
| Individual | 210,378.3 | 93,403.4 | 135,000.0 | 145,000.0 |
| GROSS RECEIPTS | | | | |
| Alaska Business License | 23,252.2 | 17,422.5 | 21,800.0 | 20,400.0 |
| Commercial Fish | 6,203.1 | 3,896.0 | 7,830.5 | 8,489.7 |
| Insurance Companies | 8,063.2 | 6,750.0 | 8,200.0 | 8,500.0 |
| Public Utilities | 1,192.7 | 975.0 | 1,392.8 | 1,532.0 |
| Other | 65.2 | 50.0 | 71.7 | 78.8 |
| SEVERANCE | | | | |
| Gravel, Timber, Land, etc. | 1,002.4 | 807.0 | 546.5 | 578.6 |
| Oil and Gas Production (1) | 23,758.4 | 113,469.0 | 113,500.0 | 176,000.0 |
| PROPERTY | | | | |
| Oil and Gas | 139,140.7 | 168,300.0 | 168,300.0 | 170,600.0 |
| Reserves (2) | 270,626.5 | -0- | -0- | -0- |
| Vehicle Registration (3) | -0- | 198.4 | 198.6 | 202.4 |
| SALE/USE | | | | |
| Alcoholic Beverages | 7,977.7 | 7,470.0 | 6,800.0 | 6,700.0 |
| Fuel Taxes-Aviation | 2,503.7 | 2,940.0 | 2,300.0 | 2,300.0 |
| Fuel Taxes-Highway | 16,745.2 | 18,113.7 | 13,200.0 | 12,800.0 |
| Fuel Taxes-Marine | 1,358.2 ✓ | 1,460.0 | 1,900.0 | 1,800.0 |
| Tobacco Products | 1,817.7 | 1,562.6 | 1,600.0 | 1,500.0 |
| OTHER | | | | |
| Death and Gift | 193.1 | 125.0 | 213.0 | 234.3 |
| School | 2,588.6 | 2,511.0 | 2,100.0 | 2,100.0 |
| TOTAL TAXES | 752,731.4 | 492,948.6 | 529,654.7 | 624,527.5 |
| LICENSES AND PERMITS | | | | |
| BUSINESS | | | | |
| Alcoholic Beverages | 949.3 | 992.3 | 988.2 | 1,007.6 |
| Amusements | 107.3 | 85.6 | 118.0 | 129.7 |
| Commercial Fishing (4) | 836.1 | 694.2 | 1,157.3 | 1,081.9 |
| General Corporation | 1,126.1 | 1,010.8 | 1,165.7 | 1,225.0 |
| Professional and Occupational | 672.4 | 779.0 | 779.0 | 721.1 |
| Regulatory | 1,729.8 | 1,743.5 | 1,747.4 | 1,769.2 |
| Other | 43.2 | 39.9 | 41.1 | 43.5 |
| NON-BUSINESS | | | | |
| Fish and Game | 48.9 | 66.7 | 47.9 | 49.5 |
| Motor Vehicle-Operators | 584.0 | 531.5 | 534.6 | 550.6 |
| Motor Vehicle-Titles/Registration | 10,020.4 | 12,251.2 | 11,505.0 | 11,350.1 |
| Other | 2.0 | 6.9 | 7.0 | 6.3 |
| TOTAL LICENCES AND PERMITS | 16,119.5 | 18,201.6 | 18,091.2 | 17,934.5 |
| INTERGOVERNMENTAL RECEIPTS | | | | |
| FEDERAL SHARED REVENUE | | | | |
| Lands | 511.0 | 564.0 | 3,520.0 | 3,255.2 |
| Mineral Rents and Royalties (5) | 1,985.6 | 3,054.2 | 1,450.8 | 1,381.9 |
| Other | 2.2 | 2.5 | 2.5 | 2.5 |
| TOTAL INTERGOVERNMENTAL RECEIPTS | 2,498.8 | 3,620.7 | 4,973.3 | 4,639.6 |

WESTERN ALASKA FUEL PRICES-AVERAGE

PRICE OF MARINE DIESEL FOR LAST 2 YEARS

| Month | Price | % of increase |
|---|---|---|
| February 1979 | 55¢ per gln. | N/A |
| February 1980 | 90¢ per gln. | 63% |
| February 1981 | $1.12 per gln. | 24% |

In the last two years there has been a 103% increase in fuel.

SB

188

SB 188

# Alaska State Legislature

## Senate

### Office of the Secretary

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

MEMORANDUM

DATE: January 30, 1981

TO: Senator Fischer
Chairman
State Affairs Committee

FROM: Peggy Mulligan
Secretary of the Senate

SUBJECT: Governor's letter

The President referred the attached Governor's letter to your committee for consideration.

JAY S. HAMMOND
GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

January 30, 1981

The Honorable Jalmar Kerttula
President of the Senate
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Mr. President:

Once again I have been requested to recommend naming the bridge over the Yukon River in honor of E. L. Patton.

I am pleased to submit Mr. Patton's name to the Alaska State Legislature, which by law is the assembly for the unorganized borough, for its consideration. I would suggest that the Legislature pass a resolution of legislative intent on this issue, if they determine that the bridge should be named for E. L. Patton.

Thank you for your assistance and consideration on this issue.

Sincerely,

Jay S. Hammond
Governor

SB

204

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

RE: SB135 and SB204 (for meeting 4/9/81)

TANANA CHIEFS CONFERENCE, INC.
NORTH SLOPE HAUL ROAD
RESOLUTION NO. 81-4

WHEREAS: Opening the North Slope Haul Road to unrestricted traffic has been of long-standing, vital concern to communities affected by its use; and

WHEREAS: these concerns:

- Protection of the culture of the Native people who live within the region,

- Protection of the land, water and wildlife resources of the region, and

WHEREAS: proposals are already being made for spur roads of the haul road, and

WHEREAS: State law now allows the road to be open partially to the public,

NOW THEREFORE BE IT RESOLVED that the TCC Board of Directors recommend that the North Slope Haul Road have limited public use only not beyond the bounds of current legislation, and

FURTHER BE IT RESOLVED that bans on hunting, off-road vehicle use, and disposing of state land all within 5 miles either side of the haul road be enforced with the most rigorous standards, and

FURTHER BE IT RESOLVED that potential impacts of all spur roads off the haul road be thoroughly studied, documented, and if adverse, be mitigated before construction.

CERTIFICATION

I hereby certify that this resolution was duly passed by the Tanana Chiefs Conference, Inc., Board of Directors on March 19, 1981, at Fairbanks, Alaska.

Corporate Secretary
Tanana Chiefs Conference, Inc.
Mitch Demientieff

Mail Reply to: Lisa Jaeger
Tanana Chiefs Conference, Inc.
201 First Ave.
Fairbanks, Alaska 99701 phone 452-8251

Fairbanks Subregion

RESOLUTIONS1
dS

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

SB

207

# Alaska State Legislature

## Senate

### Committee on Transportation

Official Business
Pouch V
State Capitol
Juneau, Alaska 99811

Senator Bill Ray
Chairman

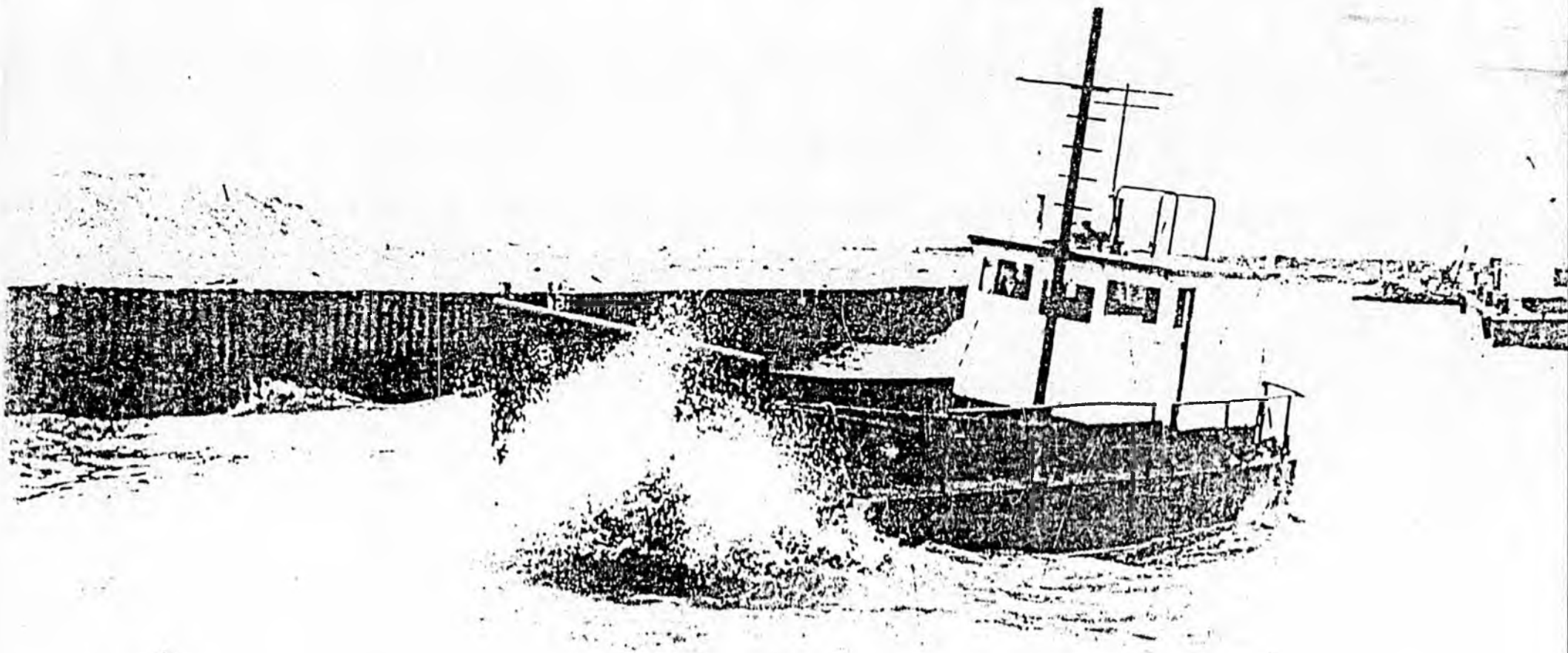
TO: Senator Don Bennett, Co-Chairman
Senator Ed Dankworth, Co-Chairman
Committee on Finance

FROM: Senator Bill Ray, Chairman
Committee on Transportation

DATE: April 27, 1982

RE: Senate Bill 207, Making a special appropriation for construction of a Nome port facility.

The Transportation Committee considers the Nome port facility feasible but questions the method of financing. We believe it should be better considered in a bond issue.



NO MEZCLA SNA

# EXECUTIVE SUMMARY

Based on the planning, engineering, and economic feasibility analyses conducted for the City of Nome for the development of a deep draft general purpose port facility, the following conclusions have been drawn:

1. It is functionally, environmentally and operationally feasible to develop a general purpose, deep draft/causeway port at the City of Nome, provided that the initial costs of land acquisition, engineering design and construction of the navigational works are assumed by the State of Alaska. This feasibility assessment is based on the present rate of growth of the city and the region. If additional growth-inducing factors such as energy resource development, mineral extraction or fisheries development accelerate the regional growth, a significant portion of the development costs can be absorbed by the port and the related industrial concerns.

2. The port facilities have been designed to accommodate general cargo, utility and fishing vessels, and ocean-going barges with a draft not to exceed 22 feet.

   Cargo handling at the pier is accommodated by ship/barge fixed cranes and a mobile crane onshore. Fuel transfer is accomplished using a fixed line/pump system to existing shore storage facilities.

   Shoreside facilities for vessel service will include fuel supply, water, power, and telephone communications.

3. The site location that has been selected for the port/causeway facility is at the west city limits, on an elevated plateau that is bordered on the north and east by the Snake River. This site is in close proximity to the city, the

city utilities, fuel storage tanks, the Nome Airport, and lies well above the level of expected coastal flooding. The selected shore facilities location also allows for expansion of material handling/storage areas for future growth, and does not compete with the city for contiguous commercial/residential land. Site location at Cape Nome was found to be unacceptable because of adverse operational and engineering reasons.

4. The port will consist of a 3600-foot long causeway with berthing/loading facilities at its seaward end and with container, general cargo and bulk handling facilities located on shore.

   The immediate need at Nome is to develop containerized and general cargo handling capabilities. To provide for this task, approximately 35 acres of onshore land are required in Phase A of the onshore development. If bulk cargo handling is required in the future (for tin ore, coal, fluorite, quarrystone), Phase B of onshore development must be implemented, requiring an additional 65 acres of onshore land adjacent to the Phase A parcel.

   The top elevation of the causeway and loading dock is +20 feet above the mean lower low water level.

5. Acquisition, design and construction costs of the port are estimated in three phases, each representing a successive level of expansion.

| | Initial Construction |
|---|---|
| Phase I | $20.4 Million |
| Phase II | $23.8 Million |
| Phase III | $26.2 Million |

Construction estimates are in 1980 dollars and are based on a $25/cubic yard unit cost for armor rock (in place) assumed to be a realistic negotiated present day value. Final construction cost can be established only after a firm quarrystone price has been negotiated.

Direct revenues for the operation at the port will accrue from berthing fees, land/facility leases and sales of fuel, power and water to the harbor users.

6. Each of the above expansion increments may be constructed without major disruptions in the on-going port activities. The causeway cross-section has been designed to accommodate additional utilities and a future bulk material handling system.

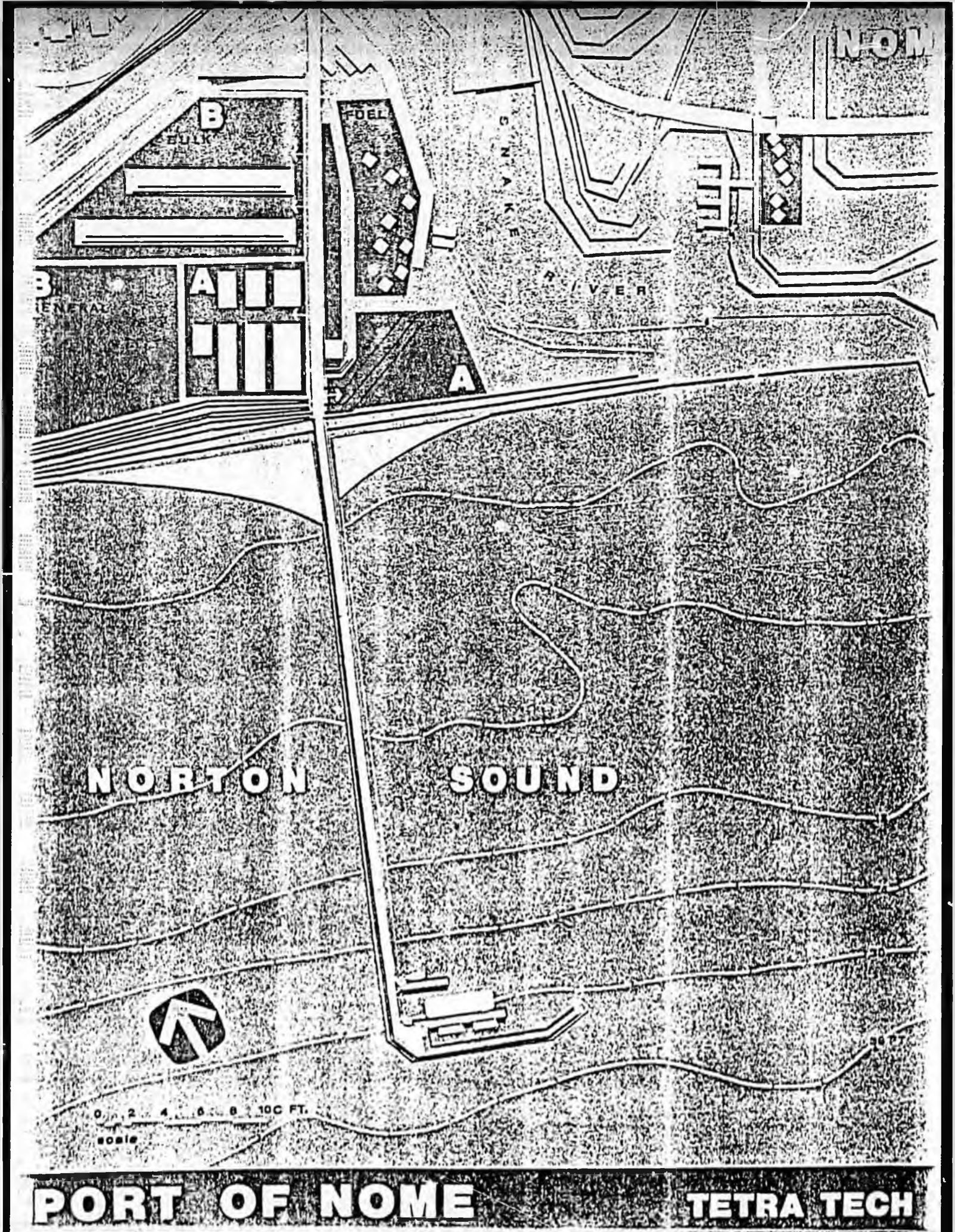
7. Environmental considerations for the proposed plan include longshore transport of sand, ice movement and forces, salmon spawning, crab fishing, induced economic growth of the region and prehistoric native dwelling sites. None of the above concerns represent irreconcilable constraints to the implementation of the port project.

8. Permitting requirements for the proposed port facility have been reviewed and include U.S. Corps of Engineers, Alaska Department of Transportation, Department of Fish and Wildlife, and a number of other specific state and federal regulatory agencies. Meeting their currently existing permit requirements and the Environmental Impact Report process will require approximately 12-18 months. Without public opposition to the project, this time period may be decreased significantly.

9. The existing harbor area has been identified as a potential location for a small boat harbor facility with a capacity

for 80-100 craft. The present harbor entrance at the mouth of the Snake River will serve the small boat traffic of the inner harbor only.

These conclusions summarize the general findings of this Phase A engineering feasibility study and define the major deep draft port development options for the City of Nome within the limits of the study. More definitive and quantitative answers to some of the questions raised will be answered in Phase B - Port Master Plan Development.


B
BULK
FUEL
A
A
NORTON SOUND
0 2 4 6 8 10C FT.
scale
PORT OF NOME
TETRA TECH

# 1.0 INTRODUCTION

## 1.1 BACKGROUND

The need for a port development plan for the City of Nome is based on the recognition of the strategic location of Nome as a major center of trade and transportation for the Norton Sound - Northern Bering Sea area. Nome not only has the most developed infrastructure for the area, but also serves as the principal center for distribution of goods and services in the Bering Sea region (see area map, Figure 1.1).

The major deterrent to growth and economic well-being of Nome and the population/industry served by this center of distribution is the lack of modern port facilities.

The shallow entrance to the limited port facilities (designed and built in the 1920's) precludes the use of the harbor for all but extremely shallow draft vessels. In fact, the present harbor represents only a marginal improvement over the lighterage techniques used at the turn of the century.

Previous studies for the improvement of the Port of Nome have contained a single economic element for their justification--the transfer of freight. This picture has changed significantly in the last few years. Nome now has a real and growing demand for services to two additional industries - fishing and oil development. The two-year old herring and red King Crab fisheries have already resulted in a multifold increase in fishing vessel visits for purposes of obtaining fuel, water and supplies.

In light of the above concerns, the City of Nome has authorized this port feasibility/expansion study to synthesize planning work done to date, to consider the latest economic pressures

and to establish a set of specific development recommendations for a viable port facility in the area.

## 1.2 SPECIFIC PURPOSE OF STUDY

In order to establish the overall feasibility for the Nome Port development, the study plan has been organized consisting of two major work phases, with the following specific purpose:

Phase A - Port Feasibility Determination. (1) A review of planning and study work done to date. (2) Schematic development of port improvements protective structures, site identification. (3) Selection of specific facility features and infrastructure. (4) Preliminary cost estimates, benefit/cost analysis. (5) Identification of major permit, environmental and financing constraints.

Phase B - Port/Facility Planning. Development of a detailed specific plan for both facilities; definition of facility element mix and supporting infrastructure, economic analysis of plan including implementation, operation, maintenance; identification of specific financing sources, development of an implementation plan and schedule.

Figure 1.2 shows the schematic relationship of the above Phases A and B to the overall development of the port, including such other specific tasks as field studies for bathymetry, geologic and soils investigations, environmental impact report development, model studies and finally, the development of detailed engineering design drawings and specifications.

This report represents work accomplished for port feasibility determination as outlined in the Phase A task.

In general, this phase of the study incorporates the following features:

1. The study uses existing data and available local inputs to the maximum extent possible to minimize time requirements for the task.

2. It addresses critical engineering, regulatory, environmental, socioeconomic, and political issues at the outset to minimize potential delays for implementation.

3. It incorporates selected energy industry, transportation industry, and mining industry needs to consolidate the financing and political interest base for the project. It also incorporates requirements for the expanding fishing industry operations and processing.

4. Engineering analysis work has been done to the level necessary to establish project feasibility; further refinement is necessary in Phase B to establish a detailed port plan.

5. Economic feasibility assessment is based on a number of growth scenarios and general assumptions which need to be refined and verified in the subsequent work element.

## 1.3 HARBOR FACILITIES

Following the Gold Rush that precipitated the growth of Nome in 1898-1900, it became obvious that a harbor was needed to support the city's growth. Not until 1915, however, did the Federal government initiate action to create the present harbor. Following government surveying efforts and further authorization, construction of the harbor jetties and dredging activities was begun in 1919. Various dredging activities and further reconstruction and rehabilitation have continued to the present day. Table 1 documents the construction history of Nome Harbor dating back to 1915. Figure 1.3 shows Nome Harbor as it exists today.

The present port facilities are operated by Arctic Lighterage (a division of Crowley Maritime). The majority of the harbor maintenance is performed by the Federal government.

### 2.4.3 Dredging History

Since its completion in 1923, Nome Harbor has undergone major periodic dredging operations to maintain adequate navigational depths. On the average, dredge volumes of from 12,000 to 20,000 cubic yards have been removed on a yearly basis. Major storm periods, however, have required the emergency removal of as much as 60,000 cubic yards of sediments to allow safe passage into the harbor. The majority of the dredging activity takes place at the harbor mouth where the prevailing southwest waves and the unlimited coastal sand supply yield a net west to east sediment flow. Within the inner harbor, settling of the sediments carried by the Snake River requires periodic dredging.

Maintenance dredging at Nome has been directed by the U.S. Army Corps of Engineers using government-owned equipment. Since 1964, the GILPIN, a 0.75-cubic yard clamshell dredge, has performed the majority of the dredge work. The GILPIN normally loads two side-dumping barges which transport the spoil to offshore areas prior to dumping. This equipment is only marginally adequate for the dredging task at Nome. This fact is exemplified by the inability of the equipment to achieve and maintain the harbor's authorized depth of eight feet.

Dredging is severely limited by the existing environmental conditions. Ice cover limits these activities to the June through October period. The limiting wave height for efficient dredge operations is three feet, a condition that is exceeded 50% of the time in July (Dames & Moore, 1977).

The importance of maintaining navigable depths within Nome Harbor is paramount to the economic well-being of the city and region. A large volume of goods are transported to Nome during the summer months aboard ocean-going barges that transfer their cargos to shallow-draft barges that can safely navigate within the harbor. As harbor shoaling occurs, the lighterage craft must limit their loads in order to maintain adequate draft for passage into the harbor. This requires these vessels at times to make trips from the ocean-going barge to the city dock with loads that are less than their full capacity. Thus, additional roundtrips must be made leading to additional costs that must eventually be absorbed by the consumer. If shoaling proceeds without dredging, Nome Harbor would eventually be closed to all vessel traffic.

The dredging costs expended at Nome by the federal government have been substantial. This history of these expenditures are presented in Table 3. To date, the total value of these activities is approximately $2.6 million. Projected costs for fiscal year 1981 are $490,000. Figure 2.5 shows the alarming rate at which annual costs have increased since 1971.

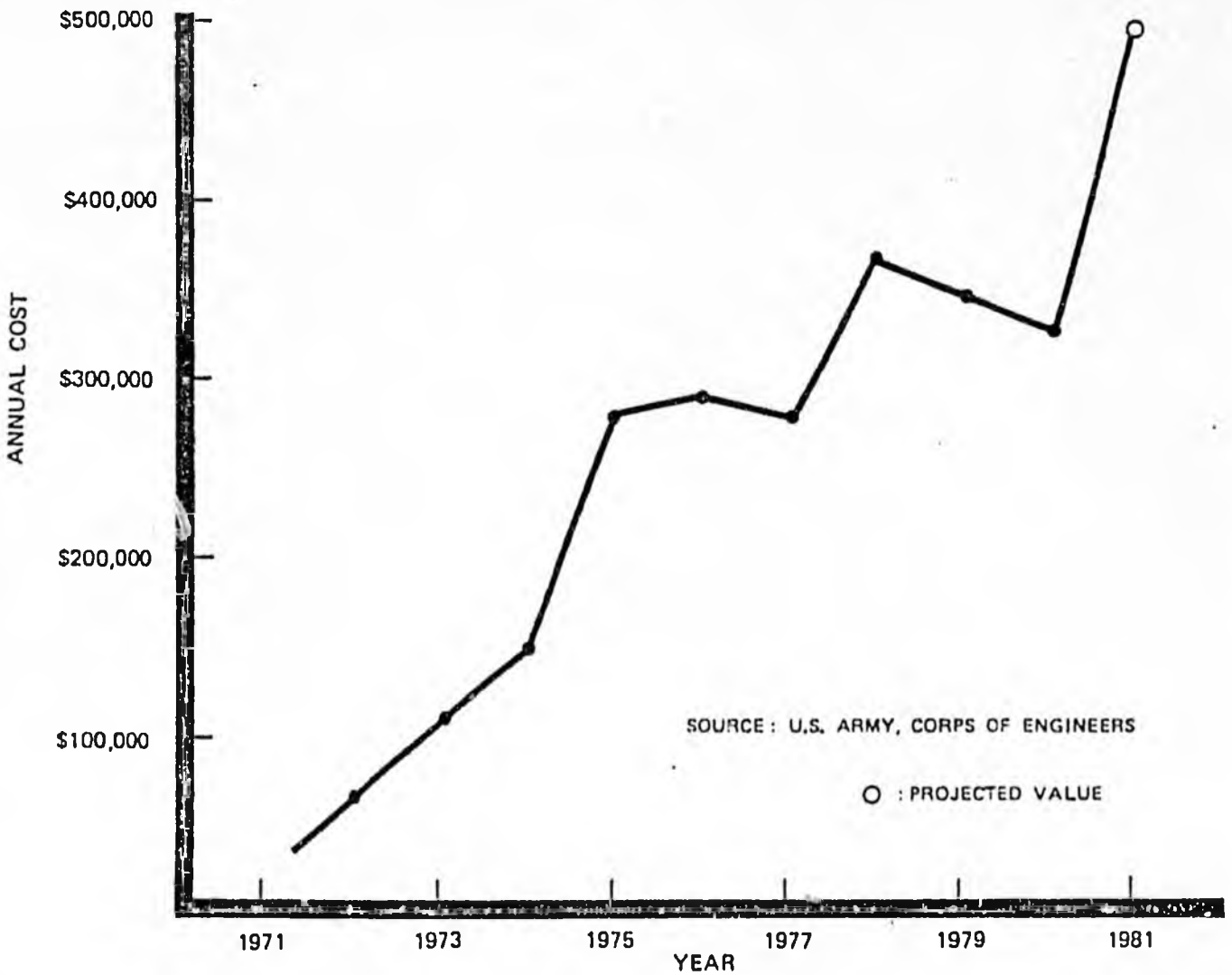



FIGURE 2.5: RECENT FEDERAL DREDGING COSTS, NOME

| DATE OF DREDGING | LOCATION | VOLUME & TYPE OF DREDGED MATERIALS | TYPE, SIZE & CONDITION OF DREDGE | DISPOSAL METHOD AND LOCATION | CONTRACTOR | COSTS |
|---|---|---|---|---|---|---|
| 1919-1920 | Turning basin and ent. channel | 20,625 cy of silts and sands | Not available | Not available | W.J. Isaac, Nome | $ 26,212 |
| 1924-1933 | Annual maint. dredging turning basin and ent. channel | 65,690 cy of silts and sands | Not available | Offshore disposal areas south of harbor | Not available | $113,735 |
| 1933-1964 | Turning basin/ ent. channel maintenance | Est. average 17,250 cy for 7 yrs. of silts and sands | Small clamshell (ARCTIC) and 2 scows | Offshore disposal areas south of harbor | Govt. owned equipment | Est. average $40,271 for 7 years |
| 1949-1951 | Turning basin expansion | Unknown volume (silts and sands?) | Small clamshell (ARCTIC) and 2 scows | Offshore disposal areas (?) | Govt. owned equipment | Unknown |
| 1964 through October 1971 | Turning basin and entrance channel maint. dredging | Est. average 15,030 8 years (silts and sands) | 3/4 cy clamshell (GILPIN) and 2 scows (65 cy) | Offshore disposal areas | Govt. owned equipment | $61,322 average for 1964 through FY 1970 |
| FY 1971 (7/1/70 6/30/71) | Turning basin and entrance channel maint. dredging | 14,350 cy (silts and sands) | 3/4 cy clamshell (GILPIN) and 2 scows (65 cy) | Offshore disposal areas | Govt. owned equipment | $100,150 |
| FY 1974 (7/1/73- | Turning basin and entrance channel maint. dredging | 13,510 cy (silts and sands) | 3/4 cy clamshell (GILPIN) and 2 scows (65 cy) | Offshore disposal areas | Govt. owned equipment | $148,104 |
| FY 1974 11/74- 4/75 | Emergency ent. channel dredging | 60,000 cy (sands) | 2900 monitoring dragline dozer, loader, scraper dumptruck (condition?) | Onshore location | D&H Dog & Barge | $150,150 |
| FY 1975 7/1/74- 6/30/75 | Turning basin and ent. channel maint. dredging | 12,000 cy ? (silts and sands) | 3/4 clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $120,000 |

TABLE 3: DREDGE HISTORY, NOME, ALASKA

| | | | | | | |
|---|---|---|---|---|---|---|
| FY 1976 7/1/75-6/30/76 | Turning basin and ent. channel maint. dredging | 12,100 cy (clamshell) 21,550 (suction) | 3/4 cy clamshell (GILPIN) 12-inch pipeline dredge (Bethel) | Offshore disposal areas | Govt. owned equipment | $183,381 |
| July-Oct. 1976 | Turning basin and ent. channel maint. dredging | 6,650 cy (silts and sands) | 3/4 cy clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $105,588 |
| 1977 | Turning basin and ent. channel maint. dredging | 12,120 cy | 3/4 cy clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $278,880 |
| 1978 | Turning basin and ent. channel maint. dredging | 9,110 cy | 3/4 cy clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $363,248 |
| 1979 | Turning basin and ent. channel maint. dredging | 13,000 cy | 3/4 cy clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $346,250 |
| 1980 | Turning basin and ent. channel maint. dredging | 13,000 cy | 3/4 cy clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $322,250 |
| 1981* | Turning basin and ent. channel maint. dredging | 13,000 cy | 3/4 cy clamshell (GILPIN) | Offshore disposal areas | Govt. owned equipment | $490,000 |

* Projected

Source: U.S. Army Corps of Engineers

TABLE 3 (CONTINUED)

With the escalating cost of diesel fuel, replacement parts, and skilled labor, these expenditures will continue to rise in the future. A principal goal of the proposed port design is to minimize the dredging requirements at Nome. Placement of any new coastal structure will have an effect on the sand transport along the shore. With proper consideration of this effect, it is hoped that a reduction in the dredge requirements at Nome can be achieved.

## 2.9 ECONOMIC BASE

### 2.9.1 Fishing Industry

The fishing industry of the Norton Sound area is limited and the commercial harvesting of fisheries resources must compete heavily with subsistence fishing interests. High operating costs have discouraged investment of private capital in seafood processing in the Norton Sound area and, consequently, transportation is a major cost factor. Typically, the fishermen of the area do not have large capital investments in their boats and equipment, and most use 18-foot skiffs with outboard motors.

#### Salmon

Salmon gillnetting is the principal commercial fishery in the Norton Sound area. Five species are harvested in Norton Sound waters with the vast majority of catches being pink and chum salmon (NOAA, 1977).

Until recently, the Norton Sound commercial fishery was sporadic because of the lack of processors and buyers or inadequate tendering service. However, the recent development of cooperatives and improved tendering facilities have helped to stabilize the fishery (Gusey, 1979).

The commercial salmon fishing season extends from June 15 to September 30, a basic season that has been in effect since 1963. The Norton Sound fisheries began in 1961. The period of high fishing effort from 1962 to 1964 was followed by several years of low effort. Beginning in 1969, levels recovered and have been consistently exceeding 140,000 fish annually (Gusey, 1979).

Annual commercial salmon harvests in the Norton Sound region ranged from 40,000 to 316,000 fish during the 1961 to 1976

period, averaging about 170,000 annually. During that time, chum salmon comprised nearly 65 percent of the total catch, followed by pink salmon with 29 percent (NOAA 1977).

In 1979, commercial fishermen harvested 10,706 king, 21,438 coho, 167,411 pink, and 140,789 chum salmon, totaling 350,344 fish in Norton Sound. This was the second largest catch on record and was 110% of the recent 5-year average annual harvest of 310,005 salmon. A total of 204 commercial fisheries entry permits were issued for the Norton Sound district in 1979. Approximately $875,000 was paid to fishermen for their 1979 salmon catches. Eleven processors operating in the Sound in 1979 purchased approximately 2.1 million pounds of salmon (Schwarz,1980A).

Commercial catches of salmon during the 1961 to 1976 period are shown in Table 4.

TABLE 4

COMMERCIAL SALMON CATCH, 1961-1976

| Year | Norton Sound Commercial Catch of Salmon (No. of Fish) |
|---|---|
| 1961 | 101,711 |
| 1962 | 232,431 |
| 1963 | 233,863 |
| 1964 | 164,671 |
| 1965 | 40,524 |
| 1966 | 100,345 |
| 1967 | 74,818 |
| 1968 | 124,499 |
| 1969 | 178,972 |
| 1970 | 178,218 |
| 1971 | 141,977 |
| 1972 | 149,713 |
| 1973 | 176,797 |
| 1974 | 315,829 |
| 1975 | 257,802 |
| 1976 | 192,917 |

Source: NOAA, 1977; Gusey, 1979

In the subsistence category, nearly all of the native peoples are dependent to some degree on the fish and game resources for their sustenance. In 1979, all subsistence fishermen interviewed by the Alaska Department of Fish and Game reported catching a total of 46,446 salmon, about 35 percent above the recent 5-year annual average harvest (Schwarz, 1980A).

Herring

The earliest American commercial effort on Bering Sea herring apparently took place in the early part of this century at Golovin Bay in Norton Sound. It declined because of foreign competition and then resumed in 1964 near Unalakleet and has continued on a limited and sporadic basis. The harvest is not taken in the Nome area, but rather in the Cape Denbigh, Unalakleet, and Stuart Island to Klikiktarik areas.

Commercial fishing for herring is carried out by local inhabitants and foreign gillnet fleets. Fishing is performed primarily with gillnets and occasionally by beach seines. Herring roe is the main product of commercial operations. Most harvest occur after winter ice break-up in May-June, while herring are in spawning concentrations (NOAA, 1977).

Considered a developing fishery, interest in northwestern Alaska herring stocks appears to be increasing. Market conditions, however, have a large influence on the catch. For example, when 1172 metric tons of herring were harvested in Norton Sound in 1979, the market price was about $300 per metric ton. This year, however, the price has fallen to $200 per metric ton and will likely significantly influence the volume of harvest (Schwarz, 1980A).

Historical herring catch figures for the 1964 to 1976 period are shown in Table 5.

TABLE 5

COMMERCIAL HERRING CATCH, 1964-1976

| | Norton Sound Commercial Harvest of Herring (Metric Tons) | | |
|---|---|---|---|
| Year | Local Inhabitants | Japanese Fleets | Total |
| 1964 | 18.1 | 0 | 18.1 |
| 1965 | 0 | 0 | 0 |
| 1966 | 0 | 0 | 0 |
| 1967 | 0 | 0 | 0 |
| 1968 | 0 | 125 | 125.0 |
| 1969 | 0 | 1270 | 1270.0 |
| 1970 | 7.3 | 54 | 61.3 |
| 1971 | 17.7 | 621 | 638.7 |
| 1972 | 15.3 | 11 | 26.3 |
| 1973 | 32.3 | 25 | 57.3 |
| 1974 | 3.1 | 720 | 723.1 |
| 1975 | 2.0 | 5 | 7.0 |
| 1976 | 7.7 | N.A. | N.A. |

Source: NOAA, NMFS, 1977; Gusey, 1979
N.A. = Not Available

King Crab

Another developing fishery is that of King Crab. A winter and summer commercial king crab fishery has recently developed in Norton Sound. The summer fishery is a large vessel fishery consisting mainly of Dutch Harbor vessels. The winter fishery is composed mostly of local fishermen who fish through the ice with pots for the crab. In 1979, 3 million pounds of king crab were harvested; this year, the harvest will be held to only 1 million pounds, however. A subsistence king crab fishery also exists.

The fishing industry harvests in Norton Sound are not expected to experience significant change, other than that resulting from normal market economics. New fisheries development is not expected for the area due primarily to the far north location,

proximity to markets, and the competition offered by more attractive, plentiful fisheries in other parts of the state (Schwarz, 1980B).

### 2.9.2 Mining Industry

Next to federal and state spending, mining and tourism were the major components of the cash economy of northwest Alaska prior to the discovery of oil at Prudhoe Bay. The Seward Peninsula has historic ties with the gold mining industry which date back to the gold rush of 1898 and the resultant settling of Nome. Beginning with this gold boom in 1898, the following minerals have been located and produced in significant quantities in the Seward Peninsula: gold, tin, tungsten, and beryllium. Small amounts of antimony, bismuth, copper, silver, lead, and quicksilver have also been found but no large deposits of these metals are known to exist on the Peninsula. A residual iron deposit occurs near Nome, while zinc, arsenic, uranium, and molybdenum occur in or near the tin and base metal lodes. Platinum, manganese, mica, fluorite and graphite have also been reported (Corps of Engineers, 1974A). Although gold is being produced at this time, other minerals are not now under active operation.

#### Gold

As discussed earlier, gold mining in the area dates from 1898. Although large dredges continued to mine placer gold in the Nome area until 1962, production was not steady and suffered severe fluctuations over the years. In 1962, the United States Smelting, Refining, and Mining Company (USSR&M) discontinued their operations, having previously employed as many as 400 persons in the area. With an increase in the price of gold, the Alaska Gold Company (successor to the USSR&M) resumed their dredging operations in 1975 and have operated in the area since

that time during the summers. The company is one of the major employers in Nome, and their operations have contributed to the overall economy. In 1978, the Alaska Gold Company produced 11,925 troy ounces of gold from the Nome area using two large dredges.

Tin-Beryllium-Fluorite

At the present time, the Lost River and Tin City deposits constitute the most important tin reserve in the United States. Although the deposits are not large, they are the only known deposits of significance in the United States. The heavy minerals belt passes through the Seward Peninsula and tin production from this belt has been in the form of both lode deposits and placer tin. Production is now relatively inactive (City of Nome, 1968).

If fluorite and beryllium deposits in the Lost River area are developed, the tin ore reserves at that location may be confirmed and expanded. In addition, tin claims on Humbolt Creek, 125 miles due north of Nome at Serpentine Hot Springs, were explored during 1970 and 1971. These are believed to be an extension of the lode tin deposits at Lost River which would make them the fourth largest known tin lode in the world (Corps of Engineers, 1974A).

Almost all of Alaska's known beryllium deposits occur in the Lost River area. These are reported to be a substantial portion of the total national resource. Although these deposits occur in commercial quantities, the feasibility of mining them is not proven due to minerology and economic factors. A proposed fluorite, tin and beryllium mining venture at Lost River is not presently active (City of Nome, 1968; 1979).

Similarly, fluorite is known to occur in commercially significant quantities at the Lost River tin mine. No active production

operations are underway (City of Nome, 1968; 1979).

Tungsten

By itself, tungsten production does not appear to be feasible on the Seward Peninsula. In connection with the tin mining activity at Lost River, however, tungsten may be a minable by-product of tin lodes in this region (City of Nome, 1968).

Other Minerals

The mining of lead, zinc, and copper does not appear to be commercially feasible at this time. Small smounts of these ores have been recovered in the past as a by-product of gold mining. In addition, there has been a minimal amount of silver production as a by-product of gold mining. Future production, however, probably rests upon the development of some of the lead and silver bearing galena lodes scattered about the Seward Peninsula (Corps of Engineers, 1974A).

Future

The future of large-scale mineral development on the Seward Peninsula is affected by the remoteness of the deposits from market outlets, available transportation, the absence of an industrial and institutional infrastructure, and the associated high production costs. The key to successful mineral production is the development of a market demand sufficient to pay the high costs of Alaska production and transport (City of Nome, 1979; Corps of Engineers, 1974A).

Transport costs alone cannot be isolated as the major impediment to development. Oil, for example, with 50 percent of its market price absorbed by transportation costs, can support its own highly sophisticated transport system. Under present economic circumstances, however, most other Alaska resources cannot

do this because they are not valued high enough in the market place.

With the exception of gold, mineral development in the Seward Peninsula must, therefore, be considered to be far in the future. The extent and timing of development is dependent partly upon unpredictable market forces. A long-term potential for development of the Lost River deposits does exist, but probably for a small, seasonally-operated mine only (Sanders, 1980).

On the other hand, the potential for developing gold in offshore beaches is very high. Forecasts of future production are not available, however.

### 2.9.3 Coal

Alaska possesses extensive coal resources, distributed widely throughout the state. Of the total 130 billion tons speculatively estimated to exist in the state, more than 90 percent is believed to be located in the northwestern Arctic. This includes an estimated total of 19.3 billion tons of bituminous and 100.9 billion tons of subbituminous and lignite coals (Corps of Engineers, 1974A). This area encompasses about 30,000 square miles bounded by the Brooks Range in the south, the lower Colville and Itkillite Rivers to the east, and the Beaufort and Chukchi Seas to the north and west. Roughly 24,000 square miles of this coal-rich area is included in the National Petroleum Reserve No. 4. The U.S. Bureau of Mines has identified the parts of the area along the Chukchi Sea coast as being "very important" in its potential for economic viability and national or local economic or strategic need for development (DMJM, 1979).

Alaska's identified resources (130 billion tons) are approximately 7.5 percent of the total United States identified coal resources of 1,730 billion tons.

Alaskan coal, including that in the Arctic, is low in sulfur content. The subbituminous coal is generally high in water and ash content, but bituminous coal of some areas possesses good coking characteristics. Some of the beds are known to be of good quality and are capable of being mined in large blocks with large mechanized equipment. Coking coal is generally in high demand on the world market at the present time (City of Nome, 1968; DMJM, 1979).

The major markets for Alaskan coal, given the limited domestic market, are the west coast of the United States and Japan. The United States market is limited to coal for electric power production, while the Japan market is limited primarily to metallurgical coal. Key to the marketability of this coal is the technology and cost of moving it from the northwestern Arctic area to a coastal loading point (Federal-State Land Use Planning Commission, 1978). Substantial investments would be required in mining equipment and transportation systems before coal can be moved from these northwestern fields. Such problems as moving the coal from mine to a port in a roadless area, plus the development of suitable port facilities and loading techniques, have caused some to hold a pessimistic outlook on near-term coal development. Rather, they suggest that production of northwestern Arctic coal under present technology and costs is far in the future (Corps of Engineers, 1974A). A more recent report (Massachusetts Institute of Technology, 1980), stresses the importance of coal as a source of energy in the United States' future. The study, which reflects the recent instability of Mid-East oil supplies, states that coal will become the primary domestic energy source for the United States within twenty years.

Although coal production activities in the northwest Arctic area would be remote from Nome, Nome may play a future role as a base of operation and supply as well as a loading terminal point for coal exports to both Japan and the west coast of the continental United States.

## 2.9.4 Petroleum Industry

The potential for development of petroleum resources in the Norton Sound area is uncertain at this time, although inferential data indicates that reserves may be sufficient for feasible development. Because detailed geophysical data is unavailable and because there is no drilling history in the Norton Basin, reserves estimates have been based upon known characteristics of similar geologic areas. Present estimates of undiscovered recoverable oil and gas reserves in North Basin are:

| | Low Find | Medium Find | High Find |
|---|---|---|---|
| Oil (billions of barrels) | 0.38 | 1.4 | 2.6 |
| Gas (trillions of cu. ft.) | 1.2 | 2.3 | 3.2 |

Source: Dames & Moore, 1980.

If exploration, development, and production of the Norton Basin petroleum resources does occur, Nome will serve as a support base for supplies and services, including aerial support for offshore operations. The extent to which this occurs will depend upon the magnitude of the development and production phases (Dames & Moore, 1978). In addition, the future development of petroleum resources to the north in the Chukchi Sea area, Kotzebue Sound, and the National Petroleum reserve could also have a significant effect upon the Community of Nome, first as a staging and transshipment point for supplies, materials, and personnel destined for these northern areas and, second, as the pipeline terminus and transshipment point for product oil from these areas.

The lease sale No. 57 for the Norton Basin is scheduled to take place in September, 1982, and is to be preceded by a number of intermediate formal steps leading to this sale. In addition, a continental offshore stratographic test well will be drilled by ARCO in 1980 to better identify the geologic strata in the Norton Sound (Scott, 1980; Fisher, 1980).

Exploitation of a petroleum reserve involves three distinct phases of activity, i.e., exploration, development, and production. The development phase involves drilling the optimum number of production wells for the field and construction of the equipment and pipelines necessary to process the crude oil and transport it to its destination. Whereas the exploration and production phases are not particularly labor intensive, the development phase creates the highest levels of employment locally and the import of the greatest amount of materials, supplies, and services for development activities (Dames & Moore, 1980).

The development of petroleum resources included in lease sale No. 57 is expected to result in the production and employment levels shown in Table 6.

TABLE 6

PETROLEUM DEVELOPMENT SCENARIOS

| | Low Find | Medium Find | High Find |
|---|---|---|---|
| OIL | | | |
| Years of Production | 1990-2009 | 1990-2011 | 1989-2016 |
| Peak Years | 1993 | 1994 | 1995 |
| Peak Production | 153,000 b/d | 463,000 b/d | 764,000 b/d |
| GAS | | | |
| Years of Production | 1990-2009 | 1989-2009 | 1989-2011 |
| Peak Years | 1993-2001 | 1994-2000 | 1995-1998 |
| Peak Production | 230.4 mmcfd | 460.8 mmcfd | 691.2 mmcfd |
| EMPLOYMENT | | | |
| Onshore & Offshore | | | |
| Peak Years | 1990 | 1990 | 1991 |
| Peak Employment | 1376 | 3555 | 5276 |
| Onshore Only* | | | |
| Peak Years | 1989 | 1990 | 1987 |
| Peak Employment | 387 | 374 | 1544 |

* A portion of this work force may establish residence at or near Nome.

Source: Dames & Moore, 1980

### 2.9.5 Port Operations

Freight service to Nome is generally via ocean-going cargo barges direct from Seattle, although some freight is transported to Nome by air. In 1979, 18 general cargo barge trips were made by the three firms serving the city as follows:

| | |
|---|---|
| Pacific-Alaska Lines | 4 Trips |
| Alaska Cargo Lines, Inc. | 4 Trips |
| Foss Barge Company | 10 Trips |

Barges from Seattle normally do not arrive fully loaded, having previously stopped in Bethel and Dillingham.

The barge season generally runs from May 1 to September 25, a period of slightly less than 5 months. Incoming general cargo averages between 6,000 and 8,000 tons per year. Nearly all general cargo is containerized; an ocean-going barge can haul about 150 containers.

Because of extensively shoaled beaches, ocean-going barges calling at Nome presently anchor about one mile offshore for unloading and reloading of cargo and freight. The harbor is too shallow to allow ocean ships and barges to enter. Therefore, cranes onboard the ocean-going barges are used to offload containers and other cargo to lighters. The average time required to offload the typical ocean-going barge is 18 hours. The shallow-draft lighters are towed through the surf and the shallow entrance channel for unloading at the transfer facilities of the lighterage company, Arctic Lighterage (Crowley Maritime). Consequently, freight is, of necessity, double-handled in lightering from ship to shore and, furthermore, freight destined for interior locations is handled a third time. Winds in excess of 15 knots make the transfer to lighters extremely difficult, the resulting delays adding a demurrage charge of $12,000 per day.

On shore, the lighters are unloaded over the entrance channel revetment by portable cranes. Empty containers and outgoing shipments are reloaded to lighters inside the harbor area for return to the ocean-going barges anchored offshore.

Lighterage costs represent approximately 22 percent of the typical freight bill between Seattle and Nome.

Bulk petroleum products are presently delivered to Nome by Chevron Shipping Corporation in tankers loaded at Richmond, California. In 1979, three direct shipments were made. The average annual imports of petroleum amount to about 7 million gallons. As with the general cargo barges, tankers are anchored offshore at Nome and the products are offloaded to lighters for transfer to onshore storage facilities.

Waterborne commerce through the Nome Harbor for the period 1969 to 1979 is presented in Table 7.

TABLE 7

CARGO TRANSPORT, NOME HARBOR, 1969-1979

| | TONNAGE | | |
|---|---|---|---|
| | General Cargo | Liquid Petroleum | Total |
| 1969 | 5,945 | 20,327 | 26,272 |
| 1970 | 8,108 | 12,843 | 20,951 |
| 1971 | 6,145 | 15,786 | 21,931 |
| 1972 | 10,643 | 32,506 | 43,149 |
| 1973 | 5,620 | 23,162 | 28,782 |
| 1974 | 10,158 | 22,156 | 32,314 |
| 1975* | N.A. | 29,000 | N.A. |
| 1976* | N.A. | 25,000 | N.A. |
| 1977* | N.A. | 29,000 | N.A. |
| 1978* | 6,800 | 24,000 | 30,800 |
| 1979* | 8,100 | 25,000 | 33,100 |

* Estimates by Arctic Lighterage

Projections of future commerce through Nome Harbor depend upon expected population growth within the service area, the extent to which the natural resources of the Seward Peninsula are developed (mining, petroleum, fishing), the potential of the Nome Harbor as a cargo transshipment point for developing areas and communities in such categories as tourism and recreation. The future of some of these factors depends upon outside economic, marketing, and physical determinants. The future of the harbor as a transshipment point may depend largely upon the physical development of the port facility itself.

In the event that the population of the service area was to increase by the projected 65 percent between 1970 and 1985, then the increase in the throughput of staples would likely increase proportionately. Other dry cargo, such as equipment and construction materials, would not necessarily experience such a proportionate increase. Rather, the import volume of these items would relate more to the economic activity and new development in the region. The consumption of oil products is expected to continue its steady long-term increase.

~~of the local labor force.~~

### 4.1.1 The Selected Causeway Design

Based on the evaluation of the various causeway designs presented previously, the cross-section shown in Figure 4.3 has been selected for the port of Nome causeway. The major positive attributes of this design are as follows:

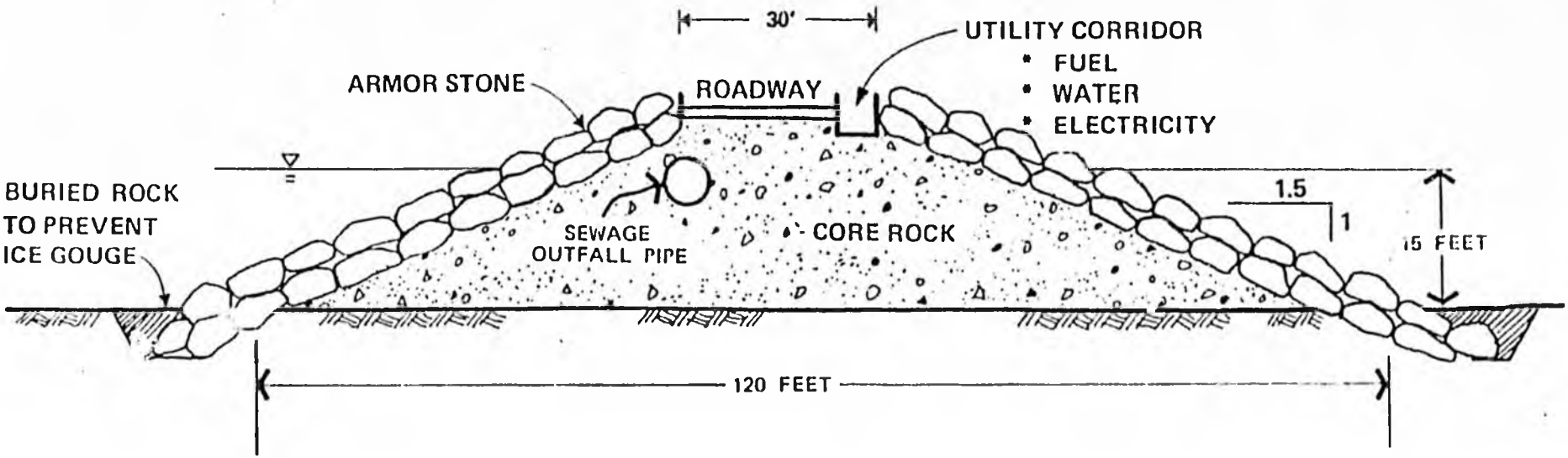



FIGURE 4.3: CAUSEWAY DESIGN CROSS--SECTION

1) Local availability of all construction materials
2) Simple construction methods
3) Durability
4) Ease of expansion
5) Maximum use of local labor force
6) Moderate cost

The use of this design assumes that wintertime port operations will not be undertaken since ice can be expected to over-ride the structure. For this reason, no structural elements will be placed on the causeway surface. Similarly, the quarrystone armor must be placed carefully to minimize its displacement by the moving ice. All utilities (fuel, water, electricity) must be placed in a covered containment channel thereby allowing easy accessibility for future expansion or maintenance of these items. Nome has an immediate need to develop an effective sewage disposal system in order to avoid the necessity of constructing a secondary sewage treatment plant. By burying an outfall pipe in the causeway, primary-treated sewage can be discharged to the relatively deep waters at the end of the causeway. The feasibility and cost-effectiveness of this plan must await future analysis. The armor rock will be buried to a depth of five feet to reduce the possibility of displacement due to wave or ice scour. The side slopes (1:1.5) have been designed to minimize construction cost while maximizing the protection afforded from wave and ice impact.

The data needed to fully refine this design is not yet available. Such critical design considerations as side slope alignment, causeway elevation, height and thickness of armor layer, and filter layer thickness are best designed in detail following close examination of the performance of these components in scale-model testing experiments. In this way, the total design can be optimized to deal with all the serious threats posed by waves, ice, and high water levels at the minimum construction cost. For example, the results of analytical studies on ice impact at the causeway shows that ice along the Nome coast will ride-up and

over the causeway if a 1:2 side slope is used. The choice of a 1:1.5 side slope will cause the formation of ice piling at the slope. It becomes important from an economics standpoint when one realizes that the choice of a 1:1.5 slope will decrease the total causeway volume by 25% relative to a 1:2 side slope. Steepening the side slopes will require an increase in the size of the largest individual armor stones, however, from 7.25 tons to 8.5 tons. The economic impact of the need for larger armor rock is not presently known. In addition, the steeper side slope will have an effect on wave overtopping during severe wave events. The final design decisions for the causeway will rely on adequate wave and water level data as well as the results of small-scale hydrodynamic testing that will seek to minimize project costs while properly dealing with expected wave and ice forces.

## 4.2 OFFSHORE TERMINAL DESIGN

### 4.2.1 Vessel Traffic

At the present time, the City of Nome is visited by a number of vessel types that are serviced by the existing harbor facility. Those vessels with drafts in excess of five feet are normally unable to enter the port and must be serviced by "lightering" barges operated by Arctic Lighterage, a Division of Crowley Maritime, Inc. The expected vessel traffic that is anticipated at the Port of Nome is briefly discussed below.

#### Ocean-going Barge

The largest vessel type that currently visits Nome is the major cargo-carrying barge that arrives throughout the summer period. These vessels are normally towed by ocean-going tugs and the containerized cargos that they carry are off-loaded to shallow-draft lighterage barges for the transfer to the Nome city dock. The dimensions of the ocean-going barges are approximately as follows:

| | |
|---|---|
| Length: | 400 Feet |
| Beam: | 100 Feet |
| Draft: (Loaded) | 22 Feet |

Because many of these barges make stops at Bethel and/or Dillingham prior to arrival at Nome, a fully loaded barge having a 22-foot draft is relatively rare at Nome. However, for the sake of conservatism and acknowledging the future status of the Port of Nome as the major maritime transport center of northwestern Alaska, the 22-foot draft value has been chosen for design purposes.

These large barges would be berthed at an offshore facility using a small fleet of tugs working in conjunction with the barge's towing vessel.

Ocean-going Tugboats

These tugs are large capacity towing vessels that supply the means of propulsion for the ocean-going barges. The dimensions of these vessels are as follows:

| | |
|---|---|
| Length: | 160 Feet |
| Beam: | 30 Feet |
| Draft: (Loaded) | 18-20 Feet |

These vessels are very powerful and can be used to maneuver the large barges i to and out of berthing spaces.

Utility Tugboats

Smaller tugboats owned, maintained, and operated by private interests would be used for many tasks at the Port of Nome. They would be required to assist in the berthing of all barge traffic. Also, certain large vessels having their own propulsion systems may require berthing assistance occasionally. Disabled craft will also require the use of these smaller tugs. The dimensions of this vessel type are as follows:

| | |
|---|---|
| Length: | 50-90 Feet |
| Beam: | 10-15 Feet |
| Draft: (Loaded) | 8-12 Feet |

Oil Industry Workboats

In 1979, Arco Petroleum initiated field work that sought to determine the extent of the petroleum wealth of Norton Sound.

The first phase of exploratory drilling will begin in 1980. If oil is discovered in exploitable quantities in the Norton Basin/Chukchi Sea Region, workboats employed by the oil industry will call at the Port of Nome to transfer personnel, equipment, and to provide general logistics services. The dimensions of these vessels are as follows:

| | |
|---|---|
| Length: | 150 Feet |
| Beam: | 30 Feet |
| Draft: (Loaded) | 10-15 Feet |

Fishing Craft

Various fishing vessels are expected to call at the Port of Nome to transfer their catch ashore, replenish food, water, fuel, and equipment supplies, and to undertake vessel or equipment repairs. These vessels vary in size from large inter-ocean craft to small boats used principally by the local residents to fish the waters of Norton Sound. Maximum draft of the fishing fleet that will utilize Nome as a port of call is assumed to be 20 feet.

### 4.2.2 The Design Vessel

At the present time, the largest vessel that calls at Nome is the ocean-going cargo barge having a loaded draft of 22 feet. In order to allow for adequate water depths at all times alongside the proposed pier facility, it is recommended that the offshore docking terminal be located at the 30-foot bottom contour. Figure 4.4 illustrates the position of the design vessel when docked at this location for both the high-water and low-water extremes. The extreme low water level will occur when offshore winds drive the surface water to the south. During these periods, the still water level can fall as much as five feet (NOAA, 1977). For design purposes,

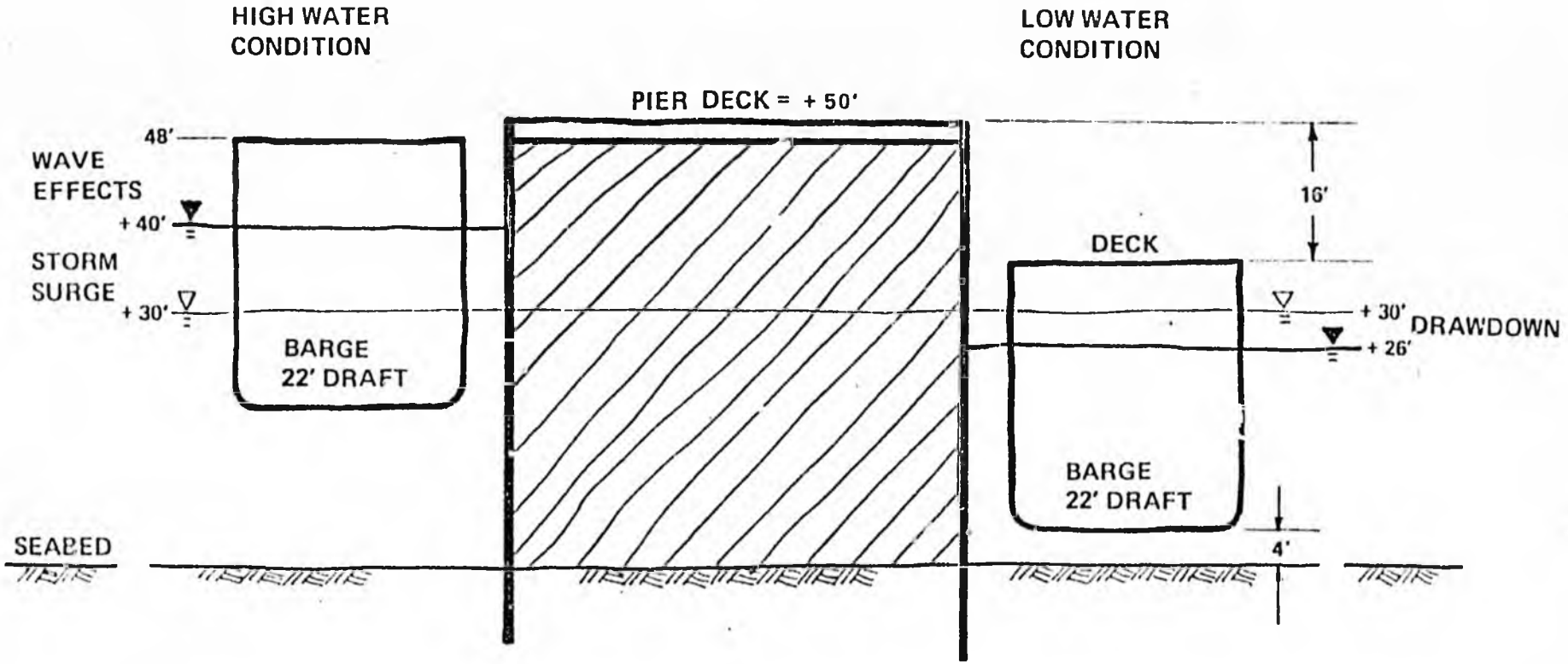



FIGURE 4.4: DETERMINATION OF DESIGN DEPTH ALONG PIER

a four foot water level fall has been chosen. At this level, the hull of the fully-laden barge will be 4 feet above the seabed. This additional depth below the keel is considered adequate to ensure vessel safety.

Conversely, during intense onshore wind episodes, the nearshore still water levels can experience increases of as much as 14 feet (NOAA, 1977). An increase of 10 feet has been chosen for the design of the terminal deck shown in Figure 4.4. During this high water period, the barge keel lies 18 feet above the sea bottom. In both cases of the high and low water extremes, the deck height as shown in Figure 4.4 is considered adequate for safe cargo transfer operations. Each ocean-going barge carries a crane for transferring its cargo. The height differential that exists between the barge and terminal decks is considered to be well within operational limits of the transfer equipment.

### 4.2.3 Offshore Terminal

The offshore berthing terminal will be connected to the onshore port facility by a 3400-foot long causeway. Five offshore terminal alternatives were developed for consideration in Section 4.0 of this report. A refined version of Alternative III was chosen to best serve the proposed Port of Nome. Figure 4.5 presents a plan view of the anticipated terminal layout. Protection from incoming wave energy will be provided by the southern armorstone slope. Berthing facilities for various vessel types are provided. The large (100' x 400') ocean-going barge is the largest vessel that can be accommodated at the port. A freight transfer area exists on the terminal's southwest corner where trucks from the city will load/unload their cargos. This area is designed such that the trucks can make a single sweeping turn to pick up the cargo and return to the onshore facility. The berthing docks will have vertical walls

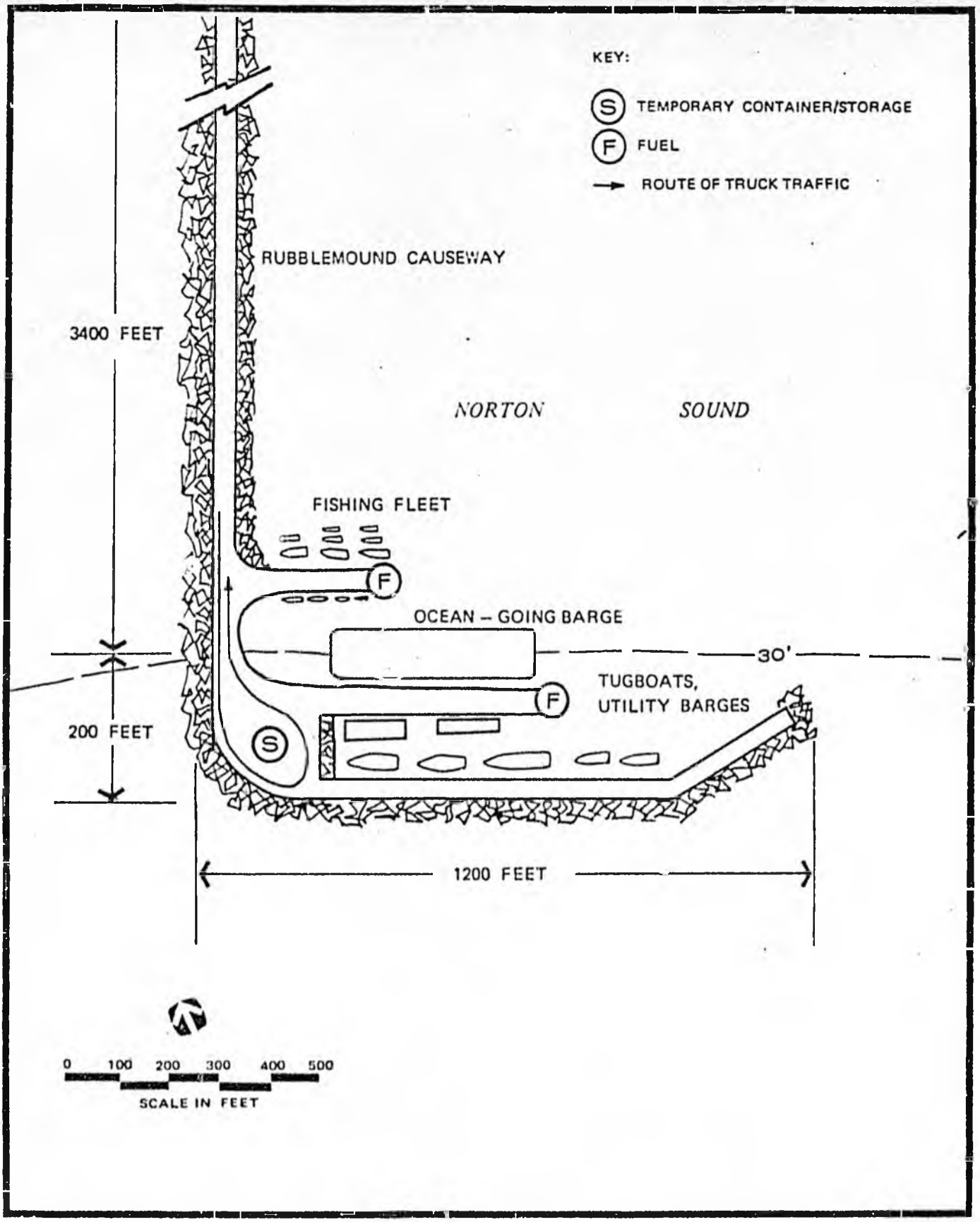



FIGURE 4.5 OFFSHORE TERMINAL LAYOUT

using either parallel sheet pile walls or circular steel sheet pile cells.

The offshore terminal has been separated into three general zones: 1) The ocean-going barge facility (accommodating one barge at a time, 22 foot design draft); 2) A utility barge, tugboat, and deep-draft vessel facility (designed to accommodate a wide range of vessels with maximum drafts of 22 feet); and 3) A small craft berthing area, to be utilized by fishing craft and other lighter-draft vessels (maximum draft = 20 feet).

Only mobile equipment will be utilized at the berthing terminal since the expected winter ice over-ride may damage any permanent facilities. Likewise, the utilities delivered to the piers (water, fuel, electricity, telephone) will be contained within a buried utility corridor.

### 4.2.4 Phased Development

It may be necessary based on financial or logistical considerations to construct the offshore facility in a number of distinct phases. An example of this means of development is presented in Figure 4.6, where three distinct stages of completion are shown. In Stage I, the south breakwater and cargo transfer area is complete to accommodate ocean-going barge traffic and the related tug fleet.

In Stage II, the primary ocean-going barge berthing facility is contained on the inshore pier structure. This allows a higher level of usage for a medium-draft tug and barge fleet between the breakwater and the newly constructed pier. As the third stage of development, a small pier is constructed further inshore for the berthing of a small-craft/fishing fleet. If additional berthing space is required in the future, small piers similar to that added in Stage III can be constructed from the causeway further inshore.

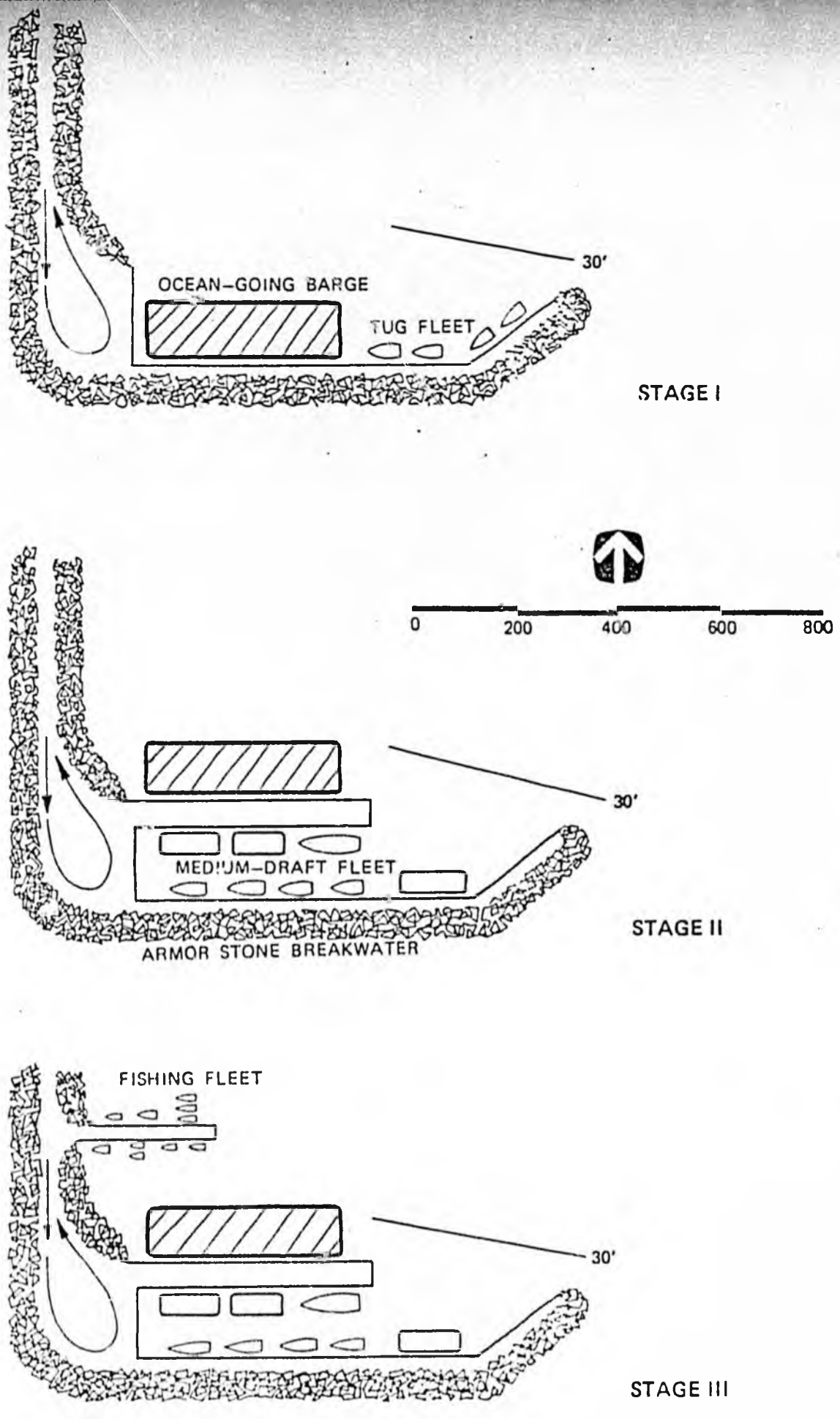



FIGURE 4.6: OFFSHORE FACILITY DESIGN

This phased development concept can be undertaken without disrupting existing port services since the Stage II and III construction sites do not directly impact on the causeway traffic. Further, the causeway can be expanded in length if, in the future, the need for a deeper draft facility becomes apparent. During such expansion activities, the existing port should experience uninterrupted service as it is physically separated from the area of future expansion.

## 7.0 ECONOMICS

### 7.1 COST PROJECTIONS

The costs associated with the construction of the proposed port facility at Nome have been estimated using a variety of data sources. The large scale of this construction project and the remote location of Nome make a precise engineering cost estimate extremely difficult to achieve. All estimates presented in this report are in 1980 dollars.

Due to the limited nature of Nome's historic growth and development, cost estimates based on comparable construction projects are not possible. This makes it necessary to develop cost estimates from limited past construction experiences with proper adjustment for both cost escalation and the economy associated with large scale acquisition of construction materials. The major raw material required for the proposed port construction is quarrystone in various sizes ranging from large armor rock to small cobbles and rock fragments that comprise the "quarry run" causeway core. Approximately 800,000 cubic yards of quarry rock are needed for the construction of the offshore facilities.

It is obvious that the unit cost of quarry rock will have a major influence on the economic feasibility of the port development. For the purpose of determining the total project cost, unit costs for the various categories of quarry rock have been selected using prices quoted in the past escalated to 1980 price levels. It is understood in this analysis process that there is a practical limit to the funding capacity of the state government beyond which a port development is not possible. In a sense, the quarry rock unit costs are the controlling factor in the port construction feasibility and should be negotiated with this fact in mind.

The source of the quarry rock needed for the project is yet to be determined, however, potential quarry sites have been identified in close proximity to Nome. The assumed unit costs of quarry rock used in the cost determination are as follows:

| | |
|---|---|
| Armor Rock | $25/cubic yard |
| Filter Rock | $ 8/cubic yard |
| Core (Quarry Run) | $ 5/cubic yard |

While more detailed design work may lead to a lowering of the total estimated costs, it seems reasonable to assume that the negotiated unit costs for quarrystone cannot increase significantly above the stated levels without severely impacting ultimate project feasibility.

The general philosophy used for the port design is to construct a simple, efficient, and cost-effective facility that will require a minimum of maintenance. For this reason, basic operating needs are filled without detailed and costly amenities. It is assumed, for example, that no road paving will be undertaken. Also, while the additional Phase B parcel of land should be purchased initially, no improvements shall be placed on that land until bulk cargo facilities are required. The cost of land acquisition is estimated to be $2000/acre. At the present time, there is very little historic cost data upon which to base this figure. No comparable real estate sales have been undertaken in recent years to use as a basis for cost estimation. Negotiations between the City of Nome and the present owner of the land will establish the final cost of the parcel required for the onshore facilities.

An attempt has been made to minimize the need for imported construction materials due to the high cost of transportation to Nome. The major construction element that is not presently available at Nome is the steel sheetpile needed for the construction of the docking facility. The cost of supplying and driving

the sheetpile has been estimated based on prices presented in earlier reports (Gute and Nottingham, 1974; CH2M-Hill, 1976) and our own cost index for remote area construction.

A tabulation of all costs associated with the Port of Nome construction are presented in Table 9.

The total cost of construction of the Port complex is shown in Figure 7.1. The three stages of port development are compared in this figure with costs associated with each option.

The different costs associated with Stage II and Stage II only refer to the additional berthing facilities for auxillary barges and other medium draft vessels and for the small pier that is associated with fishing vessels and other comparably sized smaller craft.

A summary of the primary cost items of the three phases of construction are as follows:

| PORT DESIGN | TOTAL COST |
|---|---|
| Stage I | |
| Barge Facility | $20,409,300 |
| Stage II | |
| Barge Facility | $20,409,300 |
| Medium-Draft Dock | 3,383,100 |
| | $23,792,400 |
| Stage III | |
| Barge Facility | $20,409,300 |
| Medium-Draft Dock | 3,383,100 |
| Fishing Vessel Dock | 2,449,900 |
| | $26,242,300 |

# CONSTRUCTION COST ESTIMATE

TABLE 9.A

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Offshore Facilities - Phase I

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

| LINE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| * | 3400-FOOT CAUSEWAY | | | | |
| 1 | Armor Rock | 101,800 | CY | $ 25 | $2,545,000 |
| 2 | Filter Rock | 54,600 | CY | $ 8 | 436,800 |
| 3 | Core Rock | 130,300 | CY | $ 5 | 651,500 |
| | | | | | |
| * | OFFSHORE TERMINAL | | | | |
| 4 | Armor Rock | 211,200 | CY | $ 25 | 5,280,000 |
| 5 | Filter Rock | 75,700 | CY | $ 8 | 605,600 |
| 6 | Core Rock | 264,000 | CY | $ 5 | 1,320,000 |
| | | | | | |
| * | ROADWAY SUBGRADE AND SURFACE | | | | |
| 7 | Gravel | 14,300 | CY | $ 4 | 57,200 |
| | | | | | |
| * | STEEL SHEETPILE (DOCK FACE) | | | | |
| 8 | Sheetpiles | 64,000 | LF | $ 24 | 1,536,000 |
| 9 | Pile Driving | 533 | EA | $620 | 330,500 |
| 10 | Tiebacks/Hardware | 800 | LF | $100 | 80,000 |
| 11 | Backfill Compaction | 88,180 | CY | $ 8 | 705,400 |
| 12 | Dock Fenders | LS | | | 32,000 |
| 13 | Docking Hardware | LS | | | 55,000 |
| 14 | Navigational Aids | LS | | | 15,000 |
| | | | | | |
| | SUBTOTAL | | | | 13,650,000 |
| | | | | | |
| 15 | Contingency (20%) | | | | 2,730,000 |
| 16 | Engineering/Design (6%) | | | | 819,000 |
| 17 | Supervision/Administration (6%) | | | | 819,000 |
| | | | | | |
| 18 | PHASE I OFFSHORE FACILITIES TOTAL: | | | | $18,018,000 |
| | | | | | |
| | | | | | |

# CONSTRUCTION COST ESTIMATE

TABLE 9.B

REFERENCE/PLAN NO. _____

JOB NAME Nome Port

LOCATION Port of Nome
Onshore Facilities - Phase A + B

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

| LINE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| * | LAND ACQUISITION | | | | |
| 19 | Phase A | 17 | Acre | $2,000 | $ 34,000 |
| 20 | Phase B | 53 | Acre | $2,000 | 106,000 |
| | | | | | |
| 21 | Land Preparation | 70 | Acre | $4,000 | 280,000 |
| | | | | | |
| 22 | Road Construction | 4,500 | LF | $ 40 | 180,000 |
| | | | | | |
| * | UTILITIES | | | | |
| 23 | Water | | LS | | 524,000 |
| 24 | Fuel | | LS | | 329,000 |
| 25 | Electricity/Telephone | | LS | | 105,100 |
| 26 | Lighting | 20 | EA | $1,500 | 30,000 |
| | | | | | |
| 27 | Administration Building | 1,000 | SF | 80 | 80,000 |
| 28 | Restrooms | 5 | EA | $10,000 | 50,000 |
| | | | | | |
| 29 | Fencing (Phase A only) | 2,500 | LF | 35 | 87,500 |
| | | | | | |
| 30 | Signage | | LS | | 6,000 |
| | | | | | |
| 31 | SUBTOTAL | | | | 1,811,600 |
| | | | | | |
| 32 | Contingency (20%) | | | | 362,300 |
| 33 | Engineering/Design (6%) | | | | 108,700 |
| 34 | Supervision/Administration (6%) | | | | 108,700 |
| | | | | | |
| 35 | ONSHORE FACILITIES TOTAL: | | | | $2,391,300 |
| | | | | | |
| | | | | | |
| | | | | | |

# CONSTRUCTION COST ESTIMATE

TABLE 9.C

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Offshore Facilities - Phases II Dock

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

| LINE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| * | DOCKING PIER AT 30 -FOOT CONTOUR | | | | |
| 36 | Core Rock | 24,580 | CY | $ 5 | $ 122,900 |
| 37 | Sheetpile | 76,800 | LF | $ 24 | 1,843,200 |
| 38 | Pile Driving | 640 | EA | $ 620 | 396,800 |
| 39 | Sheetpile Tiebacks | 960 | LF | $ 100 | 96,000 |
| 40 | Backfill Compaction | 8,000 | CY | $ 8 | 64,000 |
| 41 | SUBTOTAL | | | | 2,522,900 |
| | | | | | |
| 42 | Fenders | | LS | | 10,000 |
| 43 | Docking Hardware | | LS | | 30,000 |
| | | | | | |
| 44 | PHASE II DOCK: SUBTOTAL | | | | 2,562,900 |
| | | | | | |
| 45 | Contingency (20%) | | | | 512,600 |
| 46 | Engineering/Design (6%) | | | | 153,800 |
| 47 | Supervision/Administration (6%) | | | | 153,800 |
| | | | | | |
| 48 | PHASE II DOCK: TOTAL | | | | $3,383,100 |



CONSTRUCTION COST ESTIMATE - SHEET NO. ___ OF ___

# CONSTRUCTION COST ESTIMATE

TABLE 9.D

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Offshore Facilities - Phase III Dock

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

| LINE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| * | DOCKING PIER AT 26 -FOOT CONTOUR | | | | |
| 49 | Core Rock | 16,870 | CY | $ 5 | $ 84,350 |
| 50 | Sheetpile | 56,000 | LF | $ 24 | 1,344,000 |
| 51 | Pile Driving | 467 | EA | $ 620 | 289,550 |
| 52 | Sheetpile Tiebacks | 700 | LF | $ 100 | 70,000 |
| 53 | Backfill Compaction | 5,620 | CY | $ 8 | 45,000 |
| | | | | | |
| 54 | SUBTOTAL | | | | 1,832,900 |
| | | | | | |
| 55 | Fenders | | LS | | 8,000 |
| 56 | Docking Hardware | | LS | | 15,000 |
| | | | | | |
| 57 | PHASE III DOCK: SUBTOTAL | | | | 1,855,900 |
| | | | | | |
| 58 | Contingency (20%) | | | | 371,200 |
| 59 | Engineering/Design (6%) | | | | 111,400 |
| 60 | Supervision/Administration (6%) | | | | 111,400 |
| | | | | | |
| 61 | PHASE III DOCK TOTAL: | | | | $2,449,900 |

# CONSTRUCTION COST ESTIMATE

TABLE 9.E

REFERENCE/PLAN NO. _____

LOCATION Port of Nome
Facilities Cost Summary

JOB NAME Nome Port

JOB NUMBER TC 3373

PRELIMINARY [X] FINAL [ ]

BY P. Gadd DATE 6-1-80

CHECK _____ DATE _____

| LINE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | AMOUNT |
|---|---|---|---|---|---|
| * | PHASE I DEVELOPMENT | | | | |
| 18 | Offshore Facilities | | | | $18,018,000 |
| 35 | Onshore Facilities | | | | 2,391,300 |
| | | | | | |
| * | PHASE I TOTAL: | | | | 20,409,300 |
| | | | | | |
| | | | | | |
| 48 | PHASE II DOCK TOTAL: | | | | 3,383,100 |
| | | | | | |
| * | PHASE I + PHASE II TOTAL: | | | | 23,792,400 |
| | | | | | |
| | | | | | |
| 61 | PHASE III DOCK TOTAL: | | | | 2,449,900 |
| | | | | | |
| * | PHASE I + II + III TOTAL: | | | | $26,242,300 |

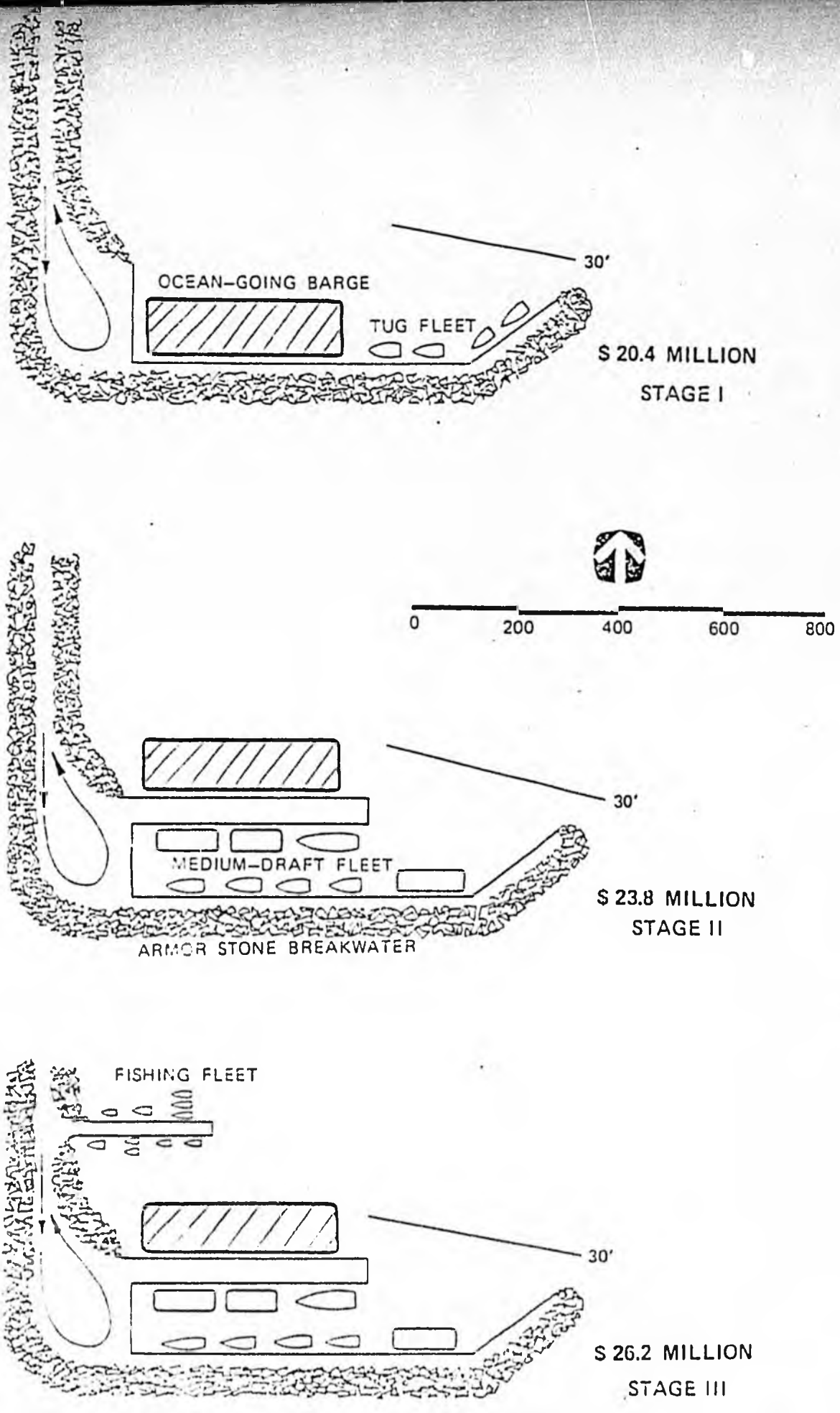



FIGURE 7.1 : TOTAL PORT CONSTRUCTION COSTS

Regardless of the specific offshore terminal design, the onshore facility configuration remains the same. Basic cost items included for development of the onshore facilities are as follows:

- Land Acquisition
- Land Preparation
- Road Construction
- Utilities
  - * Water
  - * Fuel
  - * Electricity/Telephone
  - * Lighting
- Buildings
  - * Administration
  - * Restrooms
- Fencing
- Signage

The cost estimate presented herein assumes development of only the 35 acre onshore facility shown in Figure 5.1.

In order for the port facility to be totally self-supporting, annual port income would have to exceed the yearly costs of operations, maintenance, the initial construction costs, and the costs associated with the debt service on the initial costs. Port costs can be annualized as follows:

| | | |
|---|---|---|
| A. | Capital Recovery (50 Years @ 8%) | $2,145,000 |
| B. | Operations/Maintenance | |
| | Maintenance | $ 260,000 |
| | Staff Salaries | 35,000 |
| | Equipment Maintenance | 10,000 |
| | Administrative Costs | 10,000 |
| | | $ 315,000 |

TOTAL: $2,460,000

The level of economic activity in the Nome region is not currently sufficient to generate the income needed to offset the projected $2,460,000 annual costs.

An analysis has been undertaken, however, to determine the extent to which the port projected revenues can offset the city's costs in operating and maintaining the facility.

## 7.2 REVENUE PROJECTIONS

In order to develop anticipated revenues which might be derived from the usage of port facilities in Nome, the rate structures of several other ports in Alaska were examined. In addition, the actual cargo transported through the Nome Harbor in 1979, amounting to a total of 33,100 tons (refer to Table 6), was applied against these rate structures. Nome cargo, if transported through the harbors at Anchorage, Homer, and Dillingham, would be as follows:

| | General Cargo | Petroleum | Total |
|---|---|---|---|
| Total tonnage through Nome in 1979 (refer to Table 6) | 8,100 | 25,000 | 33,100 |
| Charges by the port if processed through the port at: | | | |
| ($ in thousands) | | | |
| Anchorage | $ 20 | $ 2 | $ 22 |
| Homer | $ 35 | $ 35 | $ 70 |
| Dillingham | $111 | $305 | $416 |

Establishing Anchorage rates as the base for comparison, the ports would rank as follows:

| Port | Port Charges as a Multiple of Anchorage |
|---|---|
| Anchorage | 1.0 |
| Homer | 3.2 |
| Dillingham | 18.9 |

The present service area of the Nome Port is generally that area encompassed by the Nome Census Division. Although villages outside the Division may receive goods transshipped through Nome, it is likely that over 90 percent of incoming general cargo and petroleum products is destined for residents or users within the Division. A study of growth in the Division by the Corps of Engineers (1974A) projects a population of about 9,500 persons by 1985 and 15,800 persons by the year 2000, compared to a population in 1978 estimated at between 6,700 and 7,200 (refer to Section 2.8.1).

In the period from 1969 to 1979, the average cargo tonnage through the Nome Port amounted to between 4.6 and 4.9 tons per person per year, with no meaningful trends of increase or decrease in evidence. Therefore, using a figure of 4.75 tons per person per year, the following cargo projections resulted:

| Year | Projected Service Area Population (Nome Census Div.) | Total Incoming General Cargo and Petroleum Products through Nome |
|---|---|---|
| Base Year (1979) | 7,000 | 33,250* |
| 1985 | 9,500 | 45,125 |
| 2000 | 15,800 | 75,050 |

* Compares with actual of 33,100 tons (refer to Table 6)

Utilizing a rate structure equivalent to 15.0 times the Anchorage rates results in annual revenues for the Nome Port as follows:

| Year | Total Incoming General Cargo & Petroleum Products | Annual Revenues Rec'd from Port Charges & Fees |
|---|---|---|
| Base Year (1979) | 33,250 | $331,250 |
| 1985 | 45,125 | $450,000 |
| 2000 | 75,050 | $750,000 |

This amounts to an average rate of $10.00 per ton or about $0.50 per 100 pounds of cargo.

In addition, other port revenues will accrue from sources which cannot, at this time, be adequately quantified. These include:

1. Docking of workboats related to petroleum exploration, development, and production, primarily for the purpose of securing provisions and supplies, and transporting work crews and equipment.

2. Docking of fishing vessels operating in Norton Sound and nearby fisheries, primarily for the purpose of securing provisions and supplies.

3. Docking of vessels for the purpose of receiving minerals mined in northwest Alaska for transport to Japan or the "lower 48".

4. Docking of vessels and transshipment of cargo related to petroleum development activities on the Beaufort and Chukchi Seas. This may include export of quarrystone for oil drilling island construction in these areas.

5. Leasing of land within the port complex to private firms for the purpose of constructing and utilizing operations and storage buildings, fuel facilities, repair facilities, and similar structures, as well as for open land for container storage and other types of storage.

The above revenue items could add significantly to the revenue projections derived from incoming general cargo and petroleum products. The complex and speculative nature of this income requires that an accurate determination of this element of potential income must await further study in Phase B of the planning effort.

## 7.3 ECONOMIC CONCLUSIONS

It is anticipated that the annual cost of debt service, operation and maintenance activities of the port of Nome will exceed the income generated by the Port. This conclusion is somewhat speculative in part due to the inability of accurate forecasting of the extent and magnitude of developments in the petroleum, mining, coal and fishing industries. It does seem clear, however, that the income generated from port operations will exceed the cost of port operations and maintenance. Given the rather conservative port income scenario that anticipates income from the projected population growth only, the income roughly equals the yearly cost of port operations and maintenance. If other more optimistic scenarios develop that would increase port traffic, income levels would rise accordingly. The highly speculative nature of economic forecasting for Nome dictates that it be limited to those elements that seem most plausible. This has been our objective and it is upon this premise that our preliminary economic evaluation is based.

## 9.0 CONCLUSIONS

The planning, engineering and economic analyses undertaken in this report conclude that construction and operation of a deep-draft port facility in Nome, Alaska, is feasible from a functional, operational, and environmental standpoint. This conclusion is based solely on the expected growth rate of the city and region although additional growth-inducing factors are considered (petroleum, mineral, fisheries development), these rather speculating elements are not judged to be necessary for the port to succeed. It has been determined that port income will roughly equal the expected port operation and maintenance costs. A primary requirement for the economic viability of the port project is the ability of the State of Alaska to finance the initial costs of land acquisition, engineering design, and construction of the port facilities. The level of income generated by the port is not anticipated to absorb the total construction costs assuming even the most optimistic regional growth scenarios.

The port complex will be composed of onshore cargo storage/handling facilities connected to the offshore terminal by a 3600-foot long rubblemound causeway, as shown in Figure 9.1. The port facility will accomodate vessels with maximum drafts of 22 feet. At the offshore terminal, general and containerized cargo will be handled by vessel-fixed cranes as well as a dock-based mobile crane. Fuel, water, electricity and telephone services will be provided at dockside.

The site selected for the location of the onshore terminal is on an elevated plateau just west of the Snake River. This site is convenient to the city and city services and will lead to reduced dredging requirements at the present harbor due to the sand blocking effect of the causeway.

Onshore area requirements for the cargo storage/handling activities

are contained within a 35-acre parcel designated "Phase A". The "Phase B" parcel is 65 acres and will be utilized as a bulk cargo storage/handling area if the need should arise in the future. It is recommended that the city acquire the entire parcel (Phase A + Phase B) at the present time to preserve these lands for future use. Presently, only about 30 acres of the 100 acre parcel encompassing both Phase A and Phase B development is owned by the city.

The cost of the port project is estimated for three configurations:

| | | |
|---|---|---|
| Phase I: | Onshore Facilities<br>3600-foot long causeway<br>Barge Terminal | $20.4 Million |
| Phase II: | Phase I plus<br>Additional 450-foot long barge/<br>Ship Pier | $23.8 Million |
| Phase III: | Phase II plus<br>Additional 300-foot long<br>Docking Pier | $26.[illegible] Million |

Construction cost estimates are given in 1980 dollars. Quarry rock costs will have a major impact on project cost. A unit cost of $25/cubic yard for armor rock is assumed for these cost estimates. The structural design of the major port elements have been designed to minimize maintenance costs. This philosophy of design is reflected in the port cost estimates.

Port income will be generated from berthing fees, land/facilties lease income derived from port-related businesses located within the port complex, sales of fuel, water, and power to the port users.

The offshore terminal can be expanded in the future to accomodate deeper draft vessels as well as to provide docking space for a larger number of small, shallow draft vessels. The causeway has been designed to support additional utilities and a bulk material

transfer system in the future.

The existing harbor at Nome (in the Snake River) is envisioned as a small craft harbor with an anticipated vessel capacity of 80-100 boats. It is believed that the presently authorized depth of eight feet will not be required for the Snake River and that small craft traffic within the present harbor will be limited to vessels drawing four feet or less.

Environmental concerns that have been identified appear not to be of the nature or degree that would prevent port construction or operation. These concerns include:

- o Longshore Sediment Transport;
- o Ice Movement and Forces;
- o Salmon Spawning;
- o Crab Fisheries;
- o Expected Regional Growth;
- o Structural Foundation Support;
- o Cultural, Archeological Concerns.

Permitting requirements for the Port of Nome have been identified and include the U.S. Army Corps of Engineers, Alaska Department of Transportation, Alaska Department of Fish and Wildlife, as well as other state and federal agencies. The total time to process all permit applications is 12-18 months, however, if opposition to the project is slight it is conceivable that this time requirement would be reduced.

## 9.1 RECOMMENDATIONS

Based on the findings of this report, it is recommended that the City of Nome initiate the following tasks in order to expedite the construction of the Port of Nome:

1) Obtain specific data at the proposed port site to properly describe site geology, offshore bathymetry and onshore topography.

2) Undertake negotiations to procure onshore land from present owner.

3) Conduct tidelands survey to allow State to grant ownership to the City of Nome for the offshore lands existing between the city limits and a line located two miles offshore.

4) Conduct refined economic assessment to better quantify the expected port income given various development scenarios.

5) Organize a citizens committee and assign specific responsibilities to establish the means to obtain financial support from the State for the port facility.

6) Provide site and contract specific guidance to Tetra Tech in order to proceed with development of Port of Nome Master Plan (Phase B of ongoing study).

SB

208

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

*DEPUTY COMMISSIONER – DESIGN AND CONSTRUCTION*

POUCH Z
JUNEAU, ALASKA 99811
(907) 465-3900

February 17, 1981

200H-

Re: Egan Drive Illumination

The Honorable Robert H. Ziegler, Sr.
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Ziegler:

As requested by Guy Van Doren of your office, following are estimates for continuous illumination of Egan Drive from Norway Point to Mendenhall Loop Road.

I. Estimated Initial Cost (February 1981 Dollars)

| | |
|---|---|
| Preliminary Engineering | $ 50,000 |
| Construction | 1,342,000 |
| Construction Engineering | 101,000 |
| Total | $ 1,493,000 (current standards) |

II. Estimated Maintenance and Operational Costs (February 1981 Dollars)

| | |
|---|---|
| Electricity Cost | $ 18,000 per year |
| Maintenance Cost | 20,000 " " |
| Total | $ 38,000 per year |

If additional information is needed, please let me know.

Sincerely,

R. D. Shumway, P.E.
Deputy Commissioner

25A-T4LH

SB

209

SB 209 (special appropriation for fire fighting equipment for the City of Whittier)

Revised costs of fire truck and fire-fighting radio equipment for Whittier:

| | |
|---|---|
| FIRE TRUCK . . . . . | $175,000 |
| RADIO EQUIPMENT . . . . . | 20,689 |
| TOTAL | $195,689 |

The revised costs were provided by Chief Livingston by phone February 27. Subsequent to initial costs provided by manufacturers, Chief Livingston learned from Becker Fire Equipment that the chassis price of the fire truck had once again been increased, bringing the fire truck total to $175,000.

Chief Livingston was also notified by Motorola, Inc. that quotes for cost of two pieces of radio equipment had been in error, and that an additional $2,500 was required for each ($5,000); thus the Fire Department will need $20,689 for emergency radio equipment.

# City of Whittier

TELEPHONE 907 472-2337
P.O. BOX 608
WHITTIER, ALASKA 99693

472-2330

January 16, 1981

~~$162,650.00~~ $175,500

Jay Kertulla;

Please consider our request for a new fire truck for Whittier, Alaska. The bid for this truck comes to $162,650.00 from Becker Fire Equipment of Casper Wyo. The bid for 2 way radios from Motorola of Anchorage comes to $15,689.00 ← 20,689 These radios are for 2 fire trucks, 1 ambulance, 1 base station and 3 portable units. This is a considerable sum, however I will attempt to justify it.

1. This truck is a class "A" pumper, and is basically the same truck that the Steese VFD received last year at approx. $129,000.00. The chassis price alone went up $10,000.00 due to inflation since last year. This is the only 4 wheel drive chassis we have found heavy enough to meet our needs. We are also asking for extra capabilities that the Steese truck does not have.
   A. Full foam capability with 150 gal foam tank, turret and portable monitor for petroleum and harbor fires.
   B. 1500 gallon per min. vs 1000 gal per min. on the Steese truck.
   C. Built in 3kw generator with 2 telescoping floodlights for emergencey lighting.
2. Of our present 2 trucks, the 1949 Ford is inoperable due to various leaks incurred when it froze during a power outage in 1975. The standby generator was inoperable at that time. The 1952 Howe is operational but is hard pressed to maintain 150-200 gallons per min. This truck was originally a 500 gallon pumper with a 500 gal capacity. We cannot pump straight through from hydrant to the fire. After approx 2 1/2 min. pumping we must shut down for 1 min. and recharge the truck tank. On a fire of any magnitude this is a very unworkable situation. Most of our members are not profesional truck drivers and have troubles shifting the spur gear 5 speed with any degree of success. Our present pumper summed up is complicated to operate, hard to drive and needs more Geritol than we can afford.

The new unit would have the ability to serve Whittier as it grows in years to come, plus meeting our present needs.

Becker Fire Equipment has supplied the majority of fire trucks for Alaska for the past 2 years and has enjoyed a good reputation in our state.

We would appreciate your help as our elected representative on this matter. Becker Equipment advised us that Senator Sacketts office has been of great assistance in securing trucks for other communities on a very short time basis.

Thank you for your time and consideration.

Sincerely, Michael Livingston

Michael Livingston
Fire Chief
Whittier Volenteer Fire Dept.

MOTOROLA INC.

proposal

City of Whittier
Fire Chief
Whittier, Alaska 99502

| QTY | | DESCRIPTION | UNIT PRICE | EXTENDED PRICE | |
|---|---|---|---|---|---|
| 1 | L53JJB1190M | - VHF, 4 frequency, 60 watt MITREK SUPER CONSOLETTE Base Station (local control) | ~~1,930.00~~ 2250.00 | $1,930.00 | 2250.00 |
| 1 | TDD6481 | 6 dB Gain Base Station Antenna | ~~244.00~~ 298.00 | 244.00 | 298.00 |
| 1 | TDN6596 | 100' ½" Foam Heliax Transmission Line | ~~180.00~~ 223.00 | ~~180.00~~ | 223.00 |
| 2 | T53JJA1900K | MITREK Mobile, VHF, 4 Frequency, 60 Watts | ~~1,325.00~~ 1330.00 | ~~2,650.00~~ | 2660.00 |
| 1 | | with Touch code assy. | 1580.00 | | 1580.00 |
| 3 | H33BBU1144N | MT500 Portable, UHF, 4 Frequency, 5 Watts with N. Cad Batt. Case & Touch Code | ~~1,398.00~~ 1670.00 | ~~4,194.00~~ | 5010.00 |
| ~~3~~ | ~~NLN4528~~ | ~~Swivel Case With T Strap~~ | ~~30.00~~ | ~~90.00~~ | |
| 3 | NLN4565 | Rapid Rate Charger | ~~120.00~~ 128.00 | 360.00 | 384.00 |
| | | TOTAL | | ~~$9,649.00~~ | 12,405.00 |

Airfreight - FOB Destination

Installation at ~~$600.00~~ 200.00 per day (Time and Materials) not including transportation from Portal to Portal. 2450.00

Total monthly maintenance including parts and labor on mail in basis at $59.50 per month. 59.50 X 12 = 834.00

Customer to provide 2" mounting pipe for base station antenna

Total $15,689.00

Terms: 20% downpayment - net 10 days on balance

Prices quoted are FOB factory. Quotation good for 60 days. 20,689 ??

Delivery in approximately 56 days from receipt of order

Prepared by: William J. Morrison Date: Written

Date: October 30, 1979 Dec 4 1979

NOTE: Conversion of the Auto-Phone Patch and Air Raid Siren can be done with (1) Encoder Board and (1) Decoder Board and some minor modifications to the Auto-Phone Patch. Total cost including labor $1,750.00.

| Eq. Cat. | Sec. | Item |
|---|---|---|
| R3 | 2.1 | 63 |

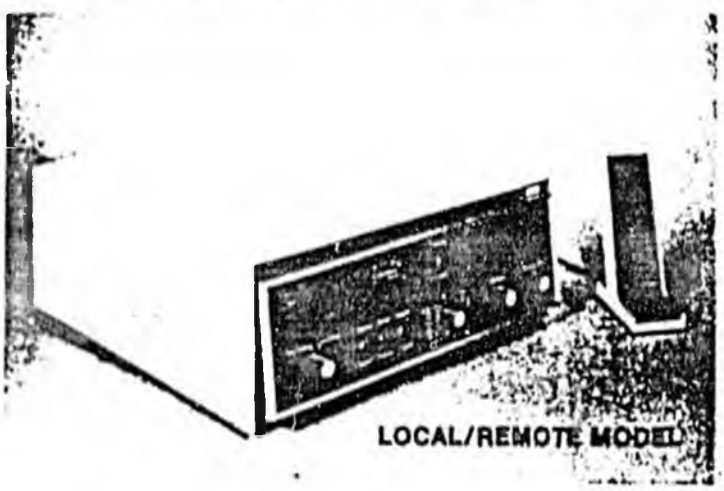
MOTOROLA

Solid-State

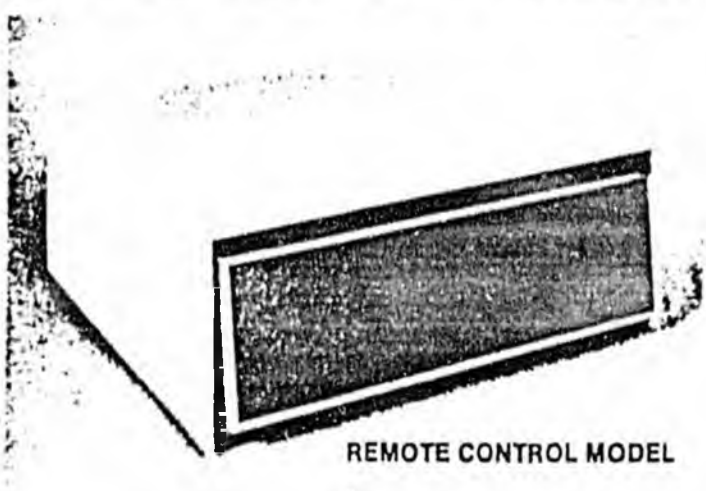
# MITREK Super CONSOLETTE Base Stations

**Local, Local/Remote and Remote Models**
**29.7-50 MHz, 60 Watts**
**136-174 MHz, 40/60 Watts**
**406-420 MHz and 450-512 MHz, 30/50 Watts**





LOCAL/REMOTE MODEL



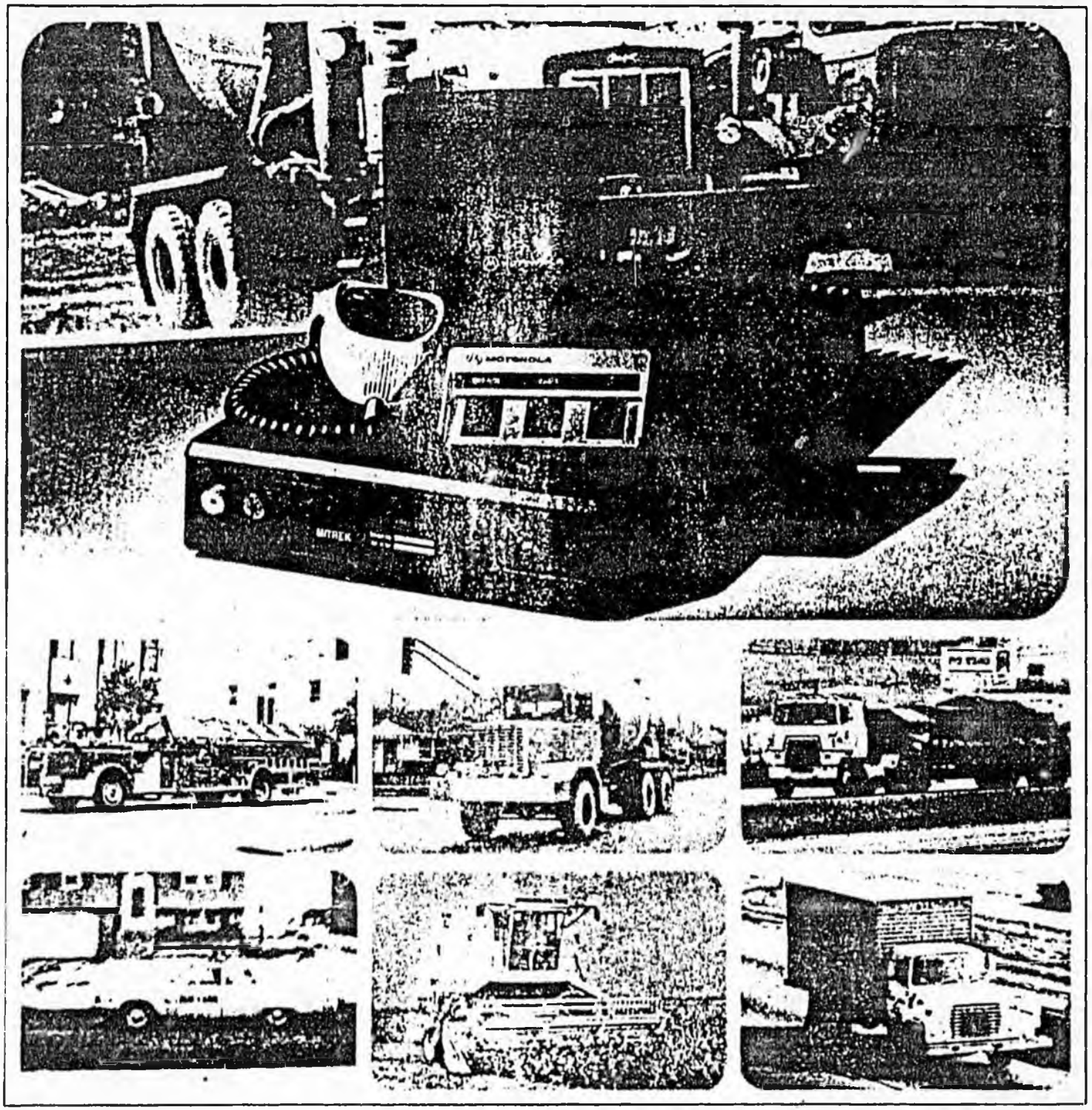
REMOTE CONTROL MODEL

MOTOROLA

# MITREK

## FM Two-Way Radio

**29.7-50 MHz 60/110 Watts**
**136-174 MHz 40/60 Watts**
**146-174 MHz 75/110 Watts**
**406-420 MHz & 450-512 MHz 30/50 Watts**
**450-512 MHz 75/100 Watts**



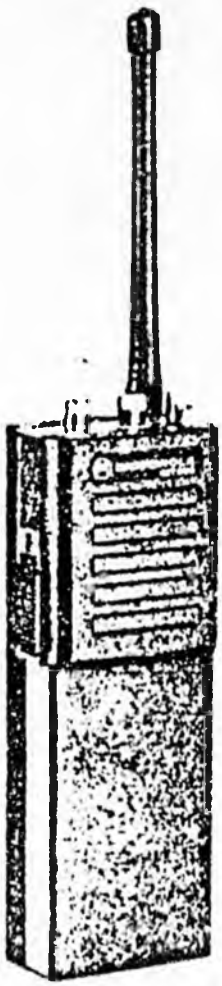
MOTOROLA

MOTOROLA
Technical communications supplier to the United States Olympic Committee

# MT 500 Series HANDIE-TALKIE

## Two-Way FM Portable Radios

5 or 2 Watts RF Power
136-174 MHz







Motorola's MT 500 Series Handie-Talkie radios offer an optimum balance of high performance, reliable advanced engineering and hybrid circuit design, convenient small size and weight, operational flexibility, and system cost. Major features include:

- Current Systems Compatible
- Rugged Construction
- Top Performance Specifications
- Superior Serviceability
- Improved Audio
- Choice of Power Levels
- 8 Frequency Capability
- Hybrid Modules
- Plug-In Channel Elements
- Basic or Universal Models
- Four Model Sizes
- Selectable Standard Options
- Complete Accessories

### FEATURES ● BENEFITS

**Current Systems Compatible**
The MT 500 radio is a natural extension of the present HT 220 system. ● It provides for both upgrading and expansion with maximum ease. Many accessories are common and can be used on both lines.

**Rugged Construction**
Designed for everyday rough handling, the MT 500 radio exceeds the EIA Drop Test Standard RS-316-A. In addition, the radio is weather-sealed against dust, moisture and splashing water. ● These features increase dependability when the going gets rough.

**Choice of RF Power**
Available in either 5-watt or 2 watt models. ● Motorola's team of experts will help you select the correct model mix to assure that the power levels best meet the needs of your particular system design. You buy what you need for full communications coverage.

SB

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PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

***

Introduced:
Referred: Transportation and Finance

IN THE SENATE BY DANKWORTH AND KERTTULA

SENATE BILL NO. ____

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE -- SECOND SESSION

A BILL

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Introduced:
Referred: Transportation
and Finance

IN THE SENATE BY DANKWORTH AND KERTTULA

SENATE BILL NO. ____

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWELFTH LEGISLATURE -- SECOND SESSION

A BILL

For an act entitled: "An act relating to the Alaska Railroad."

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

* Section 1. A.S. 42 is amended by adding a new chapter to read:

"CHAPTER 40. ALASKA RAILROAD AUTHORITY

ARTICLE 1. FINDINGS

Sec. 42.40.100. LEGISLATIVE FINDINGS AND POLICY. (a) The legislature finds, determines, and declares that:

(1) The United States government has expressed its determination to discontinue federal operation of the Alaska Railroad at the earliest possible date;

(2) For the time being, private acquisition and operation of the railroad in a manner consistent with the federal transfer legislation and this chapter is not considered to be a reasonable possibility, or in the best interests of the citizens of the state;

(3) Continued operation of the railroad is possible only if the state acquires the railroad from the federal government and provides for operation of the railroad;

(4) Continued operation and development of the Alaska Railroad is essential to the long-term economic growth and development of the state and its natural resources and will serve an important public purpose; and

(5) Continued operation of the Alaska Railroad will promote the general welfare of the people of the state by providing important freight and passenger service to residents of the state, to businesses of the state, to military installations in the state and to nonresidents visiting or doing business in the state.

(b) It is the policy of the state:

(1) to foster and promote the development of the state's lands and natural resources;

(2) to foster and promote the long-term economic growth and development of the state;

(3) to provide necessary and desirable freight and passenger rail transportation services to the state's residents, visitors, businesses and military installations in the state;

(4) to develop and implement plans for a transportation network that achieves the goals set forth in subparagraphs (b)(1), (2), and (3) above; and

(5) to provide reasonably high quality, safe, economical, and efficient transportation to the state's people, visitors, businesses and military installations in the state.

(c) The legislature further declares that:

(1) The exercise of the powers of the state in the interest of all the people of the state is necessary to

Pages 3 & 4

All suggested changes set forth on page 3 deal with granting to the Railroad greater responsibility and authority to manage its own affairs and cause it to be a greater asset to the State of Alaska when functioning as a railroad.

In those areas in which the Railroad is described as a "public authority," lines 2 and 7 on page 3 and lines 10, 19 through 21 and line 24 on page 4, seem to the Railroad to be emphasizing the public characteristic of the Railroad more than the profit-making, self-sustaining aspect of future Railroad activity. The Railroad recognizes its public responsibility, but if it is to function in the transportation marketplace in competition with other modes of transportation characterizing it as a public agency places emphasis on railroad charactistics which causes the Railroad to lose its competitive edge. The Railroad feels this would not aid the State, because it would probably lead to greater needs for subsidization.

accomplish the goals listed above in (b) of this section by authorizing the creation of ~~a public~~ an authority with the powers, duties, and functions as provided in this chapter, to operate the Alaska Railroad and its rail, industrial, port and other properties;

(2) It is in the best interests of the people of this state for the ~~public~~ authority created by this chapter to operate the Alaska Railroad in such a way as to:

(a) be ~~exclusively~~ responsible for and prudently protect the financial and legal obligations of the Alaska Railroad;

(b) render the railroad authority, and not the State of Alaska, a common carrier subject to the jurisdiction of the Interstate Commerce Commission;

(c) be able to raise capital by issuing obligations which may be exempt from federal and state taxation;

(d) carry out its responsibilities on a self-sustaining basis; to the fullest extent possible;

(e) provide the types and levels of safe, efficient and economical transportation to meet the overall needs of the state, supported where necessary by state investment in capital improvements or by other means;

~~(f) provide the best possible combination of high quality safe, efficient and economical transportation;~~

(g) operate according to sound business management practices;

(h) provide the level of service that best satisfies the needs of the people of the state;

(i) operate in a fiscally sound manner with ~~and~~ authority to invest and diversify; and

(j) ensure that borrowing by the authority does not indirectly endanger the state's own borrowing capacity.

(3) The continued operation of the railroad will assure greater utilization, development, reclamation and settlement of the state's lands for the maximum benefit of the people; and

(4) The important public purposes to be served by the railroad authority require the authority to have all of the powers and duties granted to it by this chapter; the legislature intends that the authority, consistent with sound business management practices, will exercise its powers and duties ~~as a public service~~ on behalf of the State of Alaska and recognizes that the exercise of the powers and duties granted by this chapter will require the authority to engage in the wide variety of different kinds of conduct authorized by this chapter.

## ARTICLE 2. CREATION AND ORGANIZATION

Sec. 42.40.200. ESTABLISHMENT OF AUTHORITY. There is established the Alaska Railroad Authority. The authority is a public corporation/~~and, for purposes of Section 22 of Article III of the Alaska Constitution, an instrumentality of the state within the Department of Transportation and Public Facilities~~ established under the provisions of Title 10 of the Alaska Statutes that has a legal existence independent of and separate from the state. The exercise by the authority of the powers provided in this chapter is considered an essential ~~governmental~~ function of the state. The legal existence and authority of the Alaska Railroad Authority shall commence and become effective upon the governor's appointment, under Sec. 42.40.215, of all members of the authority's board of commissioners. The existence of the authority shall be perpetual.

The Railroad, because of its emphasis on business orientation of the new Railroad authority, suggests that the board appointed by the Governor should have a greater business, rather than governmental, flavor. Therefore it suggests that the only government person on the board be that highest official in the Executive Branch which lends a greater credence to the stature of the Railroad as an entity of State government. The Railroad feels that it can function as a profit-making asset in the stable of assets serving under the seal of the State of Alaska. It will make revenues in excess of $50 million this year alone, and has over 500 employees. It is the transportation connecting link between ice-free tidewater and the interior of Alaska, and 80% of the population of the State lives in the railbelt. Therefore, the Governor of the State should serve on its board; along with the Governor, the Chief Executive Officer of the Railroad should serve on the board as most CEO's in private firms serve on the board.

Sec. 42.40.205. LIMITATION OF LIABILITY. All liabilities incurred by the authority shall be satisfied exclusively from the assets and credit of the authority and no creditor or other person shall have any right of action against the state on account of any debts, obligations or liabilities of the authority.

Sec. 42.40.210. BOARD OF COMMISSIONERS. The powers of the authority are vested in the board.

Sec. 42.40.215. APPOINTMENT AND COMPOSITION OF BOARD.

**See below.

(a)/ ~~The board of the authority consists of the Commissioner of Transportation and Public Facilities, six public members appointed by the governor, and the authority's chief executive officer as an ex officio, nonvoting member.~~ The public members shall be persons with substantial experience or professional training and expertise in fields relevant to the purposes of this chapter, including, but not limited to transportation, business and finance and have such standing in their communities as to command the respect of their fellow citizens. ~~One public member shall be an executive of an American railroad or organization which is not a connecting carrier of the Alaska Railroad.~~ At least two public members shall reside in areas served by the railroad. The public members may not be state officers or employees.

(b) The governor may exercise tne power of appointment only upon acceptance by the legislature by law of the closing report or its substantive equivalent prepared and submitted under the federal transfer legislation. The closing report must include a statement of the assets and liabilities of the Alaska Railroad proposed to be transferred to and assumed by the authority and the State /which is as specific and definitive as practicable under the federal transfer legislation. The legislature may

**(a) The board of the authority consists of the Governor or in his stead the Lt. Governor, the chief executive officer of the authority, a union representative appointed by the Governor, and six public members appointed by the Governor. One of the six shall be an executive of an American Railroad or organization which is not a connecting carrier. The union representative shall be selected from a list of members submitted by the unions representing the organized employees of the Railroad. The director of the Department of Transportation and Public Facilities shall be an ex officio member of the board.

accept or reject the report and may not condition acceptance on its modification in any material respect.

(c) The public members of the board must be confirmed by a majority of the membership of the legislature in joint session. Any public member duly appointed by the governor, unless and until he has been rejected by the legislature, has the full powers and responsibilities of a confirmed board member.

(d) The board shall elect one of its members to serve as chairman. The chairman ~~may~~ call meetings of the board at least quarterly and shall preside at the meetings and perform such other duties as the board prescribes in its rules.

(e) The board also shall elect a vice chairman, a treasurer and a secretary and prescribe their specific duties in its rules.

~~(f) The governor by written notice to the member may~~ remove a public member from the board for:

(1) incapacitation caused by injury or sickness that leaves the member unable to perform his or her duties under this chapter;

(2) continued refusal or inability to attend regular or duly called special meetings of the board;

(3) conviction of a misdemeanor involving moral turpitude or a felony; or

(4) any action that was intended to harm the authority whether or not resulting in a conviction.

Sec. 42.40.220. TERM OF OFFICE; VACANCIES. (a) The public members of the board serve for a term of six years. However, with respect to the six members first appointed, the governor will designate two to serve a term of two years, two to serve a ~~term of four years, and two to serve a term of six years.~~

~~(b) A vacancy on the board is filled by appointment by the governor and the appointment must be confirmed by the legislature in joint session. A member selected to fill a vacancy will hold office for the balance of the full term for which his predecessor on the board was appointed.~~

~~(c) A vacancy on the board does not impair the authority of a quorum of members to exercise all the powers and perform all the duties of the board.~~

Sec. 42.40.225. COMPENSATION AND EXPENSES. The public members of the board receive compensation at the rate of Four Hundred Dollars ($400) for each day such members are engaged in actual performance of duties as members of the board. The board's rules will provide for consistent compensation for partial days during which members are engaged in actual performance of their duties. Members are entitled to per diem and travel expenses authorized by law for state boards and commissions under A.S. 39.20.180.

~~Sec. 42.40.230. QUORUM AND NOTICE OF MEETINGS. Four members of the board are a quorum for the transaction of business. In addition to the notice requirements of A.S. 44.62, notice of a meeting of the board, including an agenda for the meeting, must be given to each member, the governor, the leadership of the legislature, at least two newspapers of statewide circulation and upon request to members of the general public.~~

Sec. 42.40.240. VOTING. The board's rules shall provide for the manner of voting and any representation of persons absent from meetings. For example, the rules may, but need not provide for or allow: voting and conferring by telephone or mail or voting as directed in a written proxy taking a position on a particular issue, so long as such voting is consistent with

Lines 4 thru 16

The Railroad has certain reservations about the way the hiring and firing and compensation are structured. The Railroad feels that the board should appoint the Chief Executive Officer and the CEO should appoint all other employees and fix their compensation. If the Railroad is not successful, the board should get another CEO.

However, one important comment should be made regarding the executive salary limited to that salary established for departmental commissioners. Presently there are 11 executive officials of The Alaska Railroad who make in excess of $50,000 base pay a year, plus 17-1/2%, soon to be raised to 22-1/2% cost of living allowance. If it is assumed that all executive officials are within the federal tax bracket of 50%, it can be assumed that the COLA which is tax free means a real take-home pay of double the figure set by the federal government. Therefore, these 11 executive officials must make the real income of $70,000 to $90,000, which is in excess of a commissioner's salary. Some of them may wish to take a pay cut to continue as a State employee, but some of them will not. It is the Railroad's opinion that all 11 are valuable assets to not only the Railroad but to the State of Alaska.

~~A.S. 44.62.310. However, no proxy may be allowed delegating to the holder discretion to act for a principal on undisclosed or general matters.~~

Sec. 42.40.250. EXECUTIVE OFFICIALS. (a) The board shall appoint and fix compensation for the chief executive officer ~~and legal counsel~~ of the authority. The appointments are subject to the approval of the governor. The chief executive officer appoints and fixes compensation for the other executive officials. The appointments and compensation are subject to board approval. All executive officials serve at the pleasure of the board. ~~No executive official may be compensated at a rate in excess of that established by the state for departmental commissioners except as may be temporarily required by the federal transfer legislation~~. The chief executive officer may appoint and fix compensation for any additional personnel necessary to carry out the purposes of this chapter.

Sec. 42.40.260. DELEGATION. (a) Reserving general or particular authorization or concurrence, as appropriate, the board shall delegate powers and duties necessary and appropriate for the management of the daily affairs and operations of the authority to the chief executive officer.

(b) Within 180 days of its establishment, the board shall adopt by resolution policies governing the following activities of the authority to be conducted, subject to any board review specified in the policies, by the chief executive officer or designated executive official:

(1) leasing, granting easements in and permits for the use of or other conveyances of an interest in authority real property other than a transfer or conveyance of fee simple or the authority's entire interest in said real property;

(2) establishment of specific rates and tariffs; and

(3) routine changes in service levels.

(c) General or particular board authorization or concurrence is required, without limitation, for any of the following:

(1) transfer or conveyance of fee simple or of the authority's entire interest in real estate other than the execution of a release of a lien or satisfaction of a mortgage after payment has been received.

(2) the issuance of notes, debentures, or bonds, and the mortgaging or pledging of authority assets to secure those instruments;

(3) the donation of money, property or other assets belonging to the authority;

(4) an action by the authority as a surety or guarantor;

(5) all individual capital projects with an estimated completion cost in excess of Two Hundred Fifty Thousand ($250,000), or the performance of which by the authority extends over a period of one year or more from the date of execution of the agreement;

(6) adoption annually under A.S. 40.42.425 of long-range program and capital plans;

(7) certification of annual reports to be filed under A.S. 42.40.410;

(8) generally applicable, comprehensive increases and decreases in rates;

(9) diversification and major expansion or reduction of services beyond those provided on the date of transfer or as subsequently provided under this chapter;

Lines 9-30 - Conflicts of interest the portion of the ARR bill. It is believed unecessary, as part of this statute, to laboriously reiterate detailed provisions for conflicts of interest, when there is presently a state statute on conflict of interests and the modification suggested by the railroad adequately covers this matter.

(10) the exercise of the power of eminent domain;

(11) expansion of main or branch lines, other than routine track realignment as necessary to maintain service levels in effect on the date of transfer; and

(12) selection of independent auditors and accountants.

ARTICLE 3. ADMINISTRATIVE PROVISIONS

Sec. 42.40.300. CONFLICTS OF INTEREST. ~~(a) Except as provided in this section, no board member or employee of the~~ authority may participate in any decision of the authority in which he, or a member of his immediate family has a direct or indirect financial interest. For purposes of this section, "participate in a decision" includes all discussions, deliberations, preliminary negotiations, and votes concerning a matter which is the subject of formal action by the board.

(b) (1) A board member or employee is not considered to have a direct or indirect financial interest in a decision if he or a member of his immediate family has only a remote interest and if the fact and extent of the interest is disclosed to the board in a public meeting and is noted in the minutes of the board before any participation by the member or employee in the decision, and thereafter in a public meeting the board authorizes or approves the participation by a vote of its membership excluding the interested member or employee. As used in this subsection, "remote interest" means:

(i) that of a nonsalaried officer of a nonprofit corporation;

(ii) that of an employee or agent of a ~~contracting party where the compensation of the employee or agent~~

Each director on the board and each executive official of the authority shall comply with the requirements of financial disclosure contained in A.S.39.50.010-.200. The board may provide in its rules for the removal by the board of a director or official who intentionally violates an applicable prohibition contained in A.S.39.50.010-.200.

Lines 1-30 - See comment on page 10.
The railroad suggests the total deletion of the special conflicts of interest statute found in the railroad bill. The railroad should be treated as any other arm of State Government. It is the opinion of the Legislature the State Conflict of Interest Act is not strong enough that act not the railroad act should be amended. Cosmetically the railroad act should be as succinct as possible.

~~consists entirely of fixed wages or salary and the contract is~~ awarded by bid or by other competitive process;

(iii) that of a landlord or tenant of a contracting party, except in cases where the property subject to the lease or sublease is owned or managed by the authority;

(iv) that of a holder of less than one percent of the shares of the corporation or cooperative that is the contracting party;

(v) that of an owner of a savings and loan or bank savings or share account or credit union deposit account if the interest represented by the account is less than two percent of the total deposits held by the institution; or

(vi) other interests that in good faith are defined as remote by rules or regulations adopted by the authority.

(2) The provisions of this subsection do not apply to a board member or employee financially interested in a decision who influences or attempts to influence a board member or employee with respect to the decision before he is authorized to participate in the decision as provided by this subsection.

(c) A board member or employee is not considered to be directly or indirectly financially interested in a decision when the decision could not affect him in a manner different from its effect on the public or community generally.

(d) An action, including the award of a contract, in which a board member or employee participates in violation of this section or A.S. 39.50.090 is void if the board member's or employee's vote was necessary to make up a majority of those ~~voting on the decision. In a case where a board member or~~

Page 12

Lines 19 thru 28

The Railroad suggests a modification of the requirement for public council meetings. The Railroad suggests that the executive sessions of the board should be allowed regarding all of the corporate powers given to the Railroad by this Act. All discussions by the board regarding all business decisions vis a vis the corporate powers should be available to the board in executive session. This does not mean that they must discuss these powers within an executive session, but merely have the authority to do so when necessary.

Obviously any discussion of tariffs, divisions and contract rates should fall within the power of the board to discuss those matters in executive sessions.

~~employee participates in a decision in violation of this section~~ or A.S. 39.50.090, and where his vote was not necessary to make up a majority of those voting, the board may ratify the action after disclosure of the violation in a public meeting of the board and without participation by the interested member or employee in the decision to ratify. A board member or employee who violates any prohibition contained in this section or in A.S. 39.50 forfeits his office upon a determination by the board in a public meeting that the violation was intentional.

(e) The executive employees and board members of the authority are subject to A.S. 39.50.

(f) Within 120 days of the first meeting of the board, the board shall adopt and may subsequently amend rules implementing this section, providing additional conflict of interest and ethical rules and regulations as it considers appropriate, and providing for the removal by the board of a board member or employee who intentionally violates a prohibition contained in ~~this section or in A.S. 39.50.~~

Sec. 42.40.310. PUBLIC BOARD MEETINGS. (a) The meetings of the board are public, with the exception of executive sessions as permitted by A.S. 44.62.310 and subsection (b).

(b) In addition to those subjects excepted from public meeting requirements by A.S. 44.62.310, the board may consider in executive session pursuant to the requirements of that section matters that pertain to land acquisition or disposal or proprietary information, as defined in a manner consistent with the standards and practices of the Interstate Commerce Commission for protection of the information.

Sec. 42.40.320. MINUTES OF MEETINGS. The board shall keep minutes of each meeting and shall send a certified copy of the

minutes of the public portion of each meeting to the governor and the leadership of the legislature.

Sec. 42.40.330. ADMINISTRATIVE PROCEDURE. (a) Except for A.S. 44.62.310 and 44.62.312, regarding public meetings, as limited by A.S. 42.40.310(b), and for A.S. 44.62.320(a), regarding legislative review of regulations, the Administrative Procedure Act (A.S. 44.62) does not apply to the authority, its rules, its regulations, or actions taken under this chapter. The authority shall make available to members of the public copies of the rules and regulations adopted under this section. Within 45 days after adoption, the chairman of the board of the authority shall submit a regulation adopted under this section to the chairman of the Administrative Regulation Review Committee under A.S. 24.20.400 - 24.20.460.

(b) The board shall adopt rules and regulations to govern its procedures and to carry out the purposes of this chapter. Within 90 days after its first meeting, the board shall adopt rules establishing a procedure for giving advance public notice and an opportunity for the public to comment on proposed regulations of the authority that the board determines are likely, if adopted, to have a substantial impact on the public or will be used in the authority's dealings with a significant segment of the public. The rules shall also provide for the adoption of emergency regulations without public notice and comment when the immediate adoption or repeal of a regulation is necessary to continue or reinstate the orderly operation of the authority's facilities or programs. However, emergency regulations may not remain in effect more than 120 days unless during that period the board complies with the public notice and comment procedure required for regulations which are not of an emergency nature.

(c) The rules adopted under (b) of this section establishing a regulation-making procedure and all rules or regulations relating to procurement of property by the authority, conflicts of interest, disclosure of information in the possession of the authority, or the regulation of persons outside the authority through the exercise of police power will be submitted to the attorney general for review and approval before becoming effective. The attorney general will respond to the authority within 30 days after receipt of the rules or regulations either approving them as consistent with the Constitution and statutes of the State of Alaska or disapproving them as in conflict with the Constitution and statutes. A disapproval of rules or regulations will be accompanied by a memorandum of law explaining the conflict with existing law and a recommendation for revisions to cure the defect. Rules or regulations submitted to the attorney general are considered approved if the attorney general fails to approve or disapprove them, as specifically provided in this subsection, within thirty days after receipt.

(d) A regulation is not subject to the procedures in (b) of this section if it is one that:

(1) relates to the use of public works, including terminal areas, industrial reserves, rights-of-way and streets, under the jurisdiction of the authority if the effect of the order is indicated to the public by means of signs or signals;

(2) is directed to a specifically named person or to a group of persons and does not apply generally throughout the state;

(3) concerns service schedules of the railroad; or

(4) relates to specific tariffs, divisions, and contract rate agreements.

(e) The authority is an agency of the State of Alaska

Lines 23-30 - The railroad, in its function as an entity of business and industry must be afforded specific protections from disclosure not required by other agencies.

Our suggested language provides such protections, while still bringing the railroad within the requirements of A.S. 09.25.110-.120.

for purposes of jurisdictional determinations and judicial review of the authority's action.

Sec. 42.40.335. PRE-EXISTING RULES, REGULATIONS AND ORDERS OF THE ALASKA RAILROAD. The board, by resolution, may continue in force for a period of not more than two years after transfer all or part of the rules, regulations and orders of the Alaska Railroad which were in effect one day before the date of transfer and are not inconsistent with this chapter or other state law. All authorities continued in force under this section shall expire on the second anniversary of the date of transfer. The board may adopt in its rules, regulations and orders the substance of former federal authorities relating to the Alaska Railroad. This adoption is not considered a continuation of the federal authorities if made in compliance with the procedural requirements of this chapter and other applicable law.

Sec. 42.40.340. PENALTY FOR VIOLATION OF DESIGNATED REGULATION. A person other than an authority executive official or employee within the scope of his employment, who violates an authority regulation, designated as necessary to protect life, health or property, shall be guilty of a misdemeanor punishable by a fine of not more than $1,000 or by imprisonment of not more than six months, or both.

Sec. 42.40.345. PUBLIC DISCLOSURE OF INFORMATION. ~~(a) Facts and information in the possession of the authority are public,~~ and communications, reports, files, books, accounts and papers of every nature in its possession are open to public inspection at reasonable times. However, the authority may, by rule or regulation, designate matters of a nonpublic, privileged, or proprietary nature, consistent with the standards and practices of the Interstate Commerce Commission for the protection of these ~~matters.~~

(a) The authority shall be subject to the provisions of A.S.09.25.110-.120, except as to those materials and information ordinarily treated by railroads as confidential, such as business records, divisions of revenue, contracts, legal or personnel records, or other materials protected as confidential.

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Line 9 — Conforms with suggested (a) on Page 15.

Line 13 — 42.40.400 - GENERAL POWERS, should read the "Board of Directors, by its own undertaking, or by appropriate delegation to the Chief Executive Office, may" rather than "The Authority may." This change will make the line of power much clearer. The "Authority" is the ultimate entity but all powers and duties should be granted to either the Board of Directors of the "Authority" or the C.E.O. There should be a new paragraph placed in the Bill granting the power to the Board of Directors to assign to the C.E.O. such corporate powers as, in the Board of Directors" opinion, would best serve the business of The Alaska Railroad.

Lines 17 - 18 — (4) This subsection is potentially in conflict with 42.40.250 as currently written. 42.40.250 as currently written gives the Board of Directors, with the approval of the Governor, the power to appoint the C.E.O. and the legal counsel, and all executive officers serve at the pleasure of the Board of Directors. The powers set forth in 42.40.400 as rewritten by the Railroad are clearer and less cluttered, and can be assigned to the C.E.O.

Line 19 — Subsection (5) runs contrary to 42.42.450 as rewritten by the Railroad or is redundant to 42.42.450, as currently written.

(b) A person may make written objections to the public disclosure of information contained in an application, report or document filed with the authority, stating the grounds for the objection. When an objection is made, the board may order the information withheld from public disclosure if the information would adversely affect the interest of that person; is not required in the interest of the public; and may be protected from disclosure consistent with the standards and practices of ~~the Interstate Commerce Commission.~~ subsection (a) of this section.

## ARTICLE 4. POWERS AND DUTIES

Sec. 42.40.400. GENERAL POWERS. The/ ~~authority may~~: board, by its own undertaking, or by appropriate delegation to the Chief Executive Officer, may:

(1) adopt a seal;

(2) adopt rules and regulations;

(3) sue and be sued;

(4) appoint officers, employees, trustees, and agents, and prescribe their powers and duties;

~~(5) hire legal counsel to represent the authority;~~

(6) make contracts and execute instruments necessary or convenient in the exercise of its powers and duties;

(7) acquire by purchase, lease, bequest, devise, gift, exchange, the satisfaction of debts, the foreclosure of mortgages, or otherwise, real or personal property, rights, rights-of-way, franchises, easements, and any other interests in land, including land lying under water and appropriation of water rights that are located in the state, taking title to the property in the name of the authority;

(8) acquire property by eminent domain and/or by a declaration of taking;

(9) hold, maintain, use, operate, lease, exchange, donate, improve, convey, alienate, dispose of, mortgage, encumber, and otherwise grant security interests in or transfer any real or personal property including without limitation facilities and equipment;

(10) borrow money and issue its bonds or notes and provide for and secure their payment, provide for the rights of their holders and purchase, hold, or dispose of its bonds or notes;

(11) secure the payment of its obligations by pledge or mortgage or other lien on its contracts, revenues, income, or property;

(12) contract with and accept transfers, gifts, grants or loans of funds or property from the United States, the state, and its political subdivisions, and in that regard comply with the provisions of federal, state, or local programs when necessary;

(13) acquire, hold and dispose of stocks, memberships, contracts, bonds, general or limited partnership interests or other interests in another corporation, association, partnership, joint venture or other legal entity, and exercise the powers or rights in connection with these interests which are provided in contracts or agreements and that are allowed by law concerning the satisfaction of debts;

(14) undertake the management operation, maintenance, use, and control of all of the properties of the Alaska Railroad including without limitation, the tracks, equipment and other property transferred to it by the federal government or by any person;

Page 18

Line 6 — The word "Authority" should be changed to "board."

Line 9-10 — (17) It should read "lend the authority's funds, property, credit or services for authority purposes."

(15) undertake or provide for the acquisition, construction, maintenance, equipping, and operation of connecting, switching, terminal, or other railroads and railroad facilities in the state;

(16) recommend to the legislature and the governor any tax, financing, and security measures the board ~~authority~~ considers appropriate for maximizing the public interest in the operation of the railroad;

(17) lend the authority's ~~its~~ funds, property, credit or services for authority purposes;

(18) consent to the modification of the rate of interest, time of payment of an installment of principal or interest, or other terms of a loan, contract, or agreement of any kind to which the authority is a party;

(19) include in any borrowing the amounts necessary to establish reasonable reserves and pay financing charges and interest on the obligations for a reasonable period after which the authority estimates funds will be otherwise available to pay the interest, consultant, advisory, and legal fees, and such other expenses as are necessary or incident to this borrowing;

(20) maintain offices and facilities at places it may designate;

(21) purchase the authority's bonds at a price not more than the principal amount of them plus interest;

(22) cancel bonds purchased under 42.40.400(21);

(23) apply to the appropriate agencies of the state, the United States, and to a foreign country and other proper agencies for the permits, licenses, or approvals as may be necessary to construct, maintain and operate transportation

Line 25

Between the word "on" and the work "property" the phrase "or to" should be inserted. The change is requested to allow the security force to act as state law enforcement officers for violations that occur to property owned, managed or transported by the authority but that do not occur on property owned, managed or transported by the authority.

services, and to obtain, hold and reuse the licenses and permits in the same manner as other persons or operating units;

(24) prescribe rates to be charged for services provided by the Alaska Railroad;

(25) determine the routes, schedules, and types of service to be provided by the Alaska Railroad;

(26) enter into contracts, leases, and other agreements with connecting carriers, shippers, and other persons concerning the service, activities, operations, properties and facilities of the railroad, including contracts, leases and other agreements that contain provisions intended to preserve and expand the railroad's traffic base;

(27) plan for and undertake expansion of the railroad and railroad activities, including extension of the Alaska Railroad's rail system and acquisition and operation of other modes of transportation service connecting to the railroad's rail service;

(28) adopt regulations designed to safeguard property owned, managed or transported by the authority, to protect employees and persons using the authority's property or services, and to promote safe, healthy, secure, and effective railroad operations, which regulations shall have the force of law and be enforceable in the same manner as civil and criminal statutes of the state; and maintain a security force to enforce state law and the authority's regulations. For violations that occur on or to property owned, managed or transported by the authority, the security force has the same powers and statewide jurisdiction as state law enforcement officers;

(29) adopt rules and regulations having the force of law that require designated classes of proprietary and personnel information and communications to be confidential;

Page 20-21

Line 29-30

Lines 29 - 30 of page 20 and lines 1 - 12 of page 21 should be stricken. Both the Governor and the Legislative Auditors are inexperienced in railroad accounting, in transportation law such as the Interstate Commerce Act, and in business practices as opposed to governmental practices. As a result, information of a confidential nature is subject to leakage without the safeguards of a fiduciary relationship between an accounting firm and the authority. The Railroad believes information in the hands of either the legislative or governor auditor would not remain confidential. If the Legislature and the Governor want access to audit information, they should either be given a voice along with the board in selecting the accounting firm or alternatively they should be allowed access through an independent certified accountant experienced in railroad accounting. Only the former alternative is presented in the suggested Railroad changes to the bill.

(30) hire and discharge railroad personnel and determine benefits and other terms and conditions of employment, that may be established in accordance with the obligations imposed by the federal legislation that transfers the Alaska Railroad to the state.

(31) ~~assume and satisfy all liabilities of the United States or its agencies as provided by the federal transfer legislation and the closing report, or its substantive equivalent, made under it and as accepted by the legislature; and~~

(32) do all things necessary, convenient or desirable to carry out the powers and duties expressly granted or necessarily implied in this chapter, or under other laws of the state, or the laws and regulations of the federal government.

Sec. 42.40.410. ANNUAL REPORT. The board shall direct preparation of, certify and distribute to the governor and to each member of the legislature by February 1 of each year a report generally describing the operations and financial condition of the authority. The board may include in the report suggestions for legislation relating to the structure, powers, or duties of the authority or relating to the operation of railroad facilities of the authority.

Sec. 42.40.420. ANNUAL AUDIT. The board /after concurrence by the /legislature and the governo /shall have the financial records of the authority audited annually by an independent certified public accountant experienced in railroad accounting. To the extent practicable, for the five years following the date of transfer, the status of the assets and liabilities specifically identified in the closing report submitted under the federal transfer legislation shall be noted in the annual audit. ~~The authority shall, at all times during normal business hours and as often as the governor's internal~~

Page 21

Line 22-28

42.40.425 (a) (1) should stop after the words "A.S. 37.07.050" on line 22. The Alaska Railroad should not be subject to legislative auditor and the division of budget and management unless the ARR is using State funds. An annual independent audit is recommended. 37.07.050 sets forth the requirements for "agency programs and financial plans." Nothing more need be said.

~~auditor or the legislative auditor considers necessary, make~~ available to the governor's internal auditor or the legislative auditor for examination all of its financial records, and will permit the governor's internal auditor or legislative auditor to audit, examine and make excerpts or transcripts from the records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, provision of services and the rates at which the services are provided and other data related to all these matters. Access to the above information shall be unrestricted, but disclosure of it is subject to A.S. 42.40.340 and rules and regulations implementing ~~that section.~~

Sec. 42.40.425. LONG-RANGE PROGRAM AND CAPITAL PLANNING. (a) Within 18 mon[illegible] of the date of transfer, the authority shall prepare and the board shall adopt long-range program and capital improvement plans.

(1) The long-range program plan shall delineate the manner in which the authority will accomplish the purposes of and fulfill its responsibilities under this chapter during each of the five years commencing with the year in which the initial plan is adopted. The plan shall provide information substantially consistent with the requirements of A.S. 37.07.050, ~~the format of which shall be jointly determined by the authority, the legislative auditor and the division of budget and management. Beginning three years after the preparation of the initial plan, the governor and the legislative auditor may conduct an annual performance and efficiency audit of the authority's compliance with the plan.~~

Page 22

Lines 4 - 7 — Subsection (2) should consist of the first sentence only. 47.07.060 requires the Governor to present long-range capital plans to the Legislature. The Railroad should be included in that.

(2) The long-range capital improvement plan shall present and explain the authority's anticipated capital improvements for each of the five years commencing with the year in which the initial plan is adopted. ~~The plan shall, without limitation, include all of the information required by Sec. 42.40.700(b) together with any other information prescribed by the governor or the legislative auditor.~~

(b) The plans shall be annually revised by the authority and adopted by the board.

(c) The authority shall provide copies of its initial and subsequent plans to the governor and the leadership of the legislature.

Sec. 42.40.430. USE OF AUTHORITY ASSETS. (a) The authority shall apply all funds, property, other assets and credit of the authority toward activities authorized by this chapter. The authority may not issue shares of stock, pay dividends, make private distribution of assets, make loans to council members or employees, or engage in business for private benefit. The use of authority funds, property, other assets or credit for purposes not authorized by law by persons having the possession or control of it is prohibited.

(b) Notwithstanding the provisions of this section, the authority may:

(1) assist board members and employees as members of a general class of persons to be assisted by an activity to the same extent as other members of the class and as long as no special privileges or treatment accrues to the member or employee by reason of his status or position in the authority;

(2) return to board members and employees fees, dues or service charges originally contributed by them and surplus to the purposes for which collected;

(3) defend and indemnify any current or former authority employee, agent, or board member, and their successors, against all costs, expenses, judgments, and liabilities, including attorney's fees, reasonably incurred by or imposed upon him in connection with or resulting from any claim, action, or proceeding, civil or criminal, in which he is or may be made a party by reason of being or having been an authority board member, employee or agent or by reason of an action alleged to have been taken or omitted by him as a board member, employee, or agent if he was acting in good faith on behalf of the authority and within the scope of duties imposed or authorized by law. This power of indemnification is not exclusive of other rights to which authority board members, employees, and agents are entitled as a matter of law; and

(4) purchase insurance to protect and hold personally harmless its employees, agents, and board members from any action, claim, or proceeding instituted against the foregoing individuals arising out of the performance, purported performance, or failure of performance, in good faith, of duties for, or employment with, the authority and to hold these individuals harmless from expenses connected with the defense, settlement, or monetary judgments from such actions, claims, or proceedings. The purchase of such insurance and its policy limits are discretionary with the authority board, and such insurance is not considered to be compensation to the insured individuals. The powers conferred by this paragraph are not exclusive of any other powers conferred by law to purchase liability insurance.

Page 24

Lines 11-25

Subsection (b) of 42.40.500 should be stricken. All of the Railroad land should be held intact until the reversionary period set forth in the Federal legislation is over. During this reversionary period, according to a draft of the Federal transfer legislation, land "converted to a use that would prevent the property from being used to operate or support the Railroad" would trigger either a reversion to the United States or a payment by the State of the value of the real property. If the Federals require a three-year period, then during that same period the legislators can determine whether they wish the Railroad to operate its own coal lands or the subsurface of all its lands or they wish the Commissioner of Natural Resources to do so. In the meantime, the State should take no action reducing the Railroad's interest in lands conveyed from the Federal Government.

The Railroad, during this debate will argue for the control of the subsurface to its lands. The Alaska Railroad does have coal reserves the same as the Union Pacific Railroad, the Burlington Northern, Inc., and the Denver Rio Grande, etc. If the Alaska Railroad loses its mineral rights to the State, it would reduce the potential of the ARR to earn royalties to keep revenues above expenses and to use coal once the petroleum era is over. Also, the right to use the subsurface for rocks, sand and gravel and for tunnels, ditches, and other recontouring of land is important to the Railroad.

ARTICLE 5. RAIL PROPERTIES

Sec. 42.40.500. RAIL PROPERTIES. (a) The authority shall receive from the United States and, in its own name, take title to all rail properties transferred under the federal transfer legislation. All lands among the rail properties so transferred or otherwise acquired by the authority are subject to A.S. 38.95.010 and are not subject to classification or disposal under A.S. 38 or other state law, except as otherwise specifically provided in this chapter.

~~(b) Within 120 days after transfer of the rail properties, the authority shall convey to the state the subsurface estate of and the mineral rights in the lands among the rail properties. The conveyance shall be made by one or more quitclaim deeds executed by the general manager and delivered to the commissioner of natural resources. The authority may reserve in each quitclaim deed the right to extract and use for the authority's purposes sand, gravel and other construction materials on the subject lands. The interest retained by the authority after conveyance to the state under this subsection entitles it to exclusive use and control of the surface, complete subjacent and lateral support of the surface, and the right to tunnel, ditch, recontour, excavate and otherwise use the subsurface for railroad, transportation, transmission and related purposes.~~

(c) The authority is authorized to litigate, compromise, and otherwise settle claims related to the transfer of rail properties from the United States and to recover for breach of warranties made or other obligations assumed by the United States or other party in relation to the transfer or status of the rail properties.

Page 25

Lines 14-21 Subsection (f) of 42.40.500 should be deleted, because no interest in real property should be disposed of until after the termination of the Federal reversionary period during which time any land converted from possible railroad use either reverts to the United States or the State pays the United States the value of the real property.

(d) The authority is authorized to submit applications on its own behalf as a political subdivision of the state for acquisition of interests in federal lands available under federal law that will enhance the operations of the authority and to receive conveyances of all the interests in its own name.

(e) The authority, as an agency of the state, may acquire in its own name from the United States under the Surplus Property Act (50 App. U.S.C. 1622 et seq.), the Federal Property and Administrative Services Act of 1949 as amended (40 U.S.C. 471 et seq.), or other law, property under the control of a federal department or agency that is useful for the authority's purposes and may acquire from the Department of Administration property of the state made available under A.S. 44.71.010 - .040.

~~(f) Before disposing of an interest in real property,~~ other than a leasehold, a utility or access easement, or a land use permit, to a party other than the state, the authority shall give public notice of the disposition in two newspapers of general circulation. The authority shall make copies of the notice available to the public at its administrative office, and mail copies of the notice to the director of the division of ~~lands, the governor and the leadership of legislature.~~

Sec. 42.40.510. CLASSIFICATION, ACQUISITION AND USE OF STATE LANDS FOR RAILROAD PURPOSES. (a) The board by resolution may identify lands owned by or subject to selection by the state, including tide and submerged lands, as necessary or useful for present or intended railroad purposes. The resolution shall include a statement of and justification for the present or intended railroad use and the date when such use should commence. Upon submission of the resolution and a request for classification and conveyance to the commissioner of natural resources, the

Page 26

Lines 20-30

All of subsection (c) of 42.40.510 should be stricken. There is no need for joint management of Railroad lands. Moreover, the joint use of Railroad lands could trigger either the reversion of land to the United States or the payment by the State of the value of the lands. During the reversionary period, the legislature should determine who is to control the land, whether it be the surface or subsurface, and whether joint control is necessary.

commissioner may temporarily classify and reserve the lands identified in the request for railroad purposes and may temporarily vacate a classification allowing disposal or lease of such lands under laws or programs of the state. Such a temporary classification and vacation will be subject to valid existing rights.

(b) Within 180 days after receiving the request, the commissioner of natural resources by departmental order shall either (1) permanently classify the surface estate of those lands for railroad purposes and, subject to valid existing rights, convey the state's interests in and to the surface estate of those lands to the authority; or (2) deny the classification and conveyance as not in the best interest of the state. The commissioner of natural resources may approve in part and deny in part the request for classification. In the absence of a reservation to the contrary, a conveyance under this subsection vests in the authority the exclusive right to extract and use sand, gravel and other construction materials on the lands conveyed without regard to the classification of such resources as part of the surface or subsurface estate.

~~(c) The authority and the commissioner of natural resources may agree to joint management of railroad lands and to conditions for classification of such lands. The authority and the commissioner of natural resources may agree to periodic joint review of state lands to determine their suitability for railroad purposes and periodic joint review of the status of railroad lands to determine the necessity for their continued ownership by the authority. The authority may reconvey to the state lands that the authority and the commissioner of natural resources jointly identify as unnecessary or unsuitable for the authority's purposes.~~

Page 27

Lines 16-17 — The words "Chief Executive Officer" should replace the words "General Manager."

Lines 20-30 — 42.40.515 should be deleted until such time as the reversionary period set forth in the Federal statute is complete, because non-railroad uses of railroad lands could trigger the reversion of real property to the Federal government or the payment by the State of the value of the real property interest. During this same period, strenuous debate can be had with legislators, the Governor and the public as to the management and development of Railroad land. However, the authority should have the right to use or to develop natural resources on its lands so that its income will be greater than its expenses.

(d) The authority's ownership of a surface interest in state land entitles it to exclusive use and control of the surface, complete subjacent and lateral support of the surface, and the right to tunnel, ditch, recontour, excavate or otherwise use the subsurface for railroad, transportation, transmission and related purposes.

(e) When physical conditions require that track or other right-of-way fixtures of the authority be moved from the existing location and relocated on state-owned lands adjacent to or in the vicinity of the existing right-of-way, and the ~~general manager~~ chief executive officer determines that such relocation is necessary to maintain safe and adequate rail operations, the authority may effect the necessary relocation after notice to the department of natural resources. The relocation shall be limited to land adequate to restore or continue safe rail operations at a normal level. Within 45 days after a relocation under this subsection, the authority shall request classification and conveyance of the lands for railroad purposes in accordance with (a) of this section.

~~Sec. 42.40.515. DEVELOPMENT OF OIL, GAS, MINERALS AND GEOTHERMAL RESOURCES ON AUTHORITY LANDS. (a) The department of natural resources, in accordance with A.S. 38.05, may lease or otherwise develop oil, gas, minerals and geothermal resources located on lands in which the authority owns an interest, including a surface interest, only upon satisfaction of the following conditions:~~

~~(1) The department of natural resources submits to the authority a request for authorization identifying the interest to be developed and describing with specificity the proposed plan for development of the interest, potential negative~~

~~effects the proposed development may have on the authority's~~ operations, and measures which will be instituted to avert or mitigate such effects;

(2) The authority reviews the request for authorization and, after considering potential negative effects and proposed mitigation measures, determines that the plan of development presents no appreciable risk of interference with the operations of the authority;

(3) The department of natural resources and the authority agree upon a suitable requirement that the lessee or party other than the state undertaking the development reimburse the authority from the proceeds of the development for costs incurred by the authority and materials lost by the authority as a result of the development; and

(4) The authority issues to the department of natural resources a written authorization to proceed with the plan for lease or development. The authority may not unreasonably withhold its consent to a request for authorization submitted by the department of natural resources under this section.

(b) The department of natural resources shall require a party other than the state exercising rights under this section to post a surety bond in an amount sufficient to secure the authority against potential detrimental effects of the activity undertaken.

(c) The department of natural resources shall maintain an accurate record of all income received by the state from the lands in which the authority has an interest and of the value of all subsurface conveyed by the authority to the state. The ~~department of natural resources shall prepare a yearly summary of~~

Page 29

Lines 24-26 Because this subsection (b) of 42.40.520 requires the Railroad to convey the subsurface estate to the State, the Railroad is prevented from using eminent domain to acquire subsurface resources such as coal, gravel, sand and rock.

~~such income and subsurface value and submit it to the legislature before March 15 of each year after transfer.~~

~~(d) There is established in the state treasury a fund~~ which is ~~identified~~ as the Alaska Railroad Income ~~Fund~~. All income received by the state ~~from lands~~ in which the authority has an interest ~~shall~~ be deposited into the ~~fund~~. The fund shall ~~be subject to appropriation by the legislature~~.

Sec. 42.40.520. LAND USE REGULATION. The board is authorized to adopt regulations governing land use by private parties having interests in or permits for lands owned or managed by the authority. The power conferred by this section is exercised for the common health, safety and welfare of the public and, to the extent constitutionally permissible, shall not be limited by the terms and conditions of leases, contracts or other transactions with private parties.

Sec. 42.40.530. EMINENT DOMAIN AND ACQUISITION OF PROPERTY AND MATERIALS. (a) The authority may exercise the power of eminent domain, pursuant to A.S. 09.55.240 - .460, to acquire land or an interest therein for lawful purposes consistent with this chapter.

(b) The authority may acquire a fee simple title whenever, in the judgment of the authority, ownership of a fee simple is necessary to effectuate the authority's lawful purposes in condemning property. ~~When the authority acquires a fee simple, it shall as soon as practicable reconvey the subsurface estate to the state by a quitclaim deed.~~

(c) A.S. 09.55.310(a)(4) and A.S. 09.55.350 do not apply to the authority.

(d) The authority may file a declaration of taking, under A.S. 09.55.420 - .460, in the same manner and with the same effect as the state; and

Page 30

Lines 1-4

Subsection (b) of this section 42.40.530 requires the subsurface estate to be reconveyed to the State so this subsection (e) would have no effect unless the subsurface or the gravel, sand and rock part of the subsurface could remain with the Railroad.

(e) The authority's power of eminent domain includes, without limitation, the power to obtain material, including clay, gravel, sand, or rock, the land necessary to obtain the material, and access to the land and material.

(f) The authority may vacate land, or part of it, or rights in land acquired for railroad purposes by executing and filing a deed in the appropriate recording district. Upon vacating, title reverts to the State of Alaska, if compensation has been paid.

## ARTICLE 6. FINANCIAL PROVISIONS

Sec. 42.40.600. BONDS AND NOTES. (a) The authority, by resolution of the board, may issue bonds and bond anticipation notes to provide money to carry out its purposes.

(b) The principal and interest on the bonds or notes of the authority are payable from money or assets of the authority. Bond anticipation notes may be payable from the proceeds of the sale of bonds or from the proceeds of sale of other bond anticipation notes or, if bond or bond anticipation note proceeds are not available, the notes may be paid from other money or assets of the authority. Bonds or notes may be additionally secured by a pledge of a grant or contribution or other property from the federal government, the state or any of its other political subdivisions, or a corporation, association, institution or person, or a pledge of money, income, or revenues of the authority from any source.

(c) Bonds or bond anticipation notes may be issued in one or more series and shall be dated, bear interest (fixed or variable) at the rate or rates per year or within the maximum

rate, be in the denomination, be in the form, either coupon or registered, carry the conversion or registration provisions, have the rank of priority, be executed in the manner and form, be payable from the sources in the medium of payment and place or places inside or outside the state, be subject to authentication by a trustee or fiscal agent, and be subject to the terms of redemption with or without premium, as the resolution of the board may provide. Bond anticipation notes mature at the time or times as may be determined by the board. Bonds mature at the time, not exceeding 50 years from their date, as may be determined by the board. Before the preparation of definitive bonds or bond anticipation notes, the authority may issue interim receipts or temporary bonds or bond anticipation notes, with or without coupons, exchangeable for bonds or bond anticipation notes when these definitive bonds or bond anticipation notes have been executed and are available for delivery.

(d) Bonds or bond anticipation notes may be sold in the manner, on the terms, and at the price the board determines.

(e) If an officer whose signature or a facsimile of whose signature appears on bonds or notes or coupons attached to them ceases to be an officer before the delivery of the bond, note or coupon, his signature or facsimile is valid as if he had remained in office until delivery.

(f) Bond or bond anticipation note proceeds may not be dedicated to activities other than those the board reasonably determines to be specifically related to the purposes for which the instruments are issued.

(g) In a resolution of the board authorizing or relating to the issuance of bonds or bond anticipation notes, the

board has power by provisions in the resolution that will constitute covenants of the authority, and contracts with the holders of the bonds or bond anticipation notes:

(1) to pledge to a payment or purpose all or a part of its revenues to which its right then exists or may thereafter exist, and the money derived from the revenues, and the proceeds of its bonds or notes;

(2) to covenant against pledging all or part of its revenues, or against permitting or suffering a lien on the revenues or its property;

(3) to covenant as to establishment of reserves or sinking funds and the provision for and the regulation and disposition of the reserves or sinking funds;

(4) to covenant with respect to or against limitations on a right to sell or otherwise dispose of property of any kind;

(5) to covenant as to bonds and notes to be issued, and their limitations, terms and conditions, and as to the custody, application and disposition of the proceeds of the bonds and notes;

(6) to covenant as to the issuance of additional bonds or notes, or as to limitations on the issuance of additional bonds or notes and the incurring of other debts;

(7) to covenant as to the payment of the principal of or interest on the bonds or notes, as to the sources and methods of payment, as to the rank or priority of the bonds or notes with respect to a lien or security, or as to the acceleration of the maturity of the bonds or notes;

(8) to provide for the replacement of lost, stolen, destroyed or mutilated bonds or notes;

(9) to covenant against extending the time for the payment of bonds or notes or interest on the bonds or notes;

(10) to covenant as to the redemption of bonds or notes and privileges of their exchange for other bonds or notes of the authority;

(11) to covenant to create or authorize the creation of special funds of money to be held in pledge or otherwise for operating expenses, payment or redemption of bonds or notes, reserves or other purposes, and as to the use and disposition of the money held in the funds;

(12) to establish the procedure, if any, by which the terms of a contract or covenant with or for the benefit of the holders of bonds or notes may be amended or abrogated, the amount of bonds or notes the holders of which must consent to amendment or abrogation, and the manner in which the consent may be given;

(13) to covenant as to the custody of its properties or investments, their safekeeping and insurance, and the use and disposition of insurance money;

(14) to vest in a trustee or trustees inside or outside the state property, rights, powers, and duties in trust as the authority may determine, that may include any or all of the rights, powers and duties of a trustee appointed by the holders of bonds or notes of the authority, and to limit or abrogate the rights of the holders of the bonds or notes of the authority to appoint a trustee under this chapter or limit the rights, powers and duties of the trustee;

(15) to pay the costs or expenses incident to the enforcement of the bonds or notes or of the provisions of the resolution or of a covenant or agreement of the authority with the holders of its bonds or notes;

(16) to agree with an authority trustee that may be a trust company or bank having the powers of a trust company inside or outside the state as to the pledging or assigning of revenues or funds which or in which the authority has any rights or interest; the agreement may further provide for other rights and remedies exercisable by the trustee as may be proper for the protection of the holders of bonds or notes of the authority and not otherwise in violation of law and may provide for the restriction of the rights of an individual holder of bonds or notes of the authority;

(17) to appoint and provide for the duties and obligations of a paying agent or paying agents, or other fiduciaries as the resolution may provide inside or outside the state;

(18) to limit the rights of the holders of bonds or notes of the authority to enforce a pledge or covenant securing the bonds or notes; and

(19) to make covenants other than and in addition to the covenants expressly authorized in this section, of like or different character, and to make the covenants to do or refrain from doing the acts and things as may be necessary, or convenient and desirable, in order to better secure bonds or notes or which, in the absolute discretion of the council will tend to make bonds or notes more marketable, notwithstanding that the covenants, acts or things may not be enumerated in this section.

Sec. 42.40.610. INDEPENDENT FINANCIAL ADVISOR. In negotiating the private sale of bonds or bond anticipation notes to an underwriter, the board shall retain a financial advisor who is independent from the underwriter.

Sec. 42.40.615. VALIDITY OF PLEDGE. The pledge of assets or revenues of the authority to the payment of the principal or

interest on bonds or notes of the authority is valid and binding from the time the pledge is made, and the assets or revenues are immediately subject to the lien of the pledge without physical delivery or further act. The lien of a pledge is valid and binding against all parties having claims of any kind in tort, contract, or otherwise against the authority, irrespective of whether those parties have notice of the lien of the pledge. Nothing in this section prohibits the authority from selling assets subject to a pledge, except that a sale may be restricted by the trust agreement or resolution providing for the issuance of the bonds or notes.

Sec. 42.40.620. REMEDIES. A holder of bonds or notes or of coupons attached to them issued under this chapter, and a trustee under a trust agreement or resolution authorizing the issuance of the bonds or notes, except as restricted by a trust agreement or resolution, either at law or in equity, may enforce all rights granted under this chapter or under the trust agreement or resolution, or under any other contract executed by the authority under this chapter, and may enforce and compel the performance of all duties required by this chapter or by the trust agreement or resolution to be performed by the authority or by its board members or employees.

Sec. 42.40.625. NEGOTIABLE INSTRUMENTS. Bonds and notes and interest coupons attached to them issued under this chapter are negotiable instruments under the laws of this state, subject only to applicable provisions for registration.

Sec. 42.40.630. BONDS AND NOTES ELIGIBLE FOR INVESTMENT. Bonds and notes issued under this chapter are securities in which all public officers and public bodies of the state and its political subdivisions, all insurance companies, trust companies,

banking associations, investment companies, executors, administrators, trustees and other fiduciaries may properly and legally invest funds, including capital in their control or belonging to them. These bonds and notes may be deposited with a state or municipal officer of any agency or political subdivision of the state for any purpose for which the deposit of bonds or notes of the state is authorized by law.

Sec. 42.40.635. REFUNDING BONDS. (a) The authority may provide for the issuance of refunding bonds for the purpose of refunding any bonds then outstanding that have been issued under this chapter, including the payment of any redemption premium on them and any interest accrued or to accrue to the date of redemption of the bonds. The issuance of the refunding bonds, the maturities and other details of them, the rights of the holders of them, and the rights, duties and obligations of the authority in respect of them are governed by the provisions of this chapter which relate to the issuance of bonds, insofar as those provisions may be appropriate.

(b) Refunding bonds may be sold or exchanged for outstanding bonds issued under this chapter and, if sold, the proceeds may be applied, in addition to other authorized purposes, to the purchase, redemption or payment of the outstanding bonds. Pending the application of the proceeds of refunding bonds, with any other available money, to the payment of the principal, accrued interest and any redemption premium on the bonds being refunded, and, if so provided or permitted in the resolution authorizing the issuance of the refunding bonds or in the trust agreement securing them, to the payment of any interest on the refunding bonds and any expenses in connection with the refunding, the proceeds may be invested in direct obligations of,

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Lines 25-28 — This section creates a financial revolving fund. All Revenues go into the fund; all expenses are taken from the fund. The surplus in the fund can be obligated to capital improvements, major maintenance programs, and other financial needs.

Lines 24-30 — 42.40.655 - The Board of Directors "may" instead of "shall maintain in full force and effect public liability insurance." The reason for this change is that the authority may find that the authority may not be able to obtain insurance at either any cost or a reasonable cost and that therefore it is more efficient to be its own insurer and defend its own tort lawsuits. It is a business decision, not a political one, and so should remain with the Railroad. If the ARR maintains public liablility insurance, any additional coverage required by the State naming the State as an additional insured should be funded by the State.

or obligations the principal of and the interest on which are unconditionally guaranteed by, the United States of America, the State of Alaska or other entities with comparably rated credit that mature or that will be subject to redemption, at the option of the holders of them, not later than the respective dates when the proceeds, together with the interest accruing on them, will be required for the purposes intended.

Sec. 42.40.640. CREDIT OF STATE NOT PLEDGED; REQUIRED DISCLAIMER. Bonds and notes issued under this chapter do not constitute a debt, liability, or obligation of the state or a pledge of the faith and credit of the state or of a political subdivision other than the authority but are payable solely from the revenues or assets of the authority. Each bond and note issued under this chapter shall contain on its face a statement that the authority is not obligated to pay it nor the interest on it except from the revenues or assets pledged for it and that neither the faith and credit nor the taxing power of the state or of a political subdivision other than the authority is pledged to the payment of the principal of or the interest on the bond or note.

Sec. 42.40.645. NO PERSONAL LIABILITY. No board member or employee of the authority is subject to personal liability or accountability because of his execution of bonds or notes or their issuance.

Sec. 42.40.650. REVENUES. Revenues generated by the Alaska Railroad Authority do not become part of the general fund of the state but shall be retained and managed by the authority for purposes authorized by this chapter.

Sec. 42.40.655. INSURANCE. The authority ~~shall~~ may maintain in full force and effect public liability insurance in an amount

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Lines 21-25 The phrases "expansion, reduction or diversification of services" and "significant and permanent change in the level and nature of services" need to be clarified. The above two phrases are far too broad and can be interpretted to apply to expansions, reductions or diversifications of service due to normal business changes.

reasonably calculated to cover potential claims for bodily injury, death or disability, and property damage that may arise from or be related to its operations and activities, naming the state as an additional insured. Any cost incurred for naming the State as an additional insured shall be funded by the State of Alaska.

Sec. 42.40.660. SAFEGUARDING OF FUNDS. The authority shall maximize revenues from and deposit all funds in depositories acceptable to the governor and otherwise safeguard the funds under instructions as the governor may from time to time issue.

Sec. 42.40.665. FIDELITY BOND. The authority shall obtain a fidelity bond in an amount determined adequate by the board for its members and any official responsible for accounts and finances to be in full force and effect for the duration of his tenure in office.

Sec. 42.40.670. REVERSION OF ASSETS. In the event the authority ceases to exist, for whatever reason, its assets revert to the state.

## ARTICLE 7 - STATE OVERSIGHT

Sec. 42.40.700. STATE REVIEW. (a) Prior to undertaking:

(1) expansion, reduction or diversification of services provided by the railroad upon date of transfer to the authority or as subsequently provided under this chapter that would represent a significant and permanent planned change in the level and nature of services provided;

(2) extension of main or branch lines by more than 25 miles or five percent of the railroad's total track mileage, whichever is greater; or

Lines 13-30

42.40.700 - Subsection (c) and (d) should be stricken as unnecessary. The review of any proposed action of the Railroad are unnecessary because the legislature and/or the Governor can, through resolution or legislative act or Governor's edict suggest changes or stop any action of the Railroad.

The power of the governor to intervene would make the authority a part of the executive branch government. For the benefit of the citizens of the State of Alaska, the authority should be operated as a business in competition with the rest of the transportation industry, which is in the private sector of the economy. The power of the governor to intervene would allow the governor the opportunity to award his political friends and punish his political enemies.

Similarly, the power of the legislature to intervene with respect to any "expansion, reduction or diversification of services"(an over broad phrase), would allow intervention on the basis of political reasons when only business considerations should be used.

(3) the issuance of securities, notes, bonds or contracting for other borrowings with a term in excess of one year and in an amount exceeding $5 million ($5,000,000);

the board shall notify the governor and leadership of the legislature of any such proposal, and when necessary may request proper funding or aid in funding.

(b) The notice shall be in writing and describe the proposed undertaking in detail, specifying its financial impact on the authority; its impact on the level and nature of services provided by the authority; why the project is necessary or desirable to achieve the purposes of this chapter; and whether and when the undertaking will itself be self-sustaining financially.

~~(c) Within 60 days of receipt of the notice, the governor~~, in his sole discretion, may either (i) disapprove the proposed undertaking; (ii) suspend the proposed undertaking and direct that it not be implemented until the legislature has reviewed it under subsection (d) herein; or (iii) approve it, in which case the authority may proceed. A decision by the governor disapproving the proposed undertaking also will be dispositive and binding on the authority, unless the authority is directed to proceed under A.S. 42.40.710. If the governor suspends the proposed undertaking, he shall promptly transmit his decision to the board and the leadership of the legislature in the form of a recommendation that the proposed undertaking be either approved or disapproved by the legislature. The governor is considered to have approved the authority's proposed undertaking if he fails to act under this subsection within the prescribed time.

(d) Once in session, within 90 days of receipt of the ~~governor's recommendation the legislature may, by law, reject the~~

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Line 5 — Subsection (e) should be realphabetized to (c). The words "notwithstanding the foregoing" should be stricken.

Line 11 — "(c)" should be substituted for "(e)".

Lines 13-14 — These two lines should be deleted.

Line 15 — "(2)" should be deleted.

Line 18 on — 42.40.710 should be stricken. All the Railroad would need would be a resolution passed by either house of the Legislature or a Governor's edict. The action forcing mechanism would make the authority more a part of the government than a business enterprise and subject the authority to railroad decisions made on a political basis rather than a business basis. The rest of the transportation is in the private sector of the economy so the government would be competing with private transportation companies on political grounds but with the resources behind the state government. The action forcing mechanism could allow the State to force the authority to charge unreasonably low land rents or low tariffs in direct competition with private land owners and private transportation companies. Politics should be separated from the day to day operations of the railroad authority. The operations of the railroad should be run by business considerations.

~~proposed undertaking. The legislation is binding on the~~ authority. The ~~legislature is considered to have~~ concurred in the proposed ~~undertaking~~ if it fails ~~to pass~~ legislation within ~~the prescribed time. The concurrence also is binding.~~

(c) ~~(e) Notwithstanding the foregoing~~, a proposed extension of main or branch lines by more than 50 percent of the railroad's total track mileage and requiring the issuance of securities, notes, bonds or contracting for other borrowings on an amount in excess of $50 million ($50,000,000) must be specifically authorized by law.

(d) ~~(f)~~ Any undertaking described in subsection (a) or ~~(e)~~ (c) herein is considered approved for purposes of this section if

~~(1) the authority has been directed to act pursuant to A.S. 42.40.710; or~~

~~(2)~~ the legislature by law has specifically approved the undertaking by authorizing, appropriating funding for or guaranteeing authority borrowing for it.

~~Sec. 42.40.710. ACTION-FORCING MECHANISM. (a) The governor~~ or the legislature, by resolution, may request that the authority exercise its powers and authorities or refrain from doing so. Notice of a request shall be given to the legislature by the governor and to the governor by the legislature.

(b) To the greatest extent practicable within 30 days of receipt of a request the board shall respond to both the governor and the leadership of the legislature in writing specifying:

(1) the manner in which it proposes to take the requested action or any modification thereof requested by the authority; or

(2) the specific reasons, financial, legal or ~~otherwise, why the board declines to take the requested action.~~

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Lines 9-30 and following page, lines 1-11

42.47.715 should be stricken under the same above reasoning. The operations of the railroad authority should be governed by business considerations rather than political ones so that it can compete fairly with private enterprise. On the other hand, the expansion of the railroad requiring state funds is a political decision. Moreover, section 42.40.720 serves many of the same purposes as 42.47.715.

(c) At the request of the governor or on its own initiative, the legislature by law may then direct the authority to take the requested action or the legislature may act to cure the problem precluding the authority from taking it. In the event the authority is unable to take the action for financial reasons, it is obligated to do so, even if directed, only upon provision by the legislature of sufficient funds to plan and implement the action.

Sec. 42.40.715. INTERVENTION. (a) When authorized by law, the governor as provided in the legislation may intervene and exercise such control over the authority as is necessary and appropriate to correct any deficiency or to assure that the purposes of this chapter may be reasonably accomplished, including directing affirmative action when:

(1) The board has requested such intervention by resolution;

(2) The authority has represented to the public or to creditors that recourse may be had to the assets, property or credit of the state on account of acts or omissions of the authority, unless the secondary or direct liability has been expressly assumed by the state;

(3) The authority has failed to file an annual report as required by A.S. 42.40.410 within 120 days after receipt of formal notice of the omission;

(4) A deadlock has occurred in the board, or the membership of the board is insufficient to constitute a quorum for conduct of affairs so that the authority is unable to conduct its operations or perform its activities; or

(5) The assets of the authority have been or are committed to be misapplied or wasted or illegally expended; or

~~the authority has committed or is about to commit a material violation of this chapter.~~

~~(b) The governor may take actions necessary to achieve the object of the intervention stated in the legislation and make corrections ancillary thereto, and shall accomplish the purposes of the intervention as expeditiously as reasonable; board members and employees may not be displaced nor the conduct of their duties impaired more than necessary to accomplish the purposes of the intervention and the intervention shall cease as soon as the objective stated in the legislation and corrections ancillary thereto have been accomplished.~~

Sec. 42.40.720. TRUSTEESHIP. (a) When authorized by law, the governor may petition the Superior Court of the State of Alaska for the Third Judicial District at Anchorage to impose a trusteeship over the authority and appoint the trustees therefor under any of the following circumstances:

(1) The board has requested the same by resolution;

(2) The authority has become insolvent or otherwise unable to carry out its contractual obligations to creditors and other persons;

(3) The authority has filed an annual report that is false or deceptively misleading on a material matter;

(4) The authority has become incompetent or ineligible to carry out the public purposes for which it was created;

(5) The authority has misused, abused, or continuously exceeded the power or authority conferred by this chapter or committed repeated violations of this chapter; or

(6) The assets of the authority have been or are committed to be misapplied or wasted, or illegally expended, or a material violation of this chapter has been committed or is about to be committed ~~and the governor has determined that intervention as provided in A.S. 42.40.715 would not be feasible under the circumstances; or~~

(7) The credit-worthiness of the State of Alaska has been directly or indirectly substantially impaired by actions of the authority.

(b) The trustees appointed by the superior court shall take reasonable actions necessary during the trusteeship to achieve its object. The trustees have the power and authority to reorganize the authority and amend its rules and regulations; suspend or remove board members and executive officials; manage the assets and affairs of the authority; and exercise all powers necessary or appropriate to fulfill outstanding agreements, to restore the capability of the authority to perform the functions and activities for which it was created, to reinstate its credit or credibility with its creditors or obligees or the credit of the state or its credibility with its creditors or obligees to the extent impaired by authority actions.

## ARTICLE 8. PERSONNEL AND GENERAL PROVISIONS

Sec. 42.40.800. PERSONNEL. (a) All personnel employed by the Alaska Railroad are personnel of the Alaska Railroad Authority, and not of the State of Alaska. A.S. 39.05 - .51, inclusive, do not apply to personnel of the authority.

(b) For the purposes of the Public Employment Relations Act, A.S. 23.40.020 - .260, the authority is considered a "public employer" within the meaning of that act, except that A.S. 23.40.070(3) does not apply to the authority, and the authority's employees are classified as employees under A.S. 23.40.200(a)(1).

(c) As soon as practicable after transfer, the authority and its employees shall adopt collective bargaining agreements that continue the provisions of the agreements in effect at the Alaska Railroad immediately prior to transfer. The agreements between the authority and its employees shall remain in effect until they expire by their terms or, as required under the federal transfer legislation, they are renegotiated, subject to the approval of the board.

(d) The authority may not enter into any collective bargaining agreement concerning wages, hours, working conditions or other employment terms, conditions and benefits with any organization representing the authority's executive officials.

Sec. 42.40.810. POLITICAL ACTIVITIES. (a) No funds, assets, or property of the authority may be used for partisan political activity or to further the election or defeat of candidates; nor shall funds or a substantial part of the activities of the authority be used for publicity or educational purposes designed to support or defeat legislation pending before the Congress of the United States, or the legislature of the state, provided, however, that board members and employees of the authority may communicate with and appear before committees of the congress or the legislature as well as local legislative bodies in connection with funding and other matters directly affecting the authority or its ability to carry out the purposes for which it is created and respond to requests by members of

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Lines 12 thru 17

The Railroad requests that the word "municipality" be deleted from any license or permit provision in this statute. The Railroad presently negotiates with a number of municipalities regarding crossings, traffic signals, etc. If the municipalities were granted authority to regulate the Railroad's passage through their boundaries, the Railroad's transportation of goods and services would be so erratic as to be totally non-operable.

congress, the legislature or local legislative bodies for information, views and testimony.

(b) A board member or employee who violates the provisions of this section is subject to personal liability in the form of a civil penalty assessed by a judge of the superior court in an amount not to exceed Five Thousand Dollars ($5,000). An action to enforce this penalty may be brought by any person. A violation of this chapter does not constitute a crime and assessment of the civil penalty by a judge does not give rise to any disability or legal disadvantage based on conviction of a criminal offense.

Sec. 42.40.820. LICENSES AND PERMITS. Whenever the laws of a [redacted], the state, or the United States require a license or permit to undertake certain activities or perform an act, the authority, prior to undertaking the activity or performing the act, shall comply therewith to the same extent as the state, except as otherwise provided in this chapter.

Sec. 42.40.830. UNAUTHORIZED REPRESENTATION. All persons who assume to act for the authority without authority to do so are jointly and severally liable for the debts and liabilities incurred or arising as a result thereof.

Sec. 42.40.840. CLAIMS AGAINST THE AUTHORITY. (a) All claims and lawsuits involving activities of the railroad, including without limitation suits in contract, quasi-contract, or tort, shall be brought against the authority, and not against the State of Alaska.

(b) For the purposes of actionable claims, undertakings, payments of judgments, execution, interest, punitive damages, statutes of limitations, bonds, costs, and similar matters related to the presentation and prosecution of claims by and

against the authority, the authority and its board members and employees enjoy the same rights, privileges, and immunities as the state and state officers, as provided in A.S. 09.10.120, 09.50.250 - .290, 09.65.040 and other similar or related statutes.

(c) Claims against the authority are not subject to the provisions of A.S. 44.77.010 - .070 regarding claims against the state.

(d) The authority is not subject to the provisions of A.S. 44.80.010, regarding the state as a party to action.

Sec. 42.40.855. EXEMPTION FROM TAXATION. (a) The real and personal property of the authority and its assets, income and receipts are declared to be the property of a political subdivision of the state and devoted to an essential public and governmental function and purpose, and the property, assets, income, and receipts are exempt from all taxes and special assessments of the state or a political subdivision of the state, including, without limitation, all boroughs, cities, municipalities, school districts, public utility districts and other taxing units. All bonds of the authority are declared to be issued by a political subdivision of the state and for an essential public and governmental purpose and to be a public instrumentality and the bonds, and the interest on them, the income from them and the transfer of the bonds, and all assets, income and receipts pledged to pay or secure the payment of the bonds, or interest on them, are at all times exempt from taxation by or under the authority of the state, except for inheritance and estate taxes and taxes on transfers by or in contemplation of death.

(b) Nothing in this section affects or limits an exemption from license fees, property taxes, or excise, income or

other taxes, provided under any other law, nor does it create a tax exemption with respect to the interest of any business enterprise or other person, other than the authority.

(c) For purposes of A.S. 14.17 relating to the computation of the required local effort by a district as defined in A.S. 14.17.250(3), all property exempted from taxation by this chapter are considered taxable real and personal property.

Sec. 42.40.870. PAYMENTS IN LIEU OF LOCAL REAL PROPERTY TAXATION AND IMPACT AID. (a) To the extent feasible, without impairing the authority's financial viability and consistent with sound business principles, including but not limited to the operation of the railroad on a self-sustaining basis, the need for capital accumulation and consistency with regulation by the Interstate Commerce Commission, the authority may:

(1) make partial payments to political subdivisions served by the railroad or in which the authority has substantial land holdings in lieu of local taxation of authority real property; and

(2) provide financial assistance to political subdivisions and other local districts in the development of public education and other facilities required to be developed as a result of expanded authority activities in the area.

(b) The board shall adopt regulations prescribing the conditions under and the extent to which it will undertake to provide payments or assistance, including, but not limited to the conditions cited in subsection (a): the relative magnitude of the taxation effort deficit or impact caused by authority activities in an area; the relative need among communities affected by authority activities; and the present or anticipated benefits to the communities attributable to authority activities.

ARTICLE 9. MISCELLANEOUS PROVISIONS

Sec. 42.40.900. DEFINITIONS. In this chapter, unless the context clearly indicates otherwise,

(1) "authority" means the Alaska Railroad Authority;

(2) "board" means the board of the Alaska Railroad Authority;

(3) "date of transfer" means the date on which the United States Secretary of Transportation delivers the deed of conveyance for the properties of Alaska Railroad under the federal transfer legislation;

(4) "employees" means all persons employed by the authority, including executive officials;

(5) "executive officials" means the authority's chief executive officer; assistant chief executive officer; assistant to the chief executive officer; chief of administration; superintendent of transportation; manager, marketing and sales; chief engineer; chief mechanical officer; manager, industrial development and real estate; manager, budget and accounting; manager, planning; manager, personnel; manager, supply and procurement; chief of security; manager, operating rules; and manager, data processing; or any employee of the authority who fulfills these management functions under a different title, or who exercises a similar or comparable level of responsibility if so designated by the board.

(6) "federal transfer legislation" means that act of Congress authorizing transfer of the Alaska Railroad to the State of Alaska or the authority.

(7) "immediate family" means:

(a) spouse;

(b) dependent parent, parent-in-law, child, son-in-law or daughter-in-law; or

(c) any parent, parent-in-law, child, son-in-law, daughter-in-law, sibling, uncle, aunt, cousin, niece or nephew residing in the household of the authority officer or employee;

(8) "land" means all interests in real property, including tide and submerged lands;

(9) "leadership of the legislature", for purposes of notice and filings required by this chapter, means the president of the senate, the speaker of the house, the chairmen and ranking minority members of the senate and house transportation committees, the chairman of the legislative budget and audit committee or jurisdictional successors thereto or persons or offices they may designate;

(10) "rail properties" means all right, title and interest of the United States to real and personal property, tangible and intangible, identified in the closing report prepared under the federal transfer legislation and transferred to the authority under the legislation;

(11) "regulation" has the same meaning as that term is defined in A.S. 44.62.640.

(12) "rules" means rules, standards, or written procedures relating to the governance and internal management and

Sec. 42.40.910. SEVERABILITY. In the event a court of competent jurisdiction adjudges any clause, sentence or paragraph or section of this chapter to be invalid or unconstitutional, the judgment or decree does not affect, invalidate or impair the remainder thereof and the effect of the judgment or decree is

confined to the clause, sentence, paragraph, section or part of this chapter so adjudged to be invalid or unconstitutional.

Sec. 42.40.920. CONSTRUCTION. This chapter shall deliberately be construed so as to effectuate its purposes.

Sec. 42.40.930. DATE OF EFFECTIVENESS. The provisions of this act take effect upon enactment of the federal transfer legislation.

## ARTICLE 10. APPLICATION OF OTHER LAWS

Sec. 42.40.1010. CONFLICTING LAWS INAPPLICABLE. Insofar as the provisions of this act are in conflict with the provisions of other law, or parts thereof, the provisions of this act shall prevail.

Sec. 42.40.1020. REPEAL, AMENDMENT AND APPLICATION OF EXISTING STATUTES.

(1) A.S. Title 19 does not apply to the operations of the authority.

(2) The authority is considered a "political subdivision" of the state for the purposes of A.S. 23.10.055.

(3) A.S. 23.10.420 does not apply to the operations of the authority.

(4) A.S. 30.15 does not apply to the operations of the authority.

(5) Authority activities are not considered "public works" or "public projects" for the purposes of the following provisions under A.S. Title 35:

(a) A.S. 35.05.010;

(b) A.S. 35.10.010;

(c) A.S. 35.10.015;

(d) A.S. 35.10.030;

(e) A.S. 35.10.040;

(f) A.S. 35.10.050;

(g) A.S. 35.10.090 - .120;

(h) A.S. 35.10.130 - .135;

(i) A.S. 35.10.160 - .200;

(j) A.S. 35.15;

(k) A.S. 35.27; and

(l) A.S. 35.30.10.

(6) The following chapters of A.S. Title 36 do not apply to the operations of the authority:

(a) A.S. 36.05;

(b) A.S. 36.10;

(c) A.S. 36.15;

(d) A.S. 36.20; and

(e) A.S. 36.25.

(7) The following provisions of A.S. Title 37 do not apply to the operations and budgeting procedures of the authority:

(a) A.S. 37.05;

(b) A.S. 37.07;

(c) A.S. 37.10.010 - .060;

(d) A.S. 37.10.085;

(e) A.S. 37.20; and

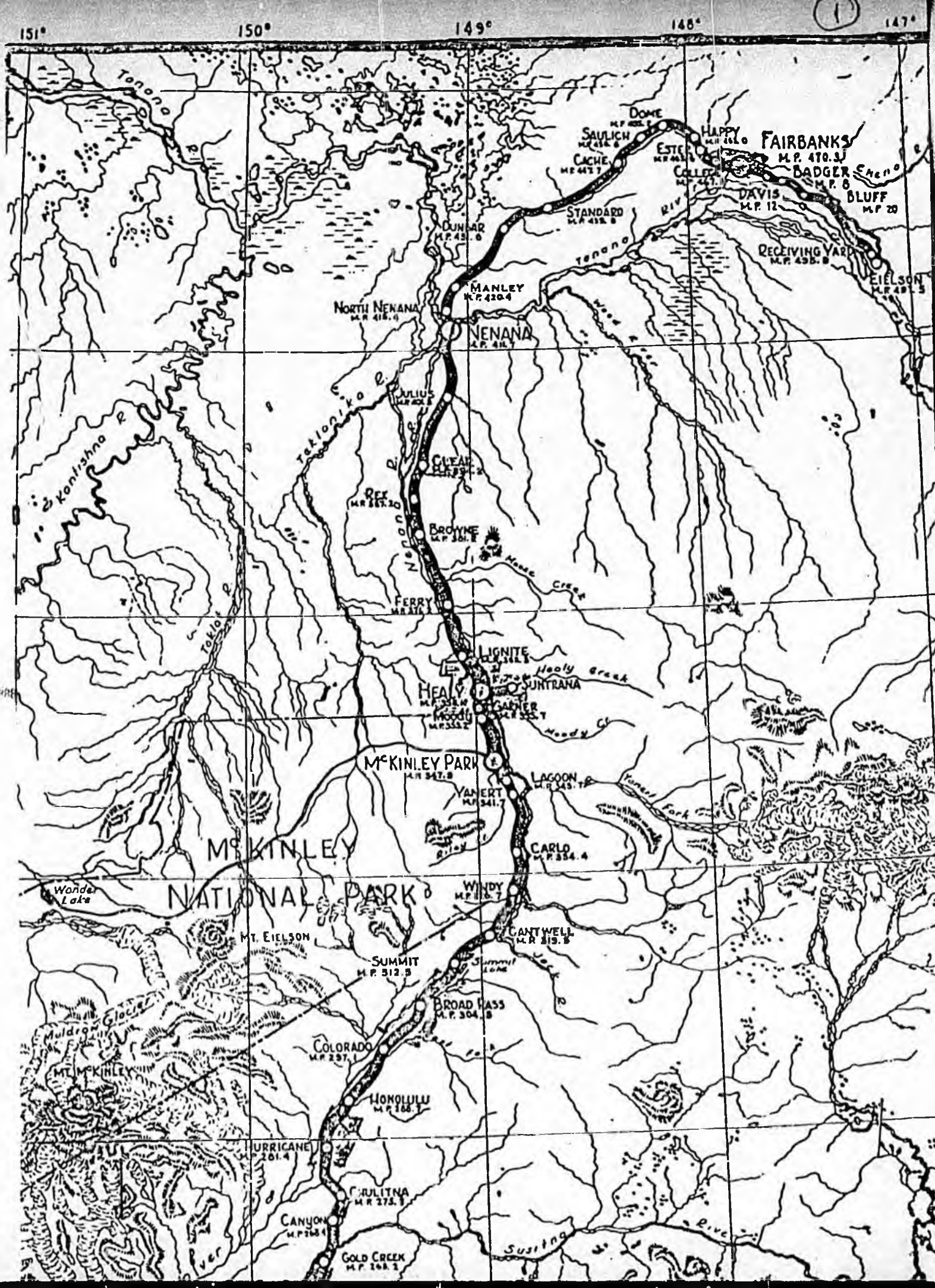
(f) A.S. 37.25.

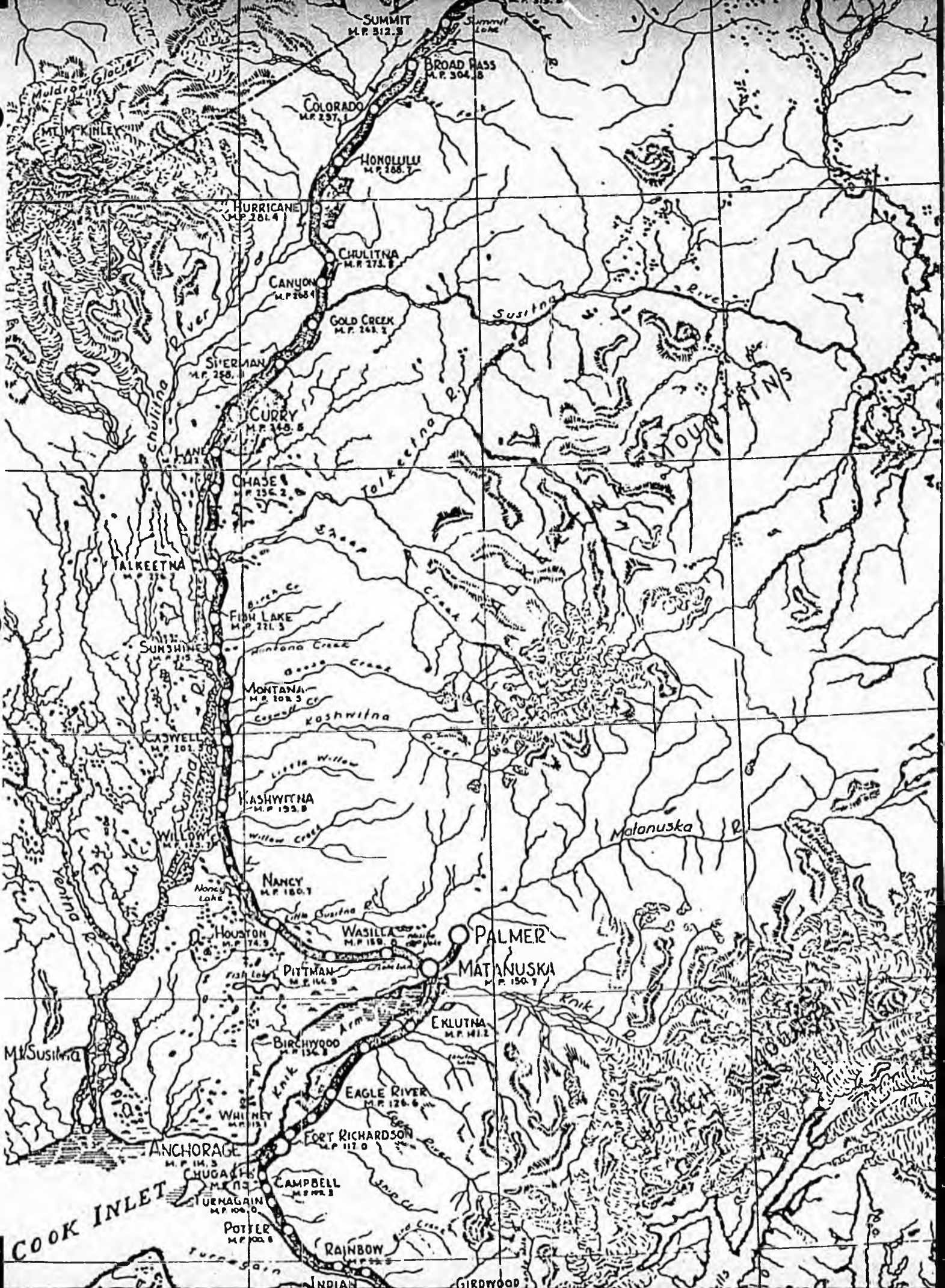
(8) The authority is not subject to the jurisdiction of the Alaska Transportation Commission.

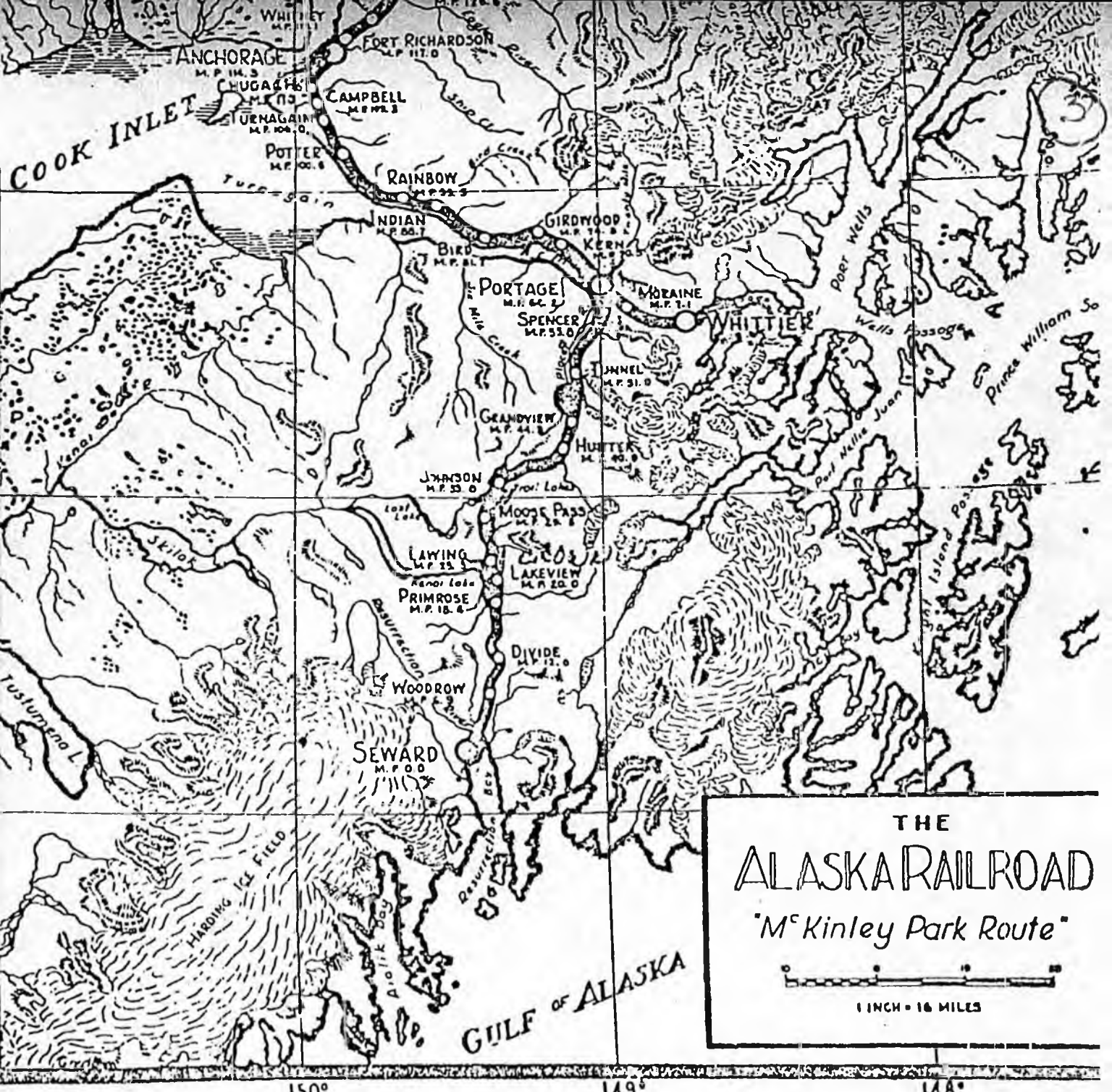
(9) A.S. 39.50.200(b) is amended by adding a new paragraph as follows: "(45) Alaska Railroad Authority"."

(10) No subsequently enacted statute shall be interpreted or construed to apply to the authority, the railroad or any of the authority's activities unless it specifically so provides by its terms.

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.


151°
150°
149°
148°
147°
Tonono R.
Kantishna R.
Tokotna R.
Tekionika R.
Nenana R.
Tenana R.
Wood R.
Nenana
Julius
Clear
Rex
Browne
Ferry
Lignite
Healy
Suntrana
Garner
Moody
McKinley Park
Lagoon
Yanert
Carlo
McKINLEY NATIONAL PARK
Wonder Lake
Mt. Eielson
Summit
Broad Pass
Colorado
Mt. McKinley
Muldrow Glacier
Honolulu
Hurricane
Canyon
Gold Creek
Susitna River
Dunbar
Standard
Manley
North Nenana
Dome
Saulich
Cache
Esteo
College
Happy
Fairbanks
Badger
Davis
Bluff
Receiving Yard
Eielson
Hoosa Creek
Hooly Creek
Moody Cr.
Yanert Fork
Riley
Windy
Cantwell
Summit Lake
Yanert R.
Susitna River


SUMMIT
M.P. 312.5
Summit Lake
BROAD PASS
M.P. 304.8
Muldrow Glacier
COLORADO
M.P. 297.1
MT. McKINLEY
HONOLULU
M.P. 288.1
HURRICANE
M.P. 281.1
CHULITNA
M.P. 275.8
CANYON
M.P. 268.1
Chulitna River
GOLD CREEK
M.P. 263.3
Susitna River
SHERMAN
M.P. 258.1
CURRY
M.P. 248.5
LANE
M.P. 241.2
CHASE
M.P. 234.2
Talkeetna R.
Talkeetna Mts.
Sheep Creek
TALKEETNA
M.P. 227.5
FISH LAKE
M.P. 221.3
SUNSHINE
M.P. 215
Montana Creek
MONTANA
M.P. 208.3
Kashwitna River
CASWELL
M.P. 201.3
Little Willow
KASHWITNA
M.P. 193.8
Susitna R.
WILLOW
M.P. 183.7
Willow Creek
Matanuska R.
NANCY
M.P. 180.7
Nancy Lake
Little Susitna R.
Houston
M.P. 174.9
WASILLA
M.P. 159.0
PALMER
Yentna R.
PITTMAN
M.P. 166.9
Fish Lake
MATANUSKI
M.P. 150.7
Knik R.
EKLUTNA
M.P. 141.2
Knik Arm
BIRCHWOOD
M.P. 134.8
Mt. Susitna
EAGLE RIVER
M.P. 126.6
WHITNEY
M.P. 123.1
Eagle River
FORT RICHARDSON
M.P. 117.0
ANCHORAGE
M.P. 114.3
CHUGACH
M.P. 113
CAMPBELL
M.P. 108.8
TURNAGAIN
M.P. 108.0
COOK INLET
POTTER
M.P. 100.8
Potter Creek
RAINBOW
M.P. 92.8
Turnagain Arm
INDIAN
GIRDWOOD


COOK INLET
ANCHORAGE
M.P. 114.3
WHITTIER
M.P. 118.1
FORT RICHARDSON
M.P. 117.0
CHUGACH
M.P. 110
CAMPBELL
M.P. 102.3
TURNAGAIN
M.P. 104.0
POTTER
M.P. 100.6
RAINBOW
M.P. 92.3
INDIAN
M.P. 88.7
BIRD
M.P. 81.7
GIRDWOOD
M.P. 75.8
KERN
M.P. 74.2
PORTAGE
M.P. 64.3
SPENCER
M.P. 53.0
MORAINE
M.P. 71.1
WHITTIER
TUNNEL
M.P. 51.0
GRANDVIEW
M.P. 44.1
HUNTER
M.P. 40.0
JOHNSON
M.P. 33.0
MOOSE PASS
M.P. 28.7
LAWING
M.P. 23
LAKEVIEW
M.P. 20.0
PRIMROSE
M.P. 18.4
DIVIDE
M.P. 12.0
WOODROW
SEWARD
M.P. 0.0
Kenai Lake
Trail Lake
Resurrection Bay
Aialik Bay
HARDING ICE FIELD
GULF OF ALASKA
Port Wells
Wells Passage
Prince William Sd
Port Wells
Juan
Island Pass
Bay
Kenai Lake
Skilak
Tustumena L.
Turnagain Arm
Placer Creek
Mile Creek
Lynx Creek
Eagle River
Snow R.
THE
ALASKA RAILROAD
"McKinley Park Route"
0
10
20
1 INCH = 16 MILES
150°
149°
148°

**CROWLEY MARITIME CORPORATION**

April 7, 1982

Senator Jalma Kerttula
President, Alaska State Senate
Juneau, Alaska

Dear Senator Kerttula:

I understand the Senate Transportation Committee will soon mark up substitute SB 212, creating an Alaska Railroad authority, and that the full Senate will consider the bill shortly. The Alaska Hydro-Train strongly supports your efforts and urges you to take all possible measures to assure that the Alaska Railroad is able to operate efficiently in the private sector environment in which it must operate. Operating as much as possible like a private business, the Railroad will be better able to provide efficient, low-cost transportation to the benefit of the State of Alaska.

Respectfully,

Thomas E. Garside
Vice President
Common Carrier Services

TEG:mkh

NORTHWEST AND ALASKA DIVISION

Crowley Maritime Plaza
Post Office Box 2287
Seattle, Washington 98111
(206) 553-8100
Telex 32-1229

One Market Plaza
San Francisco, California 94105
(415) 546-2300
Telex 34-737

201 Danner Avenue
Suite 200
Anchorage, Alaska 99502
(907) 279-5551
Telex 25-403

Post Office Box 17178
Portland, Oregon 97217
(503) 283-1244
Telex 36-0935

938-6349
100 WEST HARRISON STREET, SUITE 522, SEATTLE, WASHINGTON 98119 — PHONE: (206) ~~764-3805~~

SEA-LAND
SERVICE, INC.

April 10, 1981

Mr. Greg O'Clarey
National President
Alaska Region Vice President
Inland Boatmen's Union
124 Front Street
Juneau, Alaska 99801

Dear Greg:

Enclosed are some suggested changes which we feel should be made in House Bill No. 12, Senate Bill No. 212, Senate Bill No. 213, and Senate Bill No. 221. No change is recommended in Senate Bill No. 156. Copies of all bills are attached.

Our people are going over House Joint Resolution No. 20 and Senate Joint Resolution No. 18, as well as the new House Bill No. 312, to see if we can recommend any changes in them.

Since all of the above bills are 'initial starters', it would be a good idea to clean up the language now as, I suppose, no one knows which one will be embellished at a later date. The language we have recommended is language that we hope will make the Railroad a viable unit of the State Government and will be able to pay for its operations fro its revenues.

Best regards to you and 'Mickey'.

Sincerely,

SEA-LAND SERVICE, INC.

H. L. Schuyler
Director Public Affairs
Alaska Division

HLS:kt
Enclosures

STATE OF ALASKA

ALASKA RAILROAD LEGISLATION

House Bill No. 12

Page 3 -- At line 7, amend Subsection 12 to read as follows:

"(12) Establish, levy, and collect fully compensatory rates and other charges for the use of its railroad facilities. The Authority is specifically prohibited from allowing use of its railroad facilities on a non-reimbursable basis, or from levying and collecting rates and other charges for the use of such facilities that do not reflect the total direct and indirect costs which arise from such use."

Page 4 -- At line 7, redesignate "(e)" as "(f)" and insert new "(e)":

"(e) The proceeds resulting from the issuance of bonds pursuant to this section may only be used for the acquisition, construction and improvement of railroad facilities in the state. None of the proceeds may be used to meet the Authority's operating expenses or any deficit resulting from an insufficiency of operating revenues."

Senate Bill No. 156

No change is recommended.

## Senate Bill No. 212

Page 3 -- At line 24, amend subsection (9) as follows: "(9) Borrow money and issue its negotiable bonds or notes, the proceeds of which may only be used for the acquisition, construction, or improvement of railroad facilities in the state; provide for and secure the payment of said bonds or notes; provide for the rights of their holders; and purchase, hold or dispose of any of its bonds or notes;"

Page 3 -- At line 27, add the word "capital" after "its".

Page 4 -- At line 28, add the following new sentence: "The Authority is prohibited from authorizing the use of the Alaska Railroad's facility by any person on a non-reimbursable basis, or from levying and collecting rates and other charges for the use of such facilities that do not reflect total and indirect costs which arise from such usage.

Page 5 -- Delete line 20 and replace with "to meet its capital obligations and expenses."

## Senate Bill No. 213

Renumber Section 2 as Section 3, and insert new Section 2: "None of the monies appropriate herein may be utilized by the Alaska Railroad Authority to meet deficits and operating revenues resulting from its failure to levy and collect rates and other charges for the use of its railroad facilities that reflect the total direct and indirect costs which arise in such usage.

-FILE

**Sea-Land Service, Inc.**

100 WEST HARRISON STREET, SUITE 522
SEATTLE, WASHINGTON 98119

February 19, 1982

H. L. SCHUYLER
Director Public Affairs
Alaska Division

TELEPHONE:
(206) 938-6349

Honorable Bill Ray
Alaska State Senator
Room 103, Capitol Building
State Capitol, Pouch V
Juneau, Alaska 99811

Dear Senator Ray:

A short note to thank you for taking the time to discuss Sea-Land's concern over the Alaska Railroad Authority Bill, S.B. 212, and its amendments.

We agree with you that the A.R.R. is a necessary tool to promote the growth of Alaska's Resources and the Alaska Hinterland. However, we are concerned that it operates as a corporation to serve its Capitol and shows a profit, as all businesses must do to exist. Sea-Land's main concern is that the competitive factors are on an equal footing.

Thanks again.

Sincerely,

Hal Schuyler

HLS:kt

P.S. Two cartons, one red and one green, are forthcoming.

Technical amendments to *** "inter-lineated" draft

1) On page 4, at line 3, following the word "not ," add the words "directly or"

2) On page 7, at line 14, add a new subsection: "(d) A member whose term has expired shall serve until his successor has been appointed by the Governor."

3) On page 9, at line 21, delete the word "governing" and insert in lieu thereof the word "delegating;" at line 22 delete the words "be conducted" through the word "by" in line 23; at line 24, following the word "official" insert a comma and the words "subject to any board review specified in the policies"

4) On page 14, at line 3, following the word "information"; on page 17 at line 6, following the word "matters"; and at line 15 of the same page following the word "Commission," add the words "including but not limited to proprietary information associated with specific shippers, divisions and contract rate agreements" On these same pages add "U.S." preceding each reference to the Interstate Commerce Commission.

5) On page 14, at line 10 delete the words "and for" through the word "regulations," on the next line; At line 19 following the period add a new sentence: "The legislature by appropriate action may annul or temporarily suspend a regulation adopted by the authority."

6) On page 16, at line 12, following the word "after" insert the words "the date of"

7) On page 21, at line 30, delete the word "railroad"

8) On page 25, at line 21 following the word "classification" insert a comma and the word "control"

9) On page 25, at line 28, strike the words "general manager" and insert in lieu thereof the words "chief executive officer"

10) On page 28, at lines 26-27 strike the words "general manager" and insert in lieu thereof the words "chief executive officer"

11) On page 30, at line 19, following the word "legislature," insert the words "and the authority"

12) On page 30, at line 27, following the word "adopt," insert the word "exclusive"

13) On page 36, at line 13, delete the word "council" and insert in lieu thereof the word "board"

14) On page 38, at line 9 delete the word "appropriate" and insert in lieu thereof the word "applicable"

15) On page 41, at line 29, following the word "approved" insert the words "or rejected" and at line 30, following the word "act" insert the words "or to refrain from acting"

16) On page 42, at line 28 delete the word "may" and insert in lieu thereof the word "shall"

17) On page 43, at line 12, following the word "commission" insert the words "or has filed an annual report that is false or deceptively misleading on a material matter"

18) On page 51, at line 3, following the word "house," insert the words "the minority leaders of each house,"; delete the words "and ranking minority members" on lines 3-4; and on line 4, following the word "transportation" insert the words "and finance"

19) On page 52, at line 18 delete the text of (5) and insert in lieu thereof the following:

A.S. Title 35 does not apply to the operations of the authority.

Delete subsection 6 of AS 42.40.1020 on page 51.

Senate Bill No. 221

Page 1 -- Lines 12 and 13 have been revised to read as follows: "For the achievement of the goals of reasonable freight costs, long-term economic growth and continuing common carrier service.

Page 1 -- At line 20, add "self-sustaining, financially viable" after "a".

Page 3 -- At line 22, add "in self-sustaining, financially viable" after "operate".

Page 4 -- At line 11, delete "fares" and replace with "fully compensatory rates".

Page 5 -- At line 11, redesignate "(e)" as "(f)" and insert new "(e)": "(e) The proceeds resulting from the issuance of bonds pursuant to this section may only be used to meet the capital obligations and expenses of the Authority. None of the proceeds may be used to meet the Authority's operating expenses or any deficit resulting from an insufficiency of operating revenues."

## Senate Bill No. 212

Page 3 -- At line 24, amend subsection (9) as follows: "(9) Borrow money and issue its negotiable bonds or notes, the proceeds of which may only be used for the acquisition, construction, or improvement of railroad facilities in the state; provide for and secure the payment of said bonds or notes; provide for the rights of their holders; and purchase, hold or dispose of any of its bonds or notes;"

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Page 5 -- Delete line 20 and replace with "to meet its capital obligations and expenses."

## Senate Bill No. 213

Renumber Section 2 as Section 3, and insert new Section 2: "None of the monies appropriate herein may be utilized by the Alaska Railroad Authority to meet deficits and operating revenues resulting from its failure to levy and collect rates and other charges for the use of its railroad facilities that reflect the total direct and indirect costs which arise in such usage.

SB 212 establishes the Alaska Railroad Authority. A 7 member board of directors will act as the governing body. (DOT/PF Commissioner and 6 public members appointed by the Governor) The board may employ a president to manage the authority (subject to the Governors approval) and other staff.

The authority is authorized to acquire, provide for the operation and maintenance of, and sell bonds in order to pay for existing costs or development of the railroad or railroad facilities.

The authority is directed (Sec 3, page 14) to enter into negotiations with the Federal government for the transfer of ownership of the Alaska Railroad to the authority subject to money available from appropriations for the purpose.

# POSITION STATEMENT

There is pending legislation that would provide for the transfer of the federally owned and operated Alaska Railroad to the State of Alaska. This legislation, if enacted, would transfer ownership, operation and financial support of the Alaska Railroad from the federal government to the State of Alaska government. We do not oppose this action.

The Alaska trucking industry feels very strongly, however, that there are serious concerns regarding the impact state ownership, operation and control of the railroad could have on the privately owned and unsudsidized trucking firms in Alaska.

Further, the trucking industry feels strongly that any transfer legislation should address these concerns in a manner that will protect the future integrity of privately owned carriers in providing service for cargo movement between the Lower 48 and Alaska and within Alaska. Without such protection, the general public of the State of Alaska will have little chance of continuing to enjoy the benefits of strong and vigorous competition in transportation.

Today, the State of Alaska is well served by strongly competitive water and motor carriers providing service to, from and within Alaska. All of these firms are privately owned and receive no subsidy from the state or federal government.

Federal subsidy of the Alaska Railroad has removed any necessity for the railroad to recover its capital costs from its freight revenue.

Transfer of the Alaska Railroad from federal ownership and operation to state ownership and operation could involve the risk that the State would utilize rail properties and facilities in a manner that would artifically impact the level of rates which would otherwise be set by competition among the unsubsidized, privately-owned carriers.

The state-owned railroad must not be allowed to become a subsidized trucking company. It is essential that if the state-owned railroad competes with water and motor carriers, it must do so in a way that allows rate levels to be set through vigorous competition by the privately-owned carriers that have the requirement of buying and paying for their capital equipment, as well as earning a profit and paying taxes.

The state-owned railroad must not be allowed to instigate predatory pricing policies that would reduce railroad rates below that of competitive trucking companies that operate on parallel routes.

Legislation that addresses the transfer of the Alaska Railroad from the federal government to the state government must include safeguards that will encourage increased productivity within the private sector and less reliance on government entities to provide services that can be provided by the private sector.

The trucking industry in Alaska sincerely hopes that legislation can be developed in a way that will assure the future viability of privately owned water and motor carriage for the State of Alaska.

OUTLINE OF SEPTEMBER 29, 1981

TOTE DRAFT AMENDMENTS TO S. 1500

1. Add to Congressional Finding of S. 1500 a provision that further sets the tone for this legislation. To-wit: subsidized rail transport in Alaska is acceptable only where private enterprise cannot do the job.

2. Prohibit subsidization of service that competes with private carriers. (First sentence in a new paragraph 3(a)(2) of S. 1500)

3. Prohibit expansion of ARR motor carrier and water service as long as ARR remains subsidized.

4. Subsidy will be considered to exist for a particular service if the full expense level, including subsidy and cost of capital, exceeds the rate. (A new subsection 2(b) and the second sentence in new paragraph 3(a)(2))

5. The state would be required to maintain and make available to the public data showing the railroad's condition. Information would have to be sufficient to allow tracing of the subsidy.

6. As part of the closing agreement the state would be required to show it had taken steps to have the ARR operate like a business.

7. Impose enforcement provisions requiring the court to award damages and reasonable attorney fees as well as enjoin the offending subsidization.

24 September 1981

1. Add a new subsection 1(c) and renumber the existing subsection 1(c) as 1(d):

(c) Except where private enterprise is unable to provide freight transport service, such service in Alaska no longer requires nor should enjoy government financial support.

2. Add a new subsection 2(b) as follows and renumber existing sections 2(b) through 2(d) as 2(c) through 2(e):

(b) "full expense level" means the level described by the Interstate Commerce Commission in the study of the Alaska Railroad's rates in Ex Parte No. 405, served June 15, 1981, including direct costs plus the freight portion of overhead expenses and fixed expenses, including depreciation and including the subsidy and the cost of capital attributable to that service.

3. Add a new paragraph 3(a)(2), as follows, and renumber paragraphs 3(a)(2) through (4) as paragraphs 3(a)(3) through (5):

(2) The State has agreed that the Alaska Railroad shall be operated in a businesslike manner and that it shall not use public funds to directly or indirectly subsidize transportation services that compete with unsubsidized privately owned for hire carriers in interstate commerce and that as long as the Alaska Railroad receives public funds it will not expand in any way its current water or motor carrier service. The State further agrees that the amount of subsidy attributable to a particular service shall

be the extent to which the full expense level exceeds the rate charged for that service. The State also agrees to develop, maintain and to release to the public upon demand and to publish not less than quarterly current comprehensive data showing the expenditure of all public subsidies on the railroad (including the allocation by specific function of subsidy monies to rail services), the cost incurred in providing any service subsidized directly or indirectly by public revenues, and the revenues derived from providing such services.

4. Add just prior to the period in section 4 the following:

"and that describes in detail the procedure and instrumentality to be employed by the state to implement subsection 1(c) and paragraph 3(a)(2) of this act."

5. Change Sec. 5 to Sec. 5(a)

Add Sec. 5(b):

(b) The State owned railroad shall be operated in strict compliance with the terms of the Certification of the Secretary and agreements by the State giving rise to such Certification as described in section 3 of the Act. Any act or omission constituting noncompliance shall be enjoined by the United States District Court upon petition by any person or carrier and other appropriate relief shall be awarded any person or carrier injured by such act or omission, and the Court shall award appropriate damages and reasonable attorney's fees.

SENATOR BETTYE FAHRENKAMP
CHAIRMAN, RESOURCES COMMITTEE

4016 EVERGREEN
FAIRBANKS, ALASKA 99701

907-479-3550

# Alaska State Legislature

## Senate

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA 99811
OFFICE 907-465-3763
RESOURCES COMMITTEE
907-465-3634
HOME 907-769-9182

April 13, 1982

G. A. Seeliger
1001 Noble Street
Fairbanks, Alaska 99701

Dear Al:

Thank you for your letter concerning SB 212 which would create a vehicle for State control and operation of the Alaska Railroad.

The points you raised in your letter were compelling and I felt it imperative that both the Senate President and the Chairman of the Senate Transportaiton Committee were made aware of your concerns. I have, therefore, provided each with a copy of your letter.

It is my understanding that all parties to this legislation are working towards legislation which addresses many of the problems and concerns which have been raised in the past. This legislation may well be nearly finalized.

Al, I'll try to keep you appraised of developments in this area as they occur. Thanks again.

Sincerely,

Bettye Fahrenkamp
Alaska State Senator

BF/eb

cc: Senator Perttula
Senator Ray

G. A. Seeliger
1001 Noble Street
Fairbanks, Alaska 99701

April 9, 1982

The Honorable Bettye Fahrenkamp
Alaska State Senate
Pouch V - Mail Stop 3100
Juneau, Alaska 99811

Dear Bettye,

I have read Senate Bill No. 212, which is a proposed act to create an Alaska Railroad Authority. I have several misgivings about the proposed act, and have listed them below.

1) The State proposes to hand the Alaska Railroad over to a State Authority without provision for capitalization or funding of any kind. It is my belief that even though I am normally an anti-subsidy man, the Alaska Railroad will never be operated unless it has substantial subsidy type support. The consequences of the State cutting the railroad loose to fend for itself, in my view, would be disastrous because it would inevitably raise the cost of shipping commodities to this area by many percentage points.

2) I notice the Alaska Railroad Authority is to be administered by a six man commission. I believe, in the first place, that the number is wrong -- there should be an odd number of commissioners. Secondly, I think the commissioners should be appointed from the railbelt area because it is a regional transportation problem. Most of those appointed should be from the Fairbanks area since we have the greatest direct interest in the railroad.

3) There is no provision made for liquidated damages suffered by those persons who have invested rather heavily in warehouses and other improvements in the railroad areas.

4) If the railroad ever did have a chance of operating at a break-even figure, this bill would destroy any chance of financial independence due to the retention by the State of potentially valuable mineral properties.

5) I see a number of sections which are designed to make it possible for the governor and the legislature to essentially booby-trap the commission, tying its hands very neatly so it would be almost impossible to administer a successful business operation. For this reason, I can foresee that the Alaska Railroad Authority could, and probably would become a punching bag in the legislature.

For the above mentioned reasons, I sincerely hope you will either amend the bill or defeat it. As it stands, it is a bad bill.

Very truly yours,

G. A. Seeliger

GS:sr

Totem Ocean Trailer Express (TOTE) proposed amendments to CSSB 212

Page 19 of new CSSB 212

1. Revise AS 42.40.400(a)(24) to read as follows:

(24) prescribe rates to be charged for services provided by the Alaska Railroad; provided, however, the authority, when establishing rates to be charged for carriage of commodities in competition with private carriers, shall include any direct or indirect subsidies as costs in such rates; a private carrier may challenge a rate as unreasonably low if it is below the average rate charged by private carriers; a private carrier challenging a rate under this provision shall, on request, demonstrate that its rate is not unreasonably high under applicable regulatory standards;

Page 39 of new CSSB 212

2. Revise AS 42.40.700(b) by adding a sentence to read as follows:

(b) The notice shall be in writing and describe the proposed undertaking in detail, specifying its financial impact on the authority; its impact on the level and nature of services provided by the authority; why the project is necessary or desirable to achieve the purposes of this chapter; and whether and when the undertaking will itself be self-sustaining financially. The notice shall be published in accordance with provisions of AS 42.40.230.

MARK O. HATFIELD, OREG., CHAIRMAN

TED STEVENS, ALASKA
LOWELL P. WEICKER, JR., CONN.
JAMES A. MC CLURE, IDAHO
PAUL LAXALT, NEV.
JAKE GARN, UTAH
HARRISON SCHMITT, N. MEX.
THAD COCHRAN, MISS.
MARK ANDREWS, N. DAK.
[illegible], S. DAK.
[illegible] W. KASTEN, JR., WIS.
ALFONSE M. D'AMATO, N.Y.
MACK MATTINGLY, GA.
WARREN RUDMAN, N.H.
ARLEN SPECTER, PA.

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# United States Senate

COMMITTEE ON APPROPRIATIONS
WASHINGTON, D.C. 20510

March 26, 1981

The Honorable M. E. Dankworth
Alaska State Senator
Pouch V
Juneau, Alaska 99811

Dear Ed:

Thank you for your invitation to reiterate my remarks before the Alaska Legislature regarding the Alaska Railroad. I am eager to work with you and the Governor in negotiations between the Federal Government and the State of Alaska concerning ownership of the Alaska Railroad.

If the President's proposed budget is accepted by Congress, a multi-billion dollar reduction in the U.S. Department of Transportation's budget will mean loss of federal funds for the Alaska Railroad after Fiscal Year 1982, if not before. I have been told privately that the Federal Government would prefer to end federal ownership this year. Should the Railroad lose the financial support of the Federal Government and this support not be replaced, the Alaska Railroad will be shut down and dismantled.

The Alaska Railroad is an essential method of transportation for over half of our population. If the coal resources in our State are to be recovered, we must have an operating railroad. I could go on, but I hope we're all agreed on the importance of keeping the Railroad operational.

As I discussed the other day, the mood in Washington is to streamline the federal budget by cut-backs in funding and elimination of many programs. The Alaska Railroad is seen in Washington as a non-national budget item for which federal funding can and should be eliminated. I have been told that legislation which would do this may be introduced at the request of the Administration in the next few months. There must be authority within the State to negotiate with the Federal Government on this issue.

My staff and I will be at your disposal. We wish to work closely with you in the negotiations between the Federal Government and the State of Alaska to ensure a fair and equitable transfer of ownership of the Alaska Railroad to the State of Alaska.

With best wishes,

Cordially,

Ted

TED STEVENS
United States Senator

*Editorial Opinion and Comment of*

FAIRBANKS
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# *Railroad ownership*

This may be the legislative session in which something concrete is done toward gaining more state control over the Alaska Railroad. We believe developments in that direction are necessary for Alaska's development.

The railroad is owned and run by the federal government, but we believe it's reasonable and desirable for the state to work toward taking over the line. President Carter's budget proposed getting rid of the railroad to save money and the budget-conscious Reagan administration is not likely to reverse that position.

In recent times, except for some of the pipeline construction years, the line has lost money. The combined congressional appropriation and net loss over the past five years average $8 million a year. That would not be a particularly heavy subsidy for the state to undertake, particularly in light of the fact that the state subsidy for the Alaska ferry system has been running at $20 million a year.

The railroad is to much of Interior Alaska what the ferry system is to Southeastern. Both are vital transportation links for our state and the railroad holds enormous potential for Alaskan development.

But it's unlikely that we can expect much more than caretaker status for the line from the federal government. The railroad's managers are under orders from Washington to at least break even. And consequently railroad officials in Alaska must take a hard-nosed attitude. Every additional service or rail extension must pay its way.

Frankly, some of the needed railroad extensions and services won't pay their own way, at least not in the immediate future, and that's where the state comes in with its oil wealth.

There have been calls for state officials to begin negotiating with the federal government to take over the line. That's one good approach and we hope the state initiates those talks soon.

In addition, legislation has been introduced to create an Alaska Railroad Authority that could sell bonds to operate and expand the rail system. The goal of such work would be to promote the state's growth and development.

And pressure is building in the Legislature to get on eastward extension of the railroad to ler.

/et to say precisely which approach is e legislative hearing process should on that question. But we believe ɔe pleased by the general trend: that f our state leaders are coming to un- ɔortance of the railroad in Alaska's ey are inclined to act.

# Railroad sale in Carter budget

Times Washington Bureau

Washington — President Carter's proposed 1982 fiscal budget calls for the sale or transfer of the Alaska Railroad by 1983 and attempts to block reconstruction of the Alaska Highway.

The spending plan, released today, says Alaska is the only state that benefits from the two transportation systems. It also says the state can afford to bankroll the railroad.

(See related story, page A-8)

"The benefits from operating the Alaska Railroad are largely concentrated in that state, making continued federal funding inappropriate," the document says. "Moreover, the state has sufficient funds with which to support and improve the railroad's operation."

The Alaska Railroad is operated by the federal government under a law enacted in 1914. The 1982 budget for the railroad is $7 million, down from nearly $10.7 million in 1981.

Alaska Railroad Assistant Manager Arnie Polanchek said today the railroad has technically been up for sale since the early 1970s.

"It's really nothing other than a continuing question that comes up," he said. "It's just the federal government's policy that they would like to see the railroad transferred to the state.

Past attempts to sell the line to private railroad corporations have been unsuccessful.

"Someday it may happen but it's going to take legislation by both the federal government and the state government. A lot of things will have to be worked out."

Polanchek had no idea of the government's asking price for its only railroad. "It'll depend on the legislation and what the federal government thinks they should receive for it," he explained.

Carter's budget now moves to Congress is expected to be revised by the incoming Reagan administration.

Earlier this week, incoming Transportation Secretary Drew Lewis promised to work with the Alaska congressional delegation and the state on the possible transfer of the railroad from the federal government to state control. The commitment came at a hearing of the Senate Environment and Public Works Committee.

Carter's budget notes that freight tonnages will continue below the peak achieved during construction of the Alaska pipeline, but that the railroad hopes to achieve some increase in 1982.

The railroad made its last official "profit" during the pipeline years of 1977-78, Polanchek explained. Since then, the system has been showing a paper loss due to depreciation of the physical plant and the railroad's steady reinvestment of funds into improvements.

But fiscal 1981, said Polanchek, has been "a good year."

As in the past, Carter's budget also tries to bar the congressionally authorized reconstruction of the Alaska Highway by not including any funds for the project.

The 1973 Federal-Aid Highway Act authorized $38.7 million for the reconstruction of the Alaska Highway from the Alaskan border to Haines Junction, Canada, and the Haines Cutoff Highway from Haines Junction to the south Alaskan border.

The costs of the project have skyrocketed to $180 billion.

(See RAILROAD, page A-3)

# Railroad...

(Continued from page A-1)

"No appropriation is being requested for 1982 because the benefits from construction of the highway accrue primarily to one state — Alaska, the budget says.

In other items of interest to Alaska, the budget seeks:

— $36.6 million for the office of Federal Inspector of the Alaska gas line to coordinate the issuing of permits, carry out environmental and engineering reviews and conduct field surveillance on the project. This represents and increase from the fiscal 1981 total of $21.5 million.

— $3.5 million for the Alaska Power Administration, which operates and markets hydroelectric power from two federal projects in the state — Eklutna near Anchorage and Snettisham near Juneau. This is up from $3 million in fiscal 1981.

— $2.2 billion for Coast Guard operations in fiscal 1982, up from $2 billion last year. The money would be used for search and rescue operations, maintenance of navigation aids, ice breaking, prevention and cleanup of marine pollution, and inspections of offshore drilling rigs.

The money would allow the replacement of three aging cutters, the purchase of 41 jet surveillance aircraft and 90 new rescue helicopters.

The Carter adminstration wants to defer until 1983 major efforts to improve and modernize several Coast Guard training and shore facilities, but it supports increases in pay and benefits for Coast Guard personnel in 1982.

— $7.1 billion for Comprehensive Employment and Training Act programs nationwide, including $3.8 billion for public service employment (an increase of $7 million from 1981), $3 billion for general training and employment (a $144-million increase), and $314 million to support job placements in the private sector.

But again, we don't think that's an unreasonable amount of information to ask from a candidate for elected office. The public has a right to know who cares enough about someone's election to make a major campaign contribution.

There are several good proposals in the report to Sen. Bennett's committee, but we believe this particular one isn't among them. We hope it's put to rest quietly.

## Who'll own the railroad?

What boy has not dreamed of having his own train? It may come to pass that Alaskans will realize that dream, and on a scale no little boy would have expected.

What brings this all to mind is the budget proposal to end federal ownership of the Alaska Railroad. It's not a new idea, but it may be one that gets more serious attention now than it has in the past. It's the only railroad the federal government owns and, since the end of the pipeline days, it has been losing money.

The operating loss has been declining—$4 million last year compared to $6 million the year before—but the federal government seems less and less inclined to carry such a loss. And the line also receives federal money for capital improvements.

Outgoing President Jimmy Carter's budget proposal said ownership of the line should be turned over to the state or a private owner by 1983. We doubt that deadline can or should be met, but we do believe it's time for the state to begin thinking about the railroad.

It's evident that the line is of greater importance to Alaska than to the federal government, and therefore we believe the impetus for expansion and improvements in the railroad must come from Alaska.

State officials are justifiably wary of just plunging in; they say they want to study the issue. That's a prudent course and we believe state railroad studies should be pushed by this session of the Legislature.

Beyond that, it's too early to recommend a definite course, but it's not too early for the state to begin developing a policy toward the railroad. It's vital to Alaska and we should have a strong hand in determining what role it will play in our future.

# Carter: Give railroad to state

Empire Washington Bureau

WASHINGTON—The Alaska railroad should be handed over to the state or a private party by 1983, according to President Carter's proposed 1982 budget.

The preliminary budget, which lists Office of Management and Budget recommendations for government expenditures, suggests the railroad sale or transfer as part of an outline of transportation policy priorities of the departing President.

The Alaska Railroad is the only federally owned rail system in the country.

"Legislation is being proposed to Congress that would provide for takeover of the railroad," a Federal Railroad Administration spokesman said Thursday, adding that Democrats are not holding out great hopes of Congressional approval of the transfer in this session.

The Alaska Railroad has been running at a deficit since completion of the Trans-Alaska Pipeline in 1976.

The railroad received $10.6 million from the federal government for capital expenditures in fiscal 1981, including $4.5 million for new passenger cars.

The preliminary budget for fiscal 1982 earmarks $7 million for the railroad's capital costs. Operating costs are paid from the railroad's revenues.

In meetings earlier this week, Alaska Sen. Frank Murkowski suggested to Secretary of Transportation-designate Drew Lewis that his department investigate turning the railroad over to the state.

Sen. Ted Stevens, R-Alaska, has in the past supported transfer of the railroad to the state, but is concerned about the terms. A spokesman for Stevens said he expressed his concerns to the Reagan transition team.

Empire 1/19/81

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In another effort to cut costs and remove the Railroad from activities that are not vital federal interests, a decision has been made to terminate the present contract for providing freight barge service on the Tanana and Yukon Rivers. The ARR plans to sell its river equipment, including a tugboat and several barges, and is willing to lease its dock facilities and other land holdings that may be needed for the State or a private business to continue operating the barge service.

Proposed Transfer of the Alaska Railroad to State Ownership

It has been the policy of the past three Administrations to cease federal operation of the Railroad by transferring it to the State or a private buyer. Private companies have expressed an interest in the Railroad in the past and several concerns have recently contacted the General Manager. We suggest that this is a good time to begin serious discussion of State take-over because (1) the Railroad is essentially an intrastate railroad primarily serving the freight and tourist needs of the State, (2) the State is in a strong fiscal condition and would be able to support the Railroad's capital and operating needs, and (3) the transfer process, which will probably take two to three years to implement, should begin now while the Railroad is in a slump before the natural gas pipeline construction activity begins in a few years.

Commissioner Ward indicated that there has been some discussion within the State about eventual State acquisition of the Railroad. I would hope that these discussions can now lead to a decision to assume State responsibility for the Railroad so that we can begin the complex process of transferring ownership. I firmly believe it is in the State's interest to actively press for State ownership at this time for both the transportation needs of the State and to preserve the public services that the Railroad provides in Alaska.

We look forward to continuing this important discussion and are hopeful it will lead to increased State support for the passenger service in the coming year as well as ultimate transfer of the Railroad to State ownership. If I can be of further assistance to you or provide additional information, please let me know. Both the Alaska Railroad and Federal Railroad Administration staffs are available to meet with and assist State officials in this regard.

Sincerely,

John M. Sullivan

JOHN M. SULLIVAN
Administrator

Excerpt from Statewide Rail Systems Study - Bivens

ISSUE: ALASKA RAILROAD OWNERSHIP AND OPERATIONS

The 63rd Congress passed an Act on March 12, 1914 which authorized the President to locate, construct, and operate a railroad in the Territory of Alaska. This was the beginning of the Alaska Railroad, an experiment by the federal government in railroad ownership and operations that has been carried out over more than six decades. The federal government continues to own and operate the Alaska Railroad.

The 1914 Act instructed the President that the railroad was:

> "... not to exceed in the aggregate one thousand miles, to be so located as to connect one or more of the open Pacific Ocean harbors on the southern coast of Alaska with the navigable waters in the interior of Alaska, and with a coal field or fields as best to aid in the development of the agricultural and mineral or other resources of Alaska, and the settlement of the public lands therein ..." (emphasis added)

In large measure the Alaska Railroad has carried out the Congressional mandate given in its organic act. The Alaska Railroad operates 478 miles of single main line track from the deep-water ports of Seward and Whittier through Anchorage to Fairbanks, with branch lines to Eielson Air Force Base, Fairbanks International Airport, Palmer, and the Suntrana coal fields near Healy. The Railroad serves the agricultural communities in the Matanuska Valley. The settlements along the Alaska Railroad encompass the vast majority of the urban development of Alaska and have come to be known as "The Railbelt".

At the time in history when the White Pass and Yukon Railway was constructed, around the turn of the century, and a few years later when the Alaska Railroad was built, the situation in Alaska was vastly different from current conditions. Alaska was almost totally undeveloped. There were virtually no roads -- only trails -- and no automobiles or trucks, no Marine Highway System, and the railroads were the only reasonable transportation alternative to reach the interior of the territory. In short, the railroads were a transportation monopoly with essentially no competing transportation modes.

In addition, Anchorage did not exist until it was built to house the railroad construction crews on public railroad property which was sold to private interests. World-wide transportation and communication were very slow and this fact minimized the need for large military defense installations in Alaska. The principal economic activities in

Alaska were fishing, hunting, trapping, and prospecting. Industrialization was unknown and the economy was very basic, with commerce related to the major economic activities. Only the most hearty and fittest survived the harsh climatic existence.

Alaska today is a startling contrast to the conditions and situations in which the railroads were first constructed. Early railroad decisions had a driving force because railroads were the only reasonable land transportation alternatives at that time. Now, that force has been reduced and changed to defining the role that railroads play in Alaska in the context of a total transportation system. Railroads in Alaska today must meet present market demand for transportation services and define more clearly the services they can provide better or at less cost than other modes in the context of Alaskan and Northwest Canadian development.

The role, market, and service definitions of railroads in Alaska at this time must be applied and evaluated in the examination of the ownership and operational considerations. This is true, not only for the existing railroad system, but also for any railroad expansion including the frequently discussed link to Canadian railroads and through them to the continental United States.

In examining the Alaska Railroad ownership and operations alternatives, it is essential that consideration be given to the other major components of the State's transportation system. Ports, barges, ships, the Marine Highway, pipelines and the State Highway System are of prime importance. Of lesser importance relative to railroad use, development, and operations are the airports and air service (freight and passengers). This latter transportation component is extremely important in Alaska. Its primary relationship to railroads, however, is more indirect, frequently involving only fuel supplies.

Railroad investment decisions, by the federal and state governments, must be made within the framework of other transportation investment decisions. This is especially acute relative to ports and highways, both of which have historically been public investment responsibilities. Governmental decisions regarding port development, for example, will significantly impact upon rail traffic since all freight inbound to Alaska or outbound from the State use port facilities. Thus, public port investment decisions can either enhance or discourage rail traffic depending upon the nature, extent, type, and scheduling of port facilities and services.

By the same token, highway development investment decisions also have important implications on railroad investments and operations.

For example, the George Parks Highway from Fairbanks to Anchorage, completed in 1971, closely parallels the Alaska Railroad between Alaska's two major cities. The opening of this highway substantially reduced the land transportation mileages thereby enabling trucks to pick up cargo at the Port of Anchorage and deliver it more economically to Fairbanks. Therefore, the general public investment in a highway diverted traffic from the Alaska Railroad public investment. The extent of traffic diversion and an analysis of its economic impact including the resulting increase of public investment required on the Alaska Railroad is certainly beyond the scope of services of this project. However, it is clear that substantial diversion did occur and has had longterm implications on the changing role, function, and financial aspects of the Railroad.

A similar example may be found on the White Pass and Yukon Route between Skagway, Alaska and Whitehorse, Yukon. Funded by the Alaskan government and the federal government of Canada, the Skagway to Whitehorse Highway (known as the Klondike or Carcross Highway) was completed in the late summer of 1978. According to the Canadian Transport Commission "Report of Inquiry into the White Pass and Yukon Railway and Other Surface Transportation Services into and out of the Yukon", in its first complete summer of operation, this highway resulted in the erosion of twenty-eight thousand passengers from the White Pass and Yukon Route. Passenger revenues amount to 19% of the railway's total revenues. The White Pass generally carries about 60-70 thousand passengers per year. Traffic diversion due to public investment in alternative transportation modes is obviously one important factor in railroad finances.

It is within this context that the Alaska Railroad ownership and operation alternatives must be examined.

At the time the Department of Transportation and Public Facilities developed the Request for Proposals for this project, the issue of the ownership and operation of the Alaska Railroad was less important than it has become during the project development period. The attention given to this issue by the consultants has been substantially changed during the project by mutual agreement between the consultants and the Department. This change in emphasis has been necessitated by an inquiry by the Federal Railroad Administration, owners and operators of The Alaska Railroad, of the State's interest in the possible acquisition of the Railroad.

Additionally, the Alaska Legislature's interest in the feasibility of establishing a rail link between the Alaska Railroad and Canadian railroads and the continental railroads in the Lower 48 states raises other significant ownership and operational issues. These latter issues include such questions as: Who would own such a link? Who would have operational responsibilities? Is there adequate traffic to cover operational costs? Will there be a return on the capital investment? If operational costs are not covered by revenue, who will assume the responsibility for the required subsidy? If an operational subsidy is required, how long will it be before a subsidy is no longer necessary? What are the implications of such a trans-Alaska/Canada rail link on the present shipping patterns related to the ports of Seattle, Vancouver and others?

Clearly these are important questions. It is also clear that the scope, schedule, and financial resources of this project are inadequate to seek the essential answers to these questions.

It is now the intent of this project to raise key railroad, public investment, and related issues within the framework of the project research and definitional analysis that has been completed. The continuous rail planning process outlined in this project report provides an approach which will enable the decision-makers in Alaska and in the federal government, in cooperation with private interests and supported by an informed public, to have useful information on which to base vital railroad decisions.

In order to better understand the issue of ownership and operation of the Alaska Railroad, it is necessary to make some observations based upon work on this project. These observations may be summarized as follows:

1. There is a strong dedication on the part of officials and employees to the Alaska Railroad and to an effective and efficient operation.

2. The existing traffic base for the Railroad is quite small because of the sparse Alaskan population and limited manufacturing and industrial development.

3. Natural resource development in Alaskan offers opportunities for significantly expanded rail traffic.

4. The Alaska Railroad has not in the past had an effective marketing program in Alaska and in the "lower 48". Recent steps have been taken, however, to strengthen the marketing program. Governmental ownership of the Alaska Railroad makes marketing difficult. Some private transportation companies perceive the Railroad as being unfair competition because of public support for the Railroad.

5. The Alaska Railroad has been largely limited to the use of public funds for capital investments.

6. Alaska Railroad officials must function within governmental comstraints such as personnel procedures, procurement practices, and public funding, leading to time delays and frustration.

7. Most employees of the Alaska Railroad are unionized public employees.

8. Much of the traffic on the Alaska Railroad has historically been for the military. Although the Railroad continues to have the capacity for military transport, the traffic in the last decade or so has shifted significantly toward private freight movement.

9. There are major questions regarding the land under the control of the Railroad. The land status is uncertain if the Railroad were to be sold.

10. The institutional, accounting, and other arrangements between the Railroad and Alaska Hydro-Train, Yutana Barge Lines and others require further examination and clarification.

11. The Alaska Railroad is taking the necessary steps to improve its management of real property, partially in response to a General Accounting Office report. These management improvements should increase the income from non-operating property and provide more uniform rental agreements.

12. Rail passenger service on the Alaska Railroad needs careful evaluation relative to the nature of the market and the determination of subsidy sources. Service improvements are planned, but the need for subsidy even with the improvements is apparent.

Further expalnation and observations may be found elsewhere in this report.

There are at least four major alternatives for ownership and operation of the Alaska Railroad: (1) federal, (2) state, (3) private, and (4) combination of public and private. Obviously, there are numerous variations or combinations which could be explored. A comprehensive investigation and analysis of each of these alternatives and the longterm implications are essential, but beyond the scope of this project.

## Federal Ownership and Operation Alternative

This alternative of a continuation of federal ownership and operation is the maintenance of the status quo. Although this alternative is clearly the easiest to implement since it requires no action by anyone, it appears to be unsatisfactory. The recent inquiry by the Federal Railroad Administration of the interest of the State in acquiring the Railroad is evidence of the federal government's dissatisfaction with the present situation. In some ways it is unfortunate that such an inquiry was made while this project was being undertaken. If the information resulting from the completion of this project had been available to the State before the federal disposition inquiry was made, Alaska decision-makers would have been better prepared to cope with the issue.

Under the present situation, the Alaska Railroad cannot be operated as one would operate a private railroad for six basic reasons: (1) there is no way to seek and be sure of obtaining the much needed capital investment funds, (2) marketing efforts are difficult because of the competition issue, (3) railroad management does not have the required flexibility to make and be accountable for major decisions, (4) railroad employees are unsure whether they work for a railroad or the federal government, (5) the parameters of rail service in Alaska have substantially changed from early conditions under which the Railroad was constructed (previously discussed), and there has not been a recent evaluation of the current applicability of the basic organic act, and (6) the Railroad is unable to be as responsive as it might be in meeting the rail service needs of Alaska in such a dynamic environment.

It is possible to continue to have the federal government own and operate The Alaska Railroad. Some improvements can be made under such circumstances, but the improvements will only be minor and will not include major shifts in the responsiveness and operations of the Railroad.

## State Ownership Alternative

Ownership of the Alaska Railroad by the State of Alaska is the second major alternative. It would be possible for the State to own and operate the Railroad. However, several factors seem to favor only State ownership and not State operation, if this alternative is selected. Currently, there is no interest in state railroad operations. The State does not presently have the experience, knowledge, or personnel required to operate the Railroad. In addition, most of the basic reasons why the Railroad cannot be operated under federal jurisdiction as one would operate a private railroad apply equally to State operations. There would also be a tendancy for political involvement in operational decisions. For these reasons, the consultants for this project do not consider operation by the State to be a viable or reasonable alternative. The discussion of this alternative is, therefore, confined to State ownership.

The State of Alaska could take title to the Alaska Railroad. Before making such a commitment, however, it will be essential that legal counsel for the State carefully examine the matter and determine the necessary procedures, conditions, and process for acquisition. Undoubtedly there will be many legal questions. One such question is the land issue, specifically related to the quality of the title in light of the Alaska Native Claims Settlement Act of 1971. For example, the Eklutna land decision clearly reserve the right-of-way and all areas used for railroad operations. This decision transferred some $40 million or more in potential profits from land to Eklutna from the Railroad, thereby affecting the desirability of the property.

An alternative to direct purchase by the State could be the selection of the Railroad's land as a part of the withdrawal by the State of federal land under the Alaska Statehood Act of 1958. It appears that acquisition through selection by the State is a viable alternative if the State determines that acquiring the Alaska Railroad is in its best interest.

State ownership of railroad rights-of-way has become much more common in the last few years, particularly by states which have faced the loss of rail service due to railroad bankruptcy. While state ownership interest started in the Northeastern United States because of massive bankruptcies and abandonments, states in the Midwest and other regions have more recently been faced with similar problems due primarily to the Milwaukee and Rock Island problems.

The chief advantage to Alaska of state ownership is the control of the Railroad and the more effective integration of railroads as a significant component of the State's total transportation system. With state ownership, Alaska could not only plan for the integration of its transportation system among the port, highway, barge and Marine Highway system, but more importantly, the State could more easily implement its transportation plans. As previously pointed out, public responsibilities and state interest already extends to the other transportation modes so essential to the future of the Alaska Railroad. State ownership would provide the Governor, the Legislature, the Department of Transportation and Public Facilities, and other state agency decision-makers with the opportunity to actually make and carry out major significant capital investment decisions between transportation modes. This decision-making and full implementation responsibility relative to transportation could be effectively used to reinforce state policies on land and natural resource protection and development. In this manner the State could assure local rail service to those areas where it is useful to stimulate agricultural, commercial, industrial, and resource development.

An operational agreement could be negotiated with a suitable railroad operator with the necessary conditions thereby assuring rail users with the level and quality of service the State wants and is willing to finance.

It is clear from examination of the financial records of the Railroad that capital and operating losses have occurred from time to time in the past. The data also reveals the likelihood of additional losses. There is evidence that revenue from the freight operations have been necessarily used to subsidized the passenger operations. If the State assumes the ownership and operational responsibility for the Alaska Railroad, Alaska must be prepared to cover any future capital and operating losses.

This approach would also simplify the relationship between the State and the federal government. The State is qualified to receive federal financial assistance under the 803 program of the Railroad Revitalization and Regulatory Reform Act (4R Act) of 1976 as amended unless the Railroad has increased traffic of a magnitude that prevents it from being considered a low density line. The State retains the option of participation in the 803 program as long as it is eligible. Alaska should carefully evaluate the difficulties, time, cost, and federal involvement in considering participation in this Federal Railroad Administration program. State participation in the 803 program requires

following FRA guidelines and obtaining plan and project approvals. It should be noted that this FRA program was designed to assist railroads, through the states, which were facing line abandonments of uneconomic and marginal branch lines and not to accommodate system growth. If full advantage is to be taken by Alaska of its opportunities for economic, agricultural, and resource development, rail service to areas not presently served remains an important consideration by the State.

It should be noted that there are federal funds available for branch line funding, redeemable preference shares, loans and other programs. A transfer of ownership from the federal government to the State does not impair funding eligibility. Arrangements would also be necessary for federal assistance through legislation relative to employee benefits for the current federal employees of the Railroad.

## Private Ownership and Operation Alternative

Several years ago, the Federal Railroad Administration expressed some interest in the transfer of the Alaska Railroad from federal ownership and operation to the private sector. At that time the State did not have a Department of Transportation and Public Facilities, the financial resources, or serious interest in State ownership. Expression of interest by railroads in the continental states were sought. Some private companies did express an interest in the possible acquisition of the Railroad.

Those private companies that were most serious carefully evaluated the traffic (existing and potential), the cost of acquisition and operation, and the return on investment. Based upon their analyses, they decided that the return on their investment was insufficient to warrant the financial commitment.

Changes in the traffic base of the Alaska Railroad such as major coal export or mineral extraction and shipment could significantly change the economics of the Railroad. Such changes would make the Railroad more attractive to private investors.

This alternative must be viewed, however, from the State's perspective and not necessarily from the private enterprise view. There



are sound arguments as to why the private sector should be encouraged to own and operate the Railroad. Obviously, the private sector is much more experienced and knowledgeable in railroad ownership and operations. This private approach could potentially expand the public tax base while minimizing the necessity for governmental employment increases. Private companies have more flexibility than public agencies in the management of a business enterprise. In addition, decisions can be made more rapidly in the private sector than in government.

If the Railroad were privately owned and operated, the role of the State of Alaska changes. The State could become the regulator and not the implementor. It will be more difficult to assure the integration of the railroad with other transportation modes. Railroad expansion will be based upon a more strict test of return on investment, profit, and economic considerations.

The trade-off associated with this alternative seems to be private investment capital, know-how, experience, and ability to rapidly respond to changing markets and development in exchange for State or federal control, implementation, public rail service, policy reinforcement, public funds, and transportation system integration.

## Public and Private Combination Alternative

The fourth alternative for the ownership and operation of the Alaska Railroad involves a combination of public and private interests. Many possible variations of this alternative appear viable depending upon the relative roles, negotiations, compromises, and decisions. Since the alternative variations are almost endless, it seems appropriate to outline one approach that illustrates the possibilities and serves as a point of departure for discussion purposes.

For purposes of discussion, it is assumed that the public would own the land and facilities. The motive power, rolling stock, and equipment could be owned either privately or by the public. Operational responsibilities are assumed to be by the private sector.

One approach within these parameters would be to have a Board of Directors appointed by the Governor (perhaps for staggered terms and confirmed by the Senate or not). The Board would be made up of

businessmen and people knowledgeable about railroads. They could be paid a reasonable stipend for serving and would be given this total responsibility for oversight of the property and the administration of the contract with the private operator. An example of this type of approach is the USRA Board created by federal legislation.

Consideration would have to be given to the total number of Board members. The responsibilities, authority, power and duties of the Board tors. The responsibilities, authority, power and duties of the Board would have to be carefully determined and articulated. If such a Board is created, it seems appropriate to delineate its access to both public and private funds. Creativity and innovation will be required in the establishment of such an entity. Among the issues requiring attention are the following: (1) operator incentives, (2) source of funds if subsidy is required, (3) freight and passenger service levels and responsibilities, (4) labor provisions, (5) maintenance responsibilities and funding, (6) responsibility for liability, (7) natural disaster recovery, (8) equipment and facility acquisition and disposition, (9) industrial development and property management responsibilities, (10) accountability (to whom and when) and (11) institutional relationships with marine owners and operators. This list is illustrative and not exclusive.

The advantages of public ownership of the land and improvements are numerous. The problem of land ownership disputes would be minimized. There would be no problem of recovery of federal or state funds expended on lines which were discontinued before the expiration of their useful life. Public powers could be used, if necessary, for expansion of the railroad system. The Railroad could more effectively be integrated into the State's total transportation system. system.

Private operations with incentives for excellence also has advantages. It enables the railroad operations to be carried out by people with relevant experience, training, and capability. Marketing could be conducted in the way it is carried out within the private sector. Rail service requirements could be incorporated into the operational agreement and the users and public could be assured that service is at a proper level by enforcement of the requirements. A reasonable profit level needs to be achievable by the operator.

The public and private combination appears to be one viable alternative for the Alaska Railroad.

## ISSUE: RAILROAD EXPANSION IN ALASKA

For at least the last twenty years, there has been serious discussion about the possible expansion of railroads in Alaska. Many studies have been conducted, presented, and discussed. And yet both the Alaska Railroad and the White Pass and Yukon Railway are essentially the same system as they were when constructed. Railroad expansion in Alaska continues to be a significant issue.

This project, as a part of Alaska Rail Planning Program, was never intended to include another analysis of railroad expansion in Alaska. Rather, the report describes the background and major issues and policies, so essential to decision-making by the State of Alaska, the federal government, and private railroad and transportation interests.

The issue of Alaskan railroad expansion has four principal interrelated and inseparable elements. These elements must be carefully considered prior to an expansion decision. Failure to make a clear determination and statement relative to each element will likely result in short-term and long-term implicatons for all the people of Alaska. The four major elements related to the Alaskan railroad expansion issues are: (1) purpose of the expansion, (2) timing of the expansion, (3) cost, and (4) responsibility of the expansion and the continuing responsibility of railroad operation after construction is completed.

### Purpose

The purpose of any railroad expansion needs to be logically thought out and then articulated as an affirmative policy statement of the State of Alaska. If there were large markets for products that were manufactured or produced in Alaska, or if there were markets within Alaska for products, from other areas and these products were suitable for shipment by rail (i.e. large volumes, heavy, substantial distance, continuous flow), the purpose of railroad expansion to meet the market demand would be clear. It is obvious that these conditions do not exist in Alaska at this time.

Coal and minerals appear to be the most logical potential Alaska products for rail shipments. The discussion relative to these natural resources products and their development may be found in a previous section of this report.

A second line of reasoning indicates that if railroad lines are extended, development to support them will follow. In reality the interrelationship between railroad expansion and supporting development is more complex than the above statement indicates.

In examining this issue it is important to acknowledge that railroad construction is very expensive, especially in Alaska. High capital construction cost requires a high volume of revenue traffic if there is to be a reasonable return on the construction investment.

Railroads are absolutely dependent upon high traffic volumes and have the capacity to carry these high volumes. For example, a single train can carry cargo in the range of 4,000-8,000 tons. If one train runs each day of the year, the volume carried would be on the order of 1.5 to 3.0 million tons annually -- one way. Obviously, several trains in each direction can be physically moved over the tracks each day. Unit coal trains from Wyoming through Colorado to Texas, for example, number more than 20 trains per day and may soon run as high as 56 trains per day.

The Alaska Railroad is classified by the Federal Railroad Administration as a "low density" railroad since it carries less than 3 million gross tons per year. In 1978 The Alaska Railroad carried 2.2 million freight revenue tons and in 1979 the tonnage carried was down to 1.8 million tons.

It seems clear that the construction of the Alaska Railroad, while providing a very important service, has not resulted in stimulating tremendous economic development commensurate with its traffic transporting capacity.

Another example of high expectations, that building a railroad will automatically stimulate needed economic development but with disappointing results, is the experience with the British Columbia Railway. In a report by the Royal Commission on the British Columbia Railway, "An Interim Report on the Future of the Fort Nelson Extension", dated December 1977, the following statement is made:

> "... The Fort Nelson Extension should never have been built; it was built however, and this is the reality with which we must now deal.
>
> The question which faces the Provence, and on which the Commission must advise, is whether to roll it up, and write it off, or spend massive sums over the next three years to make the line serviceable. In

between lies the possibility of first aid treatment -- the application of bandaids, with the ultimate disposition postponed. If the line is kept in service, there is no expectation it can cover even its operating costs in the forseeable future, leave alone pay any part even of the interest on money borrowed for its reconstruction or temporary repair ..."

Evidently not enough development followed the railroad extension, completed in 1971, to make the railroad economically viable. The line cost about $70 million originally and needs another $36 million for reconstruction. As of 1977, they were losing $33 million a year just in operating cost. This is substantially more than (almost twice) the total revenue from freight on the Alaska Railroad in 1979. As a result of this situation on the British Columbia Railway, the board of directors has requested an open ended subsidy for the railroad to cover all future annual expenditures and operating losses.

The purpose of reporting these facts is not to indicate that railroads are unimportant in Alaska, but rather to show the importance of clearly determining the purpose of any proposed railroad expansion and to evaluate realistically the implications of such expansion, prior to major project commitments.

## Timing

The timing of railroad expansion is also critical. If the State of of Alaska were to expand the Alaska Railroad, laying aside all related issues, the expansion should be timed in such a way that full advantage would be taken of development which would generate rail traffic. The timing element is extremely critical and yet very complex and difficult. The scheduling of new railroad construction frequently requires several years of preliminary work including the design, location, financing, and then actual construction. The lead time necessary for railroad construction may be several years.

Since the development of natural resources offers the greatest potential for rail traffic, railroad expansion should coincide with such resource development. Private enterprise will be the most likely resource developers. This poses an interesting challenge -- finding out when and where such development will occur in time to permit the proper schedul-

ing of railroad construction. The rail planning process should include a mechanism for letting potential resource development management know of the State's interest in providing rail transportation and other needed transportation facilities and services.

In summary, the State of Alaska should carefully consider the timing element within the railroad expansion issues.

## Cost

Cost considerations are another of the vital elements related to railroad expansion. The costs have two facets: construction of the railroad expansion and the cost of operations after completion of construction. The former, although not easy to estimate, is usually easier to obtain than the latter estimates. Alaska has construction experience, but no railroad operational experience. It is also a reality that governments generally are more familiar with large public works projects which are highly visible and easily recognized. The more difficult are the operational costs since they frequently involve intangibles such as labor, rates, fuel costs, pension programs, marketing effortc, and the like.

Operational costs are also difficult to estimate because they are affected by decisions beyond the control of the governmental construction agency. For example, private shippers make the decision on how and when to use rail services or perhaps, to ship by truck if that alternative is available.

A railroad, relying on a natural resource shipper, is largely dependent upon that shipper locating a suitable market for his products. This is certainly beyond the control of the railroad. And yet, if resource products make up a substantial part of the revenue traffic base, the loss of that shipper's market can have a noticeable adverse impact upon the operating cost of the railroad. Such a loss of revenue may result in governmental subsidy if the public investment in the railroad is to be protected. An example is the loss of the asbestos traffic by the White Pass and Yukon Railway.

The railroad situation for the State is somewhat analogous to the urban community experience in public transit whereby the capital improvement funds for buses or other equipment from the federal government is

relatively easy to obtain, but the subsidy requirement including the operation and maintenance of that equipment increases geometrically. Subsidy funding is also more difficult to obtain, locally or from the federal or state government.

A careful assessment should be made by the State of Alaska of any railroad expansion capital improvement costs and of the long term operational costs which may be incurred if the expansion is made. State decision-making officials will want to evaluate both capital and operational costs before making a railroad expansion decision.

## Responsibility

The final major element in the consideration of the railroad expansion issue is the assignment of responsibility for construction, ownership and operations.

It appears important for a decision on railroad expansion to be made after the decision on the ownership and operations of the Alaska Railroad. If the ownership and operations of The Alaska Railroad remains the responsibility of the Federal Railroad Administration, then it would be logical for the expansion to also be a federal responsibility. On the other hand, if the State or a private enterprise were to assume the responsibility for the Alaska Railroad, then the expansion responsibility might well be given to the new owners.

It is possible for the federal government to retain ownership and operational responsibility for the Alaska Railroad and for the State of Alaska to assume the expansion responsibility. Under these circumstances the State will want to seek and obtain an agreement for the operations, maintenance, and marketing of rail service and facilities on the railroad expansion lines including possible federal responsibility. Failure to obtain such agreement in advance of consturciton could potentially result in a railroad line without an operator.

This element of the railroad expansion issue requires the compilation and analysis of substantial data on which to make an intelligent and logical decision on the assignment of the construction and operational responsibility for railroad expansion lines.

* * * * *

The issue of railroad expansion in Alaska is not new nor is it devoid of previous study. The research on this project has located at least thirteen studies or surveys related to this issue. In addition the Alaska Legislature in its 1980 session passed a resolution requesting the Legislative Council to conduct: "(1) a cost benefit analysis of a proposal to construction a rail line from Fairbanks to the Canadian border; and (2) a cost benefit analysis of any other Alaska rail line construction which may be proposed by the Legislative Council ..." (emphasis added). The Legislative Council report is to be presented to the First Session of the Twelfth Legislature within 10 days of the date it convenes (January 1981).

A list of previous railorad expansion and related reports follows in Exhibit V-1, "Railroad Expansion Studies and Reports". A review of these documents indicates that insufficient attention has been given to date to the operational and potential traffic aspects, as well as the purposes, timing, and assignment of responsibilities. The costs included in a number of these reports will require updating to accurately reflect the changes that have occurred and current inflation, energy, and related factors.

Excerpt from Alaska Railroad Annual Report 1979

# Overview

## THE ECONOMY

The Alaskan economy, at a low level following completion of the trans-Alaska oil pipeline, contracted still further during 1979. Construction was down, vacancy rates for single family rental units reached 25 percent in Anchorage, and the State population dropped by several thousand persons. Uncertainty over the Alaska lands issue has caused corporations to defer capital investments in the State. Alaska, as it enters the 1980's, remains an underdeveloped area.

The construction of a 4,800-mile natural gas pipeline from Alaska's North Slope is an increasingly likely prospect and would be the principal stimulant of the economy in the 1980's. Because Alaska is rich in natural resources other than petroleum, there are other possibilities for expanding Alaska's economic base. These include copper and coal mining, fishing and seafood processing, forestry products, and hydropower. In the near term, the State, using its surplus oil revenues, is expected to increase the funding of capital improvement projects in 1980. Tourism, up 10 percent in 1979, continues to grow; and commercial fishing, up 20 percent over 1978, also promises to grow rapidly as the offshore-bottom fishing industry develops.

In years past, traffic and revenues on The Alaska Railroad have risen and fallen with the Alaskan economy, and this pattern will continue. Because there is no manufacturing activity in Alaska, and no immediate prospects for its development, the Alaskan economy will continue to fluctuate throughout the 1980's. Alaska Railroad financial results during the decade will reflect these fluctuations.

## THE RAILROAD

Fiscal year 1979 saw a continuation of the decline in freight traffic (Table I) that began in 1977 following the completion of the trans-Alaska oil pipeline. All major commodities hauled in FY 1979 dropped from FY 1978 (Table II); as in FY 1978, the largest decline was in petroleum products because the refinery located near Fairbanks increased its bulk petroleum market share and thereby lessened the surrounding area's dependence on shipments via the Railroad. If the anticipated construction activity increases and an export coal movement is started, FY 1980 should reflect a modest upturn in freight traffic. No substantial gains are expected in the long-haul traffic to Fairbanks, however, until the gas pipeline project begins.

Non-freight revenues increased, led by passenger revenues which were up 35 percent. Non-operating revenues were up 26 percent; and other operating revenues increased 3 percent—from $3.3 million to $3.4 million. Total expenses were reduced almost $2 million; but revenues primarily reflecting the drop in freight traffic declined by nearly $4 million. These losses were incurred despite a 14-percent reduction in employment. Increased labor costs and material prices tended to offset the personnel reductions and the higher tariffs.

**TABLE I: RAILROAD STATISTICAL HIGHLIGHTS**

| ITEM | 1979 FY | 1978 FY | % CHANGE |
|---|---|---|---|
| Total Revenues (million $) | 25.2 | 29 | - 13.4 |
| Total Expenses (million $) | 31.8 | [illegible] | - 5.5 |
| Gain (Loss) (million $): | | | |
| Before Depreciation (gross) | (3.4) | (1.3) | -151.8 |
| After Depreciation (net) | (6.6) | (4.5) | - 45.3 |
| Capital and Major Maintenance Program (million $) | 9.4 | 3.6 | +161.1 |
| Average No. Employees | 648 | 753 | - 13.9 |
| Freight: | | | |
| Revenue (million $) | 18.2 | 23 | - 21 |
| Revenue-Tons Carried (million) | 1.8 | 2.2 | - 16.9 |
| Revenue Ton-Miles (million) | 257 | 330 | - 22.1 |
| Revenue per Ton-Mile (cents) | 7.1 | 7 | + 1.4 |
| Average Distance Carried (miles) | 142 | 152 | - 6.6 |
| Carloads Handled | 36,499 | 40,557 | - 10 |
| Total Train-Miles (thousand) | 370 | 375 | - 1.4 |
| Passengers: | | | |
| Revenue (million $) | 1.6 | 1.2 | + 35.3 |
| Miles (million) | 13.8 | 12 | + 15.5 |
| Gross Ton-Miles (million) | 878 | 915 | - 4.8 |

**TABLE II: FREIGHT TRAFFIC BY COMMODITY**

| COMMODITY | 1979 FY | 1978 FY | % CHANGE |
|---|---|---|---|
| Revenue Tons Carried (thousand): | | | |
| Sand & Gravel | 637.5 | 727.2 | -12.3 |
| Coal | 523.9 | 593.3 | -11.7 |
| Manufactures & Misc. | 276.9 | 307.8 | -10.0 |
| Petroleum, Oil, Lubricants | 219.6 | 373.9 | -41.3 |
| TOFC/COFC (Piggyback) | 88.7 | 99.5 | -10.9 |
| Products of Forests | 55.2 | 67.8 | -18.6 |
| Products of Agriculture | 7.1 | 8.2 | -13.4 |
| Total Tonnage | 1,808.9 | 2,177.7 | -16.9 |
| Revenue Dollars (thousands): | | | |
| Sand & Gravel | $ 1,009 | $ 972 | + 3.8 |
| Coal | 3,207 | 3,507 | - 8.6 |
| Manufactures & Misc. | 6,738 | 8,413 | -19.9 |
| Petroleum, Oil, Lubricants | 3,877 | 6,362 | -39.1 |
| TOFC/COFC (Piggyback) | 2,327 | 2,484 | - 4.4 |
| Products of Forests | 886 | 1,231 | -28.0 |
| Products of Agriculture | 114 | 72 | +58.3 |
| Total Revenue | $18,158 | $22,991 | -21.0 |

The Railroad's working ratio (expense/revenue, excluding depreciation) was 123 percent, up from 110 percent in FY 1978. Although expenses of all three operating departments—Transportation, Engineering, and Mechanical—were $2 million less than expenses incurred in FY 1978, the 21-percent drop in freight revenues more than offset the economies.

The FY 1979 breakdown of revenues and expenses by percentages is shown in Figure 1. Freight revenues constituted 72 percent of total revenues, with the remaining 28 percent accruing from other than freight movements.

The capital and major maintenance program rose sharply because of the $6.3 million appropriation by Congress for repairs to the Railroad's Seward and Whittier dock facilities.

Table III shows revenues, expenses, gains (losses), and cash flow for each quarter of fiscal years 1978–79. It reflects the declines in traffic which occur during the winter months, and the increases which occur during the summer months.

Although expenses are closely controlled and monitored, the Railroad will probably not show a profit until the construction equipment and material for the natural gas pipeline start to move into Alaska.

**TABLE III: QUARTERLY FINANCIAL RESULTS FISCAL YEARS 1978–79 (Million dollars)**

| QUARTER | REVENUE | EXPENSE | GAIN (LOSS) | CASH FLOW |
|---|---|---|---|---|
| FY 1978: | | | | |
| 1 | $ 7.1 | $ 8.9 | $(1.8) | $(1.0) |
| 2 | 5.7 | 8.3 | (2.6) | (1.8) |
| 3 | 7.1 | 8.4 | (1.3) | (0.5) |
| 4 | 9.2 | 8.0 | 1.2 | 2.0 |
| Total Oct. 1977-Sept. 1978 | $29.1 | $33.6 | $(4.5) | $(1.3) |
| FY 1979: | | | | |
| 1 | $ 5.4 | $ 7.9 | $(2.5) | $(1.7) |
| 2 | 5.7 | 7.7 | (2.0) | (1.2) |
| 3 | 6.7 | 8.2 | (1.5) | (0.7) |
| 4 | 7.4 | 8.0 | (0.6) | 0.2 |
| Total Oct. 1978-Sept 1979 | $25.2 | $31.8 | $(6.6) | $(3.4) |

The Railroad is taking active measures to reduce expenses further while continuing essential service to the public. Rising costs will continue to have a detrimental effect on the financial situation in FY 1980. The perennial deficits from passenger service will be offset in FY 1980 by an agreement recently signed by the Railroad and the State to cover losses associated with the Whittier shuttle service, and by a Federal appropriation which included $1.5 million for the Anchorage-Fairbanks passenger service.

To build community and shipper awareness of the Railroad, the Railroad, with the support of the State and the numerous communities along the Railbelt, celebrated Alaska Railroad Week from September 10 through 16. The following noteworthy events took place: the Railroad ran special trains; a poster was produced; officials gave speeches; an Anchorage newspaper prepared a special section on the Railroad; the Anchorage museum presented an exhibit; and communities sponsored a variety of special events.

Since the Government of the State of Alaska has substantial surplus funds because of the growth of oil revenues, the Federal Government believes that ownership of The Alaska Railroad should be with the State Government. The Federal Government believes that The Alaska Railroad exists primarily for the benefit of the residents and shippers in Alaska; they need and deserve a much larger voice in determining the role that they want the railroad to play.

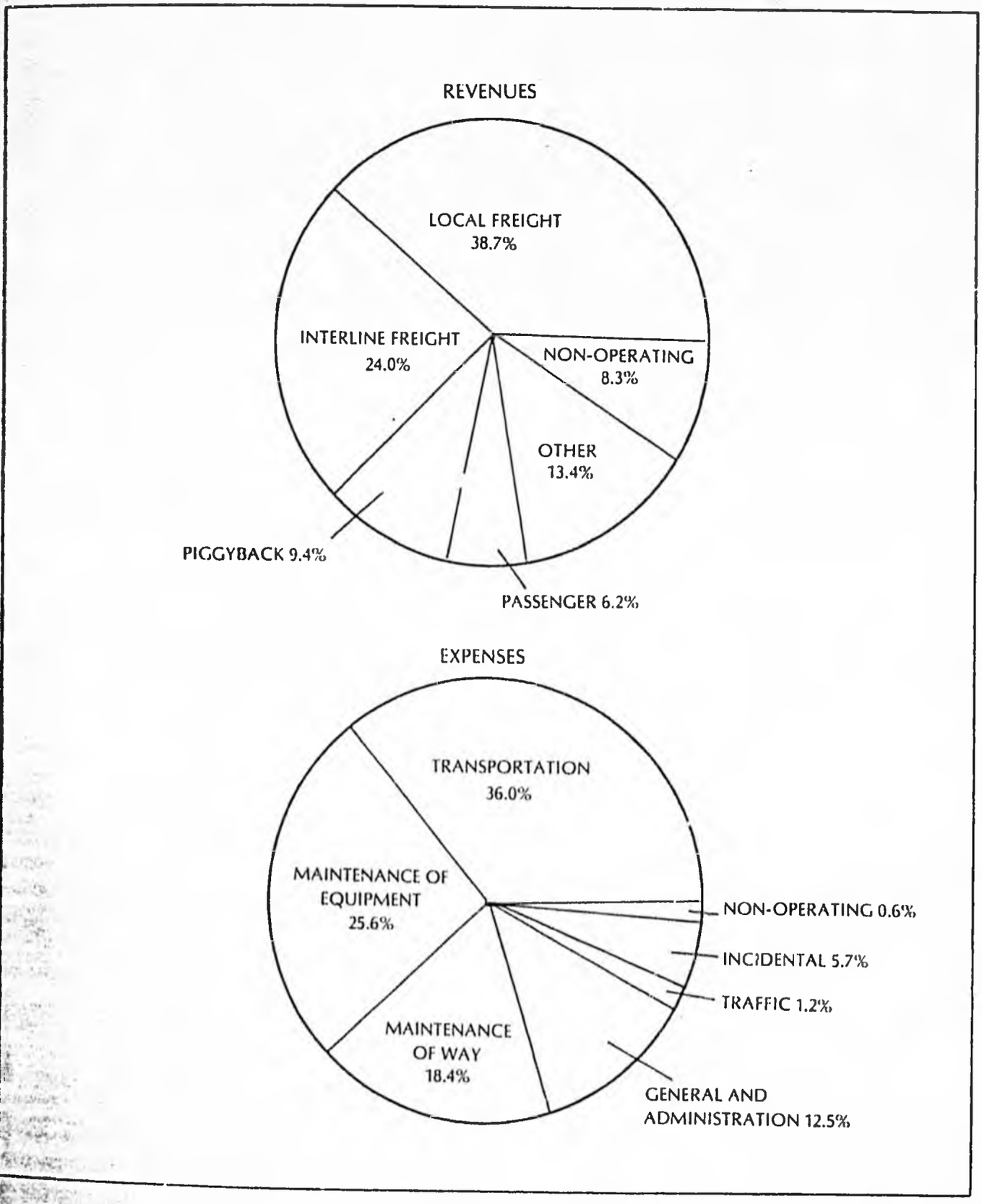



**FIGURE 1: FY 1979 TOTAL REVENUES AND EXPENSES.**

# Financial

The following four financial statements (Tables V through VIII) describe the financial situation of The Alaska Railroad.

**TABLE V: STATEMENT OF INCOME**
**FISCAL YEARS 1978-79**
**(Thousand dollars)**

| CATEGORY | 1979 | 1978 |
|---|---|---|
| Operating Revenues (Note 3): | | |
| Freight | $18,158 | $22,991 |
| Passenger | 1,564 | 1,156 |
| Other (Note 17) | 3,378 | 3,293 |
| | $23,100 | $27,440 |
| Operating Expenses (1) (Note 4): | | |
| Maintenance of Way & Structures (Note 5) | $ 5,235 | $ 6,154 |
| Maintenance of Equipment | 7,845 | 8,576 |
| Transportation | 11,821 | 12,123 |
| Traffic Management | 470 | 421 |
| Incidental | 1,937 | 1,889 |
| General and Administration (Note 6) | 4,256 | 4,249 |
| | $31,564 | $33,412 |
| Income (Loss) from Operations | (8,464) | (5,972) |
| Non-operating Properties (Note 18): | | |
| Income (2) | 2,081 | 1,651 |
| Less Expense (1) | 204 | 213 |
| Net | 1,877 | 1,438 |
| Net Gain (Loss): | | |
| Less Extraordinary Item: | $ (6,587) | $ (4,534) |
| Deferred Outlays (Note 7) | 40 | 543 |
| Adjusted Net Gain (Loss) | $ (6,627) | $ (5,077) |
| (1) Depreciation included in Expenses (Note 8) | $ 3,219 | $ 3,196 |
| (2) Income foregone because of PL 95-611 delaying implementation of fair market value rents | $ 300 | |

Notes follow Table VIII.

# Financial

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**(Thousand dollars)**

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| Net | 1,877 | 1,438 |
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| Deferred Outlays (Note 7) | 40 | 543 |
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| (2) Income foregone because of PL 95-611 delaying implementation of fair market value rents | $ 300 | |

Notes follow Table VIII.

## TABLE VI: BALANCE SHEET
## SEPTEMBER 30, 1978-79
## (Thousand dollars)

| CATEGORY | 1979 | 1978 |
|---|---|---|
| Assets: | | |
| Current Assets: | | |
| Cash (Note 9) | $ 5,225 | $ 5,714 |
| Trust and Deposit Funds (Note 10) | 63 | 87 |
| Accounts Receivable | 6,791 | 9,724 |
| Materials and Supplies (Note 11) | 6,339 | 6,578 |
| Prepaid Expenses | 83 | — |
| | $ 18,501 | $ 22,103 |
| Properties: | | |
| Land (Note 12) | 618 | 433 |
| Buildings | 12,389 | 12,151 |
| Roadway Structures & Facilities | 110,689 | 108,828 |
| Equipment | 41,330 | 40,926 |
| Non-operating Property | 3,932 | 3,542 |
| Total Properties | 168,958 | 165,880 |
| Less Accumulated Depreciation: | 49,587 | 46,766 |
| Properties—Net | 119,371 | 119,114 |
| Additions and Betterments in Progress (Note 13) | 11,759 | 7,305 |
| | 131,130 | 126,419 |
| Other Assets and Deferred Charges | 1,748 | 1,743 |
| Total Assets | $151,379 | $150,265 |
| Liabilities & Proprietary Interest of the U.S. Government: | | |
| Current Liabilities: | $ 1,615 | $ 1,607 |
| Accounts Payable | 1,325 | 1,468 |
| Accrued Payrolls Payable | 63 | 87 |
| Trust and Deposit Funds (Note 10) | 3,003 | 3,162 |
| Provision for Employees Annual Leave (Note 14) | (2) | 1,108 |
| Other Liabilities and Unadjusted Credits | 936 | 1,234 |
| Total Liabilities | 3,937 | 5,504 |
| Proprietary Interest (Note 15): | | |
| Net Investment | 167,603 | 158,294 |
| Retained Earnings from July 1, 1954 | (13,534) | (8,456) |
| Current Year Operating Results | (6,627) | (5,077) |
| Total Proprietary Interest (Note 15) | 147,442 | 144,761 |
| Total Liabilities and Proprietary Interest | $151,379 | $150,265 |

Notes follow Table VIII.

## TABLE VII: STATEMENT OF CHANGES IN FINANCIAL POSITION
## FISCAL YEARS 1978–79
## (Thousand dollars)

| FUNDS | 1979 | 1978 |
|---|---|---|
| Funds Were Provided by: | | |
| Revenues and Other Receipts | $ 25,290 | $ 29,135 |
| Appropriations from Congress (Note 16) | 9,300 | 3,000 |
| Total Funds Provided | 34,590 | 32,135 |
| Funds Were Used for: | | |
| Labor | 22,138 | 23,713 |
| Other | 5,445 | 4,356 |
| Capital Improvements & Replacements | 8,181 | 5,823 |
| Total Funds Used | 35,764 | 33,892 |
| Increase (Decrease) in Government Equity | (1,173) | (1,757) |
| Other Increases (Decreases): | | |
| Undelivered Orders | (705) | (2,176) |
| Supplies and Materials | (157) | 210 |
| Properties | 4,711 | 2,066 |
| Other | 5 | (236) |
| Total, Other | 3,854 | (136) |
| Total Increase (Decrease) in Government Equity | $ 2,681 | $ (1,893) |
| Proprietary Interest: | | |
| Beginning Balance | $144,761 | $146,654 |
| Increase (Decrease) | 2,681 | (1,893) |
| Ending Balance (Note 15) | $147,442 | $144,761 |

Notes follow Table VIII.

**TABLE VIII: FIVE-YEAR CONDENSED SUMMARY OF OPERATIONS**
**FISCAL YEARS 1975-79**
**(Thousand dollars)**

| CATEGORY | 1979 | 1978 | 1977 | 1976 TQ (Note 2) | 1976 JUNE 30 | 1975 |
|---|---|---|---|---|---|---|
| Operating Revenues | $23,100 | $27,440 | $33,376 | $ 9,737 | $52 517 | $41,416 |
| Operating Expenses | 31,564 | 33,412 | 35,727 | 11,129 | 49,406 | 36,208 |
| Income from Operations | (8,464) | (5,972) | (2,351) | (1,392) | 3,111 | 5,208 |
| Non-operating Properties (Note 18): | | | | | | |
| Income | 2,081 | 1,651 | 1,646 | 314 | 1,161 | 871 |
| Expense | 204 | 213 | 255 | 35 | 191 | 272 |
| Non-operating Gain (Loss) | 1,877 | 1,438 | 1,391 | 279 | 970 | 599 |
| Net Gain or Loss | $ (6,587) | $ (4,534) | $ (960) | $ (1,113) | $ 4,081 | $ 5,807 |
| Less Extraordinary Item: | | | | | | |
| Deferred Outlays (Note 7) | 40 | 543 | 809 | 917 | 1,038 | — |
| Adjusted Net Gain (Loss) | $ (6,627) | $ (5,077) | $ (1,769) | $ (2,030) | $ 3,043 | $ 5,807 |
| Operating Ratio | 136.64% | 121.76% | 107.04% | 114.30% | 94.08% | 87.43% |
| Working Ratio (Excludes Depreciation) | 122.71% | 110.12% | 97.69% | 107.02% | 89.26% | 81.66% |

Notes follow Table VIII.

## NOTES TO FINANCIAL STATEMENTS

### 1. Summary of Significant Accounting Policies

The Alaska Railroad utilizes generally accepted principles, standards, and related requirements of governmental accounting as approved by the Comptroller General of the United States. Operations are conducted in a manner consistent with related commercial enterprises and, at the same time, in conformance with the requirements incumbent upon a Government agency.

In accordance with the customary practice of the industry, the Railroad uses betterment and retirement accounting instead of depreciation accounting for roadbed and track. Under this concept, prescribed by the Interstate Commerce Commission, the cost of replacing track structure—less salvage recovered—is charged to the appropriate operating expense account and only the cost of betterments is capitalized. The amounts capitalized are not depreciated; but, upon retirement of track structure, the entire amounts capitalized—less salvage recovered—are charged to expense.

The accounting system and related procedures disclose financial condition and operating results to provide full acountability of the Government's investment in the Railroad and to afford management the necessary data to carry out its responsibility in the most efficient and economical manner.

The Railroad is financed from a revolving fund that bears the expenses of operating the Railroad, including incidental or collateral functions, and accrues revenues commensurate with such expenses by charging its customers for service performed.

### 2. Transition Quarter

In 1976, as the Federal Government changed to a new fiscal year, a transition quarter (TQ) was placed between fiscal year 1976 and fiscal year 1977. Commencing FY 1977, fiscal years end September 30 of the corresponding calendar year instead of June 30. The financial statements and text of this annual report are designed to clarify this change in fiscal years and avoid any misunderstanding. All financial statements show exact dates of the periods covered.

### 3. Revenues

By the assessment of the applicable tariff or contract rate for the service performed, revenues from rail operations are included in income on an accrual basis upon the completion of service.

### 4. Expenses

Expenses are accrued or applied or both on a basis consistent with generally accepted accounting principles.

## 5. Maintenance of Way and Structures

Maintenance of way and structures include expenses incurred by engineering ($4,718,000) and communications ($517,000).

## 6. General and Administration

General and administration include expenses under: general and administrative ($3,681,000); operations division ($296,000); loss on excess current inventories ($8,000); and prior-year adjustments ($271,000).

## 7. Deferred Outlays

Deferred outlays include projects for which appropriated funds are used, but are not capitalized as fixed assets until completion

## 8. Depreciation

Provisions for depreciation are computed principally on the straightline method based on estimated service lives of depreciated properties, except for the railway track structure, which is computed under the generally accepted industry betterment method. Depreciation charges are determined through use of composite, or group, rates applicable to various classes of property.

The following is a breakdown of depreciation by major property accounts in FY 1979:

| | (Thousand dollars) |
|---|---|
| Buildings | $ 322 |
| Other structures & facilities | 703 |
| Equipment | 1,957 |
| Communications | 142 |
| Riverboats | 94 |
| Other | 1 |
| Total | $3,219 |

## 9. Cash

Cash refers to the fund balance with the U.S. Treasury, which is the net amount of cash receipts, e.g., revenues, proceeds from sales and amounts of congressional appropriations, less disbursement.

## 10. Trust and Deposit Funds

Trust and deposit funds include special deposits and other collections that are not covered by the revolving fund and are cleared by disbursement or transfer, as appropriate. A contra account to this asset account is reflected in the liability section.

## 11. Materials and Supplies

Inventories, consisting primarily of replacement or repair parts for equipment and road property, construction materials, and fuel, are valued at average cost, including freight.

## 12. Land

Land includes only property purchased by the Railroad in fee simple from private owners and carried at acquisition cost. The Railroad owns over 38,000 acres that are withdrawn from the public domain at no cost, and this land is not included in the financial records.

## 13. Additions and Betterments in Progress

This is a control account for authorized capital projects during the period of construction or procurement. Upon completion of the capital project, the related costs are transferred into the appropriate fixed asset property account.

## 14. Provision for Employees' Annual Leave

Provision for employees' annual leave includes the estimated liability for annual leave accruals earned and the charges for annual leave taken.

## 15. Proprietary Interest of the U.S. Government

The proprietary interest is designed to show the Federal Government's net interest in The Alaska Railroad. At the end of FY 1979, it is summarized as follows:

| | (Thousand dollars) |
|---|---|
| Appropriation by Congress | $226,596 |
| Allotments from other agencies, sale of lots, etc. | 1,724 |
| Property transferred or donated (not public domain) | 19,785 |
| Earthquake losses | (16,738) |
| Deficits from operations and capital losses to June 30, 1954 | (63,764) |
| Retained earnings (July 1, 1954, to Sept. 30, 1978) | (13,534) |
| FY 1979 operating results | (6,627) |
| Total proprietary interest of the U.S. Government | $147,442 |

## 16. Congressional Appropriations

Funds appropriated by Congress were obligated within the fiscal year, as shown below:

| | (Million dollars) | |
|---|---|---|
| | FY 79 | FY 78 |
| Congressional appropriations received | $9.3 | $3.0 |
| Obligated during fiscal year | 7.7 | 3.0 |
| Amount unobligated at end of fiscal year | 1.6 | 0.0 |

## 17. Other Operating Revenues

Other operating revenues include operating revenues that were neither freight nor passenger. Individual accounts exceeding $100,000 in FY 1979 were:

| | (Thousand dollars) |
|---|---|
| Work performed for others—reimbursements | $1,234 |
| Equipment rentals | 479 |
| Switching | 340 |
| Whittier shuttle-vehicles only | 268 |
| Wharfage and handling | 150 |
| Mail | 107 |
| Demurrage | 104 |
| All other | 676 |
| Total | $3,378 |

## 18. Non-operating Properties

Non-operating properties include income and expense from other than railroad operating accounts. Non-operating incomes in FY 1979 were:

| | (Thousand dollars) |
|---|---|
| Land | $1,600 |
| Riverboats | 256 |
| Buildings | 186 |
| All other | 39 |
| Total | $2,081 |

Non-operating expenses in FY 1979 were:

| | (Thousand dollars) |
|---|---|
| Buildings | $106 |
| Riverboats | 97 |
| All other | 1 |
| Total | $204 |

AMENDMENT

~~MEMORANDUM~~

TO: Members, Senate Transportation Committee

FROM: Alaska Railroad Staff Work Group

RE: Additional Amendments to Committee Substitute (new ** draft)

DATE: April 12, 1982

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This new ** draft before you today reflects the changes adopted by the Committee on April 8, 1982. Additional changes have been incorporated following review of materials submitted by the management of the Alaska Railroad and of concerns raised by the House Committee. These additional changes (other than purely technical ones) are:

1) deleting the words "in . . . capital improvements" on page 3;

2) adding an ex officio, nonvoting board member who represents the labor organizations at the railroad on page 5;

3) clarifying conditions of the appointment of a rail executive to the board on page 5;

4) requiring that at least four members of the board reside in areas served by the railroad, also on page 5;

5) adding the words "or the state" on page 6 to be consistent with the federal transfer legislation;

6) changing the term for board members to five years and adjusting the staggering of initial board member terms

appropriately on page 7;

7) reducing board member compensation from $400 to $300 per day on page 7;

8) eliminating approval by the governor of appointment of the authority chief executive officer but retaining it, for competence, of the legal counsel on page 8;

9) eliminating the cross-reference to A.S. 44.62.312 on page 14 (Section 312 is a policy statement which is unnecessary and may be confusing);

10) adding the words "or to" on page 21 to ensure protection of authority property; and

11) reducing the time limits on gubernatorial (from 60 to 45 days) and legislative (from 90 to 60 days) review of proposed authority actions on page 42.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

These are changes to clean draft of bill.

Authority Operation of Federal Railroad

On page 6, line 2, following the word "legislation" and on page 51, line 23, following the word "legislation" add:

or upon approval by the legislature of operation of the Federal Alaska Railroad by the authority.

## Coal Utilization

1) On page 25, line 18, delete the word "and" and insert a comma in its place.

2) On page 25, line 19, add the following after "materials" and before "on": ", and coal"

3) On page 27, line 19, add the following after "use" and before "sand": "for its purposes"

4) On page 27, line 20, delete the word "and" and insert a comma in its place; and add the following after "materials" and before "on": "and coal"

5) On page 28, line 23, add a new subsection 42.40.510(f) as follows:

> (f). Before the authority extracts or utilizes coal on lands in which it owns an interest, as authorized by A.S.42.40.500(b) and (b) of this section, it will submit a request for authorization to do so to the department of natural resources. Within 45 days of receiving the request, the department of natural resources will approve the request if it determines that the coal described in the request is located on lands in which the authority owns an interest and is not subject to valid existing rights of a third party. The title to all coal on lands in which the authority owns an interest is in the State of Alaska until the coal is severed from the land and utilized by the authority under this subsection or otherwise disposed of in accordance with A.S. 38.05.150 and A.S. 42.40.515. The authority may use coal made available to it under this chapter for operational, non-income producing purposes only, including the generation of power to support operations and compensation in kind of a person with whom the authority contracts to extract coal.

## Elimination of Conveyance of Subsurface to State

1) On page 25, lines 11-25, delete subsection 42.40.500(b) in its entirety and renumber subsections accordingly.

2) On page 29, line 21, add following the word "development" the words "and conveys to the state the necessary interest"

3) If the coal utilization amendment is adopted, delete from A.S. 42.40.510(f) the words "A.S. 42.40.500(b) and"

## Elimination of Strike Prohibition

On page 45, line 15, delete the comma and insert in lieu thereof a period; delete the phrase

"and the authority's employees are classified as employees under A.S. 23.40.200(a)(1)."

## Private Management

1) On page 8, line 28, add a new subsection 42.40.250(b) as follows:

   (b) Notwithstanding subsection (a), the board may provide for, in a manner consistent with the purposes of this chapter and subject to the approval of the state as provided in A.S. 42.40.700, the management and operation of the railroad by a third-party contractor.

2) On page 18, line 25, add following the word "undertake," the words "or provide for"

3) On page 40, line 6, delete the word "or"

4) On page 40, line 9, following "($5,000,000);" add the word "or"

5) On page 40, line 10, add a new paragraph (4):

   (4) provision for the management and operation of the railroad by a third-party contractor

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COPY COMMITTEE MEMBERS

# STATE OF ALASKA
# THE LEGISLATURE
## LEGISLATIVE AFFAIRS AGENCY

POUCH Y · STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

M E M O R A N D U M April 7, 1981

SUBJECT: Alaska Railroad Authority
(Work Order No. 12-1364)

TO: Senator Bill Ray

FROM: Thomas A. Sofo TAS
Legislative Counsel

You have requested that this office undertake a section-by-section analysis of SB 212 and SB 221 with notations of any differences which exist between the two bills. Both bills create an Alaska Railroad Authority. SB 212 and SB 221 share more parallel provisions than they do differences. In the interest of economy of time and effort, I have attempted to summarize the main differences which exist between the two bills since this seems to be most salient feature of your request. I do not believe that one will encounter much difficulty in understanding what a given section of either bill says, but I am aware that there is some need to be able to compare differences between the two bills. I have undertaken that comparison in narrative form below. You may find that future reference would be facilitated if the format of this memo is changed into some sort of graphic presentation.

Both bills create the Alaska Railroad Authority as a public corporation of the state. However, the composition of the governing board varies. Under SB 212, the board consists of at least one banker, one attorney, one economist, one transportation person, and one business person [sec. 42.40.030.]. Under SB 221, the board consists of the commissioner of transportation and public facilities, two senators, two representatives and two members of the general public [sec. 44.87.015]. Only SB 212 specifically sets out a conflict of interest section [sec. 42.40.050]. SB 221 calls for the employment of an executive director to manage the authority [sec. 44.87.025], while SB 212 gives this job to

the president [sec. 42.40.100]. The general powers of the authority under both bills are practically identical. One of the purposes of the authority under SB 221 is to enter into talks with the federal government and Canadian provinces regarding an international rail connection [sec. 44.-87.030]. Nowhere is this expressly mentioned in SB 212 although this purpose could be implied easily under sec. 42.40.120. Only SB 212 expressly calls for an annual report [sec. 42.40.120], and audit [sec. 42.40.150].

The financial provisions of both bills are similar. SB 212 differs as it provides for bond anticipation notes [sec. 42.-40.160(b)]. SB 221 provides for a maximum forty year maturity for authority bonds [sec. 44.87.040(b)], while SB 212 calls for a fifty-year maximum [sec. 42.40.150(c)]. SB 212 goes into much more detail when describing the resolution which authorizes the issuance of bonds [sec. 42.40.160(f)], than does SB 221 [sec. 44.87.040(b)]. Only SB 212 calls for an independent financial advisor [sec. 42.40.170]. SB 221 specifically refers to trust indentures and trust agreements and provides that an issue of bonds may be secured by such instruments while SB 212 is silent on this point[sec. 44.-87.045]. SB 212, unlike SB 221, provides for the issuance of refunding bonds [sec. 42.40.220]. Only SB 212 provides for the dissolution of the authority [sec. 42.40.270], and for the exemption of authority personnel from the State Personnel Act [sec. 42.40.280]. The last substantive difference in the financial provisions of these two bills is that only SB 221 expressly states that income from investments of the authority is limited to maintenance or improvement of railroad facilities [sec. 44.87.075].

Call me at your convenience if you have any problems with understanding the content of a specific section beyond the differences identified by this comparison.

TAS:ljb

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Official Business

# Alaska State Legislature

## Senate

### Office of the President

Pouch V
State Capitol
Juneau, Alaska 99811

M E M O R A N D U M

TO : COMMITTEE MEMBERS
SENATE TRANSPORTATION COMMITTEE

FROM : SENATOR JAY KERTTULA

DATE : APRIL 12, 1982

SUBJECT: REQUESTED AMENDMENTS TO SB 212
FROM FRANK JONES

The attached information which was provided by Frank Jones, Manager, Alaska Railroad, are the same recommendations that were made to staff over two weeks ago. Many of these suggestions have been incorporated in the most recent version of SB 212.

JK/gt/aj

Pages 3 & 4

Where the Railroad is described as a "public authority," lines 2 and 7 on page 3 and lines 10, 19 through 21 and line 24 on page 4, the word "public" should be deleted.

The word "public" implies a government function. It emphasizes the governmental characteristics of the Railroad to the detriment of the business aspects of the authority. However, the authority is not performing normal governmental functions, but it is instead performing transportation services ordinarily in the private sector of the economy. The authority should be more like a business than a governmental entity; should have flexibility to meet changing conditions; should be free of political interference where normal operations are concerned, and should have the assets that lower 48 railroads have. However, the word "public" connotes the opposite of the above. It connotes an inefficient government bureaucracy rather than a more efficient business. It connotes possible political interferences.

Line 16

The authority should be allowed the flexibility of either issuing tax free obligations or to be taxable obligations. The authority may be able to issue taxable bonds similar to those issued by transportation companies, such as airlines, railroads and trucking firms at better interest rates simply because the the financial markets are familiar with such bonds, whereas the financial markets may stay away from the tax free bonds of an unique quasi-governmental railroad authority not backed by the financial strength behind the State of Alaska.

Lines 17 & 18 — In order that the state's transportation industry remain competetive but healthy, the authority should be run as much as possible like any other private transportation business.

Line 22 — The authority should be given the flexibility to be supported by means other than state investment.

Line 29 — The authority should be given broad flexible powers to meet the changes that future decades are sure to produce. The authority should be allowed to invest its funds to maximize its income until the principal and interest are needed.

The Railroad, because of its emphasis on the business orientation of the new Railroad authority, suggests that the board appointed by the Governor should have a greater business, rather than governmental, flavor. Therefore it suggests that the only government person on the board be the highest official in the Executive Branch. This lends a greater credence to the stature of the Railroad as an entity of State government. The Railroad feels that it can function as a profit-making asset in the stable of assets serving under the seal of the State of Alaska. It will take in revenues in excess of $50 million this year alone, and has over 500 employees. It is the transportation connecting link between ice-free tidewater and the interior of Alaska, and 70% of the population of the State lives in the railbelt. Therefore, the Governor of the State should serve on its board. Along with the Governor, the Chief Executive officer of the Railroad should serve on the board as do most CEO's in private firms serve on their boards of directors. Morever, a labor respresentative should be on the board to represent the labor side of railroading. Progressive business organizations recognize the importance of labor to well run organizations.

Lines 4-16

The Railroad has certain reservations about the way the hiring and firing and compensation are structured. The Railroad feels that the board should appoint the Chief Executive Officer and the CEO should appoint all other employees and fix their compensation. If the Railroad is not successful, the board should get another CEO.

However, one important comment should be made regarding the limitation of executive salary to that salary established for departmental commissioners. Presently there are 11 executive officials of The Alaska Railroad who make in excess of $50,000 base pay a year, plus 17-1/2%, soon to be raised to a 22-1/2% cost of living allowance. If it is assumed that all executive officials are within the federal tax bracket of 50%. It can be assumed that COLA, which is tax free, when equated to taxable income would then be doubled. Therefore, these 11 executive officials presently have a taxable income of $70,000 to $90,000, which is in excess of a commissioner's salary. All of these executives have expressed their concerns in accepting a 20% - 30% reduction and indicated they would circulate their resumes and seek other employment. This action would adversely affect the new authority. The loss of experienced executives could have a serious affect on the State.

Section 42.40.250 originally had subsection (b) which would allow the Railroad to be managed by a private contractor. This power has been deleted from the new SB 212. Even the Railroad's 1914 Enabling Act allowed for the operating of the Railroad by a private contractor. It is suggested that lanuage be included that would permit private contractor operation if the Board so deemed.

Pages 10-12

Lines 9-30 on

It is believed unecessary, as part of this statute, to laboriously reiterate detailed provisions for conflicts of interest, when there is presently a state statute on conflict of interests and the modification suggested by the railroad adequately covers this matter. If it is the opinion of the Legislature the State Conflict of Interest Act is not strong enough, that act, not the railroad act, should be amended. The railroad act should be as succinct as possible, not detailed and inflexible.

Lines 19-29 The railroad suggests a modification of the requirement for public board meetings. The railroad suggests that the executive sessions of the board should be allowed regarding all of the corporate powers given to the authority by this Act. All discussions by the board regarding all business decisions vis vis the corporate powers should be conductable by the board in executive session. This does not mean that they must discuss these powers within an executive session, but merely have the authority to do so when necessary.

Obviously any discussion of tariffs, divisions and contract rates should fall within the power of the board to discuss in executive sessions.

Because healthy competition brings down the cost of transportation services to the citizens of Alaska, the authority should be able to compete effectively against the rest of the transportation industry by holding its meetings in executive session. No board of any transportation company discusses strategy and assesses their own strength and weakness at meetings routinely open to their competitors.

Lines 3 - 15 There are presently existing 143 volumes with 469 supplemental orders of Railroad Rules and Regulations. This requirement of review is a monumental task which will require considerable unnecessary immediate expenses on behalf of the Railroad. This requirement of change in Rules does not aid the Railroads ability to function. The Railroad and the State would be best served by continuing the existing Rules and Regulations if they are not inconsistent with this chapter and State law until it becomes necessary through Railroad operations to change these Rules and Regulations.

Lines 23-30 - The railroad, in its business function must be afforded specific protections from disclosure not required by other agencies. The reason for this is that the transportation industry, whether it be railroads or ships or planes or trucks, is both competitive and overwhelmingly private. Because the transportation industry is competitive, the authority should not have to disclose information helpful to competitors.

Our suggested language provides such protections, while still bringing the railroad within the requirements of A.S. 09.25.110-.120.

Therefore, to maintain a competitive and healthy Alaska transportation industry, the above changes should be made.

Line 9 — Conforms with suggested (a) on Page 15.

Line 13 — 42.40.400 - GENERAL POWERS, should read the "Board of Directors, by its own undertaking, or by appropriate delegation to the Chief Executive Office, may" rather than "The Authority may." This change will make the line of power much clearer. The "Authority" is the ultimate entity but all powers and duties should be granted to either the Board of Directors of the "Authority" or the C.E.O. There should be a new paragraph placed in the Bill granting the power to the Board of Directors to assign to the C.E.O. such corporate powers as, in the Board of Directors' opinion, would best serve the business of The Alaska Railroad.

Lines 17 - 18 — (4) This subsection is potentially in conflict with 42.40.250 as currently written. 42.40.250 as currently written gives the Board of Directors, with the approval of the Governor, the power to appoint the C.E.O. and the legal counsel, and all executive officers serve at the pleasure of the Board of Directors. The powers set forth in 42.40.400 as rewritten by the Railroad on line 13 are clearer and less cluttered, and can be assigned to the C.E.O.

Line 19 — Subsection (5) runs contrary to 42.42.450 as rewritten by the Railroad or is redundant to 42.42.450, as currently written. To structure the authority like a business, the Chief Executive Officer should have the power to hire the legal counsel.

Line 6 — The word "Authority" should be changed to "board."

Line 9-10 — (17) It should read "lend the authority's funds, property, credit or services for authority purposes."

Line 25

Between the word "on" and the work "property" the phrase "or to" should be inserted. The change is requested to allow the security force to act as state law enforcement officers for violations that occur to property owned, managed or transported by the authority but that do not occur on property owned, managed or transported by the authority.

Line 29-30

Lines 29 - 30 of page 20 and lines 1 - 12 of page 21 should be stricken. Both the Governor and the Legislative Auditors are inexperienced in railroad accounting, in transportation law such as the Interstate Commerce Act, and in business practices as opposed to governmental practices. As a result, information of a confidential nature is subject to leakage without the safeguards of a fiduciary relationship between an accounting firm and the authority. The Railroad believes information in the hands of either the legislative or governor auditor would not remain confidential. Most business contracts are made in private rather than in the press. In fact, publication of business deals in the press often portend problems. If the Legislature and the Governor want access to audit information, they should either be given a voice along with the board in selecting the accounting firm or alternatively they should be allowed access through an independent certified accountant experienced in railroad accounting. Only the former alternative is presented in the suggested railroad changes to the bill.

The state would benefit by the above changes which structure the authority more like a business rather than a government bureaucracy. The structuring of the authority like a business helps maintain both an efficient competitive railroad authority and an efficient competetive transportation industry. Both are needed for a healthy Alaska economy. Moreover, the above changes would buffer the authority from political interference and influential constituents.

Line 22-28

42.40.425 (a) (1) should stop after the words "A.S. 37.07.050" on line 22. The Alaska Railroad should not be subject to legislative auditor and the division of budget and management unless the ARR is using State funds. An annual independent audit is recommended. 37.07.050 sets forth the requirements for "agency programs and financial plans." Nothing more need be said.

Therefore, the above deletion would help maintain a competitive efficient Alaskan transportation industry by structuring the authority more like a business and buffering it from political interference.

Lines 4 - 7 Subsection (2) should consist of the first sentence only. 47.07.060 requires the Governor to present long-range capital plans to the Legislature. The Railroad should be included in those plans that would aid the railroad in developing plans for long range capital improvements when any of those kinds of improvements must be financed by the Legislature and the Governors office.

Lines 11-25 Subsection (b) of 42.40.500 should be stricken. All of the Railroad land should be held intact until the reversionary period set forth in the Federal legislation is over. During this reversionary period, according to a draft of the Federal transfer legislation, land "converted to a use that would prevent the property from being used to operate or support the Railroad" would trigger either a reversion to the United States or a payment by the State of the value of the real property. If the Federals require a ten year period, then during that same period the legislators can determine whether they wish the Railroad to operate its own coal lands or the subsurface of all its lands or they wish the Commissioner of Natural Resources to do so. In the meantime, the State should take no action reducing the Railroad's interest in lands conveyed from the Federal Government.

The Railroad, during this debate, will argue for the control of the subsurface to its lands. The Alaska Railroad does have coal reserves the same as the Union Pacific Railroad, the Burlington Northern, Inc., and the Denver Rio Grande, etc. If the Alaska Railroad loses its mineral rights to the State, it would reduce the potential of the ARR to earn royalties to keep revenues above expenses and reduce the railroads potential of State subsidy funds. Also, the right to use the subsurface for rocks, sand and gravel and for tunnels, ditches, and other recontouring of land is important to the Railroad. Therefore, subsection (b) should be deleted to prevent <u>any</u> chance of essential railroad lands reverting to the Federal Government. Why expose crucial right of way land, gravel land, port land, and industrial land to any possibility of reversion? Moreover, subsurface gravel, rock and coal are needed to either produce income or lessen expenses (gravel for roadbeds) and thereby make the authority profitable so that it need not even ask for a

Lines 14-21 Subsection (f) of 42.40.500 should be deleted, because no interest in real property should be disposed of until after the termination of the Federal reversionary period during which time any land converted from possible railroad use either reverts to the United States or the State pays the United States the value of the real property.

Therefore, this subsection should be taken out, because the State should not place itself in the position of exposing itself to a high probability of the reversion of land to the United States if Railroad land is disposed of during the reversionary period.

Lines 20-30 All of subsection (c) of 42.40.510 should be stricken. There is no need for joint management of Railroad lands. Moreover, the joint use of Railroad lands could trigger either the reversion of land to the United States or the payment by the State of the value of the lands. During the reversionary period, the legislature should grant to the Railroad the right to control the land, whether it be the surface or subsurface.

Therefore, all of this subsection should be deleted so that the valuable land resources of The Alaska Railroad are not exposed to any possible danger, whether remote or inminent, of reversion back to the United States. These lands are crucial to rail transportation in Alaska. Moreover, joint management increases coordination expenses, to the authority and at the same time lessens the potential of the use of these lands to either produce income or lessen expenses, such as the gravel costs of roadbeds. If the Railroad is to be profit oriented then the Railroad should control its own lands.

Lines 10-11 The words "Chief Executive Officer" should replace the words "General Manager."

Lines 20-30 42.40.515 should be deleted until such time as the reversionary period set forth in the Federal statute is complete, because non-railroad uses of railroad lands could trigger the reversion of real property to the Federal government or the payment by the State of the value of the real property interest. During this same period, strenuous debate can be had with legislators, the Governor and the public as to the management and development of Railroad land. However, the authority should have the right to use or to develop natural resources on its lands so that its income will be greater than its expenses.

Therefore, this section should be deleted so that the valuable land resources of The Alaska Railroad are not exposed to any possible danger of reversion back to the Federal Government. These lands are irreplacable to rail transportation in Alaska. Moreover, the management of the subsistance of authority lands by the department of natural resources adds another level of bureaucracy before development of the lands to take place. Thus, department of natural resource management of authority lands could interfere with normal railroad uses of authority lands or delay or prevent the use of lands to produce income for the authority or to reduce the expenses of the authority.

Lines 24-26 Because this subsection (b) of 42.40.530 requires the Railroad to convey the subsurface estate to the State, the Railroad is prevented from using eminent domain to acquire subsurface resources such as coal, gravel, sand and rock.

Therefore, to develop the mineral and agricultural potential of Alaska, these three lines need to be deleted, because gravel, rock and sand are needed to build the roadbeds of new rail extensions. This would stymie development of the Railroad lands and therefore the Railroad.

Lines 1-4

Subsection (b) of this section 42.40.530 requires the subsurface estate to be reconveyed to the State so this subsection (e) would have no effect unless the subsurface or the gravel, sand and rock part of the subsurface could remain with the Railroad.

Therefore, to allow the Authority to have Eminent Domain to acquire gravel lands needed for expansion of the Railroad, Subsection (b) should be eliminated.

Lines 24-30 42.40.655 - The Board of Directors "may" instead of "shall maintain in full force and effect public liability insurance." The reason for this change is that the authority may find that the authority may not be able to obtain insurance at either any cost or a reasonable cost and therefore, it is more efficient to be its own insurer and defend its own tort lawsuits. It is a business decision, not a political one, and so should remain with the Railroad. If the ARR maintains public liablility insurance, any additional coverage required by the State naming the State as an additional insured should be funded by the State.

Therefore, the change here benefits the state by allowing the authority to operate like a business rather than imposing a border or the authority that may eventually lead it to request subsidization from the state.

Lines 21-25 The phrases "expansion, reduction or diversification of services" and "significant and permanent change in the level and nature of services" need to be clarified. The above two phrases are far too broad and can be interpretted to apply to expansions, reductions or diversifications of service due to normal business changes.

The State would benefit by the clarification because State review is not needed of expansions, reductions or diversifications of service due to normal business charges.

This might apply to a reduction in the service of the Whittier Shuttle or the winter reduction of trains to Fairbanks. It is not clear as drafted.

Lines 13-30 42.40.700 - Subsection (c) and (d) should be stricken as unnecessary. The review of any proposed action of the Railroad is unnecessary because the legislature and/or the Governor can, through resolution or legislative act or Governor's edict suggest changes or stop any action of the Railroad.

The power of the governor to intervene would make the authority a part of the executive branch government. For the benefit of the citizens of the State of Alaska, the authority should be operated as a business in competition with the rest of the transportation industry, which is in the private sector of the economy. The power of the governor to intervene would allow the governor the opportunity to award his political friends and punish his political enemies.

Similarly, the power of the legislature to intervene with respect to any "expansion, reduction or diversifi·ation of services"(an over broad phrase), would allow intervention on the basis of political reasons when only business considerations should be used.

Therefore, the deletion of 42.40.700 (c) & (d) would benefit the State by insulating the authority from harmful political pressure and thereby maintaining a healthy private transportation industry capable of healthy competition with the Railroad as well as each other.

Line 5 — Subsection (e) should be realphabetized to (c). The words "notwithstanding the foregoing" should be stricken because we have requested a deletion of the preceding paragraph.

Line 11 — "(c)" should be substituted for "(e)".

Lines 13-14 — These two lines should be deleted because we are asking that 42.40.710 be deleted.

Line 15 — "(2)" should be deleted, housekeeping amendment.

Line 18 on — 42.40.710 should be stricken. All the Railroad would need would be a resolution passed by either house of the Legislature or a Governor's edict. The action forcing mechanism would make the authority more a part of the government than a business enterprise and subject the authority to railroad decisions made on a political basis rather than a business basis. The rest of the transportation is in the private sector of the economy so the government would be competing with private transportation companies on political grounds but with the resources behind the state government. The action forcing mechanism could allow the State to force the authority to charge unreasonably low land rents or low tariffs in direct competition with private land owners and private transportation companies. Politics should be separated from the day to day operations of the railroad authority. The operations of the railroad should be run by business considerations.

Therefore, the deletion of section 42.40.710 would affect the State by preventing the State from unfairly interjecting itself into the free enterprise and free market system.

Lines 9-30 and following page, lines 1-11

42.47.715 should be stricken under the same above reasoning. The operations of the railroad authority should be governed by business considerations rather than political ones so that it can compete fairly with private enterprise. On the other hand, the expansion of the railroad requiring state funds is a political decision.

Therefore, the striking out of Section 42.47.715 which set forth the Governors' intervention in control of the Railroad is really covered in Sec. 42.40.720 and is unnecessary. The power of the authority should be vested in the Board.

42.47.715 is really unnecessary if 720 remains in the Bill. 720 allows the government to get a court to impose a Trusteeship over the Railroad under circumtances similar to 715. Therefore, the State is amply protected and the deletion of 715 streamlines the Railroad operation and this Bill.

Lines 12-17 The Railroad requests that the word "Municipality" be deleted from any license or permit provision in this statute. The Railroad presently negotiates with a number of Municipalities regarding crossings, traffic signals, etc. If the Municipalities were granted authority to regulate the Railroads' passage through their boundaries, the Railroads' transportation of goods and services could be controlled and severely disrupted by Municipality control and Mayoral constituents.

Line 16 Chief Counsel has been incorrectly deleted from the definition of "Executive Officials."

Line 16 Chief Counsel has been incorrectly deleted from the definition of "Executive Officials."

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

# STATE OF ALASKA
# THE LEGISLATURE

## LEGISLATIVE AFFAIRS AGENCY

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

M E M O R A N D U M

February 26, 1981

SUBJECT: Sectional analysis of Alaska Railroad Authority Bill (Work Order Number 12-0866)

TO: Senator M. E. Dankworth

FROM: Randolph G. Berry
Legislative Counsel

In accordance with your request, the following is a section-by-section analysis of your bill establishing the Alaska Railroad Authority (Work Order No. 12-0093).

Sec. 1 of the bill:

Sec. 42.40.010 establishes the Alaska Railroad Authority as a public corporation within the Department of Transportation and Public Facilities.

Sec. 42.40.020 provides that the authority shall be governed by a board of directors.

Sec. 42.40.030 sets out the membership of the board of directors, the method of appointment, and qualifications of the members.

Sec. 42.40.040 provides for a four year term of office for directors and provisions for filling of vacancies.

Sec. 42.40.050 sets out procedures to be followed in the event of a conflict of interest by a member of the board of directors.

Sec. 42.40.050 provides for per diem and travel expenses for the directors.

Sec. 42.40.070 establishes the quorum for the board of directors.

FEB 26 1981

Sec. 42.40.080 provides that board meetings are public meetings.

Sec. 42.40.090 requires board to keep minutes of its meetings.

Sec. 42.40.100 allows the board to employ a president to manage the authority and sets out certain qualifications for the president.

Sec. 42.40.110 sets out the general powers of the authority, including operating authority and financial powers.

Sec. 42.40.120 provides that the authority shall provide for the operation of the Alaska Railroad, either operating the railroad itself or otherwise, and allows the authority to expand the operations of the railroad.

Sec. 42.40.130 provides that the board shall adopt and issue regulations pertaining to its operations and the operations of the railroad.

Sec. 42.40.140 requires the board to prepare and distribute an annual report.

Sec. 42.40.150 requires an annual audit of the authority by the legislative auditor or by an independent auditor acceptable to the legislative auditor.

Sec. 42.40.160 allows the authority to issue and sell bonds and notes to provide money for corporation purposes, including the operation, maintenance and expansion of the railroad; provides that these bonds and notes are payable from funds and assets of the corporation; allows the authority to determine the number, denomination and other matters relating to the issuance of bonds and notes; allows the authority to make pledges and guarantees with respect to the security for the bonds and notes; the payment of interest and principal, the redemption of the bonds, and the establishment of special funds for payment or redemption of the bonds or notes; and allows the

authority to make pledges with regard to the appointment and powers of a trustee or trustees to protect the interests of the holders of the bonds and notes issued by the authority.

Sec. 42.40.170 requires the authority to retain the services of an independent financial advisor when negotiating for the private sale of bonds or notes.

Sec. 42.40.180 provides that pledges of assets or revenue made by the authority as security for the payment of principal or interest on bonds or notes are binding on the authority.

Sec. 42.40.190 grants the holders of authority bonds or notes, or trustees appointed to protect the holder's interests, to enforce the rights granted under this chapter and pledges made under the trust agreement or resolution of the board.

Sec. 42.40.200 provides that bonds and notes of the corporation are negotiable instruments.

Sec. 42.40.210 provides that bonds and notes of the authority are securities which are eligible for investment of state funds and qualify for investment of reserves and other funds by insurance companies, banks and other companies maintaining reserve accounts.

Sec. 42.40.220 allows the authority to issue refunding bonds to replace previously issued and outstanding bonds and notes of the authority.

Sec. 42.40.230 provides that the authority is not allowed to pledge the taxing power of the state or assets of the state other than the assets of the authority.

Sec. 42.40.240 protects the officers and employees of the authority from personal liability for the issuance of bonds or notes by the corporation.

Sec. 42.40.250 grants tax exempt status to the authority and to bonds and notes issued by the authority.

Sec. 42.40.270 allows the board of directors to dissolve the authority after provision for repayment of all its bonds and notes, but requires legislative approval of the dissolution.

Sec. 42.40.280 provides that personnel of the authority are in the exempt state service.

Sec. 42.40.990 defines various terms used in the previous sections.

Sec. 2 establishes the terms for initial members of the board of directors appointed under sec. 42.40.030.

Sec. 3 provides for the board of directors of the Alaska Railroad Authority to enter into negotiations with representatives of the federal government for the transfer of the Alaska Railroad to the authority.

RGB:ljb

Senator Ray, Senator Kertulla, Senator Dankworth, Committee Members: I am Leonard Black and am speaking for the coalition of The Alaska Railroad labor unions. This coalition includes the Brotherhood of Railroad Carmen, the International Association of Machinists, the United Transportation Union, the American Federation of Government Employees, and the American Train Dispatchers Association, all of whom represent employees of The Alaska Railroad, and also have representatives here today. The significance of this Bill and State acquisition of The Alaska Railroad is particularly important at this time when the State of Alaska is entering into an exciting era; we are expanding the development of our vast mineral deposits. The Alaska Railroad is vital to the success of this effort. All of this is happening at a time when the Federal Government is seeking to divest itself of the Railroad which it considers to be within the proper domain of the State. The employees of The Alaska Railroad appreciate the considerations incorporated to date in SB212 and strongly endorse and support the concept of transferring the Railroad to the State of Alaska. We want the transfer to proceed smoothly and our future relationship with the Authority to be successful for the State, the employees of The Alaska Railroad, our customers, and the taxpayers. We are all taxpayers and citizens of Alaska as well as employees of the Railroad. As such, we are vitally concerned about the financial viability and future success of the Railroad. With this perception as our mandate, we have reviewed the Bill and with the full concurrence of our coalition, we would like to offer these proposed alterations.

RATIONALE FOR PROPOSED LANGUAGE

Page 1, line 3

(a) We believe that it is in the best interest of the Alaska Railroad Authority and the State of Alaska that employees be allowed to move between other State agencies and the Authority without any loss of time and benefits. To limit the mobility of other State employees as it would relate to employment with the Authority appears to be shortsighted. We do not know what the future holds for either the Authority or the State. We do believe that mobility between the Authority and other State employers is in the best interest of both the Authority and the State.

Page 1, line 8

Our support for a system of merit employment with the Authority should not be construed as advocating a full scale bureaucratic nightmare in hiring employees. We strongly solicit your support in guaranteeing that the Authority is not subject to employment by "pressure." We do not want the positions and jobs of the Authority to be filled on the basis of political friends, nepotism, or other factors not directly related to the qualifications of the individual for the position to be filled. This issue is vitally important to all people involved with the State acquisition of the Railroad. No one will benefit from employment on the Railroad of those that are not highly qualified to fill the positions for which they are being considered. Employment on the Railroad should be free of nepotism, cronyism, and must statutorily require that the people hired are those that are emminently qualified for the positions for which they are being hired.

Page 1, line 14

(b.) We strongly believe that under the Public Employment Relations Act, the Authority employees should be classified into

Category A-3 rather than the current classification of A-1. We see no difference in the day-to-day operations of The Alaska Railroad versus those of any other railroad operating in the Lower 48. Employees of the Lower 48 carriers have the right to take job action. We believe the day-to-day necessities of The Alaska Railroad are no stronger nor any more vital to the economy and the welfare of the State of Alaska than the Lower 48 railroads are to the Lower 48.

Page 1, line 19

(c) This provision would absolutely guarantee that the accrued leave balances of all employees will be transferred in tact and available to employees of the Authority to take as needed.

Page 1, line 22

(d) We strongly believe that the current level of benefits should not be reduced for any current employee of the Authority after the transfer. To reduce benefits could have a severe adverse impact on the morale and positive attitude that our employees currently have as we look forward to ownership of The Alaska Railroad by the State of Alaska. To reduce any existing benefit would be extremely shortsighted and the long-term negative impact on the morale and productivity of the workforce would be far more costly than any dollar savings that could be imagined.

Page 1, line 25

(e) We feel that this is self-explanatory.

Page 1, line 29 - page 4, line 16

(f), (g), (h), (i), (j), (k), (l), (m), (n), and (o) are guarantees that are currently enjoyed by all State of Alaska employees.

In reviewing the governing Alaska Statutes, the coalition unanimously felt that these items were of paramount importance to the employees of the Railroad. The guarantees contained in these provisions of the Alaska Statutes are so fundamental, so absolutely necessary, to protect the rights and privileges of all employees of the Railroad that we strongly believe these guarantees should be statutorily provided. This proposal merely extends the same guarantees to all employees of the Authority as are currently enjoyed by all other State employees covered under this section of the statute. These safeguards protect the personal lives, family lives, and basic constitutional rights of employees. We cannot conceive of any earthly reason that there would be any objection to the coverage of all employees of the Authority with these basic human rights.

Page 4, line 18

(p) This would provide an option for [redacted] employees of the Authority currently covered by the Federal retirement system to transfer the retirement benefits from the Federal system to the Alaska Public Employment Retirement System so long as all funds deposited with the Federal retirement system were transferred to the State fund. Retirement coverage is a very, very vital issue to those employees currently on the Railroad. The concern of the employees for their safeguards that they have earned and worked for for many, many years in the form of retirement benefits, is one of the most serious items of concern to employees across the board.

Page 4, line 25

We feel that labor's participation on the Board is important as our knowledge of "grass roots" operation of railroading would be invaluable in assuring that the policies set forth by the Board

would be workable and provide a minimum of organizational disruption.

Page 5, line 3.

We believe this language should be added to Article 30. First of all, it is consistent with the American system of jurisprudence and a right to due process and, second, it is a continuance of a right that all employees currently have against the arbitrary and capricious removal from their position or employment. Many employees on the Railroad are not represented by bargaining unit representatives. This is not of their own doing. Under the Federal Labor Relations Program, management officials above the first level of supervision are statutorily barred from organizing into unions and collectively negotiating a labor agreement. Many of the people in this category have expressed fears and apprehensions about being arbitrarily or capriciously demoted or removed for non-job-performance related reasons. Should this group of employees choose to collectively organize and bargain the terms and conditions of employment, then this provision would no longer apply to that group and we strongly urge that they do so. However, we also recognize that there are managers on the property who for one reason or another may not be protected by the terms of a labor agreement. For those employees, we are urging that you provide a due process review before any career or livelihood or family life is destroyed for reasons not related to poor job performance. The maxim I'm quoting is this: If the action will not stand the test of a third party review, the action should not be taken. This is a minimal protection to this group of people who currently, as Federal employees, have a far greater protection than this proposal would provide.

ARTICLE 8. PERSONNEL & GENERAL PROVISIONS

Sec. 42.40.800. Personnel.

(a) All personnel employed by The Alaska Railroad are personnel of the Alaska Railroad Authority. Employment with the Authority is deemed to be employment with the State and all time and benefits are transferrable to other State agencies. A.S. 39.05 - .51 do not apply to employees of the Authority. A.S. 23.40.070(3) does not apply to the Authority. The Authority will develop a system of employment that provides for the hiring and promotion of applicants and employees on the basis of the knowledges, skills, and abilities required to perform the duties of the position for which they are being considered.

(b) For the purposes of the Public Employment Relations Act, A.S. 23.40.020 - .260, the Authority is considered a "public employer" within the meaning of that act. The Authority's employees are classified as employees under A.S. 23.40.200(a)(3).

(c) All accrued leave balance shall be fully transferred with the employees to the Authority.

(d) The level of current benefits for all employees shall not be diminished or reduced as a result of this transfer.

(e) Nothing in this statute shall be interpreted as to preclude the unions and the Authority from negotiating conditions of employment and benefits that are provided for by Alaska Statute.

(f) No department, agency, official, officer, or any person employed by the Authority may directly or indirectly:

1. require or coerce any employee of the Authority to participate in any way in any activity or undertaking unless the activity or undertaking is related to the performance of official duties;

2. require or coerce any employee of the Authority to make any report concerning any of his activities or undertakings unless the activity or undertaking is related to the performance of his official duties;

3. except as directly related to the performance of his official duties, require or coerce any employee of the Authority to submit to any interrogation or examination or psychological test which is designed to elicit from him information concerning:

   a. his personal relationship with any person connected with him by blood or marriage,

   b. his religious beliefs or practices,

   c. sexual matters,

   d. his political affiliation or philosophy;

4. coerce any employee of the Authority to invest or contribute his earnings in any manner or for any purpose;

5. restrict or attempt to restrict after-working-hour statements, pronouncements or other activities, not otherwise prohibited by law or personnel rule, of any employee of the Authority, if the employee does not purport to speak or act

in an official capacity.

(g) The provisions of (a) of this section do not diminish the authority of an authorized law enforcement agency to conduct criminal investigations of Authority employees suspected of being involved in criminal activity.

(h) An Authority employee may be a member of a national, state, or local political party, may take part in a political campaign, and may exercise his right as a citizen to express his opinion, register his party preference, if any, serve as a delegate to party conventions, and cast his vote. This section also permits appointment, nomination, or election to nonpartisan public office in a local government unit. However, this section may not be construed as permitting any employee to take an active part in the management of a political party above the precinct level.

(i) No person may give, render, pay, offer, solicit, or accept money, service, or other valuable thing in connection with an appointment, promotion, or advantage in a position within the Authority.

(j) No person may require an assessment, subscription, contribution, or service for a political party from an employee of the Authority.

(k) No person may seek or attempt to use a political party endorsement in connection with an appointment or promotion in the Authority.

(l) An employee of the Authority who seeks nomination or becomes a candidate for state or national elective political office shall

immediately resign his position.

(m) No action affecting the employment status of an employee of the Authority or applicant for a position in the Authority, including appointment, promotion, demotion, suspension, or removal, may be taken or withheld for racial, political, or religious reasons.

(n) No person may make a false statement, certificate, mark, rating, or report with regard to a test, certification, or appointment or in any manner commit a fraud preventing the impartial execution of the personnel rules adopted by the Authority.

(o) No person may deceive or obstruct another person in his right to examination, eligibility, certification, appointment, or promotion.

(p) [redacted] employees of the Authority will have the option of transferring their accrued retirement benefits currently provided for by the Federal Government, to the Alaska Public Employment Retirement System, so long as all funds on deposit with the Federal retirement system are transferred to the State retirement system.

(q) One labor representative shall be selected to serve as a full voting member of the governing Board of Directors. This selection will be made [redacted] from a list submitted by the Unions representing the organized employees of The Alaska Railroad. [redacted]

Add to Article 4, #30 (page 18, line 24)

A full-time permanent employee of the Authority who has completed the probationary period and who is not covered by a collective bargaining agreement and is dismissed, demoted, or suspended for more than 30 calendar days shall be notified in writing by his supervisor of the action and the reason for it and may be heard publicly by the board of directors and may be represented by counsel at the hearing. In order to be heard, the complainant shall request a hearing within 15 days of dismissal, demotion, or suspension.

If the board finds that the action complained of was taken for a political, racial or religious reason or in violation of the rules adopted by the Authority, the individual will be reinstated to his position without loss of pay or leave benefit and made totally whole, including the payment of all expenses incurred by the employee in the defense of the action, for the period of his dismissal, demotion, or suspension.

Testimony of Totem Ocean Trailer Express, Inc.,
Before Alaska Senate Transportation Committee on
Senate Bill No. 212 April 6, 1982

Mr. Chairman, Members of the Transportation Committee:
I am Leonard Shapiro, Vice President of Pricing for Totem Ocean Trailer Express. Tote operates two new deep water Ro/Ro vessels between Tacoma, Washington, and Anchorage, Alaska, where we interline trailers to motor carriers and the Alaska Railroad for movement to the interior of Alaska.

We at Totem greatly appreciate this opportunity to express our views concerning the transfer of the Alaska Railroad to the State of Alaska. It should be noted that Totem is among the top five (5) customers of the Alaska Railroad and, therefore, we strongly support a financially strong railroad.

Totem has analyzed in great detail Senate Bill No. 212 and we wish to offer our support to most of the bill. We feel it enables the State of Alaska to smoothly handle the transfer of power from the federal to the State level. We specifically support the position which Senate Bill No. 212 takes on future expansion of the Alaska Railroad, inasmuch as the railroad would be the most economic means whereby the State can develop its extensive mineral resources.

Development of these resources will mean a significant increase in the economic activity of the State and, therefore an increase in the economic activity for all carriers.

Many of you have undoubtedly heard rumors concerning Totem's position on this takeover of the Alaska Railroad by the State of Alaska. I wish to assure all present today that rumors to the effect that "Totem opposes the takeover of the Alaska Railroad by the State and desires the railroad to remain under Federal control" are totally untrue. Further we have absolutely no desire to "tie the hands of the Alaska Railroad" for rate purposes. Totem's sole desire, insofar as Senate Bill 212 is concerned, is to ensure that all participants in Alaska's intergrated transportations system "play by the same rules". As I mentioned above Totem is one of the top five customers of the Alaska Railroad and as such depends on the Alaska Railroad for a significant portion of the transportation service we need in order to reach the interior of the State. For Totem to oppose in any way legislation which would ensure a financially sound railroad, would be sheer business folly.

In reviewing Senate Bill 212 there are two primary areas of concern for Totem. These are -

(1) Entry of the Alaska Railroad into the water carrier or motor carrier field - it is Totem's belief that the Alaska Railroad will "have its hands full" in the coming years improving its right-of-way and extending its right-of-way to tap the mineral resources of the State of Alaska. Private enterprise has shown a willingness to supply necessary water and motor carrier services both within and to the State of Alaska. We can see no need for the Alaska Railroad to operate in competition with these services. Obviously if private enterprise refuses, does not, or cannot supply these necessary services the railroad should return to the State Legislature for specific authority to enable it to enter into these businesses.

(2) Rate making policies of the Alaska Railroad - The Alaska Railroad, by virtue of State ownership, will enjoy both direct and indirect subsidies. By direct subsidies I refer to such items as direct cash appropriations from the State Legislature for either capital or operating purposes. Indirect subsidies would take the form of the ability to finance debt utilizing tax exempt bonds, the ability to avoid the payment of federal, state and local property and income taxes, freedom from the need to earn a profit with which to support added investment, a re' tion

in expenses based on a State-owned entities ability to avoid paying for license and other fees, etc.

Private carriers faced with competition from a State-owned entity are at a distinct disadvantage if such competition is based on "cost alone" inasmuch as the State-owned entity has the benefit of both direct and indirect subsidies. In the case of the Alaska Railroad cross competition exists for a segment of the rail market. We at Totem have no desire to have any impact on the pricing policies of the Alaska Railroad for the movement of traditional bulk rail commodities.

We feel, however, that the Railroad should not be allowed to utilize either direct or indirect subsidies in the pricing of cross-competitive commodities where they wish to offer rates below those of the privately owned carriers.

Totem has proposed amendments to S.B. 212 which would prohibit the railroad from pricing below the levels set by the privately owned carriers where the railroad utilized either direct or indirect subsidy to achieve this level of price. It should be noted here that we have no desire to stop the railroad from meeting rates set by the

privately owned carriers. We also have absolutely no desire to stop the railroad from pricing below the rates set by privately owned carriers if the rate does not include the utilization of any direct or indirect subsidy.

We have offered a series of specific suggestions to committee staff from both houses concerning these areas and we look forward to continuing discussions with you in these areas.

FILE WITH BILL

TOTEM OCEAN TRAILER EXPRESS, INC.
619 WAREHOUSE AVENUE, SUITE 242 / ANCHORAGE, ALASKA 99501
PHONE: (907) 276-5868

Proposed Amendments to S.B. 212

2/5/82

1. Amend § 42.40.010 (ALAKSA RAILROAD AUTHORITY) by adding the following phrase at the end of the first sentence: "for the purpose of providing rail transportation services within the State of Alaska."

Comment: The proposed amendment would clarify the legislative intent that the Railroad Authority refrain from entering the motor carrier or water carrier business.

2. Redesignate § 42.40.120 (OPERATION OF THE ALASKA RAILROAD) as § 42.40.120(a).

3. Add four new subsdections to § 42.40.120 (OPERATION OF THE ALASKA RAILROAD), designated as § 42.40.120(b), (c), (d), and (e) as follows:

"(b) The board shall solicit bids from qualified private persons or firms to operate the Railroad on a contract basis and shall contract for private professional management of the Railroad unless the board determines by a 3/4 vote that direct management of the Railroad's operations by the board will be significantly less costly."

Comment: Private, professional management of the Alaska Railroad will help to insure that the Railroad is run on an independent, self-sustaining basis and will deviate from that principle only to extent that the legislature authorized the subsidy of specific enumerated services. Direct operation of the Railroad by an unpaid board of directors would tend to reduce the Railroad's accountability. Contract management can be subjected to restrictions and regulated by incentives and penalties which would not be appropriate to control the board.

"(c) Notwithstanding any other provision of this Act, the operation of the Alaska Railroad shall not be extended to the provision of any motor carrier or water carrier service which would compete with any motor carrier or water carrier service actually provided by a private carrier."

Comment: Where private enterprise is capable of providing a transportation service, the government should stay out. The purpose of this amendment is not to restrict or eliminate any current operations of the Railroad but only to prevent expansion of existing operations in direct competition with private carriers.

"(d) Each competitive service provided by the Alaska Railroad shall generate sufficient revenues to the Railroad to cover the cost of that competitive service; provided that nothing in this subsection shall prevent the Railroad from meeting a rate offered by a private carrier for a competitive service."

"(e) The Alaska Railroad shall be subject to the antitrust laws of the state of Alaska."

Comment: A "competitive service" is defined elsewhere as a service which competes with one or more private carriers. Private companies engaged in freight transportation should not be undercut and driven out of business by the operations of a subsidized, state-owned railroad. Where it competes with private freight carriers, the Railroad should be required to play by the same rules that govern the private carriers. Thus, where it competes with private freight carriers, the Railroad should be required to conduct its operations on a self-sustaining, non-subsidized basis and in accordance with the Alaska antitrust laws.

We have no objection to state subsidization of those services (e.g., passenger and bulk commodity services) which do not compete with private carriers.

Our goal is only to prevent the Railroad's use of government subsidies to compete unfairly with private carriers.

4. Amend § 42.40.150 (ANNUAL AUDITS) by inserting a semi-colon at the end of the last sentence and adding the following: "except that the financial records of the authority shall identify separately the cost of each service provided by the Alaska Railroad and revenues to the Railroad generated by each such service. The financial records of the authority and of the Alaska Railroad shall be available to the public at such reasonable times and places as the Board may designate."

Comment: These provisions are intended to assure that records are maintained by the Railroad, and accessible to the public, which are necessary to determine compliance by the Railroad with the requirement that the Railroad operate on a self-sustaining basis when it competes with private carriers.

5. Redesignate § 42.40.990 (DEFINITIONS) as § 42.40.290 and amend § 42.40.290 to add three new subsections, designated § 42.40.290(4) and (5), and (6), as follows:

"(4) A "service" provided by a carrier means any activity which the carrier performs or offers to perform, either individually

or as part of a through route, as a common carrier, contract carrier or both, including, but not limited to, any single or multiple commodity freight service."

"(5) A "competitive service" means any service in which the Alaska Railroad does or would compete with one or more private carriers, except that passenger service and bulk commodity service are expressly excluded from the term."

"(6) The "cost to the Alaska Railroad of a competitive service means all capital, operating and other costs actually or constructively incurred by the Railroad which directly or indirectly enhance the Railroad's ability to provide the competitive service. Such costs shall include:

(A) An imputed cost for any property or other right, privilege or thing of value used, received or acquired by the Alaska Railroad without cost or for a consideration less than fair market value. The imputed cost of such properties, rights, privileges and things of value shall be their fair market value as of the date of their acquisition or use, whichever occurs first. In the case of tangible real or personal property, market value shall be the M.A.I. appraised replacement cost, less observed depreciation.

(B) An imputed financing cost computed on the fair market value of the property, rights, privileges and things of value described in paragraph (A) of this section at the rate determined by the

Interstate Commerce Commission in the most recent revenue adequacy proceeding as the average cost of capital in the railroad industry; and

(C) If the Alaska Railroad receives any capital or operating funds through grants or other direct or indirect subsidies from the state or federal governments or any other source, or through the issuance of tax exempt bonds or obligations, an imputed financing cost computed on the amount of such funds at the rate determined by the Interstate Commerce Commission in the most recent revenue adequacy proceeding as the average cost of capital in the railroad industry.

(D) To the extent that costs described in this section, actual or imputed, benefit more than one of the services provided by the Railroad, the Railroad shall fairly allocate such costs among such services in proportion to the use or benefit which each service derives."

Comment: The definitions are necessary to specify the meaning of proposed subsection 42.40.120 (d), which requires the Railroad to generate sufficient revenues from each service which competes with private carriers to cover the cost of providing that service. The definition of cost is intended to place the Railroad on the same footing as any private railroad and on the

same footing as the private carriers with whom the Railroad competes. The definition is intended to prevent the Railroad from using public subsidies to compete unfairly with private carriers.

6. Add a new section 42.40.300 (COMPLIANCE), as follows: "The Alaska Railroad shall be operated in strict compliance with this Act. The Superior Courts of the state of Alaska shall enjoin any act or omission in violation of the terms of this Act upon petition by any person and shall grant all other appropriate relief, including damages, to any person injured by such act or omission."

Comment: The Alaska courts should be authorized to enforce the requirements of the Act.

TESTIMONY

BEFORE

THE ALASKA SENATE TRANSPORTATION COMMITTEE

APRIL 6, 1982

JUNEAU, ALASKA

H. L. SCHUYLER

SEA-LAND SERVICE, INC.

I AM HAROLD L. SCHUYLER, DIRECTOR OF PUBLIC AFFAIRS FOR SEA-LAND SERVICE, INC.'S ALASKA DIVISION.

WE, AT SEA-LAND, DO NOT OPPOSE THE TAKEOVER OF THE ALASKA RAILROAD BY THE STATE OF ALASKA FROM THE FEDERAL GOVERNMENT. THE RAILROAD IS NECESSARY FOR THE FUTURE GROWTH OF ALASKA RESOURCE DEVELOPMENT AREAS AND COMMUNITIES. COAL, MINERALS, AND FARMING PRODUCTS MUST HAVE AVENUES TO TIDEWATER PORTS IN ORDER TO BE EXPORTED TO WORLD MARKETS.

WE HAVE ANALYZED IN GREAT DETAIL SENATE BILL NO. 212 AND APPLAUD ITS IMAGINATIVE AND FAR-REACHING PURPOSE; HOWEVER, WE, AT SEA-LAND, ARE CONCERNED ABOUT THE ADMINISTRATION, OPERATION, POLICIES, AND RULES AND REGULATIONS UNDER WHICH THE ALASKA RAILROAD AUTHORITY WILL BE OPERATING IN CARRYING OUT ITS MISSION.

AS PRESENTLY DRAFTED, THE LEGISLATION PROVIDES US THE FOLLOWING CONCERNS:

1. A STATE OWNED ENTITY WHICH IS EXEMPT FROM ALL FEDERAL, STATE, AND LOCAL TAXES HAS A GREAT ADVANTAGE OVER OTHER COMPETITIVE MODES OF TRANSPORTATION THAT ARE PAYING TAXES TO THE FEDERAL, STATE, AND LOCAL COMMUNITIES.

2. THE OPPORTUNITY FOR THE PROPOSED RAILROAD AUTHORITY TO SELL BONDS OR BOND ANTICIPATION NOTES AS TAX EXEMPT VEHICLES GIVES THE AUTHORITY ANOTHER DEFINITE EDGE IN OBTAINING CAPITAL FOR IMPROVEMENTS AS COMPARED TO PRIVATE TRANSPORTATION THAT MUST COMPETE FOR MONEY IN THE OPEN MARKET, PAYING CONSIDERABLY HIGHER INTEREST RATES THAN DOES THE STATE GOVERNMENT.

3. THE RAILROAD AUTHORITY IS VESTED WITH THE ABILITY TO ACQUIRE AND OPERATE OTHER MODES OF TRANSPORTATION SERVICE CONNECTING TO THE RAILROAD'S RAIL SERVICE IN DIRECT COMPETITION WITH PRIVATE TRANSPORTATION. THIS ALLOWS THE RAILROAD TO BUY TRUCK LINES, WATER CARRIERS, AND AIRLINES. THIS PART OF THE BILL IS PARTICULARLY WORRISOME AS THE ALASKA RAILROAD AUTHORITY COULD VERY WELL BECOME A STATE TRANSPORTATION SYSTEM WITH NO COMPETITION AS THE PRIVATE SECTOR WOULD NOT BE ABLE TO FINANCIALLY COMPETE WITH THE AUTHORITY. THERE IS ALSO THE FACT THAT THE STATE WOULD LOSE A CONSIDERABLE AMOUNT OF TAX BASE IF AND WHEN PRIVATE SECTOR TRANSPORTATION COMPANIES ARE FORCED OUT OF BUSINESS.

4. THE LEGISLATION LIBERALLY DISCUSSES RATE MAKING, AND RATE POLICY. THE ESTABLISHMENT OF RATES FOR ALASKA RAILROAD AUTHORITY'S REVENUES WILL EFFECT THE PRIVATE CARRIERS OF OTHER MODES OF TRANSPORTATION. WE ARE CERTAINLY NOT SUGGESTING THAT THE LEGISLATURE DICTATE THE AUTHORITY'S RATE POLICIES, HOWEVER, WE FEEL THAT ALL RATES PRESCRIBED BY THE AUTHORITY MUST BE AT A LEVEL SUFFICIENT TO RECOVER THE FULL COST OF PROVIDING THE PARTICULAR TRANSPORTATION CONCERNED, TAKING INTO FULL ACCOUNT THE LEVEL OF SUBSIDY AND THE COST OF BORROWED CAPITAL. SEA-LAND WOULD URGE SPECIFIC LEGISLATIVE AMENDMENTS WHICH WOULD PROHIBIT A STATE-OWNED RAILROAD FROM CHARGING RATES WHICH ARE BELOW THOSE CHARGED BY PRIVATELY-OWNED CARRIERS, FOR FREIGHT ON WHICH BOTH CARRIERS COMPETE, WHERE THE RATES DO NOT RECOVER THE FULL COST OF THE SERVICE OFFERED (TO INCLUDE ANY DIRECT OR INDIRECT SUBSIDY).

5. WE FEEL THE LEGISLATION NEEDS AN ANTITRUST PROVISION. THE LEGISLATION NEEDS TO BE AMENDED TO PLACE THE STATE-OWNED RAILROAD UNDER STATE ANTITRUST

LAWS. ALL OF THE PRIVATELY-OWNED WATER CARRIERS AND MOTOR CARRIERS ARE SUBJECT TO THE FEDERAL AND STATE ANTITRUST LAWS, AND WHILE THIS BODY CANNOT PLACE THE RAILROAD UNDER FEDERAL ANTITRUST LAWS, STILL IT IS OUR BELIEF THAT THE RAILROAD SHOULD BE SUBJECTED TO THE SAME LAWS AS ARE THE PRIVATE CARRIERS. IN SHORT, WE SHOULD ALL PLAY BY THE SAME RULES.

6. I AM SURE YOU GENTLEMEN ARE AWARE THAT THE STAGGERS RAIL ACT OF 1980 HAS VIRTUALLY DEREGULATED INTERSTATE RAIL SERVICE. AS A PRACTICAL MATTER, THE ALASKA RAILROAD AND ALL OTHER MAJOR RAIL LINES ARE TOTALLY UNREGULATED. WHILE DEREGULATION MAY BE GOOD IN THEORY, THE TRADE BETWEEN ALASKA AND THE LOWER 48 IS IN ESSENCE A MICROCOSM: ALL TRANSPORTATION MODES COMPETE DIRECTLY WITH EACH OTHER FOR THE SAME BASIC CONSUMABLES. WE READILY ACKNOWLEDGE THAT LARGE PORTIONS OF THE ALASKA RAILROAD'S FREIGHT ARE BULK COMMODITIES; STILL, ALL OF THE COMPETING MODES ARE REGULATED WHILE THE RAILROAD IS NOT, THUS GIVING THE RAILROAD A DISTINCT COMPETITIVE EDGE WHICH CAN BE SUBJECT TO ABUSE.

7. THE BILL PROVIDES FOR THE ESTABLISHMENT OF CONTRACT RATES BY THE RAILROAD. THE STAGGERS ACT ALLOWS CONTRACT RATES BUT THAT LAW CONTEMPLATED THE RAILROADS ENTERING INTO CONTRACTS WITH MAJOR SHIPPERS WHOSE CARGO THEY HAD HISTORICALLY HANDLED FOR THE BENEFIT OF BOTH. THAT CONTRACT ABILITY WAS NOT ENVISIONED TO BE USED AS A COMPETITIVE TOOL, AS IT HAS BEEN UTILIZED BY THE ALASKA RAILROAD. SEA-LAND HAS CHALLENGED THESE PRACTICES, BOTH BEFORE THE INTERSTATE COMMERCE COMMISSION AND IN THE COURTS, TO NO AVAIL BECAUSE THE RAILROAD IS UNREGULATED AND IMMUNE FROM SUIT. WE CANNOT LEGALLY

ESTABLISH CONTRACT RATES AND, THEREFORE, CANNOT EFFECTIVELY COMPETE WITH SUCH RATES. WE URGE THIS BODY TO CRITICALLY SCRUTINIZE THAT PORTION OF THE BILL AND DELETE SUCH PROVISIONS FROM THE LEGISLATION.

8. ARTICLES 4 AND 5 OF THE LEGISLATION PROVIDE FOR THE AUTHORITY TO EXERCISE THE STATE'S POWER OF EMINENT DOMAIN/CONDEMNATION. SEA-LAND DOES NOT CHALLENGE THE STATE'S ABILITY IN THIS AREA, BUT WE STRONGLY FEEL THIS RIGHT SHOULD NOT BE LODGED WITHIN THE AUTHORITY BUT SHOULD BE RESERVED TO THE STATE TO PRECLUDE ANY COMPETITIVE USE OR ABUSE. IT IS A SIMPLE MATTER FOR THE RAILROAD AUTHORITY TO APPROACH THE STATE TO OBTAIN THE ABILITY TO ACQUIRE THE NECESSARY RIGHTS OF WAY.

9. SEA-LAND NOTES THAT THE AUTHORITY CAN DETERMINE WHAT INFORMATION IT KEEPS CONFIDENTIAL. WE URGE THAT THIS ABILITY IS SUBJECT TO POSSIBLE ABUSE. AT A MINIMUM, ALL RATES, RULES, PRACTICES, DIVISIONS OF REVENUE, CONTRACTS, IF ANY, AND COST DATA MUST BE OPEN TO PUBLIC INSPECTION.

WE, AT SEA-LAND, ARE NOT HERE MERELY TO TELL YOU WHAT IS WRONG WITH THIS PROPOSED LEGISLATION. WE WISH TO BE CONSTRUCTIVE AND ASSIST YOU GENTLEMEN IN REACHING THE BEST POSSIBLE COMPROMISE WHICH WILL WORK TO THE BENEFIT OF THE STATE, ITS CITIZENS, AND THE TRANSPORTATION CARRIERS SERVING ALASKA. TO THIS END, I AM ENCLOSING AS AN APPENDIX HERETO, CERTAIN LANGUAGE AND PROPOSED AMENDMENTS TO THIS BILL WHICH WE FEEL WILL GO A LONG WAY TOWARD MEETING THE NEEDS OF ALL INTERESTED PARTIES, WHILE PROTECTING THE COMPETITIVE ENVIRONMENT IN THE ALASKA TRADE.

I AWAIT YOUR QUESTIONS. THANK YOU.

# ALASKA STATE SENATE BILL NO. 212 - RAILROAD AUTHORITY

1) Article 1, Page 2. Findings.

Sec. 42.40.100 - Legislative Findings and Policy.
Paragraph (b). It is the policy of the state...
Sub-paragraph (5) To provide reasonably high quality and low cost transportation to the people, visitors, and businesses of the state.

Change: We suggest that the entire sub-paragraph (5) or just "and low cost" be deleted.

2) Paragraph (c), Page 3. The legislature further declares that...

Sub-paragraph (2)
Sub-paragraph (f) Provide the best possible combination of high quality and reasonably low cost transportation.

Change: Suggest that the entire sub-paragraph (f) be deleted or delete the words, "and reasonably low cost" and replace with "effectively managed".

3) Paragraph (c), Page 3.

Sub-paragraph (2)
Sub-paragraph (g) Operate according to sound business management practices.

Change: Add to this statement, "and in a manner that is consistent with the total transportation needs of the people of the State of Alaska.

4) Paragraph (c), Page 3.

Sub-paragraph (2)
Sub-paragraph (j) Ensure that borrowing by the authority does not indirectly endanger the state's own borrowing capacity.

Change: Insert after "authority", "is kept at the minimum level necessary to meet the railroad's capital needs and", before the word "does".

5) Article 2, Pages 4 and 5.

Sec. 42.40.215. Appointment and Composition of Council.

Comments: Given its structure, per diem compensation level, and conflict of interest provisions (see Article 3), it's quite likely that members will be highly politically motivated; have little, if any, knowledge of business and specifically transportation issues; and be very much subject to the whim of the Governor and the Railroad. Perhaps there is a business or trade organization in Alaska that could be designated in the Statute to nominate members of the Council for the Governor's consideration, or at least to develop recommendations as to their qualifications.

6) Sec. 42.40.250, Page 7.

Paragraph (b). The council may provide for, in a manner consistent with the purposes of this chapter and subject to the approval of the governor, the management and operation of the railroad by a third-party contractor.

Comment: The operation of the railroad may be operated by a third party under contract, after a formal bid procedure.

7) Article 2, Page 9.

Sec. 42.40.250. Executive Officials and Limited Delegation.

Paragraph (c). The general manager of the Authority manages the daily affairs and operations of the Authority.
Sub-paragraph (8) establishment of rates.

Change: This should be expanded and defined as "a joint management and council responsibility."

8) Sec. 42.40.310, Pages 11 and 12.

Paragraph (6). Public Council Meetings.

Comment: All deliberations and decisions relative to land acquisition or disposal should be made public information.

9) Article 3, Page 14.

Sec. 42.40.340. Public Disclosure of Information.
Paragraph (a).

Change: Delete second sentence.

10) Article 4, Page 15.

Sec. 42.40.400. General Powers.
Sub-paragraph (8). Acquire property by eminent domain and/or by a declaration of taking.

Change: Delete this paragraph.

11) Article 4, Page 16.

Sec. 42.40.400
Sub-paragraph (16)

Change: After the word "railroad", insert "as a common carrier."

12) Article 4, Page 17.

Sec. 42.40.400
Sub-paragraph (24)

Change: Delete "and low cost" from their sentence and add, "All rates thus described shall be at a level sufficient to recover the full cost of providing the particular transportation service concerned."

13) Article 4, Page 17.

Sec. 42.40.400
Sub-paragraph (26)

Change: Delete their paragraph and replace with, "Enter into contracts and leases pertaining to the properties and facilities of the Railroad."

14) Article 4, Page 18.

Sec. 42.40.400
Sub-paragraph (27).

Change: Delete their paragraph and replace with, "Plan for and undertake the extension of the Alaska Railroad's Rail System into areas of the State not presently served."

15) Article 4, Page 18.

Sec. 42.40.400
Sub-paragraph (28).

Change: Delete all after "operations" on Line 10, Page 18, and substitute "and the Railroad has the same ability as any private transportation company to preserve and protect such employee property and operations.

16) Article 5, Page 27.

Sec. 42.40.530. Eminent Domain and Acquisition of Property and Materials.

Change: Delete entirely.

17) Article 6, Page 28.

Sec. 42.40.600. Bonds and Notes.
Sub-paragraph (2).

Change: Delete last word "purposes" and add, "approved capital improvement and expansion projects."

18) Article 7, Page 26.

Sec. 42.40.700. State Review.
Sub-paragraph (a). Prior to undertaking...

Comment: We should make mention of the fact that the words are already sufficient to include the purchase of water or truck carriers.

19) Article 8, Pages 43 and 44.

Sec. 42.40.855. Exemption from Taxation.

Comment: Recommend deletion of entire section. This section both exempts the properties of the railroad from state and local taxes, and provides that bonds and bond anticipation note interest payments shall also be exempt. This is a very substantial subsidy measure and will afford the Railroad a significant cost advantage over its competitor commercial firms. If this section is not deleted, the legislation should require the authority to take into account a hypothetical tax liability based on railroad industry standards in the computation of rail rates.

STATE OF ALASKA TAKEOVER OF THE ALASKA RAILROAD:

SUPPORT FOR POSITION OF WATER CARRIERS AND MOTOR CARRIERS SERVING ALASKA.

THE ISSUE:

As you are undoubtedly aware, the federal government has indicated a desire to transfer ownership of the Alaska Railroad to the State of Alaska. Current press reports indicate that, while the state is agreeable to taking over ownership and operation of the Alaska railroad, there are a host of problems with the transfer legislation. Most of these problems revolve around the transfer of rail lands as well as the ability of the State of Alaska to further expand the railroad.

In addition to the problems mentioned above, the existing water carriers and motor carriers who operate between the Lower 48 and the State of Alaska, are seriously concerned with the potential impact this transfer may have on the existing transportation system between the Lower 48 and various destinations in Alaska. It should be noted that currently Alaska enjoys one of the finest integrated transportation systems in the nation. Water service is provided between the Lower 48 and Alaska utilizing all major modes (ro-ro, container, rail barge and break bulk barge). Competition between the carriers providing this service has always been intense and the result has been very high levels of service as well as relatively low prices for the service. Indeed, price competition has been so severe that many observers have often equated this competition to that of a "rate war."

Within the State of Alaska the transportation system has become very well developed with a multitude of motor carriers, as well as the Alaska Railroad, serving intrastate needs. This system is well integrated with many of the highway carriers using rail piggyback service for a portion of their movement. Again, the marketplace has seen a very high degree of both service and price competition.

THE CONCERNS OF THE WATER CARRIERS AND MOTOR CARRIERS:

In assessing the impact the transfer from federal to state ownership will have on existing, privately-owned water carriers and motor carriers, we have three major concerns. All of these concerns revolve around the fact that the railroad would be owned by a state entity and thus not subjected to the normal "checks and balances" any privately-owned business is subjected to when that business is faced with the need to earn a profit to enable it to re-invest in its business, as well as pay a fair return to its stockholders. Our major concerns are:

1. Entry by the Railroad into the Water Carrier or Motor Carrier business:

   The private carriers desire legislation which will prohibit entry by a state-owned railroad into the water carrier or motor carrier business.

   We feel quite strongly that the Alaska Railroad, which has enjoyed an average subsidy of 17.5 percent of revenue for the past several years, should direct all of its energies towards operating the most efficient rail service possible. Utilization of either their direct or indirect

subsidies (indirect subsidies are those the railroad enjoys by virtue of public ownership: examples would be significantly lowered interest rates due to tax exempt bonds; elimination of need to earn a profit; lack of any requirement that they pay interest on their working capital; freedom from taxation; elimination of the requirement that they pay for licenses, permits, etc.) to enter the water or motor carrier fields. Currently, the water carrier field is served by all four major modes, ro-ro, container, rail barge and break bulk barge, and we see no long-term shortfall in available capacity. Within the motor carrier field, there are a multitude of motor carriers available in the state, and this industry has been severely depressed for several years, i.e., there has been significant overcapacity available.

2. Antitrust:

Private carriers desire legislative amendments which would place a state-owned railroad under both the federal and state antitrust laws.

All of the privately-owned water carriers and motor carriers are subject to the federal and state antitrust laws. It is our belief that the railroad should be subjected to the same laws as the private carriers are. In short, we should all play by the same rules.

3. Ratemaking Policy:

Private carriers desire specific legislative amendments which would prohibit a state-owned railroad from charging rates which

are below those charged by privately-owned carriers, for freight on which both carriers are cross-competitive, that is, compete for the same traffic, where the rates do not recover the full cost of the service offered (to include any direct or indirect subsidy).

The railroad, by virtue of state ownership, will in all probability enjoy some form of direct subsidy as well as enjoy the benefits of indirect subsidization (as discussed above, by virtue of state ownership the railroad is not faced with all of the expenses which a privately-owned and operated corporation is subjected).

We believe that on all traffic where the railroad competes for the same traffic with privately-owned and operated carriers, the railroad should not be permitted to utilize its direct or indirect subsidies to set rates below those established in the private marketplace. This, we feel is simply "fair play" inasmuch as the private carriers do not have available to them the railroad's direct or indirect subsidies and we have no desire to become involved in any subsidy schemes. Certainly, if the railroad, without using either direct or indirect subsidies, can price their service below that of the privately-owned and operated carriers, they should be allowed to do so.

ANSWERS TO QUESTIONS WE HAVE BEEN ASKED:

In making our feelings known, we have been asked the following questions by many individuals:

1. Why Isn't ICC Regulation of the Alaska Railroad's Rates Sufficient to Eliminate any Problems the Private Carriers Might Have With the Railroad Utilizing Subsidies to Compete With the Private Carriers?

The privately-owned carriers feel, quite strongly, that the ICC is not set up to regulate a state-owned railroad. Commission cost accounting procedures have no method of taking into account either direct or indirect subsidization which the state-owned railroad may receive. It should further be noted that a primary component of commission regulation of railroads is the fact that the railroad must face the "test of the marketplace" in terms of its ability to earn a profit, i.e., a primary component of the Staggers Act, which significantly changed the reasonableness test for railroad rates was the feeling that in the "long run" the railroads would not price their services below cost because they would have to eventually earn a profit on the provision of those services.

As discussed in the foregoing, a state-owned railroad would of course have no need to earn a profit. Additionally, the ICC has no method of factoring in to any cost analysis (assuming that they utilize their current cost formulas) the value of direct and indirect subsidies which would be received by the railroad. Thus, commission regulation is not a viable method of ensuring that the economic advantages enjoyed by a state-owned railroad are not utilized unfairly against the railroad's privately-owned competitors.

2. Doesn't the Desire of the Private Carriers to Establish a "Rate Floor" in Reality "Tie the Hands" of the Alaska Railroad?

The privately-owned carriers have absolutely no desire to establish anything akin to a "rate floor" or to "tie the hands" of the Alaska Railroad. What we desire is simply that the railroad "play by the same rules" as privately-owned carriers. Our sole concern regards the railroad's rate practices on movements of commodities which can and do move by both the railroad and the privately-owned carriers. We have absolutely no desire to have any impact on the railroad's rate policies for the movement of such bulk commodities as coal, gravel and other historic rail bulk commodities.

Within that area of commodities which are cross-competitive, all we have asked is that the railroad not be allowed to use its direct or indirect subsidies when it sets prices which are below those which have been set between private carriers in a free and competitive marketplace. It should be noted that our position allows the railroad to meet any rates set by the private carriers irrespective of whether or not the railroad can earn a profit by so doing -- all we ask is that the railroad not be allowed to artifically depress the rates of the private carriers through the use of either direct or indirect subsidies -- if the railroad can legitimately price below the private carriers and still earn a profit, they should certainly be allowed to do this.

3. What is the Position of the Private Carriers on the Expansion of the Railroad?

The private carriers feel the railroad should be expanded and utilized as the primary tool in developing the mineral deposits within the State of Alaska. Any expansion of the railroad will improve the overall business climate in Alaska and such improvement will automatically mean there will be more business available for all carriers. We feel it is a legitimate use of state power for the state to use its railroad to assist in opening up undeveloped areas of the state and the private carriers will certainly support the Alaska railroad in these efforts.

4. The Privately-Owned Carriers Proposed Amendments to the Current Transfer Legislation are Too Complex:

While we admit that our proposed amendments to the current transfer legislation are somewhat complex, it must be realized that the issues we attempt to address are quite complex. Certainly, within the rate area any legislation which attempts to deal with this problem must include rigorous definitions of what both the intent and the method of implementation are if we are to avoid abuses by either side. The private carriers have no "pride of authorship" in this area and we stand ready to work with all members of the public sector to ensure that the state arrives at the fairest, and easiest-to-enforce legislation.

5. Isn't This Only a "Tempest in a Teapot" and in Fact Private Carriers Will "Continue to do Business As Usual" No Matter How the Transfer of the Railroad Occurs?

Certainly the private carriers have not suggested that "if we do not get what we want" we will close our doors. We also do not feel that this

would be the natural outcome if the private carriers are unsuccessful in obtaining the legislation we seek. What we do feel will occur, over time, is that the private carriers, if faced with competition from a state-owned railroad which uses its direct and indirect subsidies to either underprice them or operate a competing water or motor carriage service, will simply fail to reinvest the necessary dollars to maintain a viable privately-owned and operated service.

One needs only look at the existing services which are available in the water-carrier field to see that some of the vessels serving Alaska are extremely old (average age 40 years, in some cases). The ability of the private water carriers to generate the needed capital to replace overage equipment as well as to convince their stockholders that the necessary commitments of capital will be economic, is a function of the carrier's perception of the marketplace in the "long run." Certainly most business would find it difficult to authorize the commitment of almost $100 million per vessel (the approximate construction cost of any new vessels which would be placed in operation in an Alaskan service) when faced with competition from a state-owned railroad which had access to both direct and indirect subsidies with no constraints on their use.

In the motor carrier field problems could "come on" much more quickly. Many of the motor carriers operating within the Alaska area are not now well capitalized or in the best financial health. Indeed, there have been several recent bankruptcies. Certainly investment in new trailers and tractors would slow down if these carriers were faced with unrestrained competition from a state-owned railroad which had access to both direct and indirect subsidies.

# EVALUATION
# OF THE
# INTERSTATE COMMERCE COMMISSION BUREAU OF ACCOUNTS
# SECTION OF COST DEVELOPMENT JUNE 15, 1981 STUDY
# OF THE ALASKA RAILROAD WATER/RAIL CONTRACT RATES AND
# WATER/RAIL TARIFF CHARGE RATES

## Executive Summary

This evaluation of an Interstate Commerce Commission (ICC) examination of the Alaska Railroad's pricing was occasioned by expressions that the ICC had concluded that the Alaska Railroad insofar as it competes with private companies is not pricing below costs. No ICC study stands for that proposition.

Working with data supplied by the Alaska Railroad, and thus presumably favorable to the Railroad's position, the ICC report in fact demonstrates that the Alaska Railroad's prices for competitive service are provided at a level below the costs the Alaska Railroad would experience if it were an unsubsidized private enterprise.

A recently released General Accounting Office study casts doubt on anyone's ability to determine whether the Alaska Railroad is pricing above costs.[1/] GAO concludes that despite its having drawn attention to the railroad's lack of costing data, corrective action was not initiated until December, 1981, and is still not completed. Thus, the Alaska Railroad's costs of providing freight transportation service is still unknown.

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1/ Comptroller General's Report to the Congress, Alaska Railroad's Federal Rule Should End; Some Management Problems Remain, February 25, 1982, hereinafter, "the GAO Study," pages 14 and 15.

## Introduction

The Conference Report on Appropriations for the Department of Transportation and Related Agencies2/, for fiscal year 1981, directed the ICC to provide a determination (along with supporting data) to the House and Senate Committees on Appropriations as to whether the Alaska Railroad's (the "ARR" or "the Railroad") water/rail contract rates and water/rail tariff charges recover the full variable cost of such service as well as any subsidy allocable in providing such service. The pertinent part of the Conference Report states,

PAYMENT TO THE ALASKA RAILROAD REVOLVING FUND

> Amendment Number 36: ..... The Conferees also direct the Interstate Commerce Commission, in cooperation with the Federal Railroad Administration and the State of Alaska, to provide a determination (along with supporting data) to the House and Senate Committees on Appropriations as to whether Alaska Railroad water/rail contract rates and water/rail tariff charges recover the full variable cost of such service as well as any subsidy allocable in providing such service. Such determination shall be provided no later than June 1, 1981.

Report No. 98-1400, 96th Congress, 2d Session, p. 14.

The Senate Appropriations Committee gave its reasons for ordering the study as follows:

> "The Committee is concerned that the federally owned and subsidized Alaska Railroad may be pricing its interstate water/rail services at a level so low as to threaten the existence of its unsubsidized private carrier competition...".

S. Report No. 96-932, 96th Congress, 2d Session, p. 43.

The ICC completed the required study, entitled, "Study of the Alaska Railroad Water/Rail Contract Rates and Water/Rail Tariff Charge Rates Pursuant to Amendment No. 36 to the Conference

Report Making Appropriations for the Department of Transportation and Related Agencies" (the "Study") on June 15, 1981. The Study used some of the same methods employed in an earlier ICC study of two contract rates published by the ARR. The earlier study, mandated by Section 709 of the Staggers Rail Act of 1980, P.L. 96-448, was published on June 1, 1981, and was entitled, "Study of the Alaska Rates Pursuant to Section 709 of the Staggers Rail Act of 1980" (the "Staggers Act Study").

## Background

The principal commmercial link between Alaska and the contiguous or "lower 48" states is by water. No rail route exists, and motor carriage up the Al-Can Highway is both prohibitively expensive and subject to restrictions by the Province of British Columbia.

At present three water carriers haul virtually all the freight moving to Alaska from the lower 48 states. Totem Ocean Trailer Express ("TOTE"), Sea Land Service Inc. (Sea Land), and the U.S. Government owned and operated ARR are the three principal common carriers which publish tariffs for the transportation of cargo by water between the lower 48 and Alaska.

TOTE transports trailers in "RO-RO" (roll on/roll off) vessels, and Sea Land transports containers in container ships. TOTE and Sea Land publish competing tariffs, each of which states through routes and joint rates which are concurred in by various motor carriers.

The ARR, which itself only provides intrastate rail service inside Alaska, also publishes a through route/joint rate tariff

for water/rail service between the lower 48 and Alaska. The water portion of this transportation is provided by Alaska Hydrotrain, a division of Crowley Maritime Corporation. Hydrotrain transports rail cars on barges pursuant to the ARR's water/rail tariff.

TOTE, Sea Land, and the ARR all offer complete through transportation to or from inland points in the lower 48 to or from inland points in Alaska in conjunction with their respective concurring and connecting carriers. Thus TOTE, Sea Land, and the ARR are direct competitors in providing transportation between the lower 48 and Alaska.

More than 80 percent of the freight traffic (except oil) moving between Alaska and the lower 48 moves between Anchorage and the Puget Sound. Most of that movement is by water. But Alaska Hydrotrain, the only water carrier of rail cars in the trade, publishes no tariffs and establishes no separate charges for its services. Its prices are included in the joint rates charged by the ARR.

As the Conference Report indicates, TOTE and Sea Land, the ARR's unsubsidized competitors, have complained that the Railroad is using the public subsidy it receives to publish below cost rates on traffic for which it competes with ARR/Hydrotrain. The Congress therefore mandated the study to examine whether the ARR was using the subsidy it receives[2/] to price its

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2/ The ARR received $6.5 million in subsidy in FY 1980, $10 million in FY 1981, and $6 million in 1982. In addition, the ARR/Hydrotrain service has received substantial ongoing benefits through government construction of facilities such as the harbor facilities at Whittier, which the ARR may use free of debt service.

competitive service[3/] at a level below that which it could maintain without subsidy.

## Analysis

The ICC concluded that the ARR's charges for rail service recover the cost of providing that service.

Of obvious importance to a finding related to costs is that one know what the costs are. The ICC stated that the only cost data available was that "developed by the railroad's costing system."[4/]

Therein lies a basic weakness with the Study. The Railroad has no effective cost information. The General Accounting Office, at page 18 of its Feb. 25, 1982, study, noted that in its 1978 report GAO had concluded: "Furthermore, the Railroad did not have information on the cost of transporting specific commodities to use in setting rates and making other marketing decisions." GAO then reported that little substantive change had occurred. Then at page 21 GAO said,

> "...[W]e continue to believe that complete cost information is crucial to an effective marketing program. An FRA rate consultant stated that rates are determined by the market conditions, not by costs. Our previous reports stated that Alaska Railroad's rates should be based primarily on costs, but even if they are based on market conditions, as the consultant suggests, complete cost and revenue information is needed to determine

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3/ The ARR maintains a number of services for which little or no competition exists. An example is the rail passenger service between Anchorage and Fairbanks. In addition, neither TOTE nor Sea Land compete for the carriage of bulk commodities between the lower 48 and Alaska.

4/ The Study, p. 13.

which business is the most profitable and should therefore be emphasized and encouraged through marketing efforts."

Thus, the cost data underpinning for any conclusions simply do not exist on the ARR.

Even if we assume that the cost data has some relation to fact, the Study shows the Railroad's rates to be below cost "as well as any subsidy allocable in providing such service." The Study demonstrates that the ARR's prices for its competitive rail service are set at a level below the costs that the ARR would have to pay to meet that service if it did not receive a subsidy from the Federal Government. If the ARR were privately owned, it would be losing substantial amounts on its competitive service.

Table 1 below, which was compiled using data and assumptions used by the ICC in the Study, demonstrates this point.

Table 1

WATER/RAIL RAILCAR TRAFFIC: COMPARISON OF REVENUE PER CARLOAD AND FULL VARIABLE COSTS PER CARLOAD

(Cost of Capital at Government Rate and at Private Enterprise Rate)

| Traffic Category | Revenue per Carload | Full Variable Costs per Carload | | Ratio of Revenue to Full Variable Costs | |
|---|---|---|---|---|---|
| | | Govt. Rate | Pvt. Rate | Govt. Rate | Pvt. Rate |
| Competitive | 1224 | 1193 | 1389 | 1.03 | .88 |
| Noncompetitive | 1492 | 1045 | 1216 | 1.43 | 1.23 |
| Total | 1299 | 1151 | 1340 | 1.13 | .97 |

The far right-hand column on Table 1 shows the "Ratio of Revenue to Full Variable Costs"[5/] for "competitive," "noncompetitive," and total rail/water traffic moving between the lower 48 and Alaska. The Study does not break the water/rail traffic down into competitive or noncompetitive categories. But TOTE has demonstrated -- without contradiction from the ICC or the ARR -- that it and Sea Land face competition from the ARR on about 20 percent of their traffic; the bulk of the "competitive traffic" is lumber and building materials.[6/]

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[5/] The variable cost of providing transportation service includes the costs that vary according to the extent of that service, as opposed to fixed costs, which remain constant. Examples of variable cost include labor, fuel, and wear and tear on equipment, while an example of a fixed cost is the service on outstanding debt. The allocation of costs into the variable or fixed categories may be made in different ways, depending on the period of time under consideration and the assignment of certain "common" costs to different services. In the Study, the ICC computed seven different levels of variable cost, described at pages 17-20 of the Study. Table 1 uses the lowest level and, thus, the level most favorable to the Railroad's position, i.e. ICC's "Level I" variable cost computation, the level closest to the ARR's direct or out-of-pocket costs. The other cost levels contain some allocation of indirect costs to this traffic.

[6/] TOTE identified 15 commodities with which it competes with the ARR in a "Motion for Supplementary Action" filed at the ICC on January 9, 1981, in Ex Parte No. 405, the proceeding in which the ICC developed the Staggers Act Study. A copy of the Motion, and the attached Verified Statement of expert witness Carl M. Snavely, Jr., is available from counsel for TOTE, Garvey, Schubert, Adams & Barer, 1000 Potomac Street, N.W., Washington, D.C. 20007, upon request. The Study develops cost/revenue ratios for a number of different commodity groups in Appendices E, F, and H. A comparison of the TOTE list of 15 commodities with the commodities listed in the Appendices produced a list of seven competitive commodity categories, as follows: housebuilding materials, agricultural commodities, iron and steel, machinery, paper and printing paper, food and drink, and manufactured and miscellaneous. The list is not exhaustive, but it is representative: most of the traffic as to which TOTE/Sea Land and the ARR compete is lumber and building materials designated as "housebuilding" in Appendices E, F, and H.

With cost of capital computed at the "embedded cost" to the Government,7/ Table 1 shows that the revenues from the competitive traffic exceeded the full variable costs by three percent, whereas the revenues from the noncompetitive traffic exceeded the full variable costs by 43 percent.

However, Table 1 also shows that when the cost of capital is increased to the "private enterprise requirements," -- i.e. the cost of capital to private enterprises rather than to the Government -- the competitive traffic fails to cover the full variable costs by 12 percent. In contrast, the revenues on the noncompetitive traffic exceed the full variable costs by 23 percent.

Hence, the Study shows that the availability of the Government's capital subsidy does permit the ARR to continue the long-term carriage of the competitive commodities at a revenue level which would not support a private enterprise railroad. The only conclusion available is that the Alaska Railroad is using its favored position to compete unfairly with private business.

As the language in the Senate Appropriations Committee Report indicates, the Committee wanted the Commission to

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7/ The embedded cost of capital to the Government is the price the Government actually paid for the capital it has invested in rail facilities; the cost is much lower than the cost of capital to a private individual, since (1) in many cases the Alaska Railroad could rely on its subsidy monies rather than borrowing funds and (2) the interest rate available to the Alaska Railroad reflects the fact that it is an agency of the United States Government, and as such has the full faith and credit of the United States behind it.

determine if the pricing practices of the Alaska Railroad (1) increased its reliance on the Federal subsidy and/or (2) threatened the existence of its unsubsidized competitors. However, the Commission directed its entire effort to merely developing revenue-to-full variable cost ratios.

The Commission study is silent both as to the effect of the ARR's rate policies on the level of the Federal subsidy, as well as to the effect of those policies on the private enterprise carriers with which the railroad competes.

The ARR's rate policies can have several effects on the competitive private enterprise water carriers. Obviously, if its rates divert traffic from those carriers to the railroad, there is a direct and negative impact on the gross revenues of the competitive carriers and, dependent on the economics of the situation, on their net revenues. More subtle perhaps is the impact on the willingness of the private enterprise carriers to take the risk of future investment in the Alaska trade.

Over the long run, private enterprise capital cannot compete pricewise with Government funding. As a result, the private carriers will gradually withdraw investment from the trade by not replacing existing investment as it becomes worn out or obsolete. Ultimately, the private carrier will go out of business altogether unless the Government funded carrier does not have or does not obtain sufficient capacity to meet the demands of the trade.

Even in times of high demand, a history of below-cost rates -- i.e. below the costs that private enterprise carriers would have to pay -- by the Government funded carrier will cause the private

enterprise carriers to be reluctant to make investments in new capacity to meet future increases in demand. They will recognize that, if the demand increases do not materialize as projected, the Government funded carrier can and, perhaps, will undertake rate actions that will undercut their return on the new investment.

UNIVERSITY OF ALASKA
Institute of Social and Economic Research
707 "A" St., Suite 206
Anchorage, Alaska 99501
Phone (907) 278-4621

15 January 1981

The Honorable Jalmar Kerttula
President, Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Kerttula,

In light of your longstanding interest in Interior Alaska and the role the Alaska Railroad might play in the region's economic development, I wanted to share with you a number of policy issues surrounding the proposed change in the ownership and operation of the Alaska Railroad.

In the attached memorandum, John Gray of my staff identifies many of these policy issues and suggests a way to examine them. John has shared his thoughts informally with staff of DOTPF and reports that they are making every effort to address these issues with the limited resources and time available to them. Hopefully, the departmental analyses will be sufficiently timely and pertinent to legislative interests to contribute to the legislature's final determination.

The Institute has devoted several years to developing a professional capability to aid the state in its transportation policy development and training and has made substantial progress in the past few years. As discussed in the enclosed Review, our transportation system is inextricably intermodal, with something like 85 percent of all goods being transported by more than one mode of travel. This interrelationship suggests that any possible changes in one mode, such as the railroad, may affect other modes to which it is linked and those with which it competes. Moving more freight by rail suggests changes in the demand and handling capacity of port facilities, warehousing, and transfer facilities and very real impacts on highway uses and on the trucking industry. Ideally, these intermodal impacts will also be taken into account in deciding the fate of the Alaska Railroad.

Alaska has an exciting opportunity to build a foundation for its future. Hopefully, the sudden availability of surplus revenues will not make us less judicious or wise in making such important decisions as the sound development of our transportation and power infrastructure.

JAN 19 1981

If I or the Institute can be of any assistance to you as you consider this important question, please feel free to call me.

With best regards.

Sincerely,

Lee Gorsuch

Lee Gorsuch
Director

LG/ds

Enclosure

cc. Senator Ed Dankworth
Senator Bill Ray
Representative Pappy Moss
Representative Brian Rogers
Ms. Fran Ulmer, Director, DPDP
Ms. Jessie Dodson, Special Asst., Governor's Office
Commissioner Bob Ward, DOTPF
Commissioner Chuck Webber, CED
John Gray, Asst. Prof., ISER

UNIVERSITY OF ALASKA

MEMORANDUM

January 9, 1981

TO: Lee Gorsuch

FROM: John Gray JG

SUBJECT: Policy Questions Requiring Examination Prior to a Change in Institutional Status of the Alaska Railroad

There now exists a fairly high probability that the Alaska Railroad will undergo some form of change in its institutional framework over the course of the next two to four years. This expectation is based on the perception by federal decision makers that:

- The Alaska Railroad no longer serves its original function (a frontier development tool) but has become a component in a more mature transport and economic system;
- The state now possesses the resources to assume responsibility for the operation and, if necessary, subsidization of the railroad;
- Mid- to long-term traffic prospects suggest that private capital might find some degree of involvement in the railroad increasingly attractive; and
- The railroad would be capable of providing more effective support to both public and private objectives under a revised organizational and institutional structure.

Clearly, the types of changes which could evolve from the modification which these perceptions represent could have considerable influence on both federal and state transport policy and the potential for utilization of the railroad as a development tool by or in the state. To understand the bredth of the possible changes it is first necessary to identify the issues which are critical to the parties potentially involved and how various scenarios of the railroad's future could influence these issues.

The consultant's report to the Department of Transportation and Public Facilities on the preliminary phase of the Statewide Rail Systems Study identified a number of questions requiring consideration prior to decision making on this issue. These, and a number of others listed below, include:

- The status of rail-related lands both in relationship to ANCSA conveyances and to the railroad's operational and industrial development requirements;
- The status of public employee unions, existing labor agreements, employee benefits and retirement programs, and employee protection conditions;
- Design of an ownership/operational structure which permits the railroad to seek investment capital;
- Design of an ownership/operational structure which avoids the public/private conflicts now inherent in the marketing of the railroad's services;
- Design of an ownership/operational structure which give management the flexibility to make entrepreneurial decisions and to be accountable for the outcomes of these decisions;
- A determination of whether passenger service is necessary and, if so, whether it is a public good which should be subsidized if the railroad is required to continue its operation;
- A determination of whether the railroad represents an appropriate mechanism for implementing state development policy and, if so, under what types of financial, operational, political, and economic conditions;
- A determination of the present and historic financial status of the railroad particularly as this information relates to the prospect of attracting private capital, both equity and debt;
- The desirability or usefulness of establishing a state rail regulatory capability;
- The determination of tax status (federal, state, local) of revenues and for real and operating property after conveyance;
- An assessment of traffic potential for the railroad and how an institutional realignment might affect various traffic possibilities;
- A determination of responsibility and operational mechanisms for subsidies should operating revenues not be sufficient to cover operation costs and capital renewal;

- An analysis of the different possible impacts of various institutional arrangements on potential rail extensions;
- An analysis of the impact on rail competitors of various institutional arrangements for the railroad; and
- Determination of which federal funding programs would or would not be available under different ownership/operational structures.

While many of these questions have already been identified none have undergone any detailed examination. Although there are fifteen areas of interest identified above they seem to group themselves into several broad categories each of which is somewhat interrelated to the others.

The first and central of these concerns the ownership, operational, and political form of any scheme for rail status revision. This form may place important limitations on the scope of management decision making flexibility, responsiveness to state policy making and the ability to operate the railroad in a manner acceptable to the various potentially interested parties. A variety of options appear to be available including:

- Maintain the status quo. That is, continue to function as a federal agency.
- Reorganize as a federal corporation. In form this might be somewhat similar to Canadian National Railway.
- Reorganize as a state agency. This would give the railroad somewhat the same status as the Marine Highway System.
- Reorganize as a state corporation. Such an operation might be similar to either the British Columbia Railway, the Ontario Northland Railway or to any number of small operations developed in the Eastern and Mideastern U.S. during the past five years.
- Reorganize with a combination of state ownership and private operation. This would give the state ownership of some combination of the railroad's real and operating assets while a private entrepreneur would either enter into a long-term lease agreement or contract to operate the property in a manner similar to the arrangement between the Southern Railway and the city of Cincinnati for operation of several hundred miles of line owned by that city.
- Sell the railroad to a private firm who would then function in a manner similar to comparable operations elsewhere in the country.

Clearly, these options can differ substantially in the range and size of their impacts upon the state. They also would provide considerable variation in the amount of investment by the state (although none of them would necessarily entirely eliminate state involvement). Finally, the form chosen for the railroad would determine almost entirely the degree to which rail decision making in the state would be political rather than commercial.

A second group of the decision questions might be termed institutional. These include the labor, lands, regulatory, federal relationship and, to some degree, the intermodal competition questions. While these are related to the structural matters outlined above, they are grouped separately since they have substantial portions which are applicable to any of the forms noted above. Their solutions may also take several forms in any one of the cases noted above. These may also be among the most difficult questions to answer since they tend to involve a variety of rather vocal political constituencies.

The final set of areas are those involving finance and traffic. Clearly, they cannot be separated from the structural matters outlined, however, much of the content of these questions can be relevant to any of the potential forms. As such, they may serve as descriptive baselines against which to evaluate alternatives. Much of the background for these areas already exist in two documents:

- "The Preliminary Statewide Rail Systems Study"
- "The Alaska Railroad - Future Freight Markets"

The latter item would require a good deal of updating.

The principal area which is lacking is a solid understanding of the railroad's financial structure. I would suspect that much of the accounting data which one might need to compare the ARR operations with those of other carriers will not exist since the railroad has been required to maintain its books on the basis of federal government accounting practices rather than industrial practices. Additionally, valuing existing capital assets could be very difficult because of the railroad's federal status. However, it will be necessary to perform such an evaluation, particularly if private capital is to be brought into the concept.

I would suggest that the following study procedure would produce most quickly results of value to decision makers. It is based on the premise that the central element in the analysis is the structural ownership/operational form that would result from the decision making. The first step would appear to be the careful and complete definition of each of the potential structural forms including any subtypes. These definitions whould then be compared to ~~each of the fifteen quations~~

each of the fifteen questions raised earlier. To as great an extent as possible, these relationships should be quantified, however, this is clearly not possible in all of the areas. In some cases qualitative assessment will be necessary with, if possible, some thought given to a (relatively) subjective weighting of alternatives. As mentioned, many of the institutional matters may require considerations outside a specific structural form and should thus be evaluated and defined in the same manner as the forms with the results then used to judge the interaction of institutional alternatives with structural forms.

For strict decision making purposes, it is not usually of great value to have large volumes of detailed quantitative information. Therefore, I believe that the final product should be in the form of a matrix with the structural forms on one axis and decision questions (or sub-questions) on the second axis. The contents of each matrix location would be a weighting factor which would compare the quality of the forms in addressing the question. It would probably not be appropriate to suggest a best solution (although it would be possible to do so) rather, it would be more useful to indicate a best course of action in regards to each question. The text would be both a qualitative and quantitative analysis which would support the entries in the matrix.

Finally, I would emphasize that any work in this area should be coordinated with the continuing DOTPF rail planning program. This information and contacts available through their office are much more extensive than we could possibly develop within a reasonable timeframe. Further, individuals in that office have been involved in various aspects of this work for almost six months and have begun to develop a good deal knowledge in the field. They would also probably be involved in any plan of execution that in any way concerned an expenditure of state funds for the capital or operating acquisition or subsidies and would, in any case, be a part of intermodal planning efforts related to the railroad.

ADOPTED

Technical amendments to *** "inter-lineated" draft

1) On page 4, at line 3, following the word "not ," add the words "directly or"

2) On page 7, at line 14, add a new subsection: "(d) A member whose term has expired shall serve until his successor has been appointed by the Governor."

3) On page 9, at line 21, delete the word "governing" and insert in lieu thereof the word "delegating;" at line 22 delete the words "be conducted" through the word "by" in line 23; at line 24, following the word "official" insert a comma and the words "subject to any board review specified in the policies"

4) On page 14, at line 3, following the word "information"; on page 17 at line 6, following the word "matters"; and at line 15 of the same page following the word "Commission," add the words "including but not limited to proprietary information associated with specific shippers, divisions and contract rate agreements" On these same pages add "U.S." preceding each reference to the Interstate Commerce Commission.

5) On page 14, at line 10 delete the words "and for" through the word "regulations," on the next line; At line 19 following the period add a new sentence: "The legislature by appropriate action may annul or temporarily suspend a regulation adopted by the authority."

6) On page 16, at line 12, following the word "after" insert the words "the date of"

7) On page 21, at line 30, delete the word "railroad"

8) On page 25, at line 21 following the word "classification" insert a comma and the word "control"

9) On page 25, at line 28, strike the words "general manager" and insert in lieu thereof the words "chief executive officer"

10) On page 28, at lines 26-27 strike the words "general manager" and insert in lieu thereof the words "chief executive officer"

11) On page 30, at line 19, following the word "legislature," insert the words "and the authority"

12) On page 30, at line 27, following the word "adopt," insert the word "exclusive"

13) On page 36, at line 13, delete the word "council" and insert in lieu thereof the word "board"

14) On page 38, at line 9 delete the word "appropriate" and insert in lieu thereof the word "applicable"

15) On page 41, at line 29, following the word "approved" insert the words "or rejected" and at line 30, following the word "act" insert the words "or to refrain from acting"

16) On page 42, at line 28 delete the word "may" and insert in lieu thereof the word "shall"

17) On page 43. at line 12, following the word "ommission" insert the words "or has filed an annual report that is false or deceptively misleading on a material matter"

18) On page 51, at line 3, following the word "house," insert the words "the minority leaders of each house,"; delete the words "and ranking minority members" on lines 3-4; and on line 4, following the word "transportation" insert the words "and finance"

19) On page 52, at line 18 delete the text of (5) and insert in lieu thereof the following:

A.S. Title 35 does not apply to the operations of the authority.

Delete subsection 6 of AS 42.40.1020 on page 51 to you know

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. SB 212 (Dankworth, Kerttula & Sturgulewski)
Title An Act establishing the Alaska Railroad Authority
Requested by Sens. Dankworth, Kerttula & Sturgulewsk Date 2/26/81

II. FISCAL DETAIL
Agency Affected DOT/PF
Program Category Affected N/A
BRU, Program, Or Subprogram(s) Affected Transportation
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| (See Footnote #1) | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | | 160.5 | 243.8 | | | |
| 200 TRAVEL | | 25.2 | 28.0 | | | |
| 300 CONTRACTUAL | | 270.0 | 270.0 | | | |
| 400 COMMODITIES | | | | | | |
| 500 EQUIPMENT | | 5.0 | 2.0 | | | |
| 600 LAND & STRUCTURES | | | | | | |
| 700 GRANTS,CLAIMS,ETC. | | | | | | |
| TOTAL | | 460.7 | 543.8 | | | |

FUNDING (Thousands of Dollars)

(See Footnote #2)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 460.7 | 543.8 | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

ASSUMPTIONS/EXPENDITURE BREAKDOWNS:

A) All cost estimates are in FY 82 dollars.

B) Expenditures will not commence prior to FY 83. The Act carries an outdated effective date.

C) FY 83 and 84 estimates cover only initial organizational structuring and expenses through the transfer negotiation stages.

D) 100 Personal Services:

| Position | FY 83 Range | Salary | Overhead (27%) | Total |
|---|---|---|---|---|
| President (Dir. level) | 26 | $59,225 | $15,985 | $75,210 |
| Executive Secretary | 10 | $21,505 | $ 5,750 | $27,255 |
| Planner V | 21 | $45,770 | $12,305 | $58,075 |
| | | | | $160,540 |

IV. DATE 1/18/82 PREPARED BY Mark S. Hickey

AGENCY DOT/PF - S.E. Planning and Programming

PHONE 364-4332

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

33-001 (Rev. 12/81)

100 Personal Services (cont.): FY 84

| Position | Range | Salary | Overhead (27%) | Total |
|---|---|---|---|---|
| President (Dir. Level) | 26 | $62,215 | $16,790 | $ 79,005 |
| Executive Secretary | 10 | $23,345 | $ 6,325 | $ 29,670 |
| Planner V | 21 | $49,680 | $13,455 | $ 63,135 |
| Planner III | 17 | $37,145 | $10,005 | $ 47,150 |
| Clerk Typist II | 07 | $19,550 | $ 5,290 | $ 24,840 |
| | | | | $243,800 |

(These positions reflect the authority noted in the legislation allowing the President to employ additional staff as necessary. The staff growth in FY 84 is based on the assumption of increased duties following organizational structuring in the FY 83 year.)

E) 200 Travel: FY 83

Quarterly meeting of the board of directors, with an assumption of additional attendance by the President (average attendance = 8):

Round-trip air fare @ $350 x 8 = $2,800

Two days per diem @ $80 per day x 8 = $1,280

Incidental meeting expenses = $130

Total per meeting = $4,210 x 4 meetings = $16,840

Additional travel requirements of board and staff (including D.C. trips for negotiations):

12 trips per year @ $700 air fare and per diem = $8,400

FY 83 Total = $25,240

FY 84 travel budget reflects a small increase due to additional staff and greater duties: $28,000

F) 300 Contractual: FY 83 and 84

Office Space Rental: 1,000 net square feet @ $20 annual nsf cost = $20,000

Bond counsel and consultant requirements: $250,000 Total: $270,000 per year

(These latter contractual requirements reflect the authority noted in the legislation and are based on the assumption of needed expertise to establish the appropriate bonding authorities and the organizational format of this public corporation.)

G) 500 Equipment: Minor expenditures for the necessary business machines are indicated under this category.

FOOTNOTES:

1. No actual estimates are provided for subsequent fiscal years because of the difficulty in predicting levels of responsibility beyond initial organizational structuring and potential expenses through the transfer negotiation stages. In that Sec. 42.40.120 specifically requires the authority to provide for the operation of the Alaska Railroad following transfer, there exists the real possibility of the State incurring significant liabilities for the ongoing operation of the railroad. Although rough estimates could be provided of these potential costs, there exists a structural limitation under this piece of legislation as drafted, since Sec. 42.40.230 clearly states that neither the credit nor the taxing powers of the State or its political subdivisions may be pledged by the authority, and that the State and its political subdivisions will not be liable for the debts incurred by the authority.

2. The legislation does not address a specific source of funding for the establishment of this public corporation. Consequently, the first two years of funding are depicted under the General Fund category. Although no funding is shown under the Federal Fund category, there are both planning and operational assistance grants available from the Federal Railroad Administration, U.S. Department of Transportation, to aid local rail operations. DOT/PF is currently the receipient of rail planning funds, which represents the major source of funds of DOT/PF's rail studies. However, while it is apparent that if this public corporation is formed, it will become the administrator of these funds, it is doubtful that the State of Alaska would be allowed to use these funds other than for technical rail planning. As a result, these funds are not depicted as a source of funding for the contractual requirements noted above.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

# SECTION-BY-SECTION EXPLANATION TO ** DRAFT

## ARTICLE 1. FINDINGS

Sec. 42.40.100. FINDINGS. The individual findings are self-explanatory. Each was included for a specific purpose. In addition to describing the factual and policy setting in which the transfer of the railroad to the state is occurring, findings are necessary to establish the legislature's expectations with respect to the authority. Some findings are required by the state Constitution and others will strengthen the ability of the authority to secure tax-exempt financing.

## ARTICLE 2. CREATION AND ORGANIZATION.

Sec. 42.40.200. ESTABLISHMENT OF AUTHORITY. The Alaska Railroad Authority is established in this section. Its existence commences on the appointment by the governor of all of the members of its board of commissioners.

Sec. 42.40.205. LIMITATION OF LIABILITY. That all the authority's liabilities are exclusively its own and not the state's is clearly stated in this section.

Sec. 42.40.210. BOARD OF COMMISSIONERS. Self-explanatory.

Sec. 42.40.215. APPOINTMENT AND COMPOSITION OF BOARD. Subsection (a) provides that the board consists of the Commissioner of Transportation and Public Facilities and six "public" members, who may not be state officers or employees.

The authority's chief executive officer and an authority employee, appointed by the Governor, representing the unions on the property are ex officio, non-voting members. A general qualification standard is provided in order to encourage the appointment of persons who can make substantive contributions to the council. One member is to be or have been an executive of a non-connecting railroad, if legally permissible. At least four public members must come from areas served by the railroad.

Subsection (b) provides that the governor exercises his power of appointment only upon enactment of state legislation accepting the closing report prepared under the federal transfer legislation. The closing report is to include a specific accounting of the assets and liabilities being transferred. The legislature may not condition its acceptance of the report on its modification but may only accept or reject it.

Subsection (c) provides for confirmation of board members by the legislature but also provides that appointed members have full powers and responsibilities until rejected.

Subsections (d), (e), and (f) relate to the election of board officers and the removal of board members for specific reasons.

Sec. 42.40.220. TERM OF OFFICE; VACANCIES. Other than initial board members who serve staggered terms to ensure long-term continuity, board members will serve five year terms, as provided in this section. The section also provides for the appointment, subject to confirmation, of replacement members to fill unexpired

terms and the preservation of the authority of a board quorum in the event of a vacancy. A member whose term has expired serves until his successor has been appointed.

Sec. 42.40.225. COMPENSATION AND EXPENSES. Compensation in the amount of $300 per day for public board members is provided in this section. The board is responsible for determining, in its rules, how partial work days will be compensated. Members also are entitled to per diem and travel expenses.

Sec. 42.40.230. QUORUM AND NOTICE OF MEETINGS. A quorum of four voting members is established by this section. In addition to the notice requirements of state law, this section provides that notice of meetings must be given to board members, certain state officials, two newspapers of statewide circulation and, upon request, members of the general public.

Sec. 42.40.240. VOTING. This section provides that the board rules will prescribe the manner of voting and any representation of absent members.

Sec. 42.40.250. EXECUTIVE OFFICIALS. This section provides for appointment of authority officials and personnel. The board itself appoints and fixes compensation for a chief executive officer and legal counsel. Appointment of legal counsel is subject to the approval of the Governor for competence. The chief executive officer, subject to board approval, names the other executive officials. These officials, designated in the definitions, all serve at the pleasure of the board. The chief

executive officer appoints all other personnel. No executive official, except as may be temporarily required by the federal transfer legislation, may receive more compensation than state departmental commissioners.

Sec. 42.40.260. DELEGATION. This section provides that the daily affairs and operations of the railroad are the responsibility of the chief executive officer. The board is required to delegate to the chief executive officer certain matters such as leasing, specific rate-setting, routine changes in service levels and procurement. General or particular board authorization or concurrence is required for other enumerated activities.

ARTICLE 3. ADMINISTRATIVE PROVISIONS

Sec. 42.40.300. CONFLICTS OF INTEREST. This section prohibits a board member or employee from participating in a decision in which he, or a member of his immediate family, has a direct or indirect financial interest. The board may authorize a member or employee to participate when the financial interest is only a remote one, as defined in subsection (b). Additionally, a board member or employee may participate where he will not be affected in a manner different from the public generally. Subsection (d) voids board action where a vote in violation of Sec. 42.40.300 was necessary to make up the majority. Otherwise, the board may ratify action taken after a separate vote without participation by the interested person. An intentional violation of Sec.

42.40.300 or A.S. 39.50 results in the forfeit of the member's or employee's office.

Subsection (e) extends A.S. 39.50, requiring the submission of financial disclosure statements and compliance with conflict of interest standards, to the executive employees and board members. The board is also required in subsection (f) to adopt within 120 days of the first meeting rules implementing the conflict of interest section.

Sec. 42.40.310. PUBLIC BOARD MEETINGS. This section requires that board meetings be public and that executive sessions be used only when permitted by the state open meetings statute, A.S. 44.62.310, or when the matters under discussion pertain to land acquisition or disposal or proprietary information.

Sec. 42.40.320. MINUTES OF MEETINGS. This section requires the board to keep minutes of its meetings and to send certified copies of the minutes covering the public portion of each meeting to the governor and to the leadership of the legislature.

Sec. 42.40.330. ADMINISTRATIVE PROCEDURE. This section provides that the state's Administrative Procedure Act does not apply to the authority, with the exception that the Open Meeting Act applies to the authority's meetings. The authority is required to make its rules and regulations available to the public. The legislature may, by appropriate action, annul or temporarily suspend an authority regulation.

Subsection (b) requires the authority to provide advance notice and opportunity for the public to comment on regulations that are likely to have a substantial impact on the public. Emergency regulations may be adopted, but may remain in effect for only 120 days. Subsection (c) requires that certain types of rules and regulations be submitted to the attorney general for review and approval. Subsection (d) exempts from the rulemaking procedures four designated classes of regulations. Subsection (e) provides that the authority shall be considered an agency of the state for purposes of judicial review of the authority's actions.

Sec. 42.40.335. PRE-EXISTING RULES, REGULATIONS AND ORDERS OF THE ALASKA RAILROAD. This section allows the authority board to continue in effect the Alaska Railroad's existing rules, regulations and orders for a period not to exceed two years.

Sec. 42.40.340. PENALTY FOR VIOLATION OF DESIGNATED REGULATION. This section makes a violation (other than by an authority official or employee within the scope of his employment) of any of the authority's regulations designated as necessary to protect life, health, or property a misdemeanor punishable by a $1,000 fine and/or six months imprisonment.

Sec. 42.40.345. PUBLIC DISCLOSURE OF INFORMATION. This section requires that information in the possession of the authority is public unless the authority, by rule or regulation, withholds

such information by designating it to be of a nonpublic or privileged nature. A procedure is also established whereby individuals may object to public disclosure of information in the possession of the authority, and such information may be withheld if the public interest is not adversely affected.

ARTICLE 4. POWERS AND DUTIES

Sec. 42.40.400. GENERAL POWERS. This section delineates the numerous powers the authority needs in order to effectively manage and operate the Alaska Railroad. The list is intended to be nonexclusive but each of the enumerated powers appears for a specific reason. Most are obviously required by the authority to enable it to operate and manage the railroad. Others strengthen the authority's ability to engage in tax-exempt financing. Others will enable the authority to satisfy reasonably foreseeable requirements of the federal transfer legislation and still others anticipate the role the railroad will play in the future economic development of the state.

Sec. 42.40.410. ANNUAL REPORT. A report generally describing the operation and financial condition of the authority, certified by the board, is required by this section to be submitted to the governor and each member of the legislature by February 1 of each year.

Sec. 42.40.420. ANNUAL AUDIT. This section obligates the board to have the authority's financial records audited annually by an independent certified public accountant experienced in rail

accounting. The audit, during the five years following transfer, is to include the status of the assets and liabilities identified in the closing report prepared under the federal transfer legislation. The financial records of the authority also are subject to audit and inspection by the governor's internal auditor and the legislative auditor. Access to these materials by these officials is unrestricted but disclosure is limited.

Sec. 42.40.425. LONG-RANGE PROGRAM AND CAPITAL PLANNING. This section obligates the authority to prepare long-range program and capital plans. The planning process is intended to ensure authority fidelity with the purposes of this chapter. The five-year, annually updated program plan required by paragraph (a)(1) is to provide information substantially consistent with that required of line agencies by the Executive Budget Act, although the format in which it is presented is to be developed by the authority, the legislative auditor and the division of budget and management. Three years after the preparation of the first program plan, the governor and legislative auditor may conduct a performance and efficiency audit of the authority's compliance with its plan. Paragraph (a)(2) provides for a companion five-year capital improvement plan which also is to be annually updated. The information provided in this plan is to be consistent with that required in Sec. 42.40.700(b) for projects subject to state review.

Subsection (c) requires distribution of the annually updated plans to state officials.

Sec. 42.40.430. USE OF AUTHORITY ASSETS. This section requires use of authority funds, property, assets and credit for activities authorized by this chapter. It also precludes the issuance of stock, loans to board members or employees, business for private benefit and other activities inappropriate for a public authority. Subsection (b) makes it clear that the authority is allowed to serve its employees or board members in the same manner it would others in the same general class, such as passengers or shippers, as long as no special privilege is accorded the employees or board members. It also expressly permits the authority to indemnify and insure its employees, agents and board members.

ARTICLE 5. RAIL PROPERTIES

Sec. 42.40.500. RAIL PROPERTIES. Sec. 42.40.500 provides that the authority will receive and own the properties of the Alaska Railroad transferred under the federal legislation. These properties, as defined by A.S. 42.40.900(10), include both real and personal property of the railroad. Like state lands, the authority's lands are protected from adverse possession by A.S. 38.95.010. Subsection (a) also provides that the authority's lands may not be disposed of without compliance with the specific procedures contained in Chapter 40.

Subsection (b) requires the authority to convey the subsurface estate of the lands it receives to the state within 120 days after transfer. The authority may reserve the right to use sand, gravel and other materials on the lands conveyed to the state. Its retained interest includes the right to tunnel and otherwise use the subsurface as necessary for transportation and related purposes.

Under subsection (c), the authority is given the power to litigate and settle any claims arising out of the transfer process, including claims for breach of warranty by the United States. Under subsection (d), the authority may submit applications for interests in federal lands, such as rights-of-way, and receive conveyances of those interests. Additionally, the authority is authorized by subsection (e) to acquire state and federal surplus property under existing law.

Subsection (f) requires the authority to give public notice of the disposal of interests in land, other than leases, easements, and land-use permits.

Sec. 42.40.510. CLASSIFICATION, ACQUISITION AND USE OF STATE LANDS FOR RAILROAD PURPOSES. Sec. 42.40.510 provides a mechanism allowing the authority to acquire state lands for railroad purposes with the concurrence of the Commissioner of Natural Resources. Such acquisition would be necessary in the event of an expansion which involves use of state lands for new routes. The acquisition procedure is initiated by a resolution of the

authority's council identifying specific lands for rail purposes. Within 180 days after receiving the resolution, the Commissioner of Natural Resources is required to either permanently classify and convey the surface estate of the requested lands for railroad purposes or to deny the classification as not in the best interest of the state. Conveyances under this section include sand, gravel and other construction materials useful for railroad purposes.

Subsection (c) also allows the authority and the Commissioner to engage in joint management of railroad lands, to agree to conditions for the classification of state lands as railroad lands, and to periodically review both state and railroad lands to determine their suitability for railroad purposes. The authority may reconvey to the state lands which it no longer needs.

Subsection (d) elaborates on the nature of the authority's retained interest.

Subsection (e) provides an emergency procedure for relocation of right-of-way and related fixtures to state lands where such relocation is necessary to maintain safe and adequate rail operations. Within 45 days after relocation, the authority must request classification and conveyance of the state lands under the normal procedure.

Sec. 42.40.515. DEVELOPMENT OF OIL, GAS, MINERALS AND GEOTHERMAL RESOURCES ON AUTHORITY LANDS. The Department of Natural Resources may lease or develop resources on authority

lands only after a review procedure involving both the Department of Natural Resources and the authority has been completed. The review procedure requires an agreement as to suitable reimbursement for any costs incurred by the authority as a result of the development. The authority's approval of the development must be evidenced by a written authorization. Additionally, subsection (b) requires the department of natural resources to require a surety bond from any party other than the state engaged in resource development on railroad lands.

Subsection (c) requires the Department of Natural Resources to maintain records and annually report to the legislature concerning the income received from the subsurface of railroad lands and the value of all subsurface conveyed by the authority to the state.

Subsection (d) establishes the Alaska Railroad Income Fund in the State Treasury for income received by the state from lands in which the authority has an interest. The fund is subject to appropriation by the Legislature.

Sec. 42.40.520. LAND USE REGULATION. This section authorizes the authority to promote the common health, safety, and welfare of the public by adopting regulations governing land use by private parties having interests, such as leases or permits, in lands owned or managed by the authority.

Sec. 42.40.530. EMINENT DOMAIN AND ACQUISITION OF PROPERTY AND MATERIALS. This section confers eminent domain power on the

authority under the state's general eminent domain statute. When the authority acquires a fee simple interest, which may be necessary to ensure control of activities on the surface estate, the authority must reconvey the subsurface to the state. The authority is exempted from the requirements of A.S. 09.55 that fences and cattle guards be built in cases where land is condemned for railroad purposes.

Subsection (d) authorizes the authority to acquire land by filing a declaration of taking.

Subsection (e) clarifies that the authority may exercise eminent domain to obtain materials as well as the land and access necessary to develop them. The authority is also authorized by subsection (f) to vacate land, or any part of it, and reconvey title to the state, if compensation was paid for it.

ARTICLE 6. FINANCIAL PROVISIONS

Sec. 42.40.600. BONDS AND NOTES. This section authorizes the authority, by resolution of the board, to issue bonds and bond anticipation notes to provide money to carry out its purposes. The section vests broad discretion in the board in the exercise of this authority. Other than specific limitations provided in this section such as a maximum term of 50 years for instruments and the requirement that bond or note proceeds be dedicated to activities specifically related to the purposes for which the instruments are issued, it is intended that the board have the maximum flexibility legally permissible in financing its

activities. The 18 covenants and powers delineated in subsection (g) are not intended to be exclusive. Paragraph (19) is a general grant of authority to the board to exercise such other powers and make such other covenants, notwithstanding their omission from the specific list, as may be necessary, convenient and desirable.

Sec. 42.40.610. INDEPENDENT FINANCIAL ADVISOR. The board is required by this section to retain a financial advisor independent of the underwriter in negotiating the private sale of bonds and notes.

Sec. 42.40.615. VALIDITY OF PLEDGE. This procedural section facilitates the pledge of assets or revenues to the payment of authority debt. It provides for automatic lien attachments; gives the liens priority against all parties with junior position regardless of notice; and allows the authority to sell assets subject to a pledge.

Sec. 42.40.620. REMEDIES. For the benefit of holders of authority securities, this section provides that remedies and rights available under the terms of such instruments are to be broadly enforceable.

Sec. 42.40.625. NEGOTIABLE INSTRUMENTS. Self-explanatory.

Sec. 42.40.630. BONDS AND NOTES ELIGIBLE FOR INVESTMENT. This section authorizes public and private entities and individuals, including the state, and its other political subdivisions,

institutions and others subject to regulation by state law to invest in authority securities.

Sec. 42.40.635. REFUNDING BONDS. The issuance of refunding bonds to refund outstanding bonds is authorized by this section. Insofar as may be appropriate, the provisions of this chapter also apply to refunding bonds. Subsection (b) authorizes investment of refunding bond proceeds, pending their application as contemplated upon issuance, in direct or guaranteed obligations of the United States, the state or other entities with comparably rated credit.

Sec. 42.40.640. CREDIT OF STATE NOT PLEDGED; REQUIRED DISCLAIMER. This section states that the authority's securities are not obligations of the state and are payable exclusively from revenues or assets of the authority, without recourse to the state or its other political subdivisions. It also requires that each instrument issued by the authority contain a disclaimer on its face to this effect.

Sec. 42.40.645. NO PERSONAL LIABILITY. Self-explanatory.

Sec. 42.40.650. REVENUES. This section provides for authority retention and management of its own revenues, which do not become part of the state's general fund.

Sec. 42.40.655. INSURANCE. In addition to requiring the authority to maintain adequate insurance, this section requires that the state be named as an additional insured.

Sec. 42.40.660. SAFEGUARDING OF FUNDS. Self-explanatory.

Sec. 42.40.665. FIDELITY BOND. Self-explanatory.

Sec. 42.40.670. REVERSION OF ASSETS. Self-explanatory.

ARTICLE 7. STATE OVERSIGHT

Sec. 42.40.700. STATE REVIEW. This section requires the authority to obtain the approval of at least the governor and possibly the legislature for certain enumerated major actions. The authority must first notify the governor and the leadership of the legislature that it proposes to undertake any of the designated actions. The governor may either disapprove the proposal, suspend it pending review by the legislature or approve it. Approval or disapproval are final and dispositive. If the governor suspends the proposal, he transmits his decision and his recommendation to the legislature. The legislature may then reject it. If either the governor or the legislature fail to act within the time provided, the proposal is deemed approved and the authority may proceed.

Subsection (e), the foregoing notwithstanding, requires specific authorization by the legislature by law of any proposed extension representing more than 50 percent of the railroad's total track mileage and requiring the issuance of securities in an amount greater than $50 million.

Subsection (f) provides that this section is satisfied if the authority has been directed to proceed with a project through the Sec. 42.40.710 action-forcing mechanism or in the event the legislature has funded a project independently.

Sec. 42.40.710. ACTION-FORCING MECHANISM. This section requires the authority to respond formally to a request for consideration of a proposal by either the governor or the legislature. Within 30 days of receiving such a request, the authority, in writing, must commit to undertake the suggested proposal or explain why it will not or is precluded from doing so. At the request of the governor or on its own initiative, the legislature may then direct the authority to proceed, its response notwithstanding, if the legislature also provides funds to plan and implement the proposal.

Sec. 42.40.715. INTERVENTION. This section provides that the governor, when so authorized by the legislature, may intervene in and exercise control of the authority under certain delineated circumstances. The intervention mechanism permits the governor to correct the deficiencies and is to cease as soon as the necessary corrections have been made.

Sec. 42.40.720. TRUSTEESHIP. This section provides that the legislature may also authorize the governor to petition the State Superior Court at Anchorage to impose a trusteeship over the authority under specific circumstances, including insolvency, misapplication of resources or impairment of the state's creditworthiness. The trustees appointed by the court are given broad powers to cure the situation.

ARCTICLE 8. PERSONNEL AND GENERAL PROVISIONS

Sec. 42.40.800. PERSONNEL. This section provides that the employees of the authority are not employees of the state. It also provides for application of the state's Public Employment Relations Act to the authority's employees.

Subsection (c) directs the authority to adopt collective bargaining agreements which continue, until they expire or are renegotiated, the provisions of the agreements in effect immediately prior to transfer.

Subsection (d) precludes organization of the authority's executive officials.

Sec. 42.40.810. POLITICAL ACTIVITIES. This section precludes use of authority funds in political activities including legislative efforts. Nevertheless, board members and employees are authorized to participate in legislative proceedings at all levels of government in connection with matters directly affecting the authority. Violations of this section are subject to personal fines up to $5,000 under subsection (b).

Sec. 42.40.820. LICENSES AND PERMITS. This section provides that the authority, to the same extent as the state and except as otherwise provided in this chapter, will comply with local, state and federal licensing and permitting requirements.

Sec. 42.40.830. UNAUTHORIZED REPRESENTATION. Self-explanatory.

Sec. 42.40.840. CLAIMS AGAINST THE AUTHORITY. Subsection (a) of Sec. 42.40.840 requires that all legal claims involving the authority be brought against the authority and not against the State of Alaska. This requirement reaffirms that the debts of the authority are not the debts of the state.

Subsection (b) extends certain rights, privileges and immunities of the state and state officers to the authority and its council members and employees. Among these are the requirement that legal actions generally be brought within six years (A.S. 09.10.120), immunity against suit for actions taken with due care or in the exercise of discretion (A.S. 09.50.250), and an exemption from giving bond in actions where such is ordinarily required (A.S. 09.65.040).

Subsection (c) provides that claims against the authority will not be subject to the administrative procedure for presenting and deciding claims against the state or its agencies. (A.S. 44.77.010 et seq.)

Subsection (d) clarifies that A.S. 44.80.010, concerning the state's status as a party to actions against departments and agencies, does not apply to the authority. As a result, the state may not be named in an action against the authority and the Department of Law is not required to bring or defend actions concerning the authority.

Sec. 42.40.855. EXEMPTION FROM TAXATION. This section exempts the authority from state and political subdivision

taxation. Subsection (c) provides that authority property is considered taxable for the limited purposes of computing state aid to local school districts.

Sec. 42.40.870. PAYMENTS IN LIEU OF LOCAL REAL PROPERTY TAXATION AND IMPACT AID. This section authorizes the authority to provide, in its discretion and under certain circumstances, partial payments in lieu of local real property taxation by communities in which the authority has substantial land holdings. The authority also is allowed to provide discretionary impact aid to localities for public education and other facilities required to be developed as a result of expanded authority activities in such areas.

ARTICLE 9. MISCELLANEOUS PROVISIONS

Sec. 42.40.900. DEFINITIONS.

(1) through (6) Self-explanatory.

(7) "Immediate family" is defined for purposes of Sec. 42.40.300 CONFLICTS OF INTEREST.

(8) Self-explanatory.

(9) "Leadership of the legislature" is defined for purposes of notice and filings required by this chapter. The definition specifically provides that the designated office-holders may designate persons or offices to receive such notices and filings.

(10) Self-explanatory.

(11) "Regulation" is defined to have the same meaning as that term is defined under the State Administrative Procedure Act.

(12) "Rule" is distinguished from "regulation" as it relates to the authority's internal affairs and not to activities affecting the public at large.

Sec. 42.40.910. SEVERABILITY. Self-explanatory.

Sec. 42.40.920. CONSTRUCTION. Self-explanatory.

Sec. 42.40.930. DATE OF EFFECTIVENESS. This section provides that the chapter becomes effective upon enactment of federal legislation transferring the Alaska Railroad.

ARTICLE 10. APPLICATION OF OTHER LAWS

Sec. 42.40.1010. CONFLICTING LAWS INAPPLICABLE. Self-explanatory.

Sec. 42.40.1020. REPEAL, AMENDMENT, AND APPLICATION OF EXISTING STATUTES.

(1) A.S. Title 19 does not apply to the authority -- sets forth the responsibilities of and restrictions on the Department of Transportation and Public Facilities in the construction and operations of highways; some of its provisions regarding construction, public bids, etc., arguably apply to other activities of DOT/PF, to which the authority will be nominally assigned.

(2) The authority is considered a "political subdivision" for purposes of A.S. 23.10.055 -- state wage and hour statute.

(3) A.S. 23.10.420 does not apply to the authority -- full-crew law.

(4) A.S. 30.15 does not apply to the authority -- procedures for state grants for construction of local port facilities.

(5) Authority activities are not subject to A.S. Title 35, which deals generally with public works. The authority is exempt from public bidding requirements, Department of Transportation and Public Facilities supervision of construction, planning of projects, etc.

(6) The following provisions of A.S. Title 37 do not apply to the authority's operations and budgeting procedures:

(a) A.S. 37.05 -- the Fiscal Procedures Act establishes uniform accounting, purchasing, post auditing, and related financial provisions for all "state agencies" and requires state agencies to submit reports, documents, and statements to the Department of Administration for accounting purposes, requires federal funds received by state agencies to be deposited in the state treasury, makes the Department of Administration responsible for all accounts and purchases of state agencies, requires competitive bidding procedures, and imposes other financial and reporting requirements;

(b) A.S. 37.07 -- Executive Budget Act;

(c) A.S. 37.10.010 - .060 -- these sections make the Department of Administration the custodian of state funds and

require all officers, boards, commissions, etc., to account to the Department of Revenue for all moneys received;

(d) A.S. 37.10.085 -- prohibits a political subdivision of the state from subscribing to the stock of the corporation for loaning credit or borrowing money for use of the corporation;

(e) A.S. 37.20 -- authorizes the governor to accept federal grants and transfers of property, and making land so transferred subject to the jurisdiction of the initial Department of Natural Resources; and

(f) A.S. 37.25 -- determines which unexpected appropriations lapse and which do not.

(7) The authority is not subject to the jurisdiction of the Alaska Transportation Commission.

(8) A.S. 39.50.200(b) is amended to include the authority.

(9) Provides subsequently enacted statutes shall not be interpreted to apply to the authority unless they do so specifically by their terms.

PLEASE NOTE: THE PRECEDING PAGES HERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

SB

213

FISCAL NOTE: SB 212 An Act establishing the Alaska Railroad Authority

PAGE TWO

100 Personal Services (cont.): FY 83

| Position | Range | Salary | Overhead (27%) | Total |
|---|---|---|---|---|
| President (Dir. Level) | 26 | $54,100 | $14,600 | $68,700 |
| Executive Secretary | 10 | $20,300 | $5,500 | $25,800 |
| Planner V | 21 | $43,200 | $11,700 | $54,900 |
| Planner III | 17 | $32,300 | $8,700 | $41,000 |
| Clerk Typist II | 07 | $17,000 | $4,600 | $21,600 |
| | | | | $212,000 |

(These positions reflect the authority noted in the legislation allowing the President to employ additional staff as necessary. The staff growth in FY 83 is based on the assumption of increased duties following organizational structuring in the FY 82 year.)

E) 200 Travel: FY 82

Quarterly meeting of the board of directors, with an assumption of additional attendance by the President (average attendance =8):

Round-trip air fare @ $300 x 8 = $2,400

Two days per diem @ $67 per day x 8 = $1,100

Incidental meeting expenses = $100

Total per meeting = $3,600 x 4 meetings = $14,400

Additional travel requirements of board and staff (including D.C. trips for negotiations):

12 trips per year @ $600 air fare and per diem = $7,200

FY 82 Total = $21,600

FY 83 travel budget reflects a small increase due to additional staff and greater duties: $24,000

F) 300 Contractual: FY 82 and 83

Office Space Rental: 1,000 net square feet @ $18 annual nsf cost = $18,000

Bond counsel and consultant requirements: $200,000 Total: $218,000 per year

(These latter contractual requirements reflect the authority noted in the legislation and are based on the assumption of needed expertise to establish the appropriate bonding authorities and the organizational format of this public corporation.)

G) 500 Equipment: Minor expenditures for the necessary business machines are indicated under this category.

FOOTNOTES:

1 No attempt has been made to include cost estimates with respect to liabilities and obligations associated with the transfer of the railroad itself. The FY 82 and 83 figures only cover organizational structuring and transfer negotiation. However, in that Section 3 (b) (2) specifically notes the authority may enter into a transfer agreement that includes the assumption of rights and obligations of the Alaska Railroad, there are several major concerns which warrant attention prior to legislation enactment. The following list briefly highlights these items:

(a) acquisition costs: this item could potentially range from the high estimate of $220 - $240 million, which reflects the railroad's current value in terms of actual Federal dollars invested, to the inferred asking price of one dollar;

(b) deferred maintenance costs: current estimates by the railroad and the Federal Railroad Administration place this figure somewhere between $60 to $70 million, which raises the associated question of Federal replacement responsibilities to cover these expended assets;

(c) ongoing capital and operation (freight and passenger) costs: this item, which varies greatly depending on current traffic volume and the relative health of the Alaskan economy, could easily become a significant ongoing liability to the State or merely a sporadic or even nonexistent requirement; (Note: Attached are four financial statements from the Alaska Railroad's FY 80 Annual Report to provide some current data on this point.)

(d) personnel liabilities: this concern, which without more specific data is impossible to estimate other than to say it could well range into the hundreds of millions of dollars, includes not only existing retirement and benefit responsibilities, but also the assumption of contractual obligations under current collective bargaining agreements with respect to such items as pay scales, employee levels, and senority requirements.

(e) land status uncertainty: this issue involves both the general question of status of all railroad property under the transfer scenario, and the specific concern of outstanding land claims, particularly under ANSCA, against Alaska Railroad property;

(f) pending litigation: the majority of these items involve the lands question, however, all pending legal liabilities should be evaluated; and

(g) tax and commerce considerations: evaluation should be given to all potential advantages and disadvantages with respect to these items in the context of removing Federal ownership of the Alaska Railroad.

2 No actual estimates are provided for subsequent fiscal years because of the difficulty in predicting levels of responsibility beyond initial organizational structuring and potential expenses through the transfer negotiation stages. In that Sec. 42.40.120 specifically requires the authority to provide for the operation of the Alaska Railroad following transfer, there exists the real possibility of the State incurring significant liabilities for the ongoing operation of the railroad. Although rough estimates could be provided of these potential costs, there exists a structural limitation under this piece of legislation as drafted, since Sec. 42.40.230 clearly states that neither the credit nor the taxing powers of the State or its political subdivisions may be pledged by the authority, and that the State and its political subdivisions will not be liable for the debts incurred by the authority.

3. The legislation does not address a specific source of funding for the establishment of this public corporation. Consequently, the first two years of funding are depicted under the General Fund category. Although no funding is shown under the Federal Fund category, there are both planning and operational assistance grants available from the Federal Railroad Administration, U.S. Department of Transportation, to aid local rail operations. DOT/PF is currently the receipient of rail planning funds, which represents the major source of funds of DOT/PF's rail studies. However, while it is apparent that if this public corporation is formed, it will become the administrator of these funds, it is doubtful that the State of Alaska would be allowed to use these funds other than for technical rail planning. As a result, these funds are not depicted as a source of funding for the contractual requirements noted above.

# FINANCIAL

The following four financial statements (Tables VIII through XI) describe the financial situation of The Alaska Railroad.

TABLE VIII : STATEMENT OF INCOME
FISCAL YEARS 1979-80
(Thousand dollars)

| CATEGORY | 1980 | 1979 |
|---|---|---|
| Operating Revenues (Note 3): | | |
| Freight | $21,664 | $18,158 |
| Passenger | 1,549 | 1,564 |
| Other (Note 17) | 3,524 | 3,378 |
| | $26,737 | $23,100 |
| Operating Expenses (1) (Note 4): | | |
| Maintenance of Way & Structures (Note 5) | $ 5,109 | $ 5,235 |
| Maintenance of Equipment | 9,118 | 7,845 |
| Transportation | 13,146 | 11,821 |
| Traffic Management | 530 | 470 |
| Incidental | 2,456 | 1,937 |
| General and Administration (Note 6) | 4,021 | 3,977 |
| | $34,380 | $31,285 |
| Income (Loss) from Operations | (7,643) | (8,185) |
| Non-operating Properties (Note 18): | | |
| Income | 2,155 | 2,081 |
| Less Expense (1) | 344 | 204 |
| Net | 1,811 | 1,877 |
| Net Gain (Loss) | $(5,832) | $(6,308) |
| (1) Depreciation included in Expenses (Note 8) | $ 3,526 | $ 3,219 |
| Operating Ratio including depreciation | 128.59% | 135.43% |
| Operating Ratio excluding depreciation | 115.40% | 121.50% |

Notes follow Table XI

TABLE IX : BALANCE SHEET
SEPTEMBER 1979-80
(Thousand dollars)

| CATEGORY | 1980 | 1979 |
|---|---|---|
| Assets: | | |
| Current Assets: | | |
| Cash (Note 9) | $ 3,638 | $ 5,225 |
| Trust and Deposit Funds (Note 10) | 83 | 63 |
| Accounts Receivable | 8,364 | 6,791 |
| Materials and Supplies (Note 11) | 5,426 | 6,339 |
| Prepaid Expenses | ... | 83 |
| | $17,511 | $18,501 |
| Properties: | | |
| Land (Note 12) | 265 | 618 |
| Buildings | 12,361 | 12,389 |
| Roadway Structures & Facilities | 111,689 | 110,689 |
| Equipment | 44,031 | 41,330 |
| Non-operating Property | 2,997 | 3,932 |
| Total Properties | 171,343 | 168,958 |
| Less Accumulated Depreciation: | 51,529 | 49,587 |
| Properties - Net | 119,813 | 119,371 |
| Additions and Betterments in Progress (Note 13) | 14,277 | 11,759 |
| | 134,090 | 131,130 |
| Other Assets and Deferred Charges | 2,176 | 1,748 |
| Total Assets | 153,777 | $151,379 |
| Liabilities & Proprietary Interest of the U.S. Government: | | |
| Current Liabilities: | | |
| Accounts Payable | $ 2,772 | $ 1,615 |
| Accrued Payrolls Payable | 1,603 | 1,325 |
| Trust and Deposit Funds (Note 10) | 83 | 63 |
| | $ 4,458 | $ 3,003 |
| Provision for Employees Annual Leave (Note 14) | ... | (2) |
| Other Liabilities and Unadjusted Credits | 1,922 | 936 |
| Total Liabilities | 6,380 | 3,937 |
| Proprietary Interest (Note 15): | | |
| Net Investment | 174,082 | 167,603 |
| Retained Earnings from July 1, 1954 | (20,161) | (13,534) |
| Current Year Operating Results | (5,832) | (6,308) |
| Extraordinary Items (Note 7) | (692) | (319) |
| Total Proprietary Interest (Note 15) | 147,397 | 147,442 |
| Total Liabilities and Proprietary Interest | $153,777 | $151,379 |

Notes follow Table XI

TABLE X: STATEMENT OF CHANGES IN FINANCIAL POSITION
FISCAL YEARS 1979-80
(Thousand dollars)

| FUNDS | 1980 | 1979 |
|---|---|---|
| Funds Were Provided by: | | |
| Revenues and Other Receipts | $ 28,973 | $ 25,290 |
| Appropriations from Congress (Note 16) | 6,500 | 9,300 |
| Total Funds Provided | 35,473 | 34,590 |
| Funds Were Used for: | | |
| Labor | 21,360 | 22,138 |
| Other | 7,832 | 5,445 |
| Capital Improvements & Replacements | 6,893 | 8,181 |
| Total Funds Used | 36,085 | 35,764 |
| Increase (Decrease) in Government Equity | (613) | (1,173) |
| Other Increase (Decreases): | | |
| Undelivered Orders | (1,824) | (705) |
| Supplies and Materials | (996) | (157) |
| Properties | 2,960 | 4,711 |
| Other | 428 | 5 |
| Total, Other | 568 | 3,854 |
| Total Increase (Decrease) in Government Equity | $ (45) | $ 2,681 |
| Proprietary Interest: | | |
| Beginning Balance | $147,442 | $144,761 |
| Increase (Decrease) | (45) | 2,681 |
| Ending Balance (Note 15) | $147,397 | $147,442 |

Notes follow Table XI

TABLE XI: FIVE-YEAR CONDENSED SUMMARY OF OPERATIONS
FISCAL YEARS 1976 - 1980
(Thousand dollars)

| CATEGORY | 1980 | 1979 | 1978 | 1977 | 1976 TQ (Note 2) | 1976 JUNE |
|---|---|---|---|---|---|---|
| Operating Revenues | $ 26,737 | $ 23,100 | $ 27,400 | $ 33,376 | $ 9,737 | $ 52,51 |
| Operating Expenses | 34,380 | 31,285 | 33,301 | 35,703 | 11,127 | 49,38 |
| Income from Operations | (7,643) | (8,185) | (5,861) | (2,327) | (1,390) | 3,13 |
| Non-operating Properties (Note 18): | | | | | | |
| Income | 2,155 | 2,081 | 1,651 | 1,646 | 314 | 1,16 |
| Expense | 344 | 204 | 213 | 255 | 35 | 19 |
| Non-operating Gain (Loss) | 1,811 | 1,877 | 1,438 | 1,391 | 279 | 97 |
| Net Gain or Loss | $ (5,832) | $ (6,308) | $(4,423) | $ (936) | $(1,111) | $ 4,10 |
| Less Extraordinary Items (Note 7) | (692) | (319) | (654) | (833) | (919) | (1,05 |
| Annual Retained Earnings | $ (6,524) | $ (6,627) | $(5,077) | $ (1,769) | $(2,030) | $ 3,04 |
| Operating Ratio Including Depreciation | 128.59% | 135.43% | 121.53% | 106.97% | 114.30% | 94.04 |
| Working Ratio Excluding Depreciation | 115.40% | 121.50% | 109.91% | 97.62% | 107.02% | 89.23 |

Notes follow Table XI

SB

219

# STATE OF ALASKA
# THE LEGISLATURE
## LEGISLATIVE AFFAIRS AGENCY

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3811

MEMORANDUM March 7, 1981

SUBJECT: SB 219 -- Surface Transportation Projects

TO:

FROM: John B. Chenoweth
Legislative Counsel

The genesis of this bill is the limitation of Article II, section 13 of the state constitution by which "bills for appropriations shall be confined to appropriations", and the rather unsettling habit of the last few years to clothe appropriation bills with statements of intent, letters of intent and other devices in order to pin down the purpose and use of particular appropriations. So significant are the projects which are under consideration in SB 219 and SB 220 that, rather than provide the detail for authorization of the projects only in an appropriation bill, I developed two pieces of legislation, "confining the appropriation bill to appropriations" and adding all the details concerning use of the proceeds into a companion authorization. The appropriation is dependent on the authorization by its effective date clause.

SB 219: Secs. 1 - 5 amend provisions of law relating to roads built for resource development purposes by saying that these roads may be built for assistance in agricultural development. The material in Sec. 4 is responsive to your request for provisions by which to make the state transportation department the "lead" agency, and to waive major state permits that might hold up a road project. Related to this is the repealed in Sec. 10 (payment by land credit certificates). The companion appropriation bill provides money for one specific agricultural road project in the vicinity of Nenana.

Secs. 6 and 7 add a new "intermunicipal road" program for the construction of roads between settled communities which

would not be part of the federal system. Most of the provisions describe in some specificity just what is to be done, and who has legal responsibility. "Review and comment" and "permit waiver" provisions are included, and you should note the unique provision that requires all construction contracts relating to an intermunicipal road project to be released at the same time. Sec. 11 authorizes specific intermunicipal road projects to span Knik Arm between Anchorage and the Matanuska-Susitna Borough, north from Juneau to connect with Haines and Skagway, and between the Kuskokwim river communities of Bethel and Napakiak.

Secs. 8 and 9 add a parallel program for urban roads, that is, roads built wholly within one municipality without local government support (distinguishing them from matching programs and the local service roads program). There is no requirement in the urban road program that all contracts be awarded at the same time, but these are generally less extensive projects so there is likelihood that contracts for construction would be awarded to one party anyway. In all other respects, the urban program is similar to the intermunicipal road program. In Sec. 11, two urban road projects are authorized: Ketchikan and Kenai (North Kenai area).

Sec. 12 of the bill, uncodified, directs certain work to be performed to extend the Alaska railroad west from the interior to the general proximity of Nome/Kotzebue, and the alignment of a surface transportation corridor for the upper Colville area on the north side of the Brooks Range. The companion appropriation awards money for this project.

JBC:ljb

SB

221

-FILE-

# ALASKA STATE LEGISLATURE HOUSE OF REPRESENTATIVES

REPRESENTATIVE SALLY SMITH • 321 CHURCH STREET • FAIRBANKS, ALASKA 99701 • IN JUNEAU: POUCH V • JUNEAU, ALASKA 99811

March 16, 1981

Oscar L. Venable
330 Wedgewood, #7
Fairbanks, Alaska 99701

Dear Oscar,

Thank you for your letter supporting a state-owned railroad. State ownership of the Alaska Railroad is being discussed, but a bill has not been introduced that would appropriate money to actually buy it.

You have made some very good points in your letter, and I thoroughly agree with your position. House Bill 12 and Senate Bill 221 have been introduced which would establish an Alaska Railroad authority whose goal would be to work with the federal government toward purchasing the Alaska Railroad. House Bill 12 is in the House Transportation Committee and a copy of your letter has been sent to Committee Chair Bette Cato. Senate Bill 221 is in the Senate Transportation Committee so I've sent a copy of your letter to Committee Chair Bill Ray as well. Your letter will show public support to the Committee members. If you have further comments about these bills, I urge you to contact Representative Cato and Sentaor Ray at Pouch V, Juneau, 99811.

Thanks for taking the time to write and express your opinion on this issue.

Sincerely,

Sally

Sally Smith
Alaska State Representative

cc: Rep. Cato
Sen. Ray

Dear Oscar

3/6/81

Sally Smith
House of Rep.

Dear Sally:

I kinda envied you in Miami an much that cold North Slope.

Sally I hope you will look into the purchase of the railroad an Gov. put by a State Corp. I am sure it would have to subsidized but look at the Ferry System as you know a little money will be coming from the Fed. Govt for Gov. Maint & etc.

I am sure if the road Bed, Servines Equp were updated business would be good, I presume you have been to Europe put look at their railway system how fast the Trains go, Freight & Passeng — I think it would be a Worth while project for the State

Sincerely
Oscar Kendall

Oscar L. Venable
330 Wedgewood, 7
Fairbanks, AK 99701

P.S. The Govt. Might give it away to get rid of it.

COPY COMMITTEE MEMBERS

# STATE OF ALASKA
# THE LEGISLATURE

POUCH ... STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

## LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M April 7, 1981

SUBJECT: Alaska Railroad Authority
(Work Order No. 12-1364)

TO: Senator Bill Ray

FROM: Thomas A. Sofo TAS
Legislative Counsel

You have requested that this office undertake a section-by-section analysis of SB 212 and SB 221 with notations of any differences which exist between the two bills. Both bills create an Alaska Railroad Authority. SB 212 and SB 221 share more parallel provisions than they do differences. In the interest of economy of time and effort, I have attempted to summarize the main differences which exist between the two bills since this seems to be most salient feature of your request. I do not believe that one will encounter much difficulty in understanding what a given section of either bill says, but I am aware that there is some need to be able to compare differences between the two bills. I have undertaken that comparison in narrative form below. You may find that future reference would be facilitated if the format of this memo is changed into some sort of graphic presentation.

Both bills create the Alaska Railroad Authority as a public corporation of the state. However, the composition of the governing board varies. Under SB 212, the board consists of at least one banker, one attorney, one economist, one transportation person, and one business person [sec. 42.40.030.]. Under SB 221, the board consists of the commissioner of transportation and public facilities, two senators, two representatives and two members of the general public [sec. 44.87.015]. Only SB 212 specifically sets out a conflict of interest section [sec. 42.40.050]. SB 221 calls for the employment of an executive director to manage the authority [sec. 44.87.025], while SB 212 gives this job to

the president [sec. 42.40.100]. The general powers of the authority under both bills are practically identical. One of the purposes of the authority under SB 221 is to enter into talks with the federal government and Canadian provinces regarding an international rail connection [sec. 44.87.030]. Nowhere is this expressly mentioned in SB 212 although this purpose could be implied easily under sec. 42.40.120. Only SB 212 expressly calls for an annual report [sec. 42.40.120], and audit [sec. 42.40.150].

The financial provisions of both bills are similar. SB 212 differs as it provides for bond anticipation notes [sec. 42.40.160(b)]. SB 221 provides for a maximum forty year maturity for authority bonds [sec. 44.87.040(b)], while SB 212 calls for a fifty-year maximum [sec. 42.40.150(c)]. SB 212 goes into much more detail when describing the resolution which authorizes the issuance of bonds [sec. 42.40.160(f)], than does SB 221 [sec. 44.87.040(b)]. Only SB 212 calls for an independent financial advisor [sec. 42.40.170]. SB 221 specifically refers to trust indentures and trust agreements and provides that an issue of bonds may be secured by such instruments while SB 212 is silent on this point[sec. 44.87.045]. SB 212, unlike SB 221, provides for the issuance of refunding bonds [sec. 42.40.220]. Only SB 212 provides for the dissolution of the authority [sec. 42.40.270], and for the exemption of authority personnel from the State Personnel Act [sec. 42.40.280]. The last substantive difference in the financial provisions of these two bills is that only SB 221 expressly states that income from investments of the authority is limited to maintenance or improvement of railroad facilities [sec. 44.87.075].

Call me at your convenience if you have any problems with understanding the content of a specific section beyond the differences identified by this comparison.

TAS:ljb

Send to SALLY SMITH, Ichles Chair House?

ALASKA STATE LEGISLATURE HOUSE OF REPRESENTATIVES

REPRESENTATIVE SALLY SMITH • 321 CHURCH STREET • FAIRBANKS, ALASKA 99701 • IN JUNEAU: POUCH V • JUNEAU, ALASKA 99811

March 31, 1981

Is this WOLD any relation to SIG WOLD from FAIRBANKS?, BR

Bruce E. Carr
Box 81023
Fairbanks, Alaska 99708

Dear Mr. Carr:

Thank you for your message concerning your opposition to a state-owned railroad. State ownership of the Alaska Railroad is being considered, but a bill has not been introduced that would appropriate money to actually buy it.

You have made some very good points, and they definitely deserve consideration. House Bill 12 and Senate Bill 221 have been introduced which would establish an Alaska Railroad Authority whose goal would be to work with the federal government to determine if purchasing the Alaska Railroad is feasible. House Bill 12 is in the House Transportation Committee and a copy of your letter has been sent to Committee Chair Bette Cato. Senate Bill 221 is in the Senate Transportation Committee, so I've sent a copy of your letter to Committee Chair Bill Ray as well. Your message will show public support to the Committee members. If you have further comments about these bills, I urge you to contact Representative Cato and Senator Ray at Pouch V, Juneau, 99811.

Thanks for taking the time to express your opinion.

Sincerely,

Sally

Sally Smith
Alaska State Representative

cc: Rep. Cato
Sen. Ray

TO: REPS. BETTISWORTH, BROWN, FANNING, RANDOLPH, ROGERS AND SMITH
SENS. BENNETT, FAHRENKAMP AND PARR

FROM: BRUCE E. CARR, BOX 81023, FAIRBANKS 99708 479-3747

RE: STATE OF ALASKA BUYING THE ALASKA RAILROAD

I AM AGAINST THE STATE BUYING THE RAILROAD. GOVERNMENT SHOULD NOT BE IN COMPETITION WITH PRIVATE ENTERPRISE. TRANSPORTATION IS THE LARGEST PRIVATE EMPLOYER IN THE FAIRBANKS AREA AND THE RAILROAD COMPETES WITH AND TAKES BUSINESS AWAY FROM THE PRIVATE TRUCKING COMPANIES, BUS COMPANIES, SHIP AND AIRLINE COMPANIES. THE TAXES PRIVATE ENTERPRISE PAYS SUBSIDIZES THEIR COMPETITOR.

Senate Bill No. 221

Page 1 -- Lines 12 and 13 have been revised to read as follows: "For the achievement of the goals of reasonable freight costs, long-term economic growth and continuing common carrier service.

Page 1 -- At line 20, add "self-sustaining, financially viable" after "a".

Page 3 -- At line 22, add "in self-sustaining, financially viable" after "operate".

Page 4 -- At line 11, delete "fares" and replace with "fully compensatory rates".

Page 5 -- At line 11, redesignate "(e)" as "(f)" and insert new "(e)": "(e) The proceeds resulting from the issuance of bonds pursuant to this section may only be used to meet the capital obligations and expenses of the Authority. None of the proceeds may be used to meet the Authority's operating expenses or any deficit resulting from an insufficiency of operating revenues."

For a Complete Copy of this report see Legislative Reference Library (LLB document no. 8001600) or other libraries throughout the State.

# Feasibility Study
# Proposed Extension of the Alaska Railroad From Eielson AFB to the Canadian Border

Submitted to
Legislative Affairs Agency
State of Alaska

Submitted by:
Larry Orsini Associates, Inc.
Anchorage & Fairbanks, Alaska
D.J. Moore, Project Manager
December 10, 1980

Submitted to:
George H. Hohman, Jr.
Project Director

SB

222

# Alaska Transportation Consultants, Inc.

PLANNERS & ENGINEERS
212 WEDGEWOOD DRIVE · SUITE C · FAIRBANKS, ALASKA 99701 · (907) 456-1967


March 2, 1981

The Honorable John B. Coghill
Mayor of the City of Nenana
City Hall
Nenana, Alaska

Dear Mayor:

We are pleased to have had the opportunity to work with you in the development of the agricultural potential within the Nenana area. I believe that your effort has proven exemplary and you have demonstrated that projects such as these can be fast-tracked and still be accountable to all concerned.

We are confident that you now wish to proceed as fast as practicable in completing this project. Bridge construction is a key element in staying with an accelerated schedule. It will be necessary to have it under construction next winter to take advantage of the winter ice for construction purposes. Roadways should be under construction as soon as possible to provide access during the 1982 growing season.

The next phase of this work is the design of the bridges and roadways. We have given this phase serious thought and of course would like to participate in it. Alaska Transportation Consultants, Inc. (ATC), Henningson, Durham & Richardson (HDR), and Kaljenco, Inc. are prepared to do this work as a joint effort. Within this team, Alaska Transportation Consultants, Inc. would be responsible for the overall project and would work with Kaljenco to develop a final road design and with HDR to develop a final bridge design. Kaljenco would be doing design surveying. Because each of these firms have intimate knowledge of the proposed project it is possible for us to provide design services at approximately three percent (3%) of the anticipated construction cost. This works out to be approximately $519,000 and would result in a final design package that is ready for advertising and has the approval of both the client (City of Nenana) and the State Department of Transportation and Public Facilities.

Given an early notice to proceed our joint effort would have the roadway ready to advertise by the middle of July and the bridge by early September.

We would be pleased to discuss this matter with you further and to provide you with additional details regarding our proposal.

Sincerely,

Francis W. Engle

Francis W. Engle, P.E.
Vice President
Alaska Transportation Consultants, Inc.

FWE-lvb

FEE BY ACTIVITY

| | Estimated Construction | Design Fee |
|---|---|---|
| STRUCTURES<br>1 Major (600')<br>2 Minor (Less than 100') | $5,354,700 | $ 189,000 |
| ROADWAY<br>(Approximately 37 miles) | $9,965,000 | $ 160,000 |
| DESIGN SURVEYS | | $ 123,000 |
| SUB TOTAL | $15,319,700 | $ 472,000 |
| ROW | $ 30,000 | $ -0- |
| CONTINGENCY | $ 1,840,000 | $ 47,000 |
| | $17,190,000 | $ 519,000 |

CS SENATE BILL NO. 222

If the appropriation is to be granted directly to the City of Nenana, the following language should be used:

For an Act entitled: "An Act making a special appropriation to the Department of Administration for a grant for engineering and design of bridges and roads in the Nenana Agricultural Area; and providing for an effective date."

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

* Section 1. The sum of $500,000 is appropriated from the general fund to the Department of Administration for payment as a grant to the City of Nenana for engineering and design of bridges and roads in the Nenana Agricultural Area.

* Section 2. The appropriation made by this Act shall be disbursed in accordance with AS 37.05.315.

* Section 3. This Act takes effect immediately in accordance with AS 01.10.070(c).

# STATE OF ALASKA
# THE LEGISLATURE

## LEGISLATIVE AFFAIRS AGENCY

POUCH Y · STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

M E M O R A N D U M March 12, 1981

SUBJECT: Bridges and roads in Nenana agricultural area (CS for SB 222)

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Donna Spragg Pegues
Co-Revisor of Statutes

I have drafted the committee substitute in the form requested. It is in draft form for your consideration.

I have one problem with the bill. Sec. 2 of the draft you sent to me reads:

> The appropriation made by this Act shall be disbursed in accordance with AS 35.15.080.

However, nothing is actually "disbursed" under AS 35.15.080. That section simply sets up an optional program for local control of state public works projects. AS 35.15.090 provides how appropriations shall be disbursed if the optional program is undertaken by agreement of DOTPF and a municipality.

Neither section actually requires local assumption of a program. I question whether such a requirement could be made in an appropriation bill in light of our constitutional requirement that appropriation bills be confined to appropriations.

I would suggest the deletion of Sec. 2 and the substitution of a standard non-lapse clause.

DSP:ljb

Enclosure

| Violation Or Type of Violations | Point Value |
|---|---|
| (A) driving while license cancelled, suspended or revoked | 12 |
| (B) driving while under the influence of intoxicating liquor or drugs | 10 |
| (C) reckless driving | 10 |
| (D) speed contest—racing | 10 |
| (E) fleeing or attempting to elude a police officer | 10 |
| (F) leaving scene of accident | 9 |
| (G) negligent driving | 6 |
| (H) failure to yield right-of-way to authorized emergency vehicle | 6 |
| (I) failure to stop for school bus while bus is loading or unloading | 6 |
| (J) failure to obey official traffic control device in school zone, playground crosswalk, or park | 6 |
| (K) speeding: | |
| in school zone or playground crosswalk | 6 |
| 3 to 9 miles per hour over limit | 2 |
| 10 to 19 miles per hour over limit | 4 |
| 20 or more miles per hour over limit | 6 |
| (L) violation of oversize or overweight permit pertaining to restriction: | |
| on speed: | |
| 3 to 9 miles per hour over limit | 2 |
| 10 to 19 miles per hour over limit | 4 |
| 20 or more miles per hour over limit | 6 |
| on hours of operation | 3 |
| (M) careless driving | 4 |
| (N) following too closely | 4 |
| (O) failure to stop or yield | 4 |
| (P) all others | 2 |

(Eff. 2/1/69, Reg. 28; am 3/29/75, Reg. 53)
Authority: AS 28.17.010
28.17.030

13 AAC 25.050. SUSPENSION, REVOCATION AND REFUSAL TO RENEW LICENSE. (a) The commissioner or an employee of the department deputized by him for the purpose may suspend, revoke or refuse to renew a license for any of the following causes:

(1) upon determination, subsequent to the original application, that the license could have been denied under section 40 of this chapter at the time of application;

(2) for an occurrence of a cause which would be grounds for denial of license under sec. 40 of this chapter;

(3) for failure to maintain the standards required by sections 10–190 of this chapter;

(4) if the licensee has been found guilty of fraud or fraudulent practices or of inducing another to resort to fraud or fraudulent practices;

(5) if the licensee violates a provision of AS 28.17.

(b) No revocation, suspension or refusal to renew may be based on a determination under (a)(1) of this section unless action to revoke, suspend or refuse renewal is initiated by the commissioner or his representative within two years of original application, or for a cause as provided under (a)(2)–(5) of this section unless action to revoke, suspend or refuse to renew is initiated by the commissioner or his representative within two years after the occurrence of the cause. (Eff. 2/1/69, Reg. 25)
Authority: AS 28.17.010; 050

13 AAC 25.060. TEMPORARY PERMIT. Pending the satisfaction of the department that the applicant for a license has met the requirements of secs. 10–190 of this chapter, it may issue a temporary permit to the person making the application. This permit allows the operation of a driver training school, or instructing student drivers or both, as specified

SB

229

STATE OF ALASKA

MEMBER
TENTH ALASKA LEGISLATURE
ELEVENTH ALASKA LEGISLATURE
TWELFTH ALASKA LEGISLATURE

POUCH V
JUNEAU, ALASKA 99811
(907) 465-3822

283 MULDOON ROAD
STATION BOX 76
ANCHORAGE, ALASKA 99504
(907) 333-1178

SENATOR TIM KELLY

# M E M O R A N D U M

TO: SENATOR BILL RAY, CHAIRMAN
SENATE TRANSPORTATION COMMITTEE
SENATOR SACKETT
SENATOR DANKWORTH
SENATOR KERTTULA
SENATOR GILMAN

FROM: SENATOR TIM KELLY

DATE: MARCH 30, 1981

RE: SENATE BILL 229, APPROPRIATION FOR A PEDESTRIAN OVERPASS IN EAGLE RIVER

---

A pedestrian Overpass is needed in downtown Eagle River due to the new five-lane Highway which is scheduled to be started this year. The five-lane Highway thru downtown Eagle River, which is referred to as the Eagle River Urban Project, was approved last year.

The people in the community have expressed concern over the new five-lane highway because of the close proximity of a residential area with many children. The overpass would alleviate some of these fears by providing access to and from the residential areas to the shopping centers.

The Department of Transportation estimated the cost of the overpass, which would have ramps to be used by the handicapped in addition to stairs, to be $600,000. We would like the appropriation to go to the Municipality of Anchorage for planning and bidding procedures.

I urge you to support this bill. The overpass will protect the many pedestrians in the community and provide safety for the children in the area.

*Chugiak-Eagle River*
*Chamber of Commerce*

353, Eagle River, AK 99577
P. O. Box 520, Chugiak, Alaska 99567

"PLACE OF MANY PLACES"

March 17, 1981

Mr. Rowe E. Redick
Chief Central Engineer District
Alaska Dept. of Transportation
Pouch 6900
Anchorage, AK 99502

Dear Mr. Redick:

The purpose of this letter is to reaffirm support by this organization for the Eagle River Urban Project. At our regular Board of Directors meeting on March 2, 1981, a motion was made and carried unanimously to send a message to all District 8 Legislators (Senators Bradley & Kelley, and Representatives Cotton, Martin, Phillips and Halford) to take no action which would delay the project. This was done on or about March 4. We have received back written support for our position from Senator Kelly and Representatives Martin and Halford. The remaining legislators apparently prefer not to take a definate position regarding the project at this time.

This project has been in the planning stages for many years and has experienced one delay after another. Numerous public hearings were held here in the community over the past 3 years and to my knowledge there was absolutely no opposition to the project. To the contrary many members of the community were angered over the numerous delays which the project has experienced.

Over the years, as this community has grown, the traffic has increased proportionately along the Old Glenn Highway, which is the route of the Eagle River Urban Project. At the present time, this traffic is almost unbearable during rush hours. I sincerely believe that the only solution to this problem is completion of the project as currently envisioned, that is five lanes from Artillery Road to the North Eagle River exit. I base this belief on thestatements of

highway and traffic engineers who have stated to me that a three lane street is not sufficient now, let alone 5 or 10 years from now. In order to provide for the safety of our citizens and the orderly growth of this community I urge you to use the power and influence of your office to insure that the Eagle River Urban Project proceeds on schedule.

Sincerely,

Henry M Warren

Henry M. Warren
Vice President
Chugiak-Eagle River
Chamber of Commerce

cc Mr. Gene Hanna
Federal Hwy Dept, Juneau
Each legislator, District 8
Governor Hammond

March 18, 1981

Eagle River Community Council
Eagle River, Alaska 99577

Mr. Rowe D. Redick
Chief, Highway Engineering
Central Region, D O T
Pouch 6900
Anchorage, Alaska 99502

Dear Mr. Redick:

The Eagle River Community Council whole heartedly supports the construction of the Eagle River Urban Project scheduled to begin this summer.

The Council held a general meeting for members and concerned citizens within our council area and heard both the "pros and cons" for the project. Considering the facts that this project has been carefully studied and public hearings previously conducted, the Eagle River Community Council feels this project should not be delayed any further.

We are forwarding copies of this letter to the District 8 legislators and the Federal Highway Administration Offices for their reference.

If I can be of further assistance please do not hesitate to contact me.

Yours truly,

Vernelle T. Smith
President, ERCC

EAGLE RIVER VETERINARY HOSPITAL
MILE 14½ OLD GLENN HIGHWAY
P. O. BOX 1033
EAGLE RIVER, ALASKA 99577

TELEPHONE (907) 694-3800

March 17, 1981

FHWA
U. S. Department of Transportation
Federal Highway Administration
P. O. Box 1648
Juneau, AK 99802

ATTENTION: Gene Hanna

Dear Sir:

I am very disgusted and concerned that the Eagle River Urban Highway Project might be delayed.

This project is very important to my community. It will correct the crowded and unsafe road conditions currently present here. Also the annual flooding of the business parking lots along the Old Glenn Highway will be corrected. The continuation of this highway project is important in maintaining the quality of life in Eagle River.

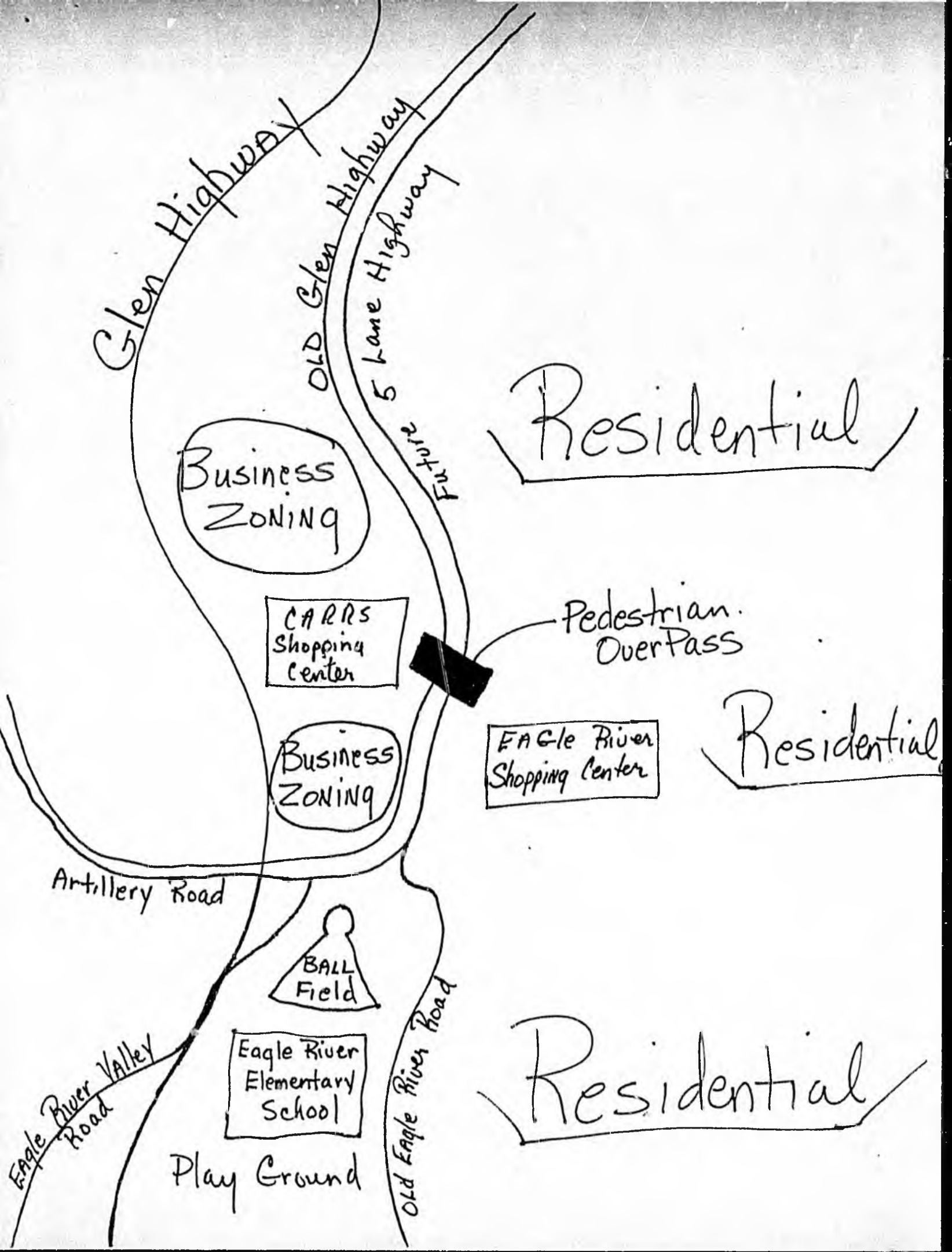
Sincerely,

Jonathan Bettridge D.V.M.

Jonathan Bettridge, D.V.M.

cc. Rep. Rick Halford
cc. Sen. W.E. (Brad) Bradley
cc. Rep. Sam Cotten
cc. Sen. Tim Kelly
cc. Rep. Terry Martin
cc. Rep. Randy Phillips

Tim
I appreciate the time you have spent on this project especially the pedestrian bridge. Thanks
Jon


Glen Highway
OLD Glen Highway
5 Lane Highway
Future
Residential
Business Zoning
CARRS Shopping Center
Pedestrian OverPass
Business Zoning
EAGle River Shopping Center
Residential
Artillery Road
BALL Field
Eagle River Elementary School
Residential
Eagle River Valley Road
Play Ground
OLd Eagle River Road

SB

294

TELEGRAM

ALASCOM, INC.
PHONE: 586-6442
JUNEAU, AK 99802

#

12048 NL FAIRBANKS ALASKA 278 05-06 247P ADT

PMS SEN BILL RAY

0476

JUN

I WANT TO THANK YOU FOR ALL THE SUPPORT AND CONSIDERATION THAT YOU HAVE GIVEN ME AND THE FOLKS FROM THE CITY OF NENANA ON OUR AGRICULTURE PROGRAM AS WE HAVE PRESENTED IT DURING THIS SESSION OF THE LEGISLATURE. ON TUESDAY THE 5TH OF MAY SENATOR SACKETT, ORIE WILLIAMS AND I MET WITH GOVERNOR HAMMOND AND HIS STAFF ON THE FEASIBILITY OF FUNDING AND IMPLEMENTING THE TOTCHAKET DEVELOPMENT PLAN THIS SESSION AS OUTLINED IN HB333 AND SB294. THE 27 MILLION DOLLARS NEEDED TO ENTER THIS PHASE OF THE PROJECT EXCEEDED THE GOVERNORS TOP LINE DOLLAR FIGURE FOR SPENDING IN THIS YEARS CAPITOL PROJECTS BUDGET. WE AGREED THAT I SHOULD FINE TUNE THE PLANNING OF THE PROJECT AS TO THE COST RETURN RATIOS TO THE STATE ON THIS AND OTHER PHASES OF THE DEVELOPMENT PLAN THAN SUBMIT THE PROJECT TO YOU IN HIS 1982 ADMINISTRATION BUDGET IN THE NEXT SESSION. NENANA FEELS THAT A MUCH BETTER APPROACH TO THE OVERALL AGRICULTURE PLAN FOR THE STATE WOULD BE TO ALLOW US TO WORK WITH THE STATE AGENCIES IN THE INTERM TO HELP DEVELOP THAT MUCH NEEDED STATEWIDE PLAN. IN ORDER FOR NENANA TO MOVE FORWARD WITH THE PROJECT WE APPRECIATED YOUR FAVORABLE CONSIDERATION TO CS FOR SB222 WHICH WILL ALLOW US TO DESIGN THE ROADS AND BRIDGES FOR ACCESS TO THE AREA AND ASK THAT YOU WORK WITH REPRESENTATIVE MOSS AND SENATOR SACKETT FOR A NOMINAL AMOUNT OF FUNDING IN THE GENERAL APPROPRIATIONS BILL TO CARRY OUT THE PLANNING NEEDED TO GIVE YOU A FULL AND TRUE PICTURE OF OUR AREAS PLAN AT THE NEXT SESSION. THANK YOU AGAIN FOR YOUR CONSIDERATION OF OUR PROJECT IN THE PAST TEN WEEKS.

JOHN B COGHILL, MAYOR CITY OF NENANA




Office of the City Clerk
832-5441
Incorporated November 17, 1921

# City of Nenana

## *State of Alaska*

M E M O R A N D U M

To: Interested Parties
From: John B. Coghill, Mayor
Date: February 23, 1981

Subject: NENANA-TOTCHAKET; Projected Financing Requirements for FY 81, FY 82 and FY 83.

In order to achieve the City's Phase I goal for the Nenana-Totchaket Agricultural Project-The Planting, Harvesting and Sale of a crop in 1982-Four objectives must be met:

1. Township 4 South, Ranges 10 and 11 West, Fairbanks Meridian must be disposed for Agricultural use no later than February 15, 1982.

2. Areas on farms whithin the two townships which are to be cultivated for barley production during 1982 must be ready for planting by May 1, 1982.

3. An Agricultural Financing program for Nenana-Totchaket will need to be available in spring of '82. An estimate of financing needed has not yet been developed.

4. Surface Transportation systems for transport of harvest from the producing farms to the rail head at Nenana must be adequate for trucking and rail car loading by September 1, 1982.

In order to maintain the pace of development necessary to achieve these objectives the City has projected financing requirements for FY 81 and FY 82 as follows:

FY 81:

1. A maximum of $500,000 for immediate engineering design of bridges crossing the Nenana, the East Middle and the West Middle Rivers.

FY 82:

1. Construction Financing for primary, secondary and tertiary roads and bridges between farm lots and the City of Nenana.

$17,305,225.00



2. Clearing, Wood Fiber Harvest and Ground Preparation: A maximum of $200.00 per acre up to a maximum of 41,472 acres. Though the City is attempting to reduce these costs by stimulating a wood fiber industry; if we are unsuccessful these costs may be a maximum of:
$8,300,000.00

3. Agricultural Design for farm lots, determination of seed varieties, wind rows, natural areas, etc.
$ 500,000.00

4. Farm Lot Surveying
$ 600,000.00

5. Coordination of information to assist Totchaket Farmers with day to day production and transportation problems, and with the development of Producers Cooperative Organization to develop markets and to assure purchasers for 1982 production.
$ 500,000.00

FY 81:
1. Bridge Design-Maximum: $ 500,000.00

FY 82:
1. Road and Bridge Construction-Maximum:
$17,305,225.00

2. Clearing Wood Fiber Harvest-Maximum:
$ 8,300,000.00

3. Agricultural Design-Estimated:
$ 500,000.00

4. Farm Lot Surveying-Estimated:
$ 600,000.00

5. Farm Support and Marketing:
$ 150,000.00

6. Engineering Design for Storage and Loading Facilities, and Livestock Processing: $ 500,000.00

Maximum development financing requested in the first session 12th Alaska Legislature for FY 82: $27,855,225.00

Assuming sufficient financing becomes available during 1982 to enable the City to substantially achieve each of it's 4 Phase I objectives, the City anticipates the following financing requirements during FY 83 in order to expand agricultural production in the Phase I area and prepare for disposal of the first two Phase III Townships scheduled for early spring 1983.

PLANNING

1. Research and Development
2. Phase III Project Planning
3. Phase III Lot Surveys

DEVELOPMENT PROGRAMS

1. Continued Clearing-Phase I
2. Beginning Clearing-Phase III
3. Farm Support Marketing
4. Aquisition of Beef and Swine herds
5. Financing for Farm Support Enterprises

CAPITAL PROJECTS

1. Phase III-Roads
2. Storage and Transfer Facilities-Nenana Port
3. Feed Mills, Feed Lots, Livestock Processing Facility.
4. Research Facility

Thank you for your interest in Nenana-Totchaket. I look forward to talking to you.

Sincerely,

John B. Coghill, Mayor
City of Nenana



Office of the City Clerk
832-5441
Incorporated November 17, 1921

# City of Nenana

*State of Alaska*

February 25, 1981

Senator Bettye Fahrenkamp
Pouch V
Juneau, Ak. 99811

Dear Senator Bettye Fahrenkamp,

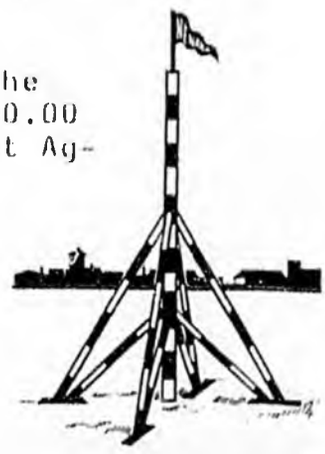
As you may recall the City of Nenana appeared before the Senate Resources Committee on February 6, 1981 to discuss the Nenana-Totchaket Agricultural Project. Following our presentation we received several requests for additional copies of our workshop proceedings, and copies of final reports by the City's consultants.

We are pleased to provide you with the following documents and maps relevant to Nenana-Totchaket:

1. Project status report and bookkeeping summary.
2. Projected financing requirements for FY 81, FY 82, and FY 83.
3. Regional maps.
4. Project planning map.
5. Nenana-Totchaket: Composite planning, Development and Production schedule 1980-1990. Revised 2/23/81.
6. Nenana-Totchaket Seminar and workshop proceedings; Published January 1981.
7. Nenana Agricultural Transportation systems; Published February 15, 1981.
8. Nenana Livestock Report; Published February 15, 1981.

We would appreciate your careful consideration of this information in your deliberations on Agricultural Financing this year.

We have been asked why these requests were not part of the Governor's FY 82 Budget request. As you may know $500,000.00 was appropriated by Chapter 50, SLA 80 for the "Totchaket Agricultural Project."



The City of Nenana did not receive authority to begin work on the project until early September. Because of the time required for the City's open bidding procedures we were not able to sign our first contract with Alaska Transportation Consultants until October 1, 1980. Since the City did not want to "second guess" our consultants it was agreed with the Agricultural Action Council that the City would request financing from the Legislature as soon as we received recommendations from the consultants.

If you need additional information please call either myself or Steve Bainbridge, City Engineering Consultant, at 832-5441 or Jerry Smetzer, Development Consultant, at 452-6500 in Fairbanks.

I look forward to discussing these reports with you.

Sincerely,

John B. Coghill
Mayor



Office of the City Clerk
832-5441
Incorporated November 17, 1921

# City of Nenana

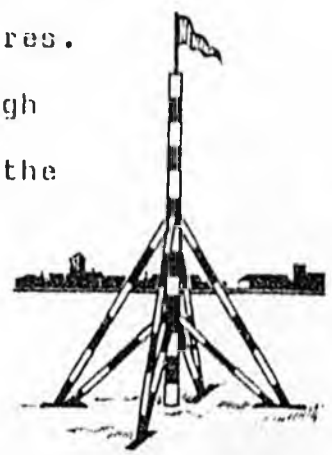
*State of Alaska*

## OVERVIEW OF THE NENANA-TOTCHAKET PROJECT

Date: March 2, 1981
From: John B. Coghill, Mayor

In 1968, during route survey and soil testing work associated with the North Commission west of Nenana, Alaska, field crews found relatively deep top soil covering a broad plateau lying between the Tanana and Nenana rivers to the east and the Kantishna river on the west. More extensive analysis of these soils showed that they possessed excellent agricultural potential. A more extensive and detailed soil survey conducted between 1975 and 1977 by the Soil Conservation Service of the U.S. Department of Agriculture defined the extent of the agricultural soils in what SCS has called the "Totchaket Area", at least 175,000 acres of Class II and Class III soils...soils which, for Alaska, show the highest potential for agricultural productivity. Thousands of acres of Class IV soils with lesser potential are also extensive on the plateau, and preliminary reconnaisance of areas west of the Kantishna show lands with agricultural potential numbering in the millions of acres.

That these lands are capable of producing both high quantity and high quality yields has been accepted by the



State's agricultural community for several years. The more important discussion in recent years has not been whether Totchaket should be developed for agriculture, but what kind of agricultural development would better satisfy the multiple and diverse needs of individual Alaskans and Alaskan families on the one hand, and on the other, what kind of agriculture can best meet the State's urgent need to invest its' short term oil wealth in long term renewable resource industries which can sustain themselves economically far into the future.

Even in view of these urgent concerns, however, planning for eventual development of Totchaket by City, State, University and Federal agricultural interests proceeded slowly during the 1970s as Native Claims in the area were resolved according to the provisions of the Alaska Native Claims Settlement Act of 1971. With final conveyance of land title to Native corporations in the area in late 1979 the last of the major concerns affecting the future of Totchaket were resolved, and the City of Nenana initiated the necessary financing and studies required for the design and long term development of what we are now calling Nenana-Totchaket.

With the support of our delegation to the legislature and the encouragement and assistance of many people around the State, these reports are now either complete or nearly complete and are being presented to the legislature for consideration. It

is important to emphasize again that these studies were not designed by the City to figure out whether or not to develop agriculture. They were designed to determine what kind of agriculture will respond to the real needs of Alaska's people for food, access to land, and increased self-sufficiency; what kind of agriculture can be developed in Nenana-Totchaket which will help the State's new agricultural industry become economically self-sustaining in a reasonably short period of time; and, finally, what will it all cost.

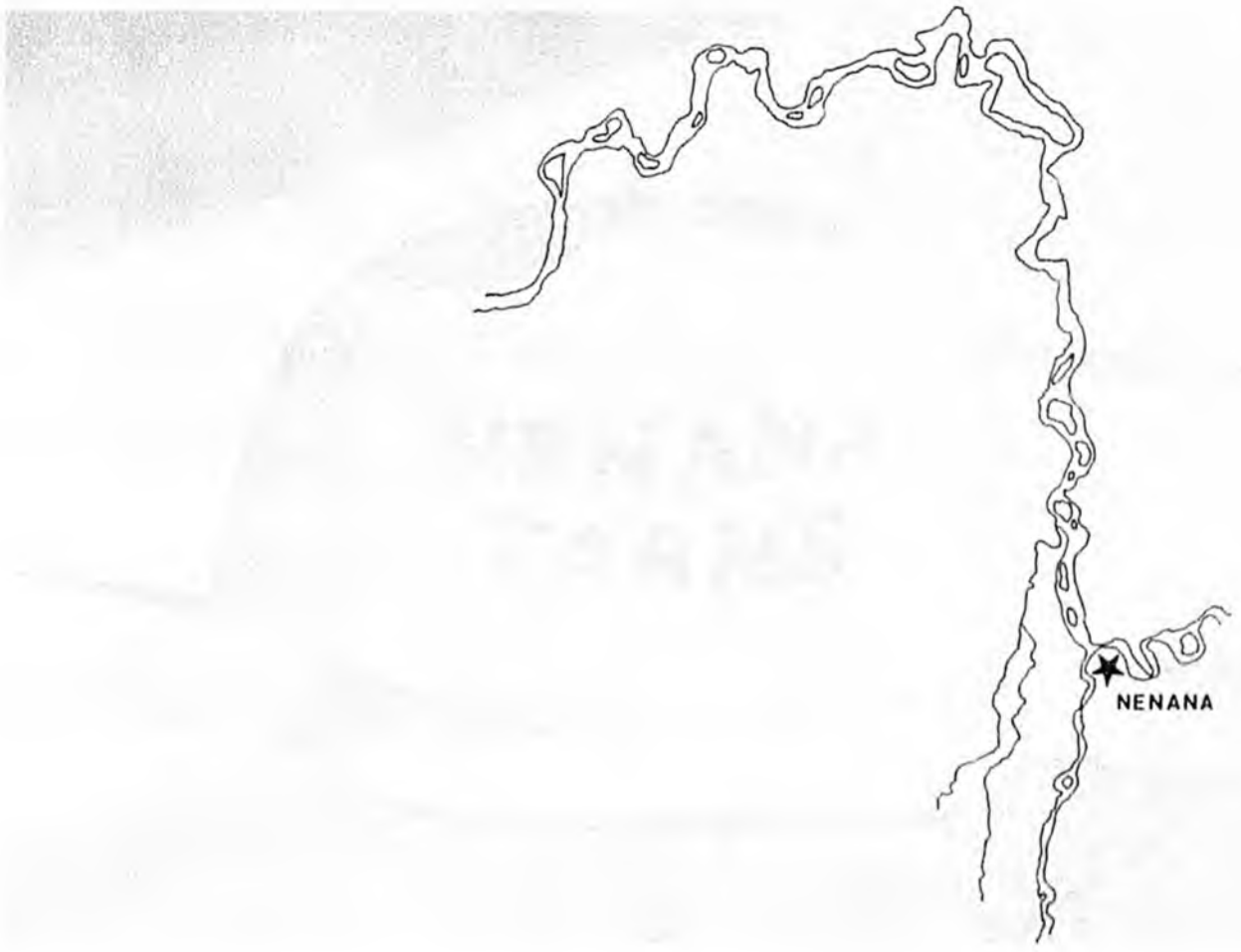
We are pleased with the reports, and we believe they offer a well thought out and detailed plan for initial development of Nenana-Totchaket. The transportation proposal includes both the initial design, and cost estimates for overland access from Nenana to the first two townships which the City and the Department of Natural Resources have scheduled for disposal in February 1982...less than one year from today. The livestock report lays out a detailed and comprehensive plan for the development of a red meat industry that will involve all the State's farming regions. The composite Planning, Development, and Production Schedule from 1980 through 1990 shows our best estimates of the annual financing required and the annual production and employment associated with development in the area. Clearly the amounts of money involved are not insignificant even when compared with the multi-billion annual revenues of the State of Alaska. More importantly, financing decisions this

year will be followed by financing decisions as large, or larger, in subsequent years throughout the decade.

The transportation system should fall into our highest priority-for without that access, the proposed clearing, wood fiber harvest, and land disposal programs are meaningless.

# NENANA — TOTCHAKET

## UNLOCKING THE AGRICULTURAL POTENTIAL OF WESTERN ALASKA

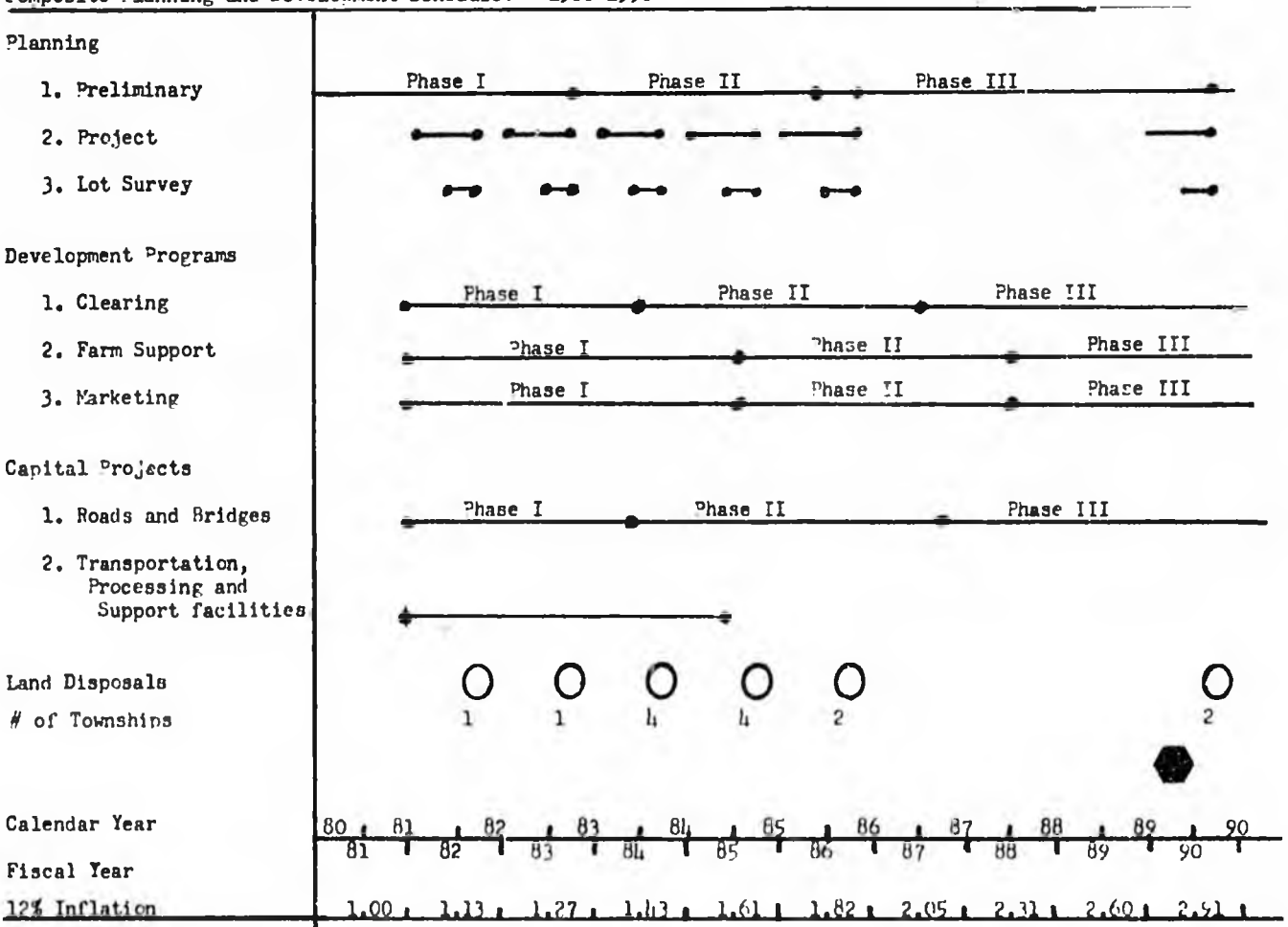


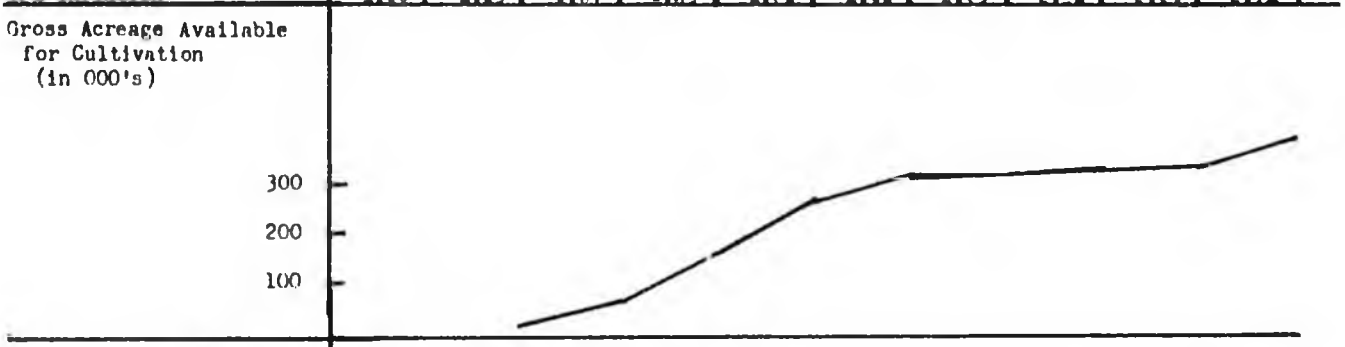

A Report on A Seminar and Workshop on Agricultural Development.
Sponsored by THE CITY OF NENANA
December 20, 1980

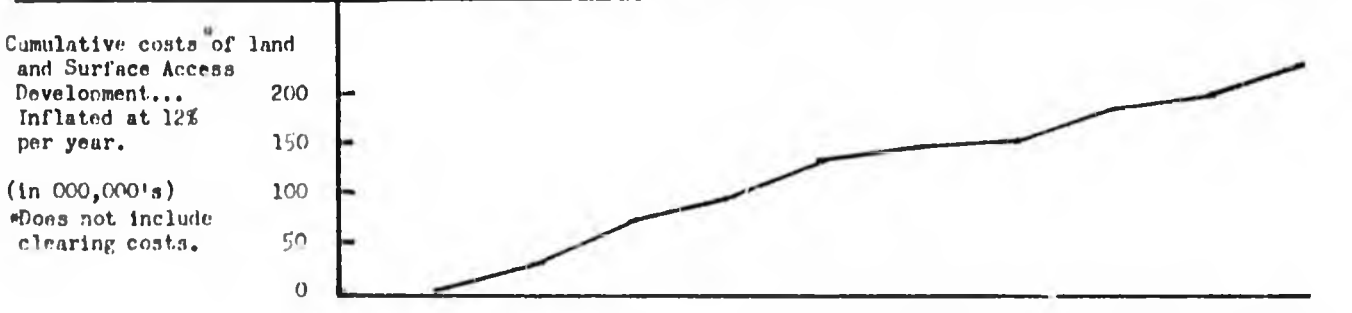
JANUARY, 1981

NENANA-TOTCHAKET
AGRICULTURAL PROJECT

Composite Planning and Development Schedule: 1980-1990




Prepared by: Northern Development Associates
Fairbanks, Alaska

The City of Nenana is pleased to publish and distribute the proceedings of our Nenana-Totchaket Development Seminar which we held in Nenana on December 20, 1980.

Though it was a cold blustery day, nearly 100 people came to the Civic Center to discuss, with us, Agricultural Development in a 700,000 acre area west of Nenana known as Totchaket.

We are at the beginning of a major development program which will open western Alaska to agriculture, and will, over time, become the single largest agricultural region in the State. Our planning and development schedule through 1990, shown on the opposite page, is both reasonable and acheivable. However, it can only happen with the continued support and assistance of people whose names and pictures appear in these proceedings and hundreds more like them.

This document is a way of preserving the comments, opinions and criticisms of the participants, including me, largely as they were offered...with some improvements in grammar and syntax.

In order to encourage the use of this document as a working paper--rather than a shelf filler--we have taken some license with the organization of the presentations. We felt it would be easier to use if the consultant reports were followed by the appropriate workshop summary. We have done so.

We appreciate your interest in these proceedings and, as always, we welcome your reveiw and comment.

Sincerely,

John B. Coghill, Mayor
City of Nenana, Alaska

January 1981

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NENANA - TOTCHAKET
December 20, 1980



Mayor John B. Coghill
City of Nenana

Welcome Speech by Mayor John B. Coghill:

When we talk about agriculture in this part of the valley, instead of saying, 'establish an agricultural base', we should be saying, 're-establish an agricultural base! In the 20's and 30's, there was a very strong agriculture in this part of the Tanana Valley, as well as Fairbanks.

It was a necessity years ago. They had large fields of oats and cow-feed and that type of thing. In those days, transportation was basically the horse and the dog. Of course, those animals by themselves created plenty of need for an agricultural industry.

It was also a fact that the transportation base of the early days -- you couldn't call Seattle and get produce or needed vegetables in here just overnight. They had to be grown here, and, by that means, of course, there was a tremendous amount of truck gardening and green-housing that were part of the industry.

Because of the fact that we are re-establishing a base, I would like to dedicate our proceedings, today, to those people who were part of the original

agriculture of the Nenana area. Frank Truffel (ph), John Peterson, Connie (ph) Jones, Frank Jones, Sr., Laurence Anderson, Al Lindser (ph), Al Wheeten (ph) and many, many more that had viable agricultural programs.

In the Fairbanks area, of course, you all know the Creamer's Dairy, the Bentley Dairy, the Yankovich's, the University of Alaska, Lloyd Oldroid (ph) and many of the rest of them were tremendously important in the agriculutral program. In fact, some of you will probably remember that they had a power mill in Fairbanks, right where the News Miner Building sets today.

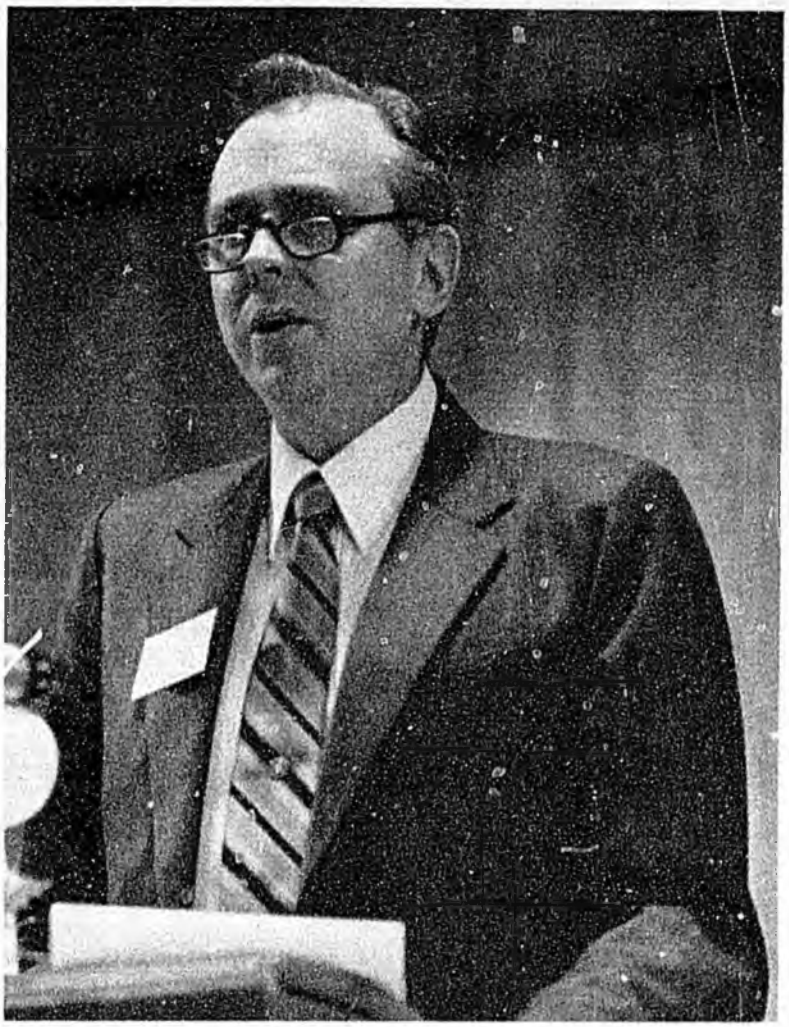
The Totchaket area, west of Nenana, was basically brought into the foreground during 1968, when we had the North Commission Transportation Corridor Study and Field Survey. During the field survey work, we found that there were good soils covering the whole area. From 1972, the U.S. Department of Agriculture, Soil Conservation Service conducted an official soils survey, and that map that sets over there shows excellent potential for a viable program for agriculture in the Class II's and Class III lands.

We put our first plan together in 1975, and we looked at agriculture from the 'market side'. Then, of course, had to put our plan on the shelf until such time as the Native Land Claims conveyances had been made in that area for the Toghetthele Corporation which is the local Native Corporation.

In December of last year, those conveyances were made and they were finalized in January, 1980. From that time on, why we have been in full gear. Of course, some people question why we are going so fast in getting our program going, we do want to harvest and sell a crop from the area in 1982. We're just trying to catch up on time, because we've been at this program for about ten (10) years, trying to get the interest of Agriculture going. It does my heart well to see this many people coming here.

There's one thing that should be put to rest. That is, in the paper about two weeks ago, there was a big headline called: "Coghill's Plantation." Although I don't mind seeing my name in print, because they did spell my name right, and that of course, in politics, is the 'main thing'. But, I think that the headline creates a negative impression, because it puts people into a position where they think that Totchaket is a 'pet project' of mine. It's not a 'pet project'. It's something that I've been very interested in, and over the years I've spent a lot of time trying to get others interested. Many people have brought Nenana - Totchaket to where it is today and many many more will be involved in bringing it to its full potential.

One of the reasons for having the symposium is, of course, to enlist your help and to pick your brain. We coined a phrase a couple of weeks ago which I think is real great. 'Nenana - Totchaket is not cast in concrete, it's cast in jello'. We want to make sure that we can bend with whichever way is necessary in order to get the grain program going in the two townships that we have designated. We're pushing straight ahead with our roads' program. We'll get those people involved and the consultants involved in their reports, so that we can then turn it over to the people here in kind of a 'roundtable' discussion and see what your opinions are.



Dr. James Drew
Dean
School of Agriculture and
Land Resources Management
University of Alaska
Fairbanks

Jim Drew: When the program for today was being planned, Mr. Goghill suggested that I might say something about the manner in which the Totchaket Agricultural Development Project relates to the agricultural development programs that are going on statewide in Alaska.

During the past few years, there have been a number of administrative and legislative actions to initiate the development of an agricultural industry within the State to expand the local farming operations we have had over the previous 10 or 15 years.

In 1976, an Agricultural Policy Task Force was formed as a result of legislative action. During the same year, an Ad Hoc Agricultural Group prepared plans for agricultural development near Delta Junction. Then, two years ago, the Alaska Agriculutral Action Council was formed to move ahead with the development and management of agricultural programs.

These activities have tended to crystalize some specific objectives with respect to agriculture in Alaska as a renewable resource industry. It is useful to review these objectives, because they give us some insight as to where we're going on a statewide basis.

The first objective for looking at increased agricultural development in the State is to broaden the economic base of Alaska; to expand the development of land for the production of agriculturall and forest products. The second is to stabilize real food costs by increasing food production in Alaska; to reduce the almost complete dependence of Alaskan consumers upon food imported from Outside. A third is to provide alternative job opportunities for Alaskans, through the expanded production of food and fiber, as well as the necessary supporting services for agriculture, forestry, and outdoor recreation. A fourth point is to approve rural and community life by developing an economic base through agricultural production and enhancing agricultural ameneities and the quality of food available in Alaskan communities. The fifth objective which seems to be becoming even more important nationally these days is to assist in meeting the national goal of increased food production, to meet world food needs; and to aid in maintaining a positive position for the U.S. in the balance of world trade.

We've moved ahead in the past few years of agricultural development in Alaska, and I think it's of interest to see just where all the parts are beginning to fit together with respect to a total agricultural industry within the State.

The first thing we need to consider is: If we're going to develop an agricultural industry in Alaska, it has to be a modern agricultural industry. Our biggest competitors are the folks in the agricultural industry in the lower '48. And, as you know, America's agriculture is the one unit of industrial activity within the United States and perhaps anywhere in the world, that has increased in efficiency every year over the past 10 to 20 years. Virtually every other industrial activity; at least in the United States, has shown declining increases in efficiency in the past few years. That's part of the reason we see so many automobiles from places other than Detroit being sold in the United States. Yet, we seem to be able to produce food with increasing efficiency in the United States.

In fact, there are only four major food exporting countries in the world today. These include the United States, Canada, Argentina and Australia. Every other country either just maintains self-efficiency in food or imports food. That doesn't mean that certain specialized products like hams from Denmark or wine from France aren't exported from those countries. But, in general, the only four major countries in the world that have a net export of food are the four countries I just mentioned.

To develop our agriculture in Alaska, we must compete with agriculture in the rest of the United States. They are good, and we have to be right up with them if we're going to do the job. Alaska's agriculture has to be large enough to provide a critical mass necessary to support the essential agricultural infrastructure that we need within the State. This is something we've lacked in the past. We've got to be technologically up-to-date, because, if we're not, we're not going to provide the most efficient and cost-effective production that's possible.

Our agricultural development must be economically sound. Our agriculture will not be successful if it's not good business.

Of course, our agricultural development will not be successful it it's not also environmentally sound. We need to take every possible precaution within the economic constraints that we have to work with, to make sure that we're doing our job in an environmentally satisfactor manner.

What has gone on in the past three or four years? Briefly, we've initiated the Delta Agricultural Project which has involved some 22 new farms on about 60,000 acres of land. The initial lottery sale for that program was in 1978, and the acreage should be producing as much as 40,000 tons of barley by 1982. The land is coming into production now. It should come into production very rapidly within the next two years. Most of the trees have been knocked down across the area and it's a matter of moving ahead now with the cleaning up the vegetation debris and getting the land broken for crops.

The Point MacKenzie Project, which is across the Knik Arm from Anchorage, is underway now and a lottery sale is scheduled for 15,000 acres in that area on March 6, 1981. That will provide a minimum 19 dairy farms and probably some 10 to 12 additional farms for other kinds of diversified agricultural production, including vegetables. So, we'll see some land coming into production there. As yet, there is very little land cleared in the project and of course, the land has not been sold. Access roads are completed, however, and it is possible to visualize the agriculture that will develop there.

As you may know, the Point MacKenzie project was designed to enhance dairy production in southcentral Alaska. Because it looked as though our major dairy processor, Matanuska Maid in Anchorage, would likely go out of business if it could not obtain larger quantities of locally produced milk for processing. In the absence of a processor, it's impossible to have dairying as an economic activity within the State.

The interesting thing is that as soon as the Delta Project and Point MacKenzie Project come on line, we're going to see a 'tying together' of these two agricultural activities, because lactating dairy cows require from 30 to 35 pounds of feed grain concentrate per day. So, it's the grain produced at Delta that will be available for dairy farms at Point MacKenzie. This will provide the elements of an integrated agricultural industry within the State, rather than the localized agricultural production that we've had before. The availability of feed grain from Point MacKenzie, at a world market price instead of a world market price plus whatever freight would be required to get it here from Vancouver or Seattle, is one of the elements that makes the Point MacKenzie project economically feasible. The two projects relate together in that sense.

Planning is moving ahead through the Agricultural Action Council to expand the initial Delta Project by an additional 45,000 acres. And, if plans go according to schedule, a land sale by lottery should be ready to go for that project by the first of September, 1981. The purpose here is to expand the grain production and make more effective and efficient the transportation and marketing systems which are necessary for economically viable feed grain production.

Today, we're involved in stages of planning for agricultural development within the Totchaket area near Nenana. The geographic location of this area is very important with respect to tying in with the transportation systems and marketing systems needed for the Delta and Point MacKenzie areas. These projects will all be on Alaska's existing roadbelt system; consequently the transportation and marketing associated with them will be facilitated.

In addition to these major commercial agricultural developments, the Alaska Department of Natural Resources has also been involved in making other agricultural land sales over the past few years. You're familar, I'm sure, with sales of smaller parcels that have been completed within the Tanana Loop near Delta Junction, the Potlatch Ponds area near Fairbanks; and near Talkeetna and the Four-mile Hill area. Of course, farming on a small scale and on a part-time basis on these farms will be enhanced by the agricultural development and the marketing and the transportation systems necessary for larger commercial farms.

While land clearing for the smaller farms is progressing more slowly than in the commercial farm projects, we anticipate that once the agricultural infrastructure is developed, we'll see more rapid development of some of these smaller and part-time farming programs.

If we're going to be successful in agricultural development, we have to keep in mind that we need to give as much attention to processing, marketing and financing, as we do to our production. We're not going to have an agricultural system or an agricultural industry if we don't have these elements. We need the total infrastructure including processing, transportation, and marketing, and we need it not just for grain production, but for livestock production, for vegetable production, and for other kinds of agricultural commodities, if we're going to diversify into these different production programs.

There is another area for agricultural development in Alaska that is not related geographically to farming plans in the Totchaket area or near Delta Junction. That is our areas of range land within the State. Alaska has substantial areas of range land on the Lower-Kenai Peninsula, on Kodiak Island and on the Aleutians much of which is not being utilized by any wild ungulates today. If we can begin to develop the feed grain base in Alaska so it becomes possible to feed cattle then feeder cattle are going to have to be produced somewhere.

Across the United States and around the world, feeder cattle are produced in areas where there is fairly extensive and accessible native range land. This provides relatively inexpensive roughage for cow-calf operations which will produce calves. Calves, thus produced, can be fed in feed lots and run through slaughter, processing and marketing facilities.

Certainly, with Alaska importing 98% of the red meat which is consumed within the State today, we should see plenty of markets within the State for beef and pork.

Thus, we're going to be looking at more expanded uses of Alaska's range lands if the present projects that we're talking about along the roadbelt near Delta Junction, Point MacKenzie and the Totchaket area come into being. We're going to see native range land utilized. In addition, we may see some pasture areas created where we do not have native range land today.

Our research and education programs are a very important part of the social infrastructure of agricultural development. If we don't have these programs, our farmers will not be able to compete with agricultural production

in other states. We've been able to move ahead successfully with barley production in Alaska in the Delta Agricultural Project because we have varieties of grains which have been developed here in Alaska by the Agricultural Experiment Station. These varieties produce good yields in short seasons because of their early maturity. In the absence of these varieties, we'd be in trouble.

We've got crop production systems including fertilizer recommendations which have been developed by the Experiment Station. These are extremely important as we develop commercial farming enterprises. If you are working only with a 'backyard garden', and you make a mistake and apply twice as much fertilizer as you need, or half as much, it really isn't a major problem. But, if you're dealing with one-thousand or two-thousand acres in production, an error like that can be the difference between economic success or failure.

We're completing work at the Experiment Station to develop the use of shellfish meal as a protein supplement in livestock feed. By using Alaska-grown grain and shellfish meal, which is also produced in Alaska as a by-product of our fishing industry, we're ending up with substantially reduced costs for hog production within the State. Keeping in mind that some 85% of the cost of raising hogs is in the feed, we can see that any reduction in the cost of feed which we can develop through research and technology is going to improve the economics of our hog production programs.

During this past summer, we initiated our first research in the Delta Junction area to look at 'no-tillage' systems for producing small grains. These are very important systems from the standpoint of soil and water conservation and also energy conservation, because they protect the soil from erosion and require fewer operations with machinery in order to grow a crop.

The interesting thing was that this past summer our results in the Delta area showed that the no-till production gave higher yields than either conventional or minimum tillage systems. So, we think that we're going to see a real potential for no-till systems within our grain production programs.

Our agricultural development is not going to move ahead if we don't have a positive commitment by Alaskans to an economically viable agricultural industry. I'm sure the project we see developing in the Totchaket area will fit in with the other ones that have already begun within the State.

If we look at agricultural development in Alaska, it's impossible to avoid some conflicts with other uses for land. We need to keep carefully in mind that if we are committed to agricultural development, then we have to designate the lands which we're going to use for that purpose and move ahead with it. If we don't, if we end up having conflicts with respect to land use in areas that have been designated for agriculture, then we have set the stage for failure of the agricultural projects.

Let me explain why:

I read a speech a month or so ago, that was prepared by John Mellor who is the Director of the International Food Policy Research Institute in the Agency for International Development in Washington, D.C. Mr. Mellor's job is to look

at policy issues that are important to developing agriculture in undeveloped countries where agricultural programs are insufficient to meet the needs of the people. The Agency for International Development has taken a leadership role in developing agriculture to alleviate world hunger problems.

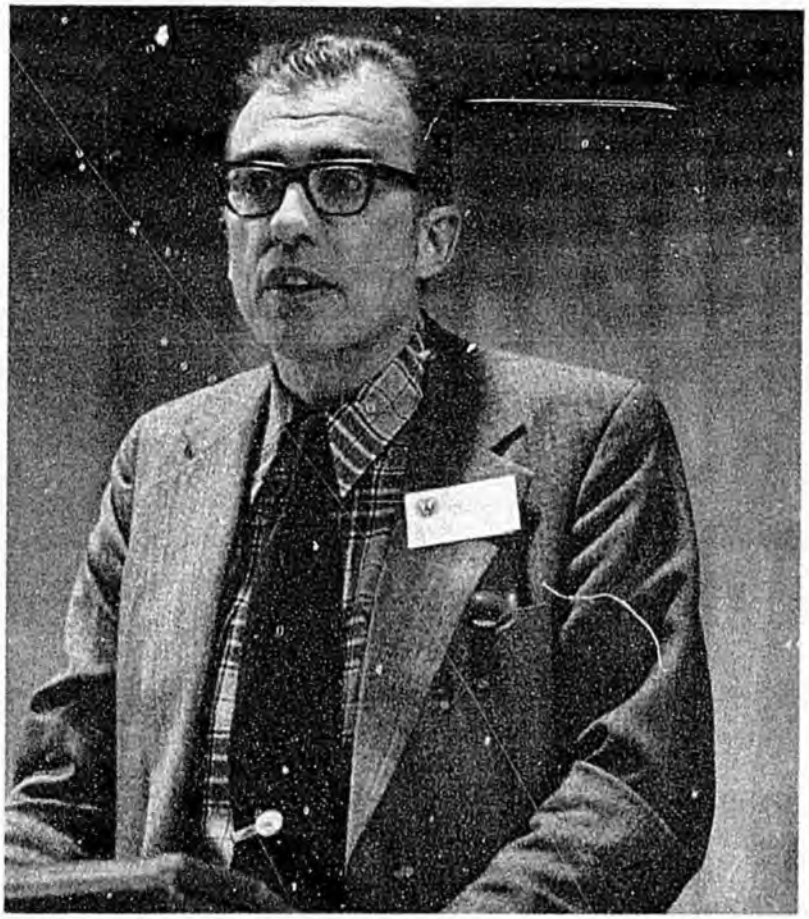
Now, Mr. Mellor pointed out an interesting fact in his speech: Of all of the various kinds of industrial development which various countries and the underdeveloped countries themselves are trying to initiate today, agricultural development is the most difficult. It's easier for them to develop almost any other kind of industry than it is to develop agriculture. If you look at Alaska as sort of an underdeveloped country, you can easily see that right here.

The kinds of management; the kinds of centralized control used to develop other industries, is easier than it is with respect to agriculture. In terms of agriculture, we're looking at individual farms; individual farmers; individual concepts; the need to tie together a whole infrastructure of production, marketing, processing and transportation.

According to Mr. Mellor, the underdeveloped countries are able to develop industries other than agriculture more easily than agriculture. What that does is provide additional income to the people in those countries. Thus, they are able to buy food. People have more money in the countries where they're developing industries other than agriculture. So, what that does is raise the demand for food and food prices within those countries themselves. In addition, it pulls food away from other underdeveloped countries that have not been able to develop agriculture and puts those countries in a totally untenable position. In other words, the ones that have not been able to meet any kind of industrial development or agricultural development seem destined to 'go down the tubes' within the next couple decades, because there's no way to provide their increasing needs for food.

Last year, the U.S. exports of food amounted to some 36 billion dollars, which was the largest export of food that has ever occurred in U.S. history, in terms of dollars. So, the U.S. is playing an important role worldwide.

The significance of Mr. Mellor's talk to us is that we need to be very careful not to put in road blocks to our agricultural development which we really don't have to put there. Because, if we do, it's very easy to have agricultural development fail, simply because it is one of the most difficult kinds of industrial development that we can undertake. We need to think about ways in which we can work together to put together the complex array of agricultural production, processing, marketing, financing, research, education and the other elements of the infrastructure. If we do this, we can meet the objectives of agricultural development that will benefit Alaskans well into the future.



James E. Fisher
Office of the Secretary
U.S. Department of
Agriculture
Anchorage, Alaska

I am here as a representative of the Department of Agriculture. All of what we will deal with here, in the way of iniatives, are primarily going to be the iniatives of the State of Alaska and the State of Alaska's agencies, its people, its institutions.

As Alaska moves towards - or as Jack Coghill points out: 'return to' - food self-sufficiency, I think I will only focus on one aspect of what the U.S. Department of Agriculture can do and does best. It doesn't hand out money very well. And, it's probably going to hand out money even less in the future. Those of us who are here in Alaska and who are sensitive to the newspaper, our governmental people, are aware of the fact that money from government is not necessarily the best kind of government support anymore. Our reactions in the territory in the early days of statehood were: Let's see if the Feds can't do something for us? Well, when it comes to money, that's not going to 'be' anymore. I say that that's part of my job to deflate the expectation as related to direct project financing from Federal sources. I used to say that facetioulsy, and I don't say it facetioulsy anymore. I say it very seriously.

However, the thing that you need to remind yourself and I need to remind myself -- the thing that the U.S. Department of Agriculture does very very well is to operate in a cooperative manner; in a cooperative manner, not in a regulatory manner -- to cooperate with people, to offer the help that's available from the Farmer's Home Administration, the Agricultural Stabilization and Conservation Service, the Soil Conservation Service, those that have cooperative agencies that are available with their expertise. Those are the people that you can call on to provide the support and the underpinning (if you will) to the State Iniatives. USDA is not going to get out and do it; the people of the State are going to do it. The USDA agencies and people are going to be there with their knowledge and expertise and their attitude of cooperation to help. I think that we need to remember that cooperative attitude because it's longer, it's tougher and once it's accomplished, it's more longlasting. I think it's the most important thing I talk about and I say it over and over again.

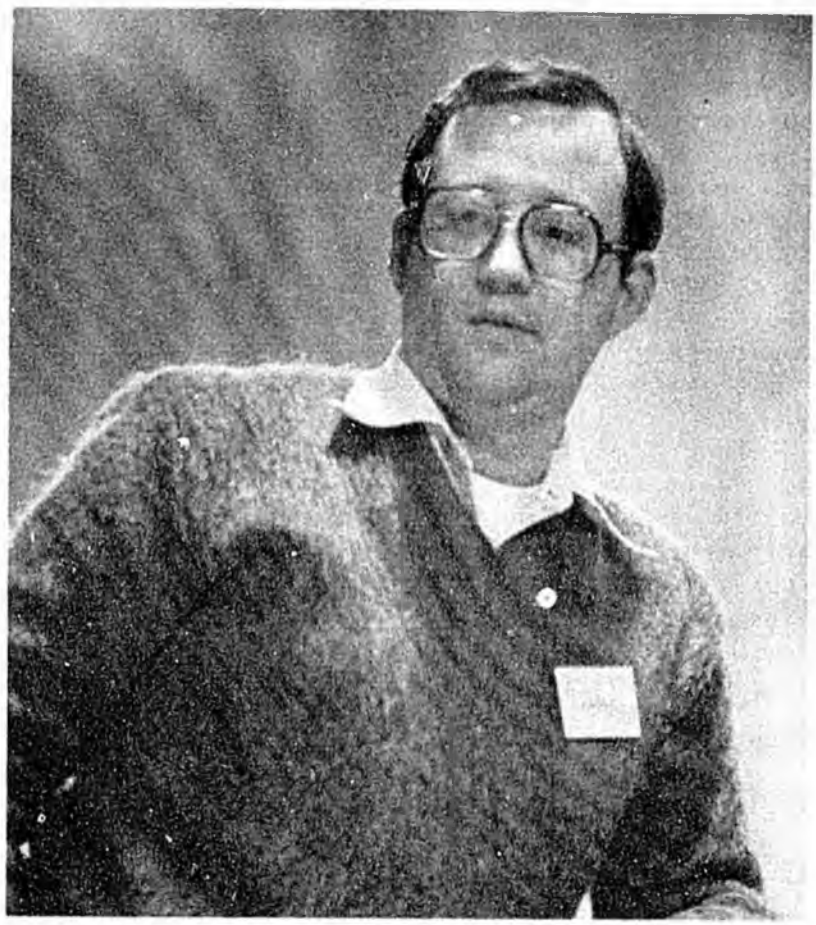
That's all I'm going to say this morning; to emphasize the cooperative nature and the availability of the cooperative program that so many of you have dealt with and so many of you are going to deal with in the future in Alaska's Agricultural Development. I would suggest: That to enhance those cooperative programs, we are going to have to pound, urge, scream and going to have to think clearly and innovatively. We're going to have to figure out how to pay, from State sources; to secure that cooperative underpinning.

The reason I say that, and I'll give you one example: When I was talking to Wayne Long, who many or most of you know, earlier this year and he's repeated it on several occasions, he said, "If I had to do one more program this year and it was not 100% funded from outside agencies, I would not do it." "I do not have the people." I would ask: 'Why should we accept that particular situation?' I would suggest that we should not wait until the Federal Government decides to make it available. I would suggest that we should ask the Federal Government to put those people there and we would furnish the payment from within Alaska.

I am IPA; Interpersonnel ACT, in reverse as you will. I would suggest that that needs to be done and hopefully it will be done. I would request that you pound on we Feds in order to see that it gets done. Because, if you pound on us, we can say, 'The interest is high; the support is there; and the people are ready to move forward when you will provide us with the appropriate response to the people of the State of Alaska'.

Thank you.

Domenic Carney
Director
Division of Agriculture
State of Alaska
Wasilla, Alaska



I think probably that quite a few of you have seen me before speaking in front of a bunch of people who are interested in agriculture. I would like to echo what Pappy said about the group. I'm very pleased to see, not only as many people as there are here, because I was with Pappy when we went through the seige when there would be 20 bureaucrats, 6 would-be farmers and one politician. Today we've got about 4 or 5 politicians, still the same 20 or 30 bureaucrats and we've got a hell of a lot more people interested in farming. That's really what it's all about. It really is encouraging to see so many people coming out and finding out exactly how the program is put together and how it is run.

The two points that I think were missed so far this morning that I would like to mention, briefly just before we get started on the department program is: The first is that I like food and I just had an excellent sample of it, and I think we ought to give the ladies a hand for the food they gave us for lunch. The second is: We had the concurrence this morning; I don't know how many of you realized that, but we had Dr. Jim Drew from the Experiment Station come up here and speak for about 20 minutes and he never mentioned research. That is the very first time that I've ever heard him speak more than two minutes without mentioning research. So, I'm going to mention research.

It happens that I feel that research is one of the most important building blocks that we have to have for an agricultural industry. I'd like to quote for you some statistics about research stations. I've been working for the last 2 or 3 months with the Office of Technological Assessments in Washington, D.C. on a Review of the United States Research Program for Food and Agriculture. It's been pointed out to me in very certain terms exactly what research means to the agricultural industry in the United States. This same principle applies here. I hope that we have some of the representatives; the senators, that will take some notes back; some of these figures that I've got for you, because -- these are telling figures.

Here in Alaska right now, we have a research station that has 15 professional people on it. We have, at present time, about 50,000 acres, including Delta, that you can figure are agriculture acres. We have plans to have, in the next ten (10) years, about 500,000 acres under crop production.

We have 15 people for about 50,000 acres now, and we're going to look at 500,000 acres in ten (10) years. By comparison, the State of Maine, which has a cultivated acreage of about 456,000, has 127 people. The State of New Hampshire, which has a cultivated acreage of only 120,000 -- now, you're only talking about twice what you have today, has 96 professional people. We're talking about people was Phd's. This is not the clerical staff; Phd people. The State of Wyoming, which has 2.1 million acres, has 79. Those are some of the smaller staffs. When you start getting into some of the bigger states of Nebraska, Iowa, California, when you start getting into larger research states, you find that the proportion is even worse.

I point this out because I think it's not the fault of the people that are representing you; it's not the fault of the people who are interested in agriculture. In fact, I don't know if we can ever say it, that it is the fault of anyone. The reason why we don't have a better research effort -- it's something that has developed over a period of years, but, the important point is that we have to reverse that trend and we have to correct that situation. We don't want to look at what's caused it; we want to look at how we can get to where we belong. We have to have a strong research effort, if we're going to succeed. You can't expect a farmer to go out there, no matter how good his markets are or how much financing you have, no matter how much land you give to him, without the research and the extension he has to have to succeed.

In a nutshell, I'd like to go through just briefly, what the department's policies are; what the governor's policies are on agriculture; and where we stand with the Nenana Project.

First, the Governor has said that it is his policy to proceed with as rapid a development of our agriculture industry as possible. He did this after reviewing the progress that has been made in Delta; after seeing that the potential is there; and after basically being influenced to see that we have to reach a certain size before we can be viable as an industry.

Part of that is the development of the Nenana area. He is in support of working with the local communities, in doing these types of developments, and that's the reason why we're here in Nenana, working with the City of Nenana and the people here to get this project started.

I'm going to let Art Davidson go through for you the schedule that we have developed. It's a joint schedule, developed by our division under Ed Kern. Ed is in charge of our planning section and has the statutory responsibility for doing the planning and the layouts for all our development programs in the State. He and Art Davidson with the Research and Development Division of our department have put together the Time Schedule for the transfer of title of the Nenana land.

Art Davidson: This fall, we've tried to take a real close look at just what it's going to take to get us to the point of having the Land Disposal for the Nenana AG project and to see if it can be done in the spring, summer or fall of '82. Target dates have been set out. This is sort of a schematic organization of some of the tasks -- you can see some of the various agencies that are going to be working together. It's going to have to be quite a cooperative effort, because there are a lot of specific tasks. This is our time-flow over here.

One aspect of the project -- a lot of data gathering, mapping analysis, economic analysis, infrastructure, transportation, for marketing. This is going to be an ongoing activity throughout the development stages of the project. In fact, it is something that will continue on even after you have cultivation. With specific dates, we're going to have various climate information or market information or transportation information available.

The next area of planning is what we've called, sort of a schematic Area and Management Plan. Before lands can be disposed -- for agriculture, they need to be classified: You need to look at the area to make your major resource allocations; find where the Fish and Wildlife Habitat is; the forest products; the AG land; and come up with a plan of the area which is going to balance or coordinate the various resource uses.

We determined that if we had the funds and the people would rearrange the work schedules, that we could do a schematic Area and Management Plan in the Department by next August; if we begin right away. This would meet, not only statutory requirements, but what we feel has to be done; various considerations to look objectively at where is the best way to begin a road or to balance the resource uses. To take in the whole sphere of various interests; things that might be effected by this AG development. This will lead to the classification, which takes a couple of months. And, we anticipated by the middle of May, to have the recommendation for Classification. That they would then be complete by August.

Now, a major part of this Management Plan in this area is going to be the AG Design. I see that we have a workshop on that this afternoon. In other words, considering things like: exactly where the roads are going to be; what size and shape and adjust the position the farms are going to be; consider things like wedge-row (ph) -- a whole variety of detail planning.

We need to begin data gathering on that right away. Then this spring -- go for about five (5) months to actually work out the detailed plans and have that ready by August.

The next se·ies of activities that we have listed here, we put under the title of Project Development. Things such as developing of farm financing; the access road; bridge construction; and clearing of land. Nick will get into this perhaps in a minute, but, basically we set out two different options for clearing of land: 1) Would be clearing by the industry before the land is disposed of. That would be dependent upon industry coming up with a suitable program for not only clearing the land, but utilizing the products and leaving the land in suitable condition for farming.

If that's not feasible, then it is thought that the farmers, themselves sill handle clearing as they've done in other projects.

Another area is the legislative request. There will have to be financing for roads and bridges, farm development financing. And, the planning -- to put that finance package together, will have to be thought out real clearly. We'll have to find appropriate dates to tie in that financing of legislative requests, if it's going to be cultivation by '82 or'83, or whatever date that would be.

The disposal process itself takes about six (6) months. It has various aspects to it, ranging from public workshops, requalification submittals, requalification selection and notice, lottery brochures and field periods, and finally down to lottery.

Now, as we've looked at the mechanics of making the Nenana Project go, we feel that the necessary planning (up on the top here) can be done by next August. That's on an accelerated basis and dealing with available data. But, we feel that can be done. We also note that this process takes about six (6) months, and that that could be done.

We feel though, in this area, where we're talking about the necessity of building the roads, the bridges and the clearing, that there's some uncertainties as to exactly how soon that can be done and how it can be accomplished. So, there's some degree of uncertainty here, as far as the timing.

Roughly, that's the time schedule that we perceive at this time. Nick.

Nick Carney again:

I'd like to point out a few things on the chart that I think merit some consideration. You heard Jack say that when we began that our plans here are not 'cast in concrete, they are cast in jello'. This chart will show you exactly why.

It requires, for example, if we're going to have a farm clearing project by industry, we have to have access out there before industury can get out there to cut those trees. If we're going to have that backing off, we have to have that access built early this summer. To do that, you've got to have the money available very early this spring, so that we can advertise and lease those contracts. This chart shows what we feel -- that happens to be the critical path of the project during that period of time.

If we, for some reason, do not meet that deadline, we can still change our option, go ahead and have the lottery later, and have the farmers themselves do the clearing, as we did in Delta and as we're doing at Point MacKenzie. Or, as another alternative, we can delay the lottery, if we have more than one.

It may be, and again keep in mind that we're talking possibilities here; we're not talking anything that anyone has decided upon, it's just what we have thought -- It may be that we would want to, for example, proceed with the timber of harvesting project on the different parts of the ground from this initial disposal AG land at Nenana. I don't know, it may be that we would want to delay that disposal until we get that timber harvested off. Those decisions are going to have to be made, probably, by the legislators and by people in administration at a higher level than myself. Those are the kinds of things that we have to consider when we're looking at this.

That's the reason why we put into this plan the different clearing options. I hope later on that we will get some time and maybe you can come and take a look at this. We're available to answer any questions that you have on it.

This is the way we see it. It hasn't been adopted by anybody. It's the Department's feeling of how we can put together the disposal of Nenana by late February, early March of 1982. It presumes that we're going to make substantial decisions very soon. For example: We're going to have the farm's design we hope by sometime in August. That means that we will have to have it done by August; between August and January of next year - We have to put together the financing package for the farm operation in themselves; for the infrastructure; for processing facilities. Those things have to be built very soon, after disposal. Because they have to be introduced to the Legislature in early '82, to pass the Legislature and be available for us by July of '82. That's the kind of lead time we're looking at.

One other thing that we'd like to bring to you up-to-date on: We do have a contract between Nenana and the State's Division of Technical Services on preliminary survey. I have Ron Mitchell here who is the Assistant Director for that division. He can give you just a very brief rundown of exactly where they stand with that contract.

Ron Mitchell: I'll go fast. We have been involved with this project since September. We have identified four (4) phases. We have an additional one which is identified on this one.

The Division of Technical Services is responsible for the State ownership identification of lands. They are also responsible for the technical identification of lands, which is surveying.

On this project, we identified Phase I as 'Ownership and Status Plats', which this green map over here represents. It identified the ownership's status of the lands involved. The two townships that we are now talking about are identified as patented land for state lands. We plan to update this map one or two more times before the project is over. Since we only planned that, we'll probably do it several more times than that.

We're doing Soil's mapping with the SCS and with the other state agencies. We have produced some colored photos; we have obtained them, actually.

In Phase II, we have controlled mosaics which are hanging back over here. That was taken with high altitude NASA photography. I don't know the year. The altitude is somewhere around 12 miles when it was taken.

We also have photo base maps which we have produced under contract. I might point out that this identifies the two townships which are involved. We also have produced a three (3) quadrangles to the south of that. We are identifying or preparing maps to the three (3) quadrangles to the north, making a total of the nine (9) quadrangles for the entire State.

These maps are based off of aerial photography. They are relatively accurate. Therefore, they can be used for making measurements and to be used in your platting.

Phase III is vegetation mapping which we are having done by other agencies within the State.

Phase IV (indiscernible) form permafrost wetlands construction material map. This is on schedule and we expect to have this information done by March 1, 1981.

Art Davidson added: I would just like to add that: To the right of the schedule over here, is a map which sets up a boundary of the area; the area planning and some of the areas like Minto Flats, up to the north. I would also like to introduce Peggy McNees who will be working on the area planning.

Nick Carney: Well, if I had to sum it up - I hope I'm not getting too wordy, but -- If it had to sum it up: There's no reason why we can't hold a disposal on this parcel by the spring of '82. There are three (3) possible areas that we will have to approach in the way of making decisions.

One of them, of course, is: Getting the road money available; getting those roads built so we have access very soon, because we have a policy in the Department, at least as far as Agricultural Lands are concerned: That we do not want to dispose of anymore agricultural lands without access on the ground.

The second one, of course, is the decision about what type of clearing procedure; who does the clearing procedure and what type is followed; and how the farmer is charged for that clearing if it is done for him.

And, the last (I don't feel that it's going to be a problem, but I'm duty-bound to mention it, because it has come up in the past) -- and that is: The possibility that we will have conflicts with our area plan. In other words, there may be small areas within this area that we want to dispose of for agriculture that someone -- some vested interest will be interested in preserving for their particular use, and if that does come up, it can take some time to resolve those differences to make the determination of exactly which resouce use takes priority.

I mentioned it as a possibility because that's the reason why we go through the area plan, and it would be presumptious on my part to give you the impression that it is cut and dried 100% in that area and that the two townships are already determined to go for agriculture. That isn't decided until the Commissioner signs the documents and accepts that area plan.

THE FLOOR WAS OPENED FOR QUESTIONS

By Senator Bettye Farhenkamp:

Q How much attention are these people paying to the studies?

A The studies that we heard from this morning are part of the material that we're considering already. That's the process that we started to go through.

Q Okay. It wasn't clear. In my mind, I could see the studies going out the window and that bothered me.

A No, that's the idea of getting those done, because it has to be done very early in the process. Those studies give us the basic material that we use when we decide how big the parcels are going to be; what's economically viable; and what kind of infrastructure we need.

Q How soon will this 'jello' that you have now fill up enough that we know where you want the roads; how much money for doing it etc?

A We felt that the end of January is the absolute deadline. That's what these are; they're absolute deadlines. Anything you see up here -- we feel the last date that that can occur. If we can get it a month earlier, that's what we'll do.

Q Senator Farhenkamp requested some small reproductions of the maps.

A We will have some. All the legislators will get one.

By Representative Bob Bettisworth:

Q There might be lands within these two townships that would be in dispute for other -- Is there any reason they aim to hold up your time schedule on the whole project -- that they just be set aside until resolved -- go ahead and . . .

A Well, I think we probably could do it that way, yeah. The question comes down to: at what point do you actually have an area plan? And, it also comes down as to how much of a disruption could those areas be on what you want to do for agriculture? In other words, if they are fairly substantial, I think we could aim more to get those things resolved in a hurry than to try to bypass them and think we're going

to have a pocket of land in there that we didn't make a decision on and we're going to do it later. I think that that would be the attitude of the division. I don't consider the area plan to be one of the restricting time schedules here. The road and the clearing decisions are much more restrictive than the area plans. We've got enough time built into this area planning process, we would be able to resolve any of those difficulties that come up. I hate to make a commitment and say that they're not going to happen. I hate to give the impression that the status of the use of that land has already been decided, because that's what this whole process is about.

By Senator Farhenkamp:

Q Which agencies have you already contacted? Where do you foresee possible conflicts? Are you working on those now?

Answer by Art Davidson:

A We've been talking to a lot of different people; different agencies within the department, the AG Action Council. As I see it, to make something like this happen, it's gotta be a big cooperative effort. It's not one person or one agency going out and doing it all. It's going to take a lot of people in this room, working together to make it happen.

I want to add, Nick, on the planning: Our attitude in the planning section is that we want to organize ourselves; to apply ourselves, so we can get that done just as expeditiously as possible, and also to make certain that we're going to have the information to date; and answer the questions and make sure that this thing is going to work. The worse thing that could happen is that we should miss something. It is really important.

By Charlie Farron:

Q Fish and Game is interested in lands of this size. Have you had any contact with . .

A Yeah. The planning process approaches Fish and Game, Parks, Transportation and just about all the agencies. We have a lot of conflict often times in agriculture with Fish and Game. So far, we haven't had any indications from them. Of course, they're aware of what we're doing. They're going to have a problem with this particular area. It seems pretty clean so far, but I'm not with Fish and Game.

Q Sir, just one point for clarification. I don't really understand. Is it necessary that the City of Nenana annex the two townships before the land be turned over to the farmers?

A Oh, no!

Q Or is that red tape -- tax base -- I really don't understand that.

A Even if it were annexed, the responsibility for disposing of state land would still rest with the State. The title to the land does not transfer to the City, if they do annex.

Question of Dr. William Wood:

Q Indiscernible

A Well, we expect the area plan to do just that. The area plan will take care of our planning for the entire area. We won't have to do this area plan for the next phase.

Question by Dr. William Wood:

Q Indiscernible

A That to me is a time scheduling problem and not a problem of deciding what the land is going to be used for. It's a fact of timing.

Unidentified Person:

Q Has there been a conflict with Mr. Coghill and D.N.R. over the use of forest products on this land? How much of a conflict is going to arise?

A (Nick) I wouldn't call that a conflict between them and ourselves. That's a conflict between the method and the time schedule. Somewhere we're either going to have a meeting of the minds or we're going to have to say, 'if we follow this procedure and it shows that the industry cannot take that timber off there for five (5) years and we're willing (both of us) to live with the fact that we won't have a disposal for 5 years, that's cool. We'll do it.' But, when that comes, I suspect that we're going to have a compromise somewhere and that's the reason that we work with the local community. Don't get me wrong. The State has a responsibility for managing state lands. And, in the ultimate outcome I'm not saying that we're going to ignore the City of Nenana. We have statutory responsibilities. It's in our best interest and the City's best interest, that we sit down and say, 'here's our problem. What is the most logical solution to it? How do we achieve both ends, if possible, and still get our agricultural project off the ground'? That's the reason why we're working with the City in the area planning process and the reason why we're here today.

Unidentified Person:

I have a few comments I'd like to make on the clearing process. For your harvesting wood chips; harvesting your timber on the hydro electric project like Susitna, industrial development project. I've been here in Alaska for 40 years and I've been involved in Agriculture. I came to Alaska in 1940, started clearing land for my

homestead. The way we did it was like we always did it -- plowed it with a dozer in a big pile. Then 10 or 15 years later when you get those minerals worked out you start farming it. Your vegetation, your grains and potatoes (whatever you grow) where those burn piles were, you get twice the production as you do on the area that was taken off.

In the last few years, I've been working in the Fairbanks area, where you sheer your ground in small minerals; you burn it in small minerals. You get the benefit in two ways; the heat from your fire and the distribution of your ash. You save all your nutrients and your vegetaion. It stays in the ash on the ground, except nitrogen. You lose about 95% of that. But, everthing else stays on the ground. So, you've got some considerations to make there. Clearing it the way they did in Delta and the way they've done it in the past, putting it in minerals and burn piles, (indiscernible inaudible). . .

A That's right. That's a consideration. When you consider the decision on exactly how we're going to dispose of the land, which decides who's going to clear it under what method. That's one of the factors that we have to consider; we're well aware of it.

Q In my case, let the farmer decide how he wants it there.

A That may be. It may be that if we're going to meet a time schedule, that may be the only one we have on this particular parcel. I'm in full agreement that we ought to try and salvage that timber if we can. Keep in mind that we're only supposing. It may be an option that we'll want to go out and try the timber-harvesting method on Phase II to try to get Phase I started, so that we get some infrastructure begun. I don't know. It may be well to do both, but that's a decision we'll have to come up against very soon, probably some time by May.

Asked of Art
by Celia Hunter:

Q Art, the D.N.R. process, the planning process is supposed to have pretty structured public participation. I don't see it on your program.

A These lines we have out here really combine quite a few different things. For example, we talking under the data gathering and the mapping analysis. We can do another whole chart, which would show the various studies which feed in there, that have already been done and presented here today and the same way on the area management planning. You could do a whole other chart of various workshops and other participation and meetings we're going to have.

Q In January?

A In fact, those charts are already roughed. Each agency that's responsible in our department for a phase, is putting together exactly that kind of a chart, so that they have their own time schedule to meet this major time schedule. Those are required by law. There's no way to get around them when they're in there.

Nick: I'd like to make just one more little statement before I give up the podium. Contrary to popular belief, in the Division of Agricultdure and within the Department as well, we appreciate and would like to get letters from people or expressions of their concerns and suggestions as to how we might approach this problem. Because, it is a major problem and it's one that we wrestle with all the time in the Department. We often do have to make decisions in the vacuum of public opinion or maybe we only get verbal opinion that can either be distorted or twisted. If some of you have concrete suggestions as to how you feel this should be done, don't hesitate to send them to us. I enjoy getting them.

* * *

Mayor Coghill: Thank you very much Nick. I might make one or two point clarifications to answer Dr. Wood's question and to answer a couple of others. I think we're getting into the spirit of these workshops, because this is what we want. We want to get input from all of you folks that have had practical experience or that are interested in this type of thing. When we zeroed in on the two townships -- if you look at that map over there, the four that are outlined in the middle are patented - State Patented Land. The one down below has a recreational area in it. It's the closest access to Nenana. If you transpose this over onto the red overlay, you'll see that it's in the Class III lands. It's in the part of the area that we're going in.

The City of Nenana and my staff felt that, if we could convince the Department of Natural Resources and Nick's shop to do a land classification on those two townships as a beginning that we wouldn't hold up the project as we did the classification on the whole thing. In other words, it would be an on-going program, and this way we can shorten the time. Because at the outset, I said that we were trying to compress time. It really frustrates some people because it has, of course, changed their priorities in some of the things.

We know that if you took it on those two townships that the Legislature would say, 'Heh, the cost of getting in there is way too great.' But, when we start looking at the whole classification, there will be an awful lot more cost-ratio benefit. The thing is, there are no recreational areas that have been designated by the State at this particular time for it.

Dr. William R. Wood
President Emeritus
University of Alaska
Former Mayor
City of Fairbanks



Dr. William Wood

Referring to Pappy Moss who would be the luncheon speaker:

Think of him in connection as a farmer. Really, he's aggressive and a forager for things that will help us. Something like to buffalo. So maybe he's part buffalo. He's very persistent. He does it in rather an amiable way! But, he's stubborn; he's persistent. So, he's (I suppose) part mule. Then, he has a very exuberant optimism and a tremendous confidence about Interior Alaska. Of course, we're all very grateful.

So, I think I have to introduce Pappy by saying, 'He's part buffalo, part mule and part bull'. All of them are needed; all three have thick hides. Anyone attempting to promote Interior Alaska, certainly has to have a thick skin.

But, the future is going to be an exciting one. I have tremendous confidence in it myself. I think some day we're going to realize that the most expensive thing that there is for cultural and social progress is idle resources, especially idle, human resources. The reason I have been so opposed to various programs that are going to do good for us; simply because we are. All they do is destroy our initiative, our enthusiasm, our opportunity to be creative.

Idle, natural resources are also exceedingly expensive. Someday, I think we'll all face up to that 'basic issue'. That the one thing that human existance cannot abide for long is idle resources; human or natural.

There are also uses; multiple uses that can be put to use. One may be just recreation; one may be just spiritual fulfillment. But, you also have to have your land to use, your natural resource uses for food (food fibre); for tools as well as for recreation.

Pappy, you being in a very key position this year where the other members of the Interior Delegation -- frankly, at this stage in history, that has tremendous significance for every, single person that chooses to reside in Alaska.

We talk about the fact that we think that the government would just get out of our hair; that, on our own, we could do anything. I suppose that's true, but I suggest we're also past that time in history.

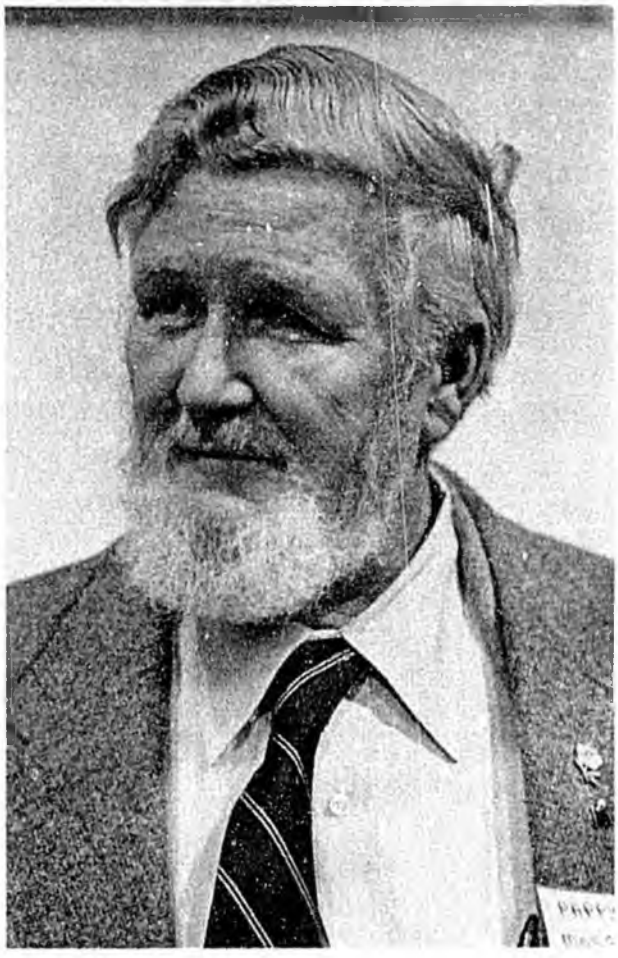
What we're talking about now is Partnership. Private sector and Public sector in Alaska -- it's the public sector represented by the State government that is absolutely the key to what is or is not going to happen to us in the immediate future and in the long years ahead.

So, Pappy, give us some insight into what is going to happen this year.

* * *



Representative Pappy Moss
District 19
Delta Junction



Pappy Moss: Thank you Dr. Wood. It's always been a pleasure to be around when Dr. Wood is, because I always learn a little something. An old country boy like me, everywhere I go, I'm trying to learn something. I sometimes feel like I'm a little like Don Quixote and the windmill -- I do a lot of flailing on occasion, but I stir up a little wind once in a while. I'll try not to pass out too many chips, but you know -- I was standing around here today and looking at the people here today. And I can't help recall -- In the past years that we were trying to develop agriculture and set us this great renewable resource of ours, the problem was much smaller. We felt like we were a bunch of participants, dreamers and fools. I'm glad to see a hell of a bunch more participants, dreamers and fools in here today.

I might ought to clarify what I mean by the word participants, dreamers and fools. A participant -- the first participant -- in fact, it started out in agriculture -- it was that fellow named Adam. Eve convinced him to take a bite out of the apple. Ever since then, he's been trying to figure out where to get something to eat.

Everyone of you today have just participated in agriculture by the very simple fact that you've had something to eat. There is nobody -- developers, non-developers, poor people, rich people -- that can get by without being a participant, at least every day of their lives. Some days are kind of thin in your participation. Up here in Alaska it's going to get even thinner.

I'm kind of reminded about the opportunities which we've got now to make a viable resource out of our agricultural business renewable resource. It is an opportunity -- you know, it reminds me of a story I heard once. It's alright for mixed company I think.

It seems that there was a young fella who was a salesman for farm supplies, travelling through the countryside. He had a long day and he came to this farmhouse. He asked if he could spend the night. The farmer said, 'Yeah, sure. Come on in, you'll have to sleep with baby sister.' He said 'baby' really. So, he took his lighted lantern and he went upstairs and he put him to bed up in the big, feather mattress; put a pillow between him and the baby. He went to sleep; he was real tired. The next morning, he went down on the back porch there, washing his face in the cold water out of the well, and this beautiful vision stepped out of the building there. There was a little breeze blowing. She had on a big bonnet and it blew over the garden fence. 'Wait a minute, honey, I'll get it for you'. She says, 'Heh fella, you done missed your opportunity'! The point is, let's not miss our opportunity.

We've got an opportunity now to make agriculture one of the greatest things in the State of Alaska. You know, when I spoke of fools, I think that sometimes we are perceived in being fools, to think that we can grow anything up here that we can eat. Especially the people in the lower '48. Of course, right now in Delta and Nenana, I think the best probably that we can grow right now is a few igloos. I know that we have a few upstarted down at Delta now. But, that's wintertime.

But, that Delta Project is beginning to prove a point; that we're going to be able to make it. A lot of people think we're foolish to even try. Are we foolish to try to put food on our tables? By golly, you know -- if we don't start thinking now, we're in trouble; we're in big trouble.

I read some statistics the other day where it said, 'There are approximately 3 million acres', and I think Jim Drew over there will probably bear with me on this and back me up on it (it's not a chip really) -- 'there's 3 million acres a year that's disappearing in the lower '48 of farmlands; 3 million acres a year.' (Paved parking lots and suburbia.) Right now, we just heard this morning that $36 billion a year in exports are going out of this country across the waters. It's one of the greatest balances of payments we've got. Here we're worried to death about all this energy that we're having to buy from the Arabs over there.

By the year 2000, we ain't going to have it if we continue at the rate we're going. Do you think that those poeple down there are going to sell us a 'tater' up here? Hell no, they're going to eat it 'theirselves'. They're going to have to. If Alaska is not into the mainstream of Agricultural Production, where we have something to feed ourselves with by the year 2000, we're in big trouble.

The people that are in this room today and the number of other people that are around the State; new members of that New Frontier Society. We're about 50 years behind in everything we're trying to do. I know that there's a building that I'm working on right now, for example, talking about being years behind. The Soil Conservation people, the federal government, have had a beautiful thing here for a number of years. We've had some small clearing practices. They've eliminated money for that. That's going to eliminate the little farmer to some extent. I hope that we can reintroduce that with State participation.

The point that I'm talking about there is: The backbone to our agriculture industry is going to be the 'little guy'. We've got to continue on as we have in the Delta Project. For example: To have the large farms to help develop the infrastructure which we have spoken to here this morning. But, we've got to start considering the 'little guy'. He's going to be the meat that's going to go on that skeleton and make it a viable industry. It we don't, we're going to be awfully hungry in not too many years from now.

I mentioned the fact that we are participants. Every time we eat, we're participants in agriculture. I would hope that each and every one of you -- Every time you talk to somebody, tell them, 'Heh, you're part of that agriculture business. You eat don't you?'

The very fact -- As I was looking this morning, I saw people registering to come to the symposium. It kind of reminded me of a story. You're registering to show that you are a part, and that you are interested in this thing. It kind of reminds me of a story one time -- You know, the farmboy -- His dad had a cow that was about ready to be bred. So, he told his young son to take the cow over to the next farm next-door and get her bred. So, he's going around the corner, around the front porch and mama came out. 'Where are you going?' 'Well, I'm taking the cow up to get her bred at Mama Brown's.' 'Oh, don't do that'. 'How come mama?' 'Well, you should let your father do that.' 'But Ma, he ain't registered!'

The point of the whole story is: Every one of us should let people know we're registered and we know where we're coming from in agriculture. It's important tc be registered in this thing. And, you've got to know what you're doing too.

We've got a lot of expertise up here. Some of it's good and some of it's bad. We've got a lot of problems in trying to assimilate all of it. A lot of the things that they did in the lower '48 don't work up here. They say that we don't know what we're doing.

That reminds me of another story about a fellow that might not have known what he was doing either, but at the same time he was doing something anyway. He was studying to be a veterinarian. He was taking it by correspondence course. You know how that stuff goes Dr. Wood. You have to do certain practical experiments and everything. He had a paper made out and was ready to send it in about what he did on his tests and everything. He knew exactly what he was doing. He took a frog to use as a demonstration. He had a piece of paper to tell what he did and what happened. So, he took a frog and put the frog on the floor and he said, 'Jump frog'. and, the ole frog jumped about 15 feet. He wrote down on his paper 'Frog with 4 legs jumps 15 feet'. So, he took out his correspondence veterinarian scalpel and cut a leg off; put the olde frog back on the floor again and says, 'Heh, jump frog'. And, the olde frog didn't jump so far that time, but he did jump. He jumped about half the distance. He did that until he got down to that last leg there and he stomped around there and hollered at him. The ole frog jumped about 2 feet. He says, 'Frog with 1 foot jumps 2 feet'. He got his correspondence scalpel out and he cut that last leg off. And, he put the frog back on the floor and he jumped and he stomped and he says, 'Jump frog, jump'. The frog wouldn't move. He scratches his head and he looked down on his paper and he says, 'Frog with no legs can't hear'.

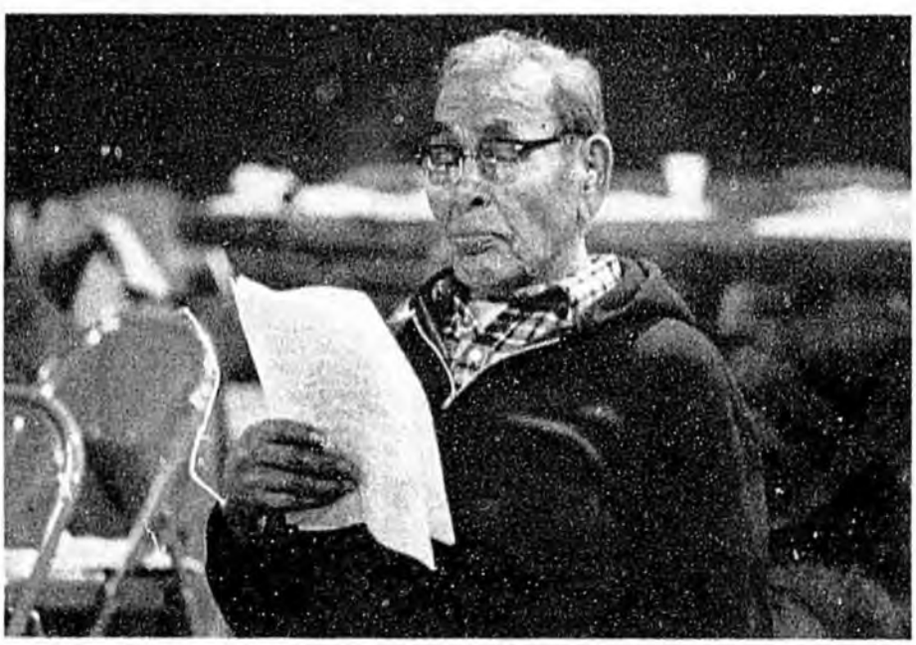
The point of it is: I hope that we're all going in the same direction. I like to see all this stuff going on, but I hope that we're going in the same direction by the same set of rules, and that we don't change in the middle of the stream.

And that means, pure and simple, a lot of things that we have learned in the past, let's don't forget them in trying to create new things in the future in our agriculture business. I hope we don't get off in left field.

I don't want to take a much more of your time because you have quite a bit to do this afternoon, but I would like to quote to you, when I said 'dreamers'. One of my favorite quotations is from George Bernard Shaw. George Bernard Shaw said, "you see things as they are and you ask why. I dream of things that never were and I ask, 'Why not'?"

So, folks, there's where we can be dreamers and we can make it happen if we would work together. I think we've got the people here that can do it.

And, now that I've got the opportunity, I hope you all have a very Merry Christmas and a Happy New Year. You've got some good seed for next spring's planting. Thank you for having me.





Consultant for Transportation Planning
Bob C. Thomas, President, Alaska Transportation Consultants, Inc., Fairbanks
Transportation Workshop Moderator
Mike Tinker, DOT/PF, Fairbanks

Mr. Bob Thomas: I've known Jack Coghill for an awfully long time. There's one quality about Jack that I really admire and that's: Whatever he gets involved with, he's committed to it. It kind of reminds me of a little stoy: Remember the last time you had ham and eggs -- If you remember eating that egg -- That chicken that laid that egg -- he got involved in that project but that pig -- well, he was committed. Jack has always been committed on anything he's ever done.

I'd like to talk a little bit about the transportation. One of the important things to a project and one of the keys to the success of this project is Transportation.

Agriculture in Alaska is kind of like a safety deposit box. It takes a couple of keys to get into it. In fact, more than two. But, with the safety

deposit box, you have to have two keys and you have to unlock them both to get inside. Transportation is just one of those keys to the success of this project.

We were retained by the City to look into the Transportation aspects of it, and we're excited about being able to work on this most important project.

One of the first things that we looked at was an overview of the transportation as a whole, to the Nenana area. Jack has already alluded that the transportation system in Nenana is pretty good. You have the railroad here; you have the Marine transportation in here and you have a highway here. You also have an airport.

It was pointed out by the City that two townships needed immediate access to. We had to look down the road then to see what kind of access would be needed in the future, because I don't think that this is going to stop with just two townships. So, we've developed the overview transportation system that goes beyond this first stage.

(He pointed out the prints that his company had prepared for audience viewing. One showed an ultimate transportation system. Immediate access, though, needs to come from Nenana into the two townships.)

There was an alternative to this, and that was to come in by Rex and then come back down, parallel with the Parks Hishway into the two townships. We did a comparative cost analysis on that. The reason that we did that was because of the bridges that were necessary to go directly from Nenana.

The one bridge across the Nenana River is a major bridge. It's going to cost a lot of money. So, we tried to compare the cost of coming into the area from Rex to the south.

From a cost standpoint, we found that building the road from Rex into the area would be more expensive. From this point, we feel very comfortable in saying that: The most economical way to get into the area now is building a bridge across the Nenana River and going directly into the area. Later on as the project expands, and there is more property under cultivation -- expand to the east and to the west, and ultimately end up with you loop roads and have an efficient transportation system

Another conside ation is the processing area. Where are you going to process whatever you grow or raise? I was very impressed by the Featherstone Corporation's presentation at a meeting not too long ago, concerning the red meat market in the area. I was always under the impression that the foreign market might be very lucrative. But, after listening to a very impressive presentation, I found that it's the local market here that can be met. That's the important thing, at this point.

A processing area needs to be close to your source of labor; your source of water and your source of transportation. We looked at three major variations of this, one being directly in the Nenana area just to your right, across the railroad tracks into the Railroad Industrial area. That really seems to be the best source, because it's within walking distance of the labor force here in Nenana and it's right on the rail so you won't have to extend the railroad tracks over into your processing area, which you would have to do if you moved it somewhere else, and you have plenty of water to do your processing with.

Another area that we looked at was: By putting the processing in the

center of the project. We ran into some difficulties there and some high expenses. 1) You have to extend the railroad to your processing area, which means another bridge leading across the Nenana River which becomes very expensive or 2) We have to truck the stuff from your processing area to Nenana to the rails. Now this multiple handling of product is what increases transportation costs. I'll give you and example: Bringing fertilizer into the area, if it's bought in (the lower '48) and shipped up by the marine mode, it's more economical to bring that in by rail into the area here. If we would obtain that fertilizer locally (say in the Kenai Penisula), it's more economical to truck it from Kenai Penisula to the area here than by rail. That's because you eliminate about two processes of handling of that product. When you're speaking of processing areas and where they're to be located, you want to get them close to your labor market if it were say 14 or 15 miles north of here and people had to travel back and forth from Nenana every day to the processing area -- because, it will be an economic base. It becomes a personal expense each day and you're creating some transportation problems and long term costs that you really don't need to. So, we are recommending that the processing area be located as close to Nenana, preferably on this side of the river as possible.

The Road-Use -- I think this is a very important consideration because the area is some distance from that area. (He pointed out Nenana and the two townships on the display map.) There are three classes of roads shown on this map. One is a dark line, one is a dashed line and just a small pen line. The dark line is your main road into the area. That road has to be a good standard. If it's not, several things are going to happen. One of them is that you're going to start a little town out in that area, because of transportation distance going back and forth. You're going to have to start a gas station, a grocery store and pretty soon Nenana is moved to the center of your area. Then you've got to move the railroad tracks. If you build a good road to begin with there, you will cut down of the need for land that's good for farming, being under some other use.

The farmer will be travelling this road, probably on a daily basis. If you put in what I call a 'poor boy road', that's going to cost him a lot of money on a daily basis and the cost will be passed on to the consumer. It's also going to cost the State a lot of money to maintain that type of road. You're much better off putting in (up front) a good investment and getting a good foundation for your road. You don't need to pave it immediately. But, as the traffic increases, you will have to pave it. I think that's been the experience in the Delta area. The Jack Warren Road -- ultimately it had to be paved because of the traffic. The maintenance cost is a very important consideration. When you start receiving between 300 and 500 vehicles per day over these roads, and on a farm road it doesn't even take that much, because many of your vehicles are trucks. They create the need for more maintenance because they're heavier on the road.

One of the things that we considered in maintenance was: How can we reduce maintenance costs? One way is building the road in such a fashion that you don't have snowdrifting. I try to eliminate as much snowdrifting as possible. What we are recommending is that the right-of-way for the highway that goes into the area be cleared from right-of-way edge to right-of-way edge. This will allow the wind to get in there and blow the road free. We're recommending the use of side slopes that are quite gentle. This will help the road to blow free.

We are also recommending that any wind breaks be not constructed close to the road. They may be constructed in the middle of the field. What this will allow to happen is: When the snowdrifting begins, it will allow the snow to drift up on the fields and not on the roads.

The other two types of roads there: We've got a main road into the area. We think that should be built to the secondary standards of the State. Then we have the access roads within the area and then, finally, the feeder type roads which will go into your individual farms. Those other roads are not quite so important as the access roads in the area.

We looked at the construction techniques. Basically, you have two choices up here. One, is you can use roadside borrow method, which means clearing out the right-of-way, pushing your overburden to the edge of the right-of-way and then coming in and scooping up the underlying good material, which in this case, as far as we were able to tell, was sand. That would make a good combination. Now you scoop that up; you build your road with that and you take the material that you push to the side (the organic). You top this sand base with a gravel surface and that should hold up real well.

Another technique would be to clear the area and then come in from borrow sources and actually build your road on top of the ground with these borrow sources. We found by using the roadside technique, you can save approximately $30,000 per mile and build the same quality of road. There will be areas where we'll have to use borrow, but for the most part, we're recommending that roadside borrow be utilized.

In our final report, we're seriously considering moving this major access road down one section line and coming in -- bringing the railroad right along with it to the railroad right-of-way. The railroad authority has the right to obtain 200 feet of right-of-way throughout these places in Alaska. The land that's been passed onto Alaska has this covenant with it. It will take the cooperation of the railroad to this, but, if you take the 200 feet of right-of-way that's available from the railroad and plus the 100 feet section line easement; put the two together and you'll have a total of 300 feet and that will make a good transportation corridor. And, if that's possible, that would be the best route to go.

The layout, of course, is based upon parcelization. I'm talking about the layout in the area. There will be a mix of farms in the area, as far as we're able to tell; some grain type farms; some gardening type farms. Each of these require different sizes. We have tentatively divided up the area in parcels to match the size of farms that's needed for whatever they will be raising there. We've done this basically on a soil basis. If the area has excellent soils, that would probably go into truck farming and we made those smaller parcels. If the soils were not quite so good, then we went to the grain size areas. However, as Jack pointed out, all of that parcelization in the area there is 'cast in jello' at this point.

We are recommending that you go along the section line easement, because that is a good way to get land, and, that's also the way the land is broken up when people are disposing of it.

Okay, what needs to be accomplished at this point? No. 1, your right-of-way needs to be settled. There are several ways of obtaining rights-of-way. One is with all of state lands, there is a right-of-way that can come with it on section line, which is basically 50 feet on each side of the centerline. On Federal Lands that were homesteaded between such and such a period, there's a -- some periods there were no right-of-way and some periods there were 33 feet and other periods there were 50 feet. Most of this would be involved in state land, so it would have a 50 foot right-of-way available on the section line.

In this day and age, we need a permit to do most anything. You have to have a permit to investigate and you have to have a permit to construct. We have already started the process rolling on those permits, so hopefully there would not be any hangups on that.

If we want to fast tract this project and we plan to have it under cultivation in '82 or '83, that means the one key has to be unlocked this year. That's the transportation. You have to be able to get into the area; get the machinery into the area. That means that the field work needs to be done this winter; there's some extensive drilling that has to be done on the bridge site and there's some centerline drilling that has to be done to verify what we think is out in the field. Then it has to go into a project design and let our for contract.

We've looked at some of these problems and we feel that the funding that's needed for this should come through the Local Service Roads and Trails Program. We feel that that particular program in the State Government has been an excellent program.

For one thing, it obligates the State to maintain it after it's done, or at least to make sure that it is maintained. It doesn't mean that the State has to come out and maintain it, but it does mean that maybe the City of Nenana could maintain it. But, it makes it eligible for Revenue Sharing. That's different than the Access Program under the Agricultural Act within the State Government. It also allows the use of imminent domain and all those other powers available to the State to acquire right-of-way.

We're recommending that the funding for this project be funded through the Local Trails and Roads Program. We think that's the most efficient way of doing it. Having worked with this program, it's a very flexible program and can be utilized very efficiently.

I'll be open for questions if at any time you'd like to ask and I'll try to answer. Thank you.

* * *

Mike Tinker - Transportation Workshop

We didn't come up with any big surprises in transportation because I think the consultant covered it pretty clearly.

This morning, however, we did have the unique opportunity for the Alaska Railroad and the Department of Transportation and the Department of Natural Resources and the City and the consultants to sit down and talk together in a format other than one originally structured in the office. I think that there was some good interplay there. And, those members of the public who were with us would agree that it was a very amiable discussion among the various agencies that will have to come together -- to come to grips on whatever transportation structure is determined to be suitable here.

We did talk about access point in respect to Nenana as the population center and possible alternatives. All we did there really was to bring out a few statistics that didn't come out in terms of the distance of trying to go around through Rex, or something like that. Bob, as the consultant, in his report this morning referred to the fact that it is quite a bit farther and it would be more expensive to build more roads. We drew out of him the fact that we're talking about plus or minus 30 miles of road one way, which, of course, would necessitate a rather lengthy round-trip if you were to go to Nenana, down south and back over into the AG area.



We did talk a little bit about the bridges and what would be required to come up with designs and plans and construction of plans and then operational systems on the bridges, beginning with the on-site surveys that we understand are going to commence here pretty soon.

I talked a little bit about the combination of railroad and highway rights-of-way with respect to getting enough right-of-way to provide the transportation corridor.

We also talked about the fact that there would be about 28 miles of main road in this Phase 1, of roughly 18 miles of main road and 10 miles of collectors and feeders. We questioned Bob on the availability of material sources and he responded, 'The plan was to develop that, in relation to the centerline survey and material investigations, that will go on there in conjunction with the bridge site surveys and others'.

They expected geological formation with the sand under a top soil there. That's based on previous drill logs and whatnot from the area. We found out, just when we were concluding our meeting, that there is a fault located just west of the Nenana River that will have to be considered as a design constraint for any of the structures. And, that we should probably expect some frozen soils just off and adjacent to the active flood plains.

The consultant's final report on transportation incidentally is roughly due February 15th for those of you who are time-tracking this thing.

We talkd a little bit about maintenance of whatever road structure or transportation structure would be there. The consultant recommended that, if the road projects were to be funded under Local Service Roads and Trails, that then the State would have a responsibility for maintenance, whether they did it themselves or provided through the City of Nenana or others to do it.

The City commented that: If they were expected to do that, it would probably about double the amount of energy that they would have to put into maintaining road systems now. Of course, we would interpelate that to be 'full manpower and equipment', to reasonably meet the needs there.

We talked a little bit about the relationship of the timing of the project, in terms of building the bridges and getting access, and that kind of thing. Because of the time needed to build the more comprehensive structure such as the Nenana River bridge, it should be fairly obvious that, whatever access has gone in there (if we're going to go to some type of clearing fairly soon -- I don't want to steal George's thunder on clearing and whatnot,) but, the access will probably have to be provided around those structures in some type of winter trail, or something around the bridges for now, because the bridges will take at least a year and a little more to complete, once they're started. Obvioiusly we're not ready to start them today.

We just briefly commented on the fact that the clearing versus access problem recalling the Department of Natural Resources agricultural discussion this morning, that there was no policy on the required clearing of all the farm land prior to disposal, which is something that could keep the disposal on track if access were a key in the clearing concept.

We also talked about the potential of a railroad tie-in with the existing system. There doesn't seem to be any particular problem in the configuration of the main tracks here in Nenana and getting a spur that would then cross the Nenana River and then go west, either into the agricultural area or farther west from there in time.

We did talke in a little more detail than Bob did this morning about river transportation and kind of got to the point where, because of the late season expected in the harvest of both of the grains, for example, it probably wouldn't be appropriate to consider a water borne transport for that particular agricultural product, because the water, in fact, has early freezeups, which preclude getting a boat down the river. Also, they've considered that, and the only possible markets then really that they can get to via water borne transport would be on the foreign market, once they had them loaded onto a ship.

We talked a little bit about the existing trails in the area, which we recognized probably as some eariler rights-of-way and surveys that were put in as a result of some eariler surveys for various transportation links such as rail corridors. These were surveyed years ago. Some also that were probably used by local trappers on and off. It was thought by those who have good familiarity with the area and who fly over it a lot, that in the disposal area itself right now, there was probably not much use of the area for transportation. The question was aksed: 'Would you see many snowmachine tracks if you flew over it this afternoon?' The answer was: 'No, you probably wouldn't except for the main survey line, trapline trail.'

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Consultant for the Livestock Industry
Kathy Schedler, Ellerbe, Inc., Fairbanks
Representing Featherstone Corporation, St. Joseph, Missouri
Livestock Work Shop Moderator
Alan Epps, University of Alaska, Fairbanks

Livestock

Jerry Smetzer, coordinator for the program stated the City of Nenana had applied for necessary permits and have been working closely with HDR and ATC on transportation. They were about to put out a request for bids to conduct centerline surveys; soil sampling and, in particular, bridge core-drilling which has to get underway very shortly. The core-drilling information will be available for bridge design. The bridge design has got to be completed and ready for bid by this spring.

The position of the City has been very stong in saying that: It's important to look at the local market; it's important to see these studies take a close look at that market that we can best serve in the early stages of argiculture.

I think again, without presuming to say anything about the livestock report, that point was made clearly by Mr. Wilson of the Featherstone Corporation. It's been an important feature of the City's development of agriculture in the region. It's very important that we be able to serve that market which we are best able to serve. That's an important part of this whole project.

Another important part of the City is: Whatever the development is out there, that it make a contribution to the City's economic base over the long term.

Ms. Kathy Schedler of Ellerbe, Inc. Ellerbe is associated with Featherstone Corporation of St. Joseph, Missouri. They are under contract to the City to investigate the Livestock Industry; to present to us a course of action for developing that industry based on the production of livestock at Totchaket.

Ms. Kathy Schedler of Ellerbe, Inc., representing Mr. Ted Wilson: Due to the time frame, certain assumptions had to be made. Hopefully, all these assumptions will be verified by a report. One of these assumptions is: That the Alaska Livestock Industry will follow the same economic and marketing trends of the lower '48. This is to say that the product and services demanded by Alaskans will have the same economic portion on them as in the lower '48. An example of this assumption is that the red meat per capita consumption is the same here as in the lower '48. An example used in this report is: The lower '48 has found that shipping light weight animals to grain sources is more profitable than shipping grain to the animal.

Another assumption is: Freight rates from Seattle to Alaska for chilled food stuffs is $12. per hundred weight. The most pivatable point of the American Beef Cattle Industry is the feedlot segment. Both the cow-calf operator and the packing house operator have large firms and fixed investors, which means that both must look at the long-term to make a return on their investment. The feedlot operator has a relatviely small fixed cost basis in his operation and can increase or decrease his inventory rather quickly in response to market conditions. A a result, neither the cow-calf operator nor the packing house operator will make the necessary investments to start operating with a stable and long-term feeding operation, guaranteed. The cow-calf operators will not grow beef cattle if there's another feedlot to finish these cattle. Without a feedlot to which he can send his cattle to cow-calf operator, he must finish his own cattle which often requires investment and equipment beyond his cow investment as his means. Rarely has the cow-calf operator been big enough to build an economically efficient feedlot for finishing only his own cattle.

The packing house operator has a large front end investment in drilling and equipment. He cannot afford to have his investment sit idle for lack of cattle to kill. If a source of cattle is available; he can sell approximately; he will then make that long-term investment.

For the above reasons, the Alaska Beef Cattle Industry, beginning with the cooperative feedlot and packing house combination, by the cooperative having both operations under control, two objectives are then met. The cow-calf operators see the long-term investment in the packing house and the feedlot as a place to finish his cattle.

The Packing House and Feedlot Operations can import feeder cattle from the lower '48 to start the operation and to fill-in in times of inadequate supply for a short run. The importation of live feeder cattle is not a long-term, economically feasible option, but must be treated as a short-term cost to start up the industry and cover short-term supply problems.

The Packing House operation may or may not be physically located next to the feedlot. The feedlot needs a good sized piece of land that is relatively inexpensive; not too close to a population center. The Packing House, however, needs very little land, but requires a lot of utilities in the form of electricity, water, sewer and cheap energy to produce steam for rendering by-products. By having the packing house a co-op venture, several advantages are obtained. First, the cow-calf operators, in the feeder industry, will feel more secure in investing in their herds, knowing they are part-owners in the co-op packing house.

Several of these operators expressed reluctance to expand, if a packing house was built by private or governmental means. Second, a packing house, if a cooperative venture, can be a source of information gathering into semination for the rest of the industry.

Grade and yield information regarding certain lots of cattle will be given to member operators to improve their feedlot techniques.

Thirdly, to disperse information gained from research facilities in Alaska and the lower '48. To report would be a natural function. To start the swine industry in Alaska, many of the same problems exist as for the Beef Cattle Industry. The packer and processor will not fill the plant without a supply of swine to slaughter available. Likewise, the sow and feeder pig operators will not produce without processing units available for their end product. We suggest from start to finish that a swine slaughtering facility be built in conjunction with the beef slaughtering facility. No comparable feedlot operation for slaughtering would be necessary, due to the nature of the market.

Swine reproduce and grow much more rapidly than cattle and the pounds of the product deemed are less. As a result, if relatively few operators are given incentives to enter the swine producing segment of the industry, starter feeds of the plant will be satisfied.

There are already a few confined swine breeding and finshing operations in existence in Alaska. Undoubtedly these operators have a processing plant available and were given some incentives to grow. They would serve as good examples for others to enter the business.

Within one year after processing each stock, an operator can be producing 2,000 to 2,500 animals per year. It is also estimated, within four (4) years, that a good operator can have extension operation, and a basis for no additional breed stock would be needed. Having such a closed out operation greatly reduces these problems which plague many of the operators.

The swine industry would naturally be part of the co-op and would probably be a large purchaser of feed mill products. Of course, specialized research develops needs of the industry and could easily be supplied by the co-op.

It has been estimated that 90% of the meat consumed in Alaska is brought in from the lower '48. Most of the meat arrives by barge, airplane or truck to a central distribution plant in either Anchorage or Fairbanks. That central distribution plant would be the same as the processing unit for transportation purposes. As a result, we can look at the freight factor from Seattle to Anchorage or Fairbanks as the economic differential deposit by Alaska.

Alaskan livestock processors must produce meat FOB manufactured differential less than the freight factor. This is to say that the added cost of producing the product in Alaska, due to climatic and economic conditions, is less than the transportation factor; then the industry is economically feasible. By using this method to define viability of the local industry, one must assume that the basic industry is also viable. That is to say that the ups and downs of the short-term market experienced in the lower '48 are going to occur in Alaska. In the long run, however, it must be assumed that the lower '48 has a viable livestock industry, in order to compare the commerical cost of Alaska.

The transportation costs to Alaska have been identified as $12. per hundred weight. That figure will be verified by a report. The cost to deliver one head of beef to a central marketing place is $54. One head of hog is $16.30. The additional cost of raising and processing these species in Alaska must be less than these figures in order to say that the local industry is viable, in the long-term.

The cattle industry will be analyzed first. The first segment of the industry is the cow-calf operation. The Kenai Peninsula, in the June 1980 Alaska Agricultural statistics showed (indiscernible) conditions, very similar to southern Missouri, Oklahoma, northern Arkansas, Tennessee area and the lower '48, which has figures that produce calves economically.

The calves coming from these portions of the lower '48 have traditionally been finished in western Texas, Arizona and northeast Colorado. The Kenai Peninsula can produce 400 pound feeder calves as economically as the lower '48 with proper breeding and poly techniques.

The next segment of the market is the growing and finishing of stockers and feeders. The areas best suited to produce barley have been identified as the Delta-Clearwater area and the Nenana-Totchaket area.

Experience in the lower '48 shows the cattle ideally should be grown and finished near the source of grain, which appears to be the barley producing area.

Transportation of calves from the southern area of growing and finishing areas of Alaska is no different than shipping them west or south, as is done in the lower '48.

The Montana livestock cooperative and the University of Montana Agricultural School are requested to work up the present stage; the least cost of feeding formulas and rates and daily grain. The rate of grain is estimated to be 10% rate of grain; was estimated to be 10% less in Alaska due to cold weather, which is a high differential in our opinion, and will give a conservative differential cost figure.

The feed conversion is estimated to be 6.5 to 1 for growing and 8 to 1 for finishing. The 10% slow rate of grain, which will be 10% in feed cost or $29.50 per animal differential with the lower '48. We are in the process of determining costs of confining the feeding of cattle, which makes it essential to reduce this figure. Once the cattle are finished, they must be slaughtered. Using figures of a large beef slaughterer that we do consulting work for as a base which we'll determine the additional cost to process beef in Alaska is approximately $5.06 per animal. Adding the increased cost of feeding and the increased cost of slaughtering, and the differential cost of beef produced in Alsaka, $34.56 per head; this figure being less than $54.00 proved the beef industry in Alaska is very definitely, economically viable.

To determine that viability in the swine industry, it is considerably less complicated due to the confinement method of feeding. It has been estimated that 50% of all commercial pork production is presently done in confinement. In confinement with temperature and humidity control, swine will grow at the same rate as in the lower '48. The cost of construction and operating the confinement unit will be greater, and these increased costs must be compared to the $16.32 per head to determine viability.

The cost of constructing a confined hog operation in the lower '48 in $375,000 for a 144 sow operation. If you use approximately 20% higher construction costs because of freight and labor costs, the added 20% would make the unit cost $450,000 for a difference of $75,000. If that difference is advertised and depreciated over the 20 year life of the building on the basis of 2,500 head per year, the added cost amounts of $1.50 per head.

If the additional money required could be borrowed at 10% interest and dispersed over the same 2,500 head annually, the added interest cost would be $3.00 per head.

The added power cost to heat the building and the waste products has been estimated to cost $3.00 per hundred weight of finished animal or $6.60 per head. The total added cost to raise swine in Alaska is $11.10 per head. As with beef, swine will have addtional cost of slaughtering because of climate, relatively small capacity and added power costs.

We estimate that these costs will not exceed $1.25 per head. When $1.25 per head is added to the $11.10 added raising cost, the total added production cost is $12.35, which is less than the $16.32 presently used to transport fresh pork to Alaska. Without a doubt, the swine industry in Alaska is also economically viable.

So, from that assumption, we then went on and said, 'Well, what will it cost to set up a livestock industry in Alaska'? In a quick summary of that:

We need the processing units; the cow-calf operation; feed mill and lots and the swine operation. We came up with a total initial cost of $55 million.

The figures are the cost of building and inventory only. The decision is: Whether this investment by the State or its residents is worth the return of 25,000 head of cattle and 80,000 head of swine produced per year? In making that decision, not only should the process be considered, but also the balance of the added costs which will stay in Alaska instead of going to Seattle.

At $54.00 per head for cattle and $16.30 for swine, the total figure that stays in Alaska is $2,000,064 per year. It also must be remembered that this figure will grow if the industry gets more than the 50% of the market or if the population in the railbelt grows.

Additionally, the normal process made by the lower '48 in the cow-calf operation, the feed mill and the feedlot operation, the confined feed operation and the processing unit will be made in Alaska and stay in Alaska.

The summary of these average processes we will put in the final report. The State of Alaska will gain many additional benefits as well, such as the job to create increase in industrial tax base and decrease independence on the shipping yard in Seattle.

* * *

Report of Grain and Livestock Workshop

Alan Epps, Grains and Livestock Workshop: We started out by taking a look at the four basic, broad assumptions that the contractor put forth in their summary report in our handout. Those being, the cost factors which were dealt with in arriving at the feasibility of the project and the possibility of producing cattle and swine primarily.

It was pointed out and discussed at some length that although the numbers may change over time, one of the things that we find in many of these studies is; that when you take the added cost feature versus transportation cost, the relative position does not change over time. Many of the projects that we're looking at within the State of Alaska apparently do, indeed, look good on paper from that standpoint and we have to deal with other issues that are the stumbling blocks.

There are three other generalized areas that we looked at: 1) The market itself (relative to the railbelt and capturing 50% of it). 2) The cooperative approach (and the importance of that). 3) The $55 million financing that they propose as the initial cost of the effort.

One of the things that was pointed out in the discussion group was that the study limited itself to cattle and swine. There was a feeling on the part of most of the people there that there were some other options. Some of these options may be dependent upon the initial development of the cattle-swine industry from a processing standpoint and for the major infrastructure. There were other critters that might fit into this scheme and this part of the world.

It was suggested that fowl for one, was a key thing to take at look at; both egg production and meat production of various fowl. Another animal was suggested that might be worth exploring -- the buffalo and its relationship with cattle (beefalo) as another possible animal which could fit into this enviornment and utilize the kinds of habitat we're looking at out here.

One of the things that was discussed in some detail was the location of the processing plant itself, whether it was one single plant in a certain area or whether it may be someplace between here and Fairbanks and have satellite plants which may be as far away as Delta. This is another issue that the consultants might want to take a look at.

A key that relates to this processing plant issue is the utilization of waste products. It was pointed out that in many parts of the country presently the proceeds utilizied from the waste products quite often pay for the processing plant's operation. The rest of it then becomes profit or its benefits are related back to the producer.

The question that was dealt with somewhat in the Design Group in addition to our group was over 'parcel size'. There is a need to take a hard look at this. One thing that was pointed out was: "It may, indeed, require vast acreages if you're going into a calf-cow operation and graze these animals."

In relationship to this, the question was also asked: "What is the best use of Class II and III soils?" Can we really afford to put Class II and III soils into forage production versus some other more intensive return crop?

(Vegetation or something else I would assume. This is an issue; the State and the people involved in this planning process are going to have to examine. Are there Class IV soils -- generally across the nation these tend to be the soils in the grazing areas? This is something we need to look at, to see if at the fringes of this large block of Class II and III there are soils for grazing areas.

One of the things that was pointed out was: "Although, historically, it's been assumed that the best grazing areas in the State fall on the Kenai and Kodiak areas and out on the Aleutian Chain, it isn't always true." One thing that was pointed out by people who are actually 'in production' here in the valley, as well as some of the research staff, is that it's cheaper to winter a calf in the Tanana Valley than it is on the Kenai Peninsula. This may change the economic influence as we begin to get into these projects at larger scales. It may change the way we address how we develop the project and where the processor draws it products.

One of the main issues that this study is based on is: Capturing 50% of the railbelt market. There were several people within the group who have had upwards to 20 some years experience in trying to break into some of these markets in Alaska. They related to the group some of the problems that they have had and some of the things that will have to be overcome if we are going to do this. This is something that was suggested that the planning group may, indeed, want to look at. They've questioned whether or not the 50% of the market is realistic. It seems logical that to break into the first 30% is real easy, trying to capture that additional 20% might get to be tough.

An issue was raised over the phases of the project. The group questioned the existing report where the contractor indicated that the phases over time will be dealt with in the final report.

One of the things that came out loud and clear is a typical situation of an outside consultant. I say that because one of the returns pointed out in the summary is the benefits in the form of taxes. In this state and the next legislature, taxes (from a state standpoint) may become moot. There was some Alaskanization that might be included in this report before it is in the final stage.

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Vegetables




Consultant for the Vegetable Industry
Eugene Whiting, Little Goldstream Associates, Nenana, Alaska
Vegetable Workshop Moderator
Sig Restad, Palmer, Alaska

Mr. Eugene Whiting is associate with Homan-McDowell of Juneau and Professor Don Dinkel of the University of Alaska for expertise in the vegetable industry.

The overall picture of developing the Totchaket area -- compared to hundreds of thousands of acres for livestock and cattle, we're only talking about thousands of acres for vegetables.

In our contract with the City, we have to: 'Research, survey and recommend a course of action to establish an economically viable vegetable industry project.' This includes many facets of the market, to say the least.

The fresh market, for instance: There is enough land in private hands to satisfy the fresh market many times over. Much of this land is already centered in the main population centers.

To get even with the Processing: Why do we have to have processing? Obviously, vegetables area perishable. If you but into the year round market, they have to be processed. What I have come up with is: The only hope is a frozen vegetable industry. You're shipping full cans up here, you may as well ship enough (indiscernible - manner of speech).

To get into the frozen vegetable business, you need a sizable market. This is the same problem with the livestock business and everything else. The market is so small in Alaska. Well, what is the market?

According to the consumption figures that we dug up, Alaska consumed 15,670,000 pounds of frozen vegetables this year. This rises as the population increases, of course.

They've come up with a market share of what we could hope to sell. We took two-thirds of the Institute of Markets at half the retail market. We came up with 9,765,000 pounds of frozen vegetables that could be processed and sold, if you could meet that share of the market. 82% of this fails. That's a tremendous amount.

It takes about 10 million pounds of product to make a small plant feasible. We're right on the edge; according to that number, which has probably gone up in the last years. This was several years ago. We're right on the edge of having a viable vegetable freezing project. In fact, I'd go out on the limb right now and say, 'If you could process potatoes alone, which is 82% of the market, and capture the market shares that we have estimated, which equals 62% of the overall consumption of the State, you'll make money off of it.' Some of the people in the audience and some other authorities say just the opposite. We are right on the edge of having the necessary volume, the necessary market to support its own vegetable freezing operation.

Now, that's the good news! The bad news is: The rest of the vegetables that should be grown in Alaska are pretty much losers except for potatoes. Not so much from processing itself, but a farmer just cannot make much money growing (indiscernible) at the price a processor can afford to pay, and that processor is seldom on the market.

The high freight costs are an extra advantage actually for vegetables opposed to livestock, because vegetables are a much lesser value product per pound. The freight, therefore, is a much higher percentage of the value.

The 22% of the wholesale price of frozen potatoes is freight. It can cost us 22% more to develop frozen potatoes and still keep the market.

The problem with the other vegetables is that the market is just so small. Here are some numbers; this is a preliminary report, but we're going to be real close. Okay, it would take only 847 acres to provide all of the potatoes to supply the forzen vegetable market.

The next one is seven percent (7%); is peas. They can be supplied on 301 acres. Peas are really a loser for the farmer if he has to harvest them himself, which he won't because the processing plant who own the pea combine, which is a $130,000 piece of equipment by itself and do the harvesting but according to our figures, the farmer would make $389 an acre, gross on an acre of peas. That's not a lot of money.

We're talking about potatoes, peas, broccoli, cauliflower, carrots, brussel sprouts. The gross figure that I came up with; the farmer would gross $1,252 for a acre of broccoli, but it only takes 69 acres to supply the Alaska consumption. Here we get into the problem where the farmer could make some money per acre; perhaps not enough to do it fulltime which isn't the volume of market.

So, if we are going to develop vegetable processing or vegetable farming, we're going to have to put more emphasis on the serious 'part-timer' and develop it over a period of time as the marketing increases and the population grows.

Now, what about the foreign market? We just can't afford to take a chance and get into the foreign market right now. For instance, Japan alone imports to the United States 6½ times as many frozen vegetables as Alaska consumes. If you're going to try and make a dent in the foreign export frozen market, 80% of your planting capacity would have to be geared for the foreign market. I don't think that anybody can take the risk of building five times the plant that would supply Alaska and some of the folks overseas; at least, not right off.

The industry is dependent soley upon a solid domestic base.

Then we come to the problem: Potatoes are the only thing that is going to make money. Can we make an effective penetration into the local market with only one product" That's a good question. Where we are right now -- we'd have to talk to retailers. But I really don't think so.

The other way around this situation is to sit down and figure out how much we can afford to pay a farmer for his product if it's sold; all the other vegetables other than potatoes at cost. This would be based on cooperative type endeavor where farmers, of course, own the processing plant and, therefore, they are working to build the market and take advantage of the overgrades, so to speak.

In addition to, let me add, the 847 acres for a frozen potato market -- there could be another 515 acres added for the rest of the fresh potato market that's available right now. A considerable amount of potatoes are grown and marketed in Alaska, but according to the market data and production data I have, there's still room for another 515 acres. This would be graded out.

As far as the other fresh vegetables go, the quality clouding is just so small I can't see a processing plant really getting involved in marketing fresh vegetables as well as handling the frozen.

I think if an industry like this got started, someone would certainly jump in there and form a (indiscernible) in a central area from which to market the fresh vegetables in addition to the frozen vegetables.

This is all really tentative. I'll probably work up a scenario where the cooperative frozen vegetable plant was established with the farmers and the owners to supply the peas and potatoes alone. 301 acres for the peas and 1,362 acres for the potatoes. That includes the frozen (indiscernible). It will take 14 farms at 240 acres each. The reason I came up with this size was: I just sort of estimated the 100 acres of potatoes to make a living and added the 22 acres of peas. The reason I threw into the peas -- when you go into this business, you take advantage of the market; all the various vegetables. You're going to have to force people to grow some of these things whether they like it or not. People that would sell 100 acres of potatoes, have to supply 22 acres of peas. This is not a losing proposition for the farmer.

If the market was met right now at the wholesale price -- this is the retail-wholesale price by the way, and not the institutional wholesale price -- I would admit to having idealized most of these numbers. I have taken the large market numbers; I've taken the best wholesale price numbers, just to make this thing work out initially. But, there's enough extra, after doing this I think, that we can work back.

Okay, this enterprise could gross over four million dollars a year. That's a pretty hefty sum. I've come up with a cost of over three million dollars annually. It's going to cost me more than that because I'm still in the middle of it. It's enough to make me optimistic.

How much is it going to cost? I figure a capitalization cost of two to three million dollars. It's a wide gap there, but. . . An engineering study is being done in Oregon by a firm there that does engineering studies all over the world for special processing plants. Their costs and engineering analysis should be in this week.

If the additional crops, other than peas and potatoes, would only require another 145 acres total -- the problem that we run into here is that there just isn't enough acres of these diversified vegetables for anybody to make a full-time living at it. I think the State needs to address the serious part-timer, perhaps to a greater extent then they have.

As far as out here in the Totchaket area, I only come up with, right now, 3,360 acres for the 14 farms at 240 acres each plus another 1:5 farms of mixed vegetables. This is the actual crop (indiscernible) of the mixed vegetables. Right now, I'm trying to figure out how to break those up. If you have serious part-timers, they have to work elsewhere to make most of their money. That's a little bit far away from any industry right now.

I believe that there is room in Alaska, right now, to begin a vegetable processing plant. I'm just not quite sure where it should be.

Sig Restad, Vegetable Production in Alaska Workshop: We didn't have a very large group. I'm not sure whether our consultant scared everybody away from that table with his report or it was the report that there was a mystery moderator and they didn't want to get involved in any further mysteries today.

It seems as though there is considerably more interest in other areas of discussion.

Those that were there did 'cuss and discuss' the processing possibilities a little bit. As was reported earlier, the Alaska market provides a rather small market from the industrial standpoint and presents some real problems in developing an industry adequate economy of scale.

They raised the question about the criteria about where vegetable processing should be. The few people who were there were of the concensus that such things as energy costs for processing; electrical energy, cost of producing steam and so-on; transportation and labor force played a large part in plant location. The availability of your labor force both for processing and for intensive farming operations may be more important than an extensive amount of land. The availability of large tracts of lands or large acreages per unit would certainly not be as important or necessary in many of the vegetable production systems as other types of agricultural pursuits.

There was some concern expressed about whether financing was going to be available. We talked about the financing availability, as it now stands, which is much larger than it was a few years ago, but was spread over 14,000 to 15,000 acres of AG production compared to 50,000, 60,000, 100,000 or up to 200,000 acres by 1990 plus new industrial investment. We may become spread, from a financing standpoint, more than a few years ago. I guess that's a challenge for people like Pappy Moss who are very interested in doing something about that.

One of the things that came out in the report by the consultant is the very significant lack of vegetable consumption figures and potential market data, such as movement of vegetables and the utilization by Alaskans compared to the national standard per capita consumption. From what past experience we've had, the material figures may not be applicable. This lack of knowledge yet to be addressed by someone in the State could be a sizeable task.

The study was made on some assumptions as mentioned earlier by Alan Epps. Capturing a certain percentage of the existing market is a factor that probably needs to be addressed. We have, within the State, many present buying procedures by national chains. Markets such as french fries, and some others that have a significant volume handled by these buying procedures may be less available than previously estimated. It may be a significant portion of the industrial use.

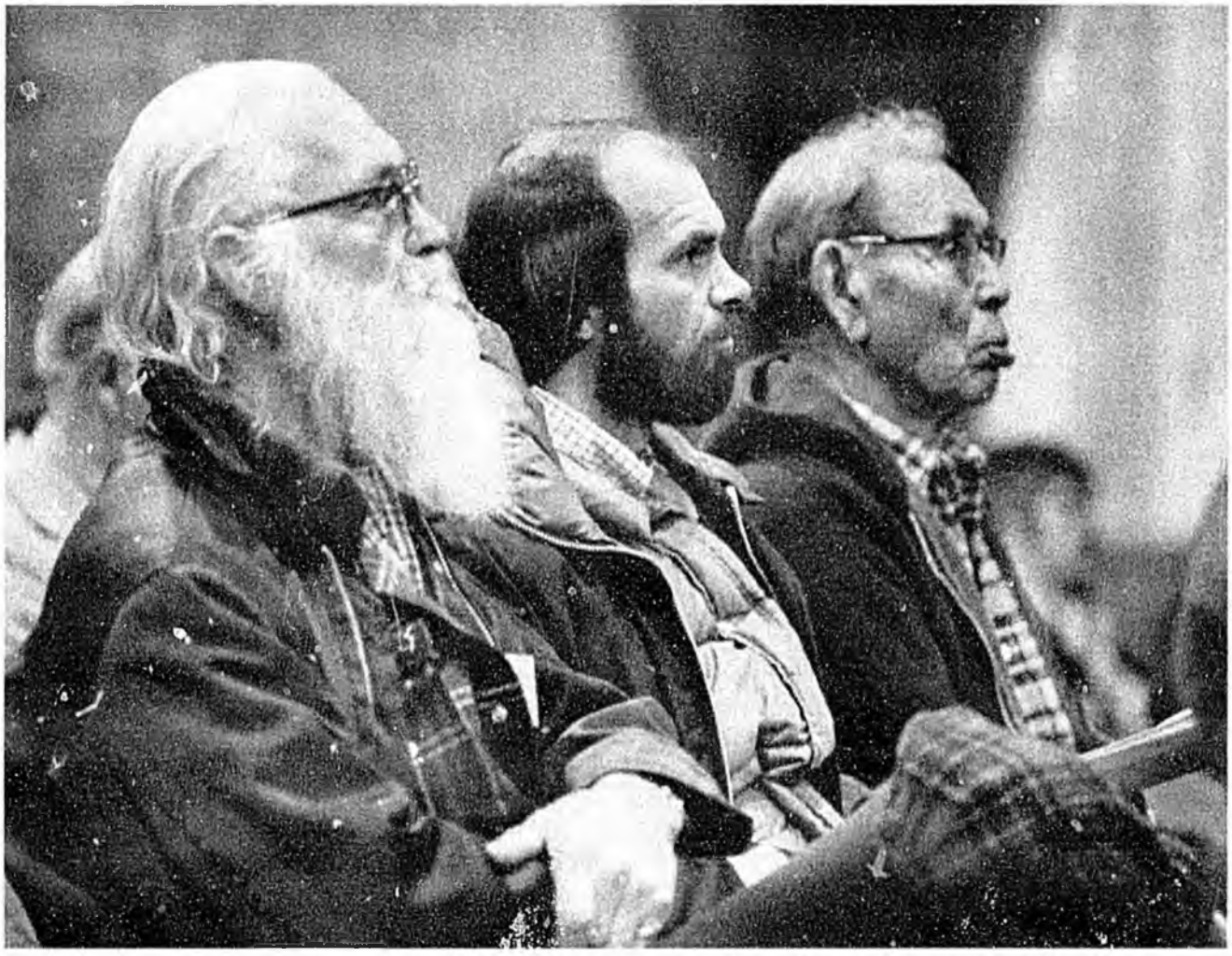
I think that there was a feeling of optimism in that group that, 'Yes, something could be done'. There may be a potential for markets outside the State, but I don't think the consultant, or any one of use, has really guts enough to say, 'Yes, there is'! And, they'd want to commit a huge investment, at this time, based on the hopes that there would be.

Ten years ago, or os, we attempted to export some peas to Oregon for a test. There were comments like: 'That was coal to New Castle', and to a large degree, it was. You wouldn't think that one vanload of peas to Oregon would upset anybody, because it probably was less than 10 minutes of their normal, operational procedure. I learned a lesson, at that particular time.

They agreed to cooperate and evaluate a vanload of peas and give us a marketing report. But, somehow or other, very immediately our vanload of peas got lost into their two million pounds a day. And, to get any information out of them that might express any type of future competition, or anything that might look like some place else in the world grew better peas than Oregon really wasn't publishable.

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Mayor Coghill: One of the problems that we've seen in Agriculture, both in the Big Delta area as well as in the Point MacKenzie area, is the negativism that is being generated by the way those fields were cleared. We believe that there is a resource made available by the clearing of this land in wood fiber. We talked about it over a year ago -- two years ago at a seminar, that we were looking at getting into a shear cutting; going in first of all harvesting the round-logs, the house log, the logs that were available for market in the round, and then going into the area with a shear system; shearing off at the root level all of the wood mass that would be needed to be cleared, and then going in with a root-plow and then root-raking so that we save the soil at its original stance.

I'm not saying that this will be the way that it will be done. You'll notice in your booklet that we have the clearing of fiber, harvest, marketing, preparation for cultivation on the third page. We're offering a proposal, and we wish to have industry give us their proposal to go into these two townships and, at our design, to clear that land. We feel that it can be done and should be done, because as we look at it, as we get further down the line, as a very exciting thing from the standpoint that it's going to open up a whole new industry in wood fiber processing.

We'll talk about the fact that hydro-electric power is coming into being; that the Susitna Dam Project will be underway. There's an awful lot of interest; it's going to happen and it's just around the corner.

In the making of those dams, there's an awful lot of form material that is going to be needed and a lot of wood materials are going to be needed in order to place that particular installation in place. Fiber board is going to become a very necessary thing. We can provide that right here in the Interior. As you can see, Koyukon down on the middler Yukon around Galena, is starting to get into the Agricultural Program in a large way. They're going to be doing a lot of clearing; they're going to need some kind of a system set up.

We're proposing, and I have with me today Mead Treadwell, who I will introduce to you shortly who is working with Senator Mike Coletta of the Anchorage area on the wood fiber program. We find that we've come upon a program that is going to create a new industry in Interior Alaska. As we look at the clearing that is going on in the Galena area, we can foresee that they will be sending their chips up to Nenana for transshipment.

There are two different kinds of chips. There's what they call the white chip, which is marketable on the international market. That will, of course, be the first harvest that will come out of there, after the house logs and the logs that will be needed for our basic round log industry here in Nenana.

Then, what happens to all the rest of the chips? We're finding that there's quite a few tons of chips, per acre, that will be used or will be manufactured as we clear. We propose that we wind row these and that we set them up and dry them for hog fuel. That we use the hog fuel -- and, that's not swine fuel -for the purpose of firing boilers. You fire boilers at MUS in Fairbanks. The boilers at Healy are adaptable to using a wood fiber as well as a coal substance for generating energy.

We see that, possibly, in the Totchaket area, after we get into these two townships, that a small generating unit might be established in the heart of the Totchaket area instead of going to a very expensive system of trying to get Golden Valley or the REA to establish a line system in there.

Like I said before, these are all 'in jello' and we're looking at them, because we're looking at everything on the economic curve on the market side of it. It can be done; it can be done right in the field. The new technology that's coming about, as far as the wood fiber industry, is very exciting. I think that this is one of the areas that we've opened up; we've taken a peek at it; it's in its infancy; and it's one of those areas that's going to excite us, because the by-product -- When I listened to the vegetable presentation -- I think that Gene has done an excellent job in where he's at. He's given you some negative approaches to it, but it's just like looking at the Delta program.

The Delta Program was a grains program. There was no indication at the outset that they would start getting into a 'red meat' system. But, that's evolving at Delta with the development of livestock which eat Delta barley.

As we progress in developing this whole program, other things are going to fall out; other things are going to happen.

The City of Nenana has already negotiated with the Alaska Railroad to take over the Port Facility. By February, we'll have a Port Authority in place. We'll be operating the total river operation on the port; we will, by necessity, do that by contract with the carrier that is now in place. The idea behind it is to get ourselves into a position to be able to put bunkers on the Nenana River; to be able to receive wood chips; or to be able to receive grain, as we develop the Agricultural Program further west, because of the rail system.

I think that we're just seeing the tip of the iceberg.

I would like to indroduce to you now, Mead Treadwell, who came all the way from Boston to be here at this particular symposium to give you a report. And, it anybody hasn't received one of these handouts, why we've got a whole box of them here.

Mead Treadwell, Timber Industry Consultant to Senator Mike Colleta, Anchorage

Mead Treadwell: I used to laugh when they say that an expert is somebody who comes from out of town with a brief case. I'm not an expert. My background is basically as a journalist and I am now a student at Harvard Business School. I am working with Senator Colleta on a number of different proposals to try and increase the amount of small business going on in the State and to try to use the State resources in such a way as to make that happen.

Senator Colleta has been interested in the projects going on at Delta and Point MacKenzie. We've been looking at the potential of the wood at Totchaket, as probably the best place for looking at a diversified wood fiber products industry.

In going about this, there were three (3) basic studies that have already been paid for by the tax payers that are worth looking at again, in showing how this is feasible.

First is the one that was done for the State Division of Energy last year by Batellle, which says, 'assessment of bio-mass versus energy for the Delta Agricultural Project', which received very limited circulation.

Second, is a very thorough study called, 'Feasibility of Structural Fiber Board', manufacturer in Alaska that was commissioned by the Fairbanks Industrial Development Corporation and U.S. Forest Service in 1977. That looked at both the costs of bringing a particle board plant on line in the Interior or Anchorage area, and also the markets for particle board, not only in Alaska, but around the Pacific Rim.

The third report which I have with me is one that was done by the military, as recommendations for local military installations to use such as food fiber in their area and wood chips in their area for energy.

All these are fairly constructive cost estimates, which apply here; which show that, individually, there are three (3) things which can help make the cost of clearing the land here in the Totchaket area self-liquidating.

I have written them up in a brief report. They are outlined on the thrid page of that report. First, is wood chips for fuel and electric boilers.

At the present time, land is cleared by dragging a chain between two large bulldozers and knocking the trees down in one way and then bringing the bulldozers back and chaining the trees the other way; then pushing the trees up in wind-rows. What that does: It takes a very valuable resource, which are these trees, and it tends to diminish their value right away, by mixing them with moss, stones, and dirt and piling them in wind-rows. That happens to be one of the fastest ways of clearing the land. I recognize that the primary purpose here is getting agriculture going. You can't get agriculture going unless you have a lot of land going quickly.

Because Jim Drew has told us earlier, you really need a lot of infrastructure to make it happen.

Regardless of the way the land is cleared, however, the wood can be chipped for use in electric boilers. I've talked with the major utility companies in the State, and all of the coal burning boilers in the Anchorage and the Fairbanks area can be converted to using wood chips. It's more difficult to convert Healy, which uses pulverized coal, but the utilities at the military bases in the Fairbanks and Anchorage areas could start using wood chips as a supplement tomorrow, if there was a way to transport chips to them. This, when you look at the cost of clearing could be applied as a credit toward the cost of clearing for agriculture.

The agriculture needs are: You need to get the land cleared quickly. So, once you get that stream of chips going into energy, then the next thing to do is to put a filter in front of it. One of the suggested filters is this picture (part of the report) -- it's called a vacuum airlift segregator. It was developoed by the U.S. Forest Service in Hope, Michigan where they're using it for pulp chips in the Great Lake states, using wood fiber very similar to what we have in this area; spruce, birch and aspen.

What this does, as you can see: It has a conveyor belt. The chips go through it. You've got three (3) vacuum hoods. The first one picks up the lightest stuff, the foilage; the second one picks up the clean wood chips and the third on picks midlings.

The clean wood chips -- If you use this filter, and especially if you use another filter in front of that, can be exported on the pulp market just the way round wood chips are being exported now. This is the type of thing that goes to Japan; is made into tissue paper. But, whatever it's used for, it ends up making money. In fact, the developer of this system, believes that just by grinding up the foilage; if the land is cleared in the summer, and using the hot fuel midlings that remain after you take off the whole sheet of chips, that can pay for the cost of the machine itself. Whatever clean, white pulp chips you get out for export is for pure profit.

What you're looking at here -- for an area the size of Totchaket is a $200,000 machine which can handle 20 tons an hour.

The next step is something which requires a coordinated effort on the part of the State and somebody in private industry, who is interested in doing this. This is to go much further and take a look down the road, and say that we're going to have two (2) million acres of agriculture into production by the year

2,000. Say, if we're going to do that, we're going to be clearing a lot of acres of land. And, if we're going to be clearing a lot of acres of land, that's a lot of tons of wood bark that could be used right here to make things like this, which right now, we import. All the panelling you see right here is brought up from the States. That could very easily be manufactured, using the wood fiber that's coming off this land.

A letter that you can see from the foremost builder of these fiber board plants at the end of this report -- on the second page of the letter: 'Could you assure an annual supply of say, 100,000 tons of green wood, at a reasonable cost for a reasonably long plant life span, say, an economic life of ten (10) years'? I went back to the report and looked at the weight and the composition of the bio-mass of Delta. There it tells us: 'That is unburned bio-mass, actual trees, were getting 15 to 18 tons per acre'. Being very conservative about what you get out of this filter processing: If you're getting ten (10) tons of wood per acre, that is 10,000 acres a year of bio-mass that you would need to sustain a fiber board plant in the Interior. That's as far as supplies are concerned.

We're talking about here at Totchaket, 40,000 acres to be cleared within a period of a little more than a year. That's one way of looking at it.

The other way of looking at it is: If you want a fiber board industry in the State and you want it in the long-term, that fiber board industry is going to have to behave like any other industry in the long-term, and that is to regenerate the land. In the beginning when it's trying to establish a foothold and get going, we can combine the process of clearing agricultural land with the process of getting a fiber board plant going.

Finally, I would urge those of you who are interested, to attend George Sampson's workshop. He knows a lot more about the technical part of this than I do. We may have some discussion later this afternoon. Thank you.



Clearing, Wood Fiber Harvest and Ground Preparation Workshop
George Sampson, Moderator
Research Forester Institute of Northern Forestry, Fairbanks

George Sampson: Our group didn't reach any unanimity on the solution to clearing wood fiber harvest to marketing and preparation of the ground, which probably doesn't come as a surprise to anyone.

We were nearly unanimous in support of the idea of utilizing material that is removed. I say 'nearly' -- The idea was again brought up of the value of burning the material on site and its value for future crops on the site. This was countered with the agrument that we could remove the material, burn it elsewhere and bring the ashes back and scatter it, and have the best of both worlds.

The big problem that we see, as far as the clearing and utilization, is timing. Timing, first of all, with getting anyone interested in harvesting the timber on the site -- because, at this stage, we don't have very good information on what is available. It's hard to get any 'hard' information from industry as to what they would do with the material out there unless they have volume information to use in developing estimates.

Then, we have trouble with timing of getting the land cleared and into agriculture and still utilize the timber. There is a basic conflict between timber utilization here and getting the land cleared for agriculture as soon as possible.

If we build an industry sufficient to remove the timber on the proposed time schedule, they will be looking for other timber when this is gone. The idea was expressed that this could lead to 'timber mining'. (In the event that we did get an industry that could handle this volume of timber in such a short time.)

So, we recognize that this problem exists, regardless of whether the utilization of the timber is undertaken by the State before transferring land to the farmer or whether the timber is transferred to the farmer when he gets the land, and he's expected to utilize it while clearing the land. The problem is still there in getting the timber utilized and still getting the land into cultivation early, which is the goal of the farmers, obvioulsy, since this is going to be their business.

There was some interest expressed for export of the timber to be removed, either in log form or chips. It was pointed out that, this time, we don't have any means of exporting chips from the site. The Alaska Railroad doesn't have a single chip car. It's doubtful that we have enough trucks to move the volume of chips that would be taken out of these sites, if we didn't go the railroad.

Fire danger, of course, was mentioned. Dick Jackson of the Department of Natural Resources reviewed the fires that have occurred on the sites and what might likely occur as land clearing begins on the site. The potential for fires is very large.

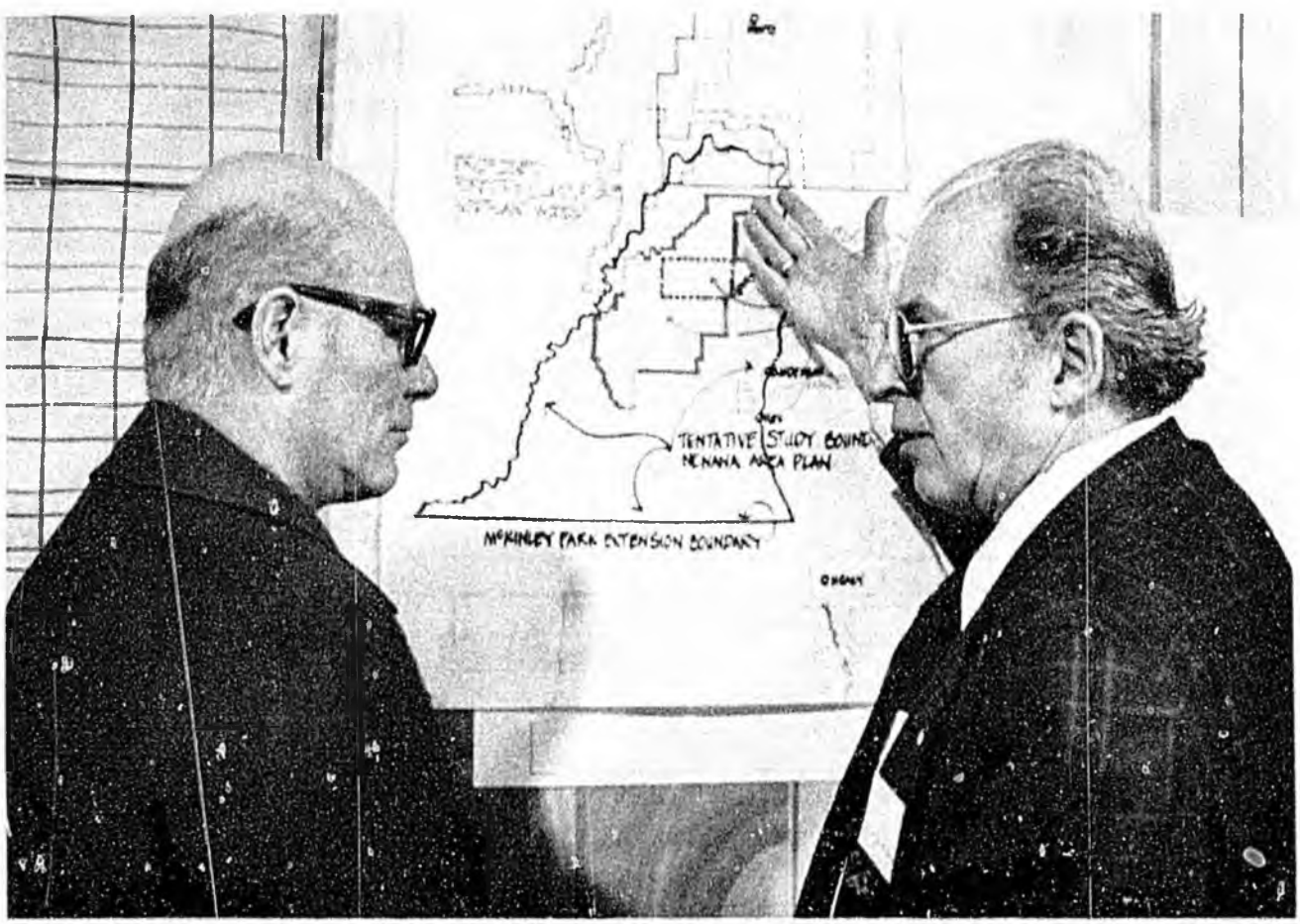
It seems that regardless of what clearing procedure is followed, a fire plan would probably be needed before clearing begins. This would, at least, reduce the potential for fires.

The demand for firewood that exists should be recognized, but again, we would have trouble moving the volume of firewood off in a short time. For a long-term project, firewood would be excellent.

The problems with 'chaining' were again discussed. On some sites, soil may be lodged in the root wads and go into burn piles, if chaining was the route taken. Some of the good soils is piled up that would be better left in place.

There were a couple of representatives of future land ownerships that will adjoin this property present. They were very concerned with what occurs on this property and the effect it will have on the timber on their lands. For example, if slash is left from road building or land clearing, it would create insect infestations which will spread to their property. They are very concerened about this. They are also very concerned about fire; fire from the Totchaket site spreading onto their property and destroying their timber.

* * *



Agriculture Design Workshop
Dr. Robert Weeden, Moderator
School of Natural Resources, University of Alaska, Fairbanks, Alaska

Workshop Summary by James Fisher, Department of Agriculture, Anchorage



Questions considered by the Agricultrual Design Section were:

1. Soils information for the proposed agricultural project was the first subject discussed. It was explained the soil survey had been made by photo interpretation with field checks, which was as detailed as would be accomplished for farming purposes.

    A. Engineering work was being accomplished by borings every quarter mile for roads and core drilling for bridge areas was in process or soon would be.

2. What was ground water availability:

    A. Nobody was sure of the precise progress of water inventory, if any was under investigation.

    B. Unknown was the manner in which the aquafer might flow or general perculation characterics of the soil.

    C. Was there any need to check immediately for ground water availability or status?

D. Executive Director AAAC pointed out that most of the emphasis in agriculture had been on dry land farming and if irrigation considerations were to be undertaken, new approaches were necessary.

E. The question about ground water was prompted by a phrase "droughty soils" in the soil survey report.

3. What are the climatic conditions in the area:

A. Are they highly variably?

B. There are a number of micro climates in the area.

C. After clearing will wind patterns change? Answer: Probably not much.

D. Can no tillage, or minimum tillage, practice findings under study at the Delta Agricultural Project be extrapolated to this project?

E. Should final wind protection requirements be deferred until farmers are on the ground?

F. What detailed meteorological information is required? How does one insist that soil protection be accomplished if the results of wind erosion will not be a cause for economic loss within the life time of the owner?

G. Soil Conservation Service (SCS) representative stated no soils information other than the existing survey, was necessary--other than onsite surveys after individual farm layouts were available.

4. Land form questions:

A. Where would the Nenana River go if it floods? Answer: It should not be close to the proposed project area.

B. Protection against flooding might be afforded by one quarter mile green belting, if such practice is followed in this project as has been accomplished in places in the Delta Project.

C. Will access routes be affected by the land forms or ice jams or the rivers?

5. Thermokarst is not a problem in the area designated for the project. Thawing in sands which might have ice in them are believed to have an inconsequential potential impact.

6. Access: Will there be competition with proposed direct access by bridge?

   A. Are alternate routes known?

   B. Is there a need to design alternate access?

7. What types of farms are to be designed for:

   A. Has enough planning for infrastructure been accomplished to date, so such infrastructure will permit approachable variety of farming plans?

   B. What will be the <u>end production objectives</u> for the farms in question?

   C. How will design for flexibility for changes in the future be accomplished?

   D. It was pointed out that the State has not settled on (1) an agricultural marketing system or (2) a transportation system, so flexibility is exceedingly important.

   E. If the size of farm is to vary, it should be designed for largest size reasonably foreseeable.

8. What are the chances for another service community:

   A. Will another community occur in the project area?

   B. Is <u>another community</u> in the project area necessary?

   C. A strong caution was raised to avoid the encouragement of a competative community i.e. to Nenana to avoid the diversion of energies that occurs from competative desires in competing communities.

9. Should conservation practices be mandatory before disposal:

   A. It was pointed out that State regulations require conservation plans for State disposed lands.

   B. Should windbreaks be recommended prior to disposal of property.

   C. Should there be an allowance on flexibility to accomdate to local best management practices to accomdate for conservation concerns.

10. What are wildlife and recreation concerns:

   A. Are there any great conflicts in the area.

B. Fish & Game has apparently done little planning to date--however, there are no present apparent severe conflicts. Only recently has Fish & Game started to put resource values on maps in the project area.

C. There was cauiotn that any alternation of habitat would change the species population.

11. Is there any area near the project which will require forage considerations or availability?

A. What is the value of the Native grasses in the area?

B. Would a cow/calf operation convert the existing Native forage to something else when regrowth occurs?

C. It was observed that a major problem with livestock is presently lack of a disease transmission control system. Planning and organization for such a system is presently in process and should be available before too long.

D. The moderator commented a plan for the area should encourage a variety of types of farming which should hopefully be better to live in and would provide the other advantages of diversity.

* * * * * * * * * * *

Summary by Mayor Coghill: In summary, I would like to thank everybody for coming out to this program. I know that the 20th of December is a bad time for a lot of people to travel away from their homes. But, if we didn't hold it 'to the 20th', we would probably be about 45 days down the road before we could get 'on line' again. As you've seen the chart -- we're really trying to press an awful lot of things into an awful short time frame. If we can't meet some of those schedules, we'll at least have a target that we can shoot to.

The two townships that we chose, of course, we've said were the two patented townships. The question was raised: 'Well, if you're going to go into the shear cut program, how are you sure that you can get those two townships done in that time frame?' We say that if we can get half of it done or we can only get a third of it done and the proposal that we're putting out in the paper (is the one that's in your little packet) as to how we can do this.

We feel that the harvesting of the natural fiber on the land is a very important factor. The questions that were raised by the workshops are very important to us, because they raise the things that we possibly 'skirt over'. We're looking very strongly at getting into the processing program, whether that be in fact, at Nenana or whether that be in fact, some place in the Interior or that part of this program be in the Matanuska Valley and some of it be in the Delta area or part of it be in the Fairbanks area or part of it be in the Nenana area.

As we progress in our push to get Totchaket-Nenana West on program, we find that we're bumping into area where there is concern about provincialism. we're not looking at 'provincialism', we're looking at trying to fit a total AC program into the Interior or into the State of Alaska, be it part of it coming from the chain; part of it coming from the Kenai Peninsula; part of it coming from the Matanuska Valley; part of it coming from Delta; and/or down the river. Not much was said about Koyukon, but the Koyukon project at Galena is going great guns. If you get a chance to go 'down river', you'll see some very fine, small vegetable farm programs going right now. They're using the old ox-bow areas where the Yukon River used to wander. They're finding that the soil's conditions in those areas are great.

They did this same thing at Aniak two years ago. They had a very successful part. When they talk about wildlife, they find that wildlife has a tendency to migrate towards these areas, because that's the least resistance of their food requirement. I think that Delta's finding that out with the buffalo. The buffalo just dearly love that barley, because it's the easiest thing for them to get and the natural flow of animals is: To get the food at the least resistance. We find that in the Totchaket area and particularly this plateau, that we're not interfering with the natural flow of caribou or moose or anything else, because they basically stay in the river areas along where there's more foliage and there's a great area.

To answer the question about the logging on the farm tract areas: If you'll look at the ground proofing, and when Bill Copeland and his crew get done with the ground proofing, that particular area that we're talking about in those two townships, there very very little spruce tree or the log-type tree that you would need to get into that. We might be able to then take a look at it. It brings up the question: Where can we then have a selection, and maybe we can talk the State into a position that: In another area that has good forest area, that we would get those people that are going to be on the AG plots, the farmers; that they be given a 'house log' permit to go in there and get their logs.

This is the whole thing; trying to put all of these pieces together. We're still kind of in a 'jello' position. It was brought out by all of the questions that were asked in these workshops as to where we're at.

I sure want to thank everyone of you for participating in them. I want to wish you all a Merry Christmas. And, when we get down the line in January and we get our summation put together, we'll be sending all of you that have registered a copy of that. Unless there's something that somebody else has to say, I guess we can adjourn our seminar. Thank you very much for coming.

* * *

PARTICIPATION

City of Nenana Representatives:

1. Mayor John B. Coghill Nenana
2. Councilman Terry Forness Nenana
3. Councilman Bob Knight Nenana
4. Planning and Zoning Commission Chairman Milt Jauhola Nenana
5. Steve Bainbridge Fairbanks
6. Jerry Smetzer Fairbanks
7. Bob Thomas Fairbanks
8. Kathy Schedler Fairbanks
9. Gene Whiting Fairbanks
10. Kaye Knutsen Nenana
11. Bev Staley Nenana
12. Kathy Shaw Nenana
13. Mary Hollander Fairbanks
14. Cynthia Fields Fairbanks
15. Charlie Backus Fairbanks

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2. Mike Tinker DOTPF Fairbanks
3. Bob Pollock AAC Fairbanks
4. Scott Grundy ADF&G Fairbanks
5. Dick Jackson DNR Fairbanks
6. Ed Kern DNR Palmer
7. Bill Copeland DNR Fairbanks
8. Nick Carney DNR Wasilla
9. Doug Lowery DEC Fairbanks
10. Art Davidson DNR Anchorage
11. Peggy McNees DNR Anchorage
12. Dick Reger DNR Fairbanks
13. Enzo Becia DNR Anchorage
14. Ron Mitchell DNR Anchorage

Alaska Legislature

1. Senator Bettye Fahrenkamp Fairbanks
2. Representative Pappy Moss Delta Jct
3. Representative Bob Bettisworth Fairbanks
4. Representative Ken Fanning Fairbanks

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1. James E. Fisher D.Ag Anchorage
2. Charlie Marsh D.Ag Anchorage
3. George Sampson D.Ag Fairbanks
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1. Jim Drew Fairbanks
2. Alan Epps Fairbanks
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4. Carol Lewis Fairbanks
5. Tony Gasbarro Fairbanks
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Private citizens

1. Richard Huntsman Fairbanks
2. Lyndon Funk Fairbanks
3. George A. Hobson Nenana
4. Lee Fett Delta Junction
5. Russ Talvi Fairbanks
6. Sig Restad Palmer
7. Frank Buck Delta Junction
8. Randon Guy Juneau
9. Ed Rose Nenana
10. Ron Nelson Fairbanks
11. John Hendricks Fairbanks
12. Don and Alice McKee Fairbanks
8. Ray Morgan Fairbanks

Private Citizens

13. Berle Mercer Healy
14. Mike and Leslie Holz Nenana
15. Al Cronk Doyon Fairbanks
16. Phil Berrian Doyon Fairbanks
17. Larry and Karla Zervos Fairbanks
18. Art Weideman Nenana
19. Nina Cotter Nenana
20. Celia Hunter Fairbanks
21. Charles Knight Fairbanks
22. Clifford Jury Nenana
23. William R. Wood Fairbanks
24. Bud Williams Fairbanks
25. Charlie Fannon Fairbanks
26. Cecil Gates Nenana
27. Vic Van Ravensway Nenana
30. Steve LaRue Fairbanks
31. Ed Yarmak Anchorage
32. Mead Treadwell Anchorage
33. Dale McKee Fairbanks
34. Fred Pratt News-Miner Fairbanks
35. Alfred Starr Sr. Nenana
36. Martha Ketzler Toghotelle Nenana
37. John C. Irwin Nenana
38. Robin Carter Nenana
39. Skip Slater Nenana
40. W.W. Roberts Fairbanks
41. Mike Roberts Fairbanks
42. Allison Persinger Fairbanks
43. Karen McCluskey Fairbanks
44. Howard Holbert Nenana
45. Hinton White North Pole

# The Nenana Livestock Report

# AG 102

*Prepared For*

**Office of the Governor**
**Special Projects**

*In Coordination With*

**The Alaska Agriculture Action Council**
**and**
**The City of Nenana**

*Prepared By*
**Featherstone Corporation**
**2400 Frederick Avenue**
**St. Joseph, Missouri 64506**

**February 15, 1981**

## PREFACE

Featherstone Corporation has been requested to prepare this report on the economic justification and methodology for an Alaskan livestock industry. The livestock industry in the Lower 48 has been in existence for a long time and has developed slowly to what it is today. To a person outside of the industry there are certain mysteries which are difficult to explain. In reading this report such a person will question many such aspects of the report and there will be no footnotes or backup information to substantiate many statements. The personnel in Featherstone have over 100 years of combined experience in the industry and have consulted with people on this report with many years of experience in their area of expertise.

Featherstone was commissioned to write this report in only three months and was asked to emphasize the working methodology of the industry. To comply with these requests, charts, schedules, and tables have been used that are well established as doctrine for the industry but the documentation for them has not been researched and presented. As a result this report has become a practical guide on how to develop the industry on the individual producer level and is not a scholarly disertation. Featherstone has enjoyed preparing this report for what it considers to be a unique situation and believes it contains a wealth of practical information that should help Alaska build a strong livestock industry.

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# INTRODUCTION

The purpose of this report is to determine the economic feasibility of an expanded livestock industry in Alaska and to find a practical way to expand that industry if found to be feasible. Featherstone Corporation of St. Joseph, Missouri was sub-contracted by the City of Nenana, Alaska (under a contract with the State of Alaska) to make this report. The sub-contract was awarded on October 20, 1980 with the restriction of being finished by February 15, 1981. The time restriction has limited Featherstone's ability to learn all of the particular idiosyncrasies of Alaska's nature and economics. Consequently, if after reading this report the City of Nenana or the State of Alaska feels certain aspects of the report may not be applicable in Alaska, they should contact Featherstone for discussion on those points.

The restricted time has also necessitated making this one assumption that is critical to the report: Alaskans respond to marketing and economic stimuli in the same manner as people in the Lower 48 Continental United States (Lower 48). For example, in dealing with the population as a whole Featherstone has assumed the per capita consumption of different meats will become the same as in the Lower 48 if the price relationships are the same. The same thinking assumes that producers will respond to economic conditions the same as in the Lower 48. Featherstone feels that in making this assumption, the validity of the report is not affected. In traveling through the state, Featherstone found that total costs were higher than the Lower 48, but relationships between costs were similar.

The time limitation has also restricted the scope of this report to the two primary species of livestock grown in the Lower 48: Cattle and Swine. Poultry, lamb, and other species were not considered. The poultry industry is highly technical and has become so specialized only extremely large facilities have survived in the Lower 48. The population of Alaska was not found to be sufficient to support such a facility. The lamb industry, wild game, etc. has a rather narrow market and per capita consumption. The economic impact is rather small. The beef industry having a 105 pound per capita consumption and the pork industry about 60 pounds, has a major impact.

The economic advantages to raising livestock became readily apparent when the transportation costs were considered. As a result, a relatively small amount of time will be devoted to proving the economic viability of the two species. The practicality of developing, timing, and creating the infrastructural needs of the livestock industry will be dealt with in great detail.

To be successful, a large sum of money must be invested in the industry in the beginning years. The people of Alaska, as a result, are going to expect a return on that investment and expect it the first time. As a result of that expectation, the effort must be done properly the first time. To be done properly two areas must not be neglected. The first area is sufficient money to create an industry that is large enough to perpetuate itself. The second area is adequate expertise to solve the technical working problems of the industry. Featherstone will paint a picture of the monetary aspects of the industry with a rather broad brush. That is to say, the figures used in this report will familiarize the reader with what size of investment dollars are needed and in what broad amounts. The actual hard costs will vary from the 1981 dollars used in the estimates.

This report should also give the reader an idea of the technical equipment that will be needed in the industry initially. The expertise to operate that equipment efficiently must be found. An opinion will be given on how that expertise must be gained. In the final analysis, however, the State must look at the expertise needs of the industry in the same manner as monetary needs. Both will be an investment which will pay handsome dividends if done properly.

Featherstone does not believe the methods and ideas presented in this report are the only ones from which the industry can be created. It does believe, however, that the ideas presented will produce an industry designed for the State in the most efficient, and economical manner. One must realize, however, that efficiency and economics are not the only consideration when political decisions must be made. If adequate monies and expertise are committed, however, Featherstone believes a livestock industry in Alaska can evolve (after all considerations are made) that is economically viable.

Before beginning the body of the report, Featherstone would like to acknowledge the help it has received. The staff of the Mayor's Office in Nenana has been most helpful in supplying local information and maps. The Alaska Agricultural Action Council and the faculty of the University of Alaska have supplied a great quantity of data that has been invaluable and very expeditious to this report. Ellerbe Alaska has collaborated on this report giving local data and insights which has facilitated making this report. Featherstone wants to thank all of these people and institutions for their help.

During the development of this report, Featherstone was requested to prepare a preliminary report for the development of future legislation. That report was made on December 1, 1980 and transmitted to the Mayor of Nenana. In that report some very rough preliminary figures were used. This report has refined and changed some of those figures. If the reader has had access to the preliminary report some very significant changes will be noted but the conclusions reached will be found to be the same.

## SUMMARY

In order for this report to be understood by as many readers as possible a short synopsis of the cattle and swine industry in the Lower 48 was put at the beginning of the report. Some variations of this description will be found by the reader during the sections describing the proposed industry in Alaska. The variations were made to compensate for local conditions.

To determine the economic viability of a livestock industry, the present transportation costs were used as a base competing figure. Featherstone determined if the local industry could produce cattle with added costs of less than $67.50 per head and swine for less than $20.25 added cost per head, the industry could compete and become viable. In order for these figures to be valid all added costs associated with producing and processing livestock in Alaska had to be analyzed. Each species was then analyzed for what extra costs would be needed in Alaska.

The cattle industry was divided into four sections or phases to determine added costs for the industry. Each phase was then subdivided into weather, labor, and technological related added costs for the industry in Alaska. The sum of all costs for the different phases was found to be $41.95 per head which was less than the transportation costs of $67.50. The difference of $25.55 leaves more than an adequate margin for deeming the industry potentially economically viable.

The swine industry was only divided into two phases — the production and processing phases. Each area was subdivided into the relevent costs and they totaled $12.77 per head. The transportation factor being $20.25 left an advantage to the local industry of $7.48 perhead, which appears adequate.

The industry having been found to be economically viable, the development of the industry within those added cost perimeters was described. It was determined that the cattle industry and swine industry should be built to handle 50% of the market needs of the rail belt. Such a sized industry would need 26,250 head of cattle and 70,000 head of swine per year, which would be large enough to make a single processing facility with dual kill floors feasible. These figures were used to size the producing segments of the industry.

The beef industry needs 70% of its animals feed lot finished and 30% for manufacturing or hamburger purposes. The 30% will be produced from cull dairy animals and cull beef breeding stock which are by-products of their industries. The 70% amounted to needing a beef herd of 20,000 cows. After comparing investment needs, operating costs, and labor needs of various size cow-calf operations, it was determined the average size best suited to Alaska was 750 head per operation. The industry would require 27 such operations. Because of the variations in climate within the state of Alaska it was recommended that the cow herd be divided between four areas of the state to reduce problems. Eight areas were identified as having potential for such operations.

Through the use of silage and pasture feeding, Featherstone determined four acres would be needed to support each cow-calf unit. As a result the industry would require 80,000 acres for such operations. The breeding stock recommended was Herefords, Angus, Short Horns, and crosses of these breeds. Due to the expense and handling problems, only half of the herd needs to be shipped to Alaska and that half would produce the other half. A variety of ages was also recommended to prevent problems. The total cost of a cow-calf operation with land, breeding stock, feed handling equipment, and general facilities was found to be $2,145,000.

The growing operation was dealt with briefly due to that phase being the simplest. Three types of potential operators for this phase were discussed, cow-calf operators, barley farmers, and feed lot operators, each requiring little management or capital input. The total investment needs for this phase were put at $6,100,000.

For the feed lot operations Featherstone recommends two 5,000 head lots be constructed with a continuous self flushing waste removal system. A simple feed mill system using high moisture barley and mixing trucks were found to be as cost efficient and as maintenance free a system as possible which is desirable for Alaska's purposes. Even though the feed lot is smaller by Lower 48 standards and the feed mill is simple, the management requirements were deemed critical. The basic feed lot management techniques must be combined with diplomatic abilities to handle such a job in a new area like Alaska in order to be successful. The investment requirements for each feed lot was figured to be $2,398,000 and it was recommended one good manager could oversee the operations of both lots.

The last recommendation for the cattle industry was for improved experimental facilities at the University of Alaska. The best such facility would be a model cow-calf operation with a small feed lot attached. The benefits and the revenue from such an operation could not be estimated but to Featherstone it seemed invaluable to a the industry in the long term.

To accomplish the development of a cattle industry in the shortest possible time, a schedule by calendar quarters was developed. The key element to promoting the industry is the processing facility and it was determined such a facility could some on stream the third quarter of 1983. In order to meet such a schedule and have animals available to slaughter, positive steps had to be taken in the second quarter of 1981.

The swine industry sized to produce 70,000 animals per year was developed using 144 sow confined farrow to finishing operations. Each unit produces 2,500 pigs per year so it was determined 28 such operations were needed in the grain producing sections of the state. Featherstone recommended twelve (12) units being in Nenana, twelve (12) in Delta, and four (4) in Fairbanks to allow supplying feed mills large enough demands to gain adequate economics of scale. The confined farrow to finishing units described in the report have six buildings each with special requirements and construction techniques to provide the most efficient growing techniques feasible in Alaska. The specialization described even included a day by day work schedule for the week required to operate such a unit which can be done by a "Mom and Pop" farm family.

The feed requirement of swine was found to be just as specific as the unit's design. Each unit will need 2,100,000 lbs. of total rations which will contain 892.5 tons of high moisture grain. The different rations for the different growth and development phases of swine required a feed mill capable of handling a variety of components. The feed mill will need to produce 206 tons of ration per week for twelve units to be kept in feed.

The breeding stock for a 144 sow unit should include 15 boars and all of the breeding animals should be selected carefully for proper genetic characteristics. The production of these breeding animals should be done in specialized 144 sow units operated by pig breeding specialists trained in the Lower 48 to maintain the needed genetic quality.

Because of the specialization and level of management required in these confined units little of a veterinarians service should be required. Featherstone did however recommend the Univeristy of Alaska operate one of the confined units as a research and teaching facility. After the initial investment in such a facility with the proper staff, it could be almost self supporting and at the same time be responsible for more of the growth of the industry than any other facet.

The investment needs of the swine industry were determined to be as follows:

| | |
|---|---|
| Confined Units | $12,600,000 |
| Breeding Stock | 1,864,800 |
| Feed Mill & Equipment | 2,076,000 |

A time schedule is laid out on the same basis as the beef industry heading toward animals produced in time for a processing plant to be opened in the third quarter of 1983. Units in areas already cleared like Delta would be on schedule but units on lands that have to be sold and cleared like Nenana would be ready within 9 months with animals for the processing facility.

As mentioned earlier a processing plant is seen as critical to the development of the livestock industry. The construction of a proper facility would promote this private sector of the economy faster than any other single investment. To make this investment economically viable both cattle and swine should be processed in the same plant to improve the by-product recovery income, utilization of labor during start up, and reduce managerial overhead. The plant should be located near the animals to reduce transportation costs and it should be owned by a cooperative venture to promote participation and growth in the producing segment of the industry.

The kill floors for each species is described with major operations detailed with the carcasses from each specie in their own coolers. The various cuts made from the carcass for different mechandizing techniques, however, are performed in a common cooler. To improve profitability Featherstone has described in the processing plant a cured meats operation, and a lunch meat manufacturing operation. The increased investment in such operations pays excellent dividends since these products have greater margins than carcass meat.

The sales of meat products should be to all of the different markets of Alaska in order to capture 50% of the total market. Featherstone calculated if the military market and 75% of the hotel, restaurant, and institutional market is sold only 22% of the retail market will be needed to obtain 50% of the total market. The military and HRI markets should be emphasized since they are not brand conscious and are more receptive to new suppliers.

The cost of a processing facility that can handle the needed number of animals and supply the various markets required was determined to be $3,517,900. The design, engineering, and construction period was determined to be 24 months on a fast track basis and 34 months on a conventional building basis. Even though the fast track method may increase the cost, to have a plant on stream 10 to 12 months sooner may have a positive psychological benefit worth the price.

One of the necessary criteria to make the economic analysis valid using transportation costs as a basis to determine viability, is that the industry must be as independent as possible. The development described is of an adequate size that few infrastructural needs outside of Alaska will be required. After the initial machinery is installed, the only needs of the industry should be medical supplies, vitamin mineral premix, and a hide market. Featherstone identified adequate in state infrastructural support for the industry in veterinarians, by-product markets, protein supplements, supplies and miscellaneous maintenance requirements. The in-state infrastructural needs however should not be very great if proper supervision is given to the machinery in the producing and processing segments of the industry.

The bottom line figure for the whole industry that many readers are concerned with is almost $90,000,000 with land for cattle included and $60,000,000 without the land. By some accounting methods some additional costs may be considered. In the above figures are no working capital beyond the initial breeding stock and no monies for utilities which can be purchased from public companies. The working capital cost for the livestock industry for the most part is owed to another segment of the industry and on an industry-wide basis appears to duplicate entries. Also to determine the amount of such working capital now, would be useless since the value of agricultural products would have to be priced on a world basis which fluctuates greatly from year to year. The majority of such investment would be two and three years from now and the working capital needs could vary greatly in that time.

Legislation to implement the industry was found already in existence for the Delta projects and Point MacKenzie project. Featherstone found no need to change what has been found needed for these projects. What was recommended however was on a long term industry incentive type legislation. Extended price supports, improved research facilities, funding, and staffing, and the creation of a Department of Agriculture with its own Commissioner where the main legislative changes recommended. None of these recommendations will impact the start up but will greatly effect the long run development of the livestock industry and whether it becomes self sufficient or always dependent on the Lower 48.

In piecing the whole industry together the economic benefits derived by the state appear to make the investment and effort very worthwhile. The annual payroll will be slightly over $3,000,000 but with the established multiplier effect applied to this payroll the total impact of the industry will be $15,300,000. Additionally the present drain of $27,800,000 of sales and transportation costs to Seattle will be stopped. Even if the cost of meat in the retail shelves is not reduced significantly, the creation of jobs and the improvement of the local economy by the livestock industry will have a great impact. Not only is the state's economy affected but small communities like Nenana will be significantly effected and stabilized economically. Featherstone described how a livestock complex can be developed in Nenana which is the most feasible opportunity for economical development of the area that could otherwise be wasted by the state. As will be noticed in this report, the industry is very complex and intertwined. Rural communities best development chances are with agriculture. The livestock segment of agriculture is an excellent opportunity for these rural areas to supply a product which is sorely needed by the Alaskan economy. An investment in livestock is an excellent one for the state and for rural areas.

## SECTION I

## OVERVIEW OF THE LIVESTOCK INDUSTRY IN THE LOWER 48

Featherstone Corp. realizes many reacers of this report have little, if any, background in the livestock industry. For this reason, a very general overview of the industry has been written to try and familiarize the average reader with what happens when and where with cattle and swine.

### A. The Cattle Industry

**Classifications of Cattle**

Bull — Male animal

Cow — Female that has had a calf.

Heifer — Female that has not had a calf.

Steer — Castrated male.

Feeder Calf — Calf that is weaned from the cow.

Fat Cattle — Calves that are ready for slaughter.

A cow is considered to be one producing unit. This unit in a year's time must produce and wean a calf. The cow is very much like a small factory in the way she works. She takes roughages like grass, clover and alfalfa and converts it into red meat. Most of the land that is used to produce beef is suited only for this purpose. The land is usually rough, might have low fertility or limited rainfall. The ground described, if it was row cropped, would be ruined in just a few years and would be considered waste land incapable of growing anything. Having a feed supply for cattle is important. One must know how much feed you will need to feed during the winter months.

The main time cows are fed is during the winter months when the pastures have quit growing and been grazed off. A cow on the average will need 2 lbs. of hay per 100 lbs. of weight. This will, of course, vary with weather conditions and the state of the cow. If you had a 1000 lb. cow and you fed 2 lbs. of hay per 100 lbs. of body weight for 180 days it would take 3,600 lbs. of hay. Pasture is another important feed source.

Pasture feeding is just turning the cow out to eat grass or whatever is growing on the land. The carrying capacity of the land varies from 2 acres to 100 acres per cow. This, of course, depends on weather conditions and fertility of the ground.

It doesn't matter whether the cows are eating hay or pasture, they must have water and minerals on a free choice basis. Cows are very good at balancing their mineral needs themselves. A cow will do a good job of eating but in return she must raise a calf and wean it.

The cows reproductive system operates very much like the humans. The cow will come into heat every 21 days on the average until she is bred. When the cow is bred she will carry the calf for about nine months and then give birth. During that nine months there are diseases that can cause the fetus to die during pregnancy. The fetus can be re-absorbed by the cow's body or the calf will be born dead. In the last three months of pregnancy the nutritional needs of the cow changes.

The nutritional level of the cow goes up in the last three months of pregnancy because the calf's body will increase in size by at least 50%. The calf will be taking nutrients from the cow's body. The cow's system is stressed at this time. If the proper feed and minerals are not fed at this time the cow will break down her body tissue to feed her developing calf. She will break down muscle and fat tissue to provide energy for her calf. She will take the calcium from her bones to develop the bones of the calf. This process is called Ketoeises or pregnancy disease.

After the calf has been in the cow for about nine months it is ready to be born. Generally when a cow is ready to have a calf she will get off by herself to have the calf. Cows will generally have their calves in the early morning hours or in the evening hours. It is best to check the cows twice a day, once in the morning and evening. If a cow is getting ready to have a calf, check her every hour until she has had the calf. The cow will have a water bag appear just before she has the calf. The cow should have the calf within two hours after the water bag has appeared. The size of the calf will vary with the breed, but the weight range is from 60 to 120 lbs. at birth. If the cow is having trouble having the calf, you need to either examine the calf and cow or call the veterinarian. The calf can live from 6 to 12 hours inside the cow after the water bag has appeared.

The calf is now ready to spend seven months with the cow until he is weaned. The cow's milk for the first month of the calf's life is the main source of his food. The cow's nutritional needs is very high at this time because she has to produce milk for her calf and maintain her body at the same time. For a calf to grow and reach a high weaning weight the cow must be able to produce the milk for the calf. If a cow is a poor milker her calf will be poor doing and have a low weaning weight. If a cow is a poor milker the cow should be culled because it takes just as much feed to feed a good cow as it does a bad one. After the calf is a month old he will start to eat hay and any other type of feed.

A calf will get natural immunity to many diseases for the first three months of the calf's life from the cow's milk. But after 3 months of age the milk is becoming less and less part of his diet, so the calf's immunity has to be brought back up by a vaccination program. The best way to set up a vaccinating pro-

gram is to talk to your veterinarian. Usually at the time of vaccination the bull calves are casterated and made into steer calves.

Some people creep feed their calves while they are still nursing the cow. The calves will be heavier and will be easier to start on feed than those that weren't, but creep feeding is an additional cost. A person must take under consideration the cost of the feed to put on a pound of gain on the calf in comparison to the price per pound for the calf. The calf at weaning time should be some where around 7 months of age and weigh 350 to 500 lbs. The calf is now ready to enter another phase of his life.

When a calf is weaned from the cow he is called a feeder calf. The feeder calf is started out on a growing ration that is high in roughages and low in grain. The calf will be on a growing ration for about 3 to 5 months or until they weight about 700 to 800 lbs. Then the calf is started on a finishing ration.

The finishing ration is a ration that is high in energy but low in crude fiber. A finishing calf will on the average have an 8 to 1 feed conversion (8 lbs. of feed to put on a pound of gain). A calf should finish out from 1,000 to 1,200 lbs. A calf should finish out in about 100 days with the calf gaining about 3 lbs. a day. The calf is now ready to be marketed.

To market a fat calf you can either take the calf to an auction or have a cattle buyer come out to your feed lot and bid on your animals. After the animal is bought he is ready to start a journey through the slaughter house.

The United States Department of Agriculture (USDA) dictates how an animal should be slaughtered and what types of facilities that can be used. But any way the calf is fasted over night to reduce the rumen contents. The animal is then stunned and bled, then hung by his hind legs on an overhead rail system. The next thing to happen is the hide is removed. Now the chest cavity is split open to allow evisceration of the animal. The "H" bone in the rear end is split to start the evisceration. The stomach is opened to allow the viscera and pluck to fall out. The animal is then split into 2 halves down the back bone. The carcass is then shrouded. Shrouding is putting a sheet over the carcass to absorb any blood on the carcass and to spread the fat out more evenly. The carcass is put into the cooler to chill and be graded.

The beef carcass has two different grades. They are quality and yield grade. The quality grade is based on the amount of fat and marbling that is present in the meat (marbling is fat streaks in the meat). The quality grades are based mainly on four factors.

1. Class or kind of meat.
2. Sex classification (if applicable).
3. Maturity.
4. Marbling and firmness of rib eye muscle.

There are five quality grades. They are: Prime, Choice, Good, Standard, and Utility. Prime has the highest amount of marbling and fat. On the other hand Utility has hardly any marbling or fat.

The second grade used on beef cattle is yield grade. Yield grade is based on the yield of boneless, closely trimmed retail cuts from the round, loin, rib, and chuck in comparison to the warm carcass weight. There are four charateristics used to help determine the yield grade.

1. The amount of external fat.
2. Amount of kidney, pelvic and heart fat.
3. The area of the rib eye muscle.
4. Warm carcass weight.

There are five yield grades numbered 1 through 5. Yield grade 1 has the highest degree of cutability with Yield grade 5 having the lowest degree of cutability. So higher the Yield grade the more meat you will have from the carcass.

The head is worked up by removing the tongue, and cheek meat. Then the head is opened and the brain is removed. The hide is salted and sent to a tanner. The hide can be made into shoes, clothes, and gloves. The Viscera has several parts that are specialty foods. The pauch and reticulum are two parts of the stomach that are saved for food and are called tripe. The lungs and heart are called pluck and are served as food. The bile salt from the liver is used as a drug for liver patients. Insulin from the pancreas is saved for people that have diabetes. The rumen contents are dried and sold as feed additives. The blood can be dried and used as protein source.

The carcass is ready to be broken down further. Beef that is used in restaurants is cut into serving portions before they get it.

Beef going to retail outlets is sent in one of four ways: Half carcass, quartered carcass (fore or hindquarter), primal cuts (see 8 primal cuts on Beef Chart), or fabricated (primals that are defatted and partially or totally deboned). Fabricated beef has become very popular recently because of labor efficiencies and reduced weight in shipping to the store.

After a store gets the meat they have to merchandise it. Meat does not have a very long shelf life. Store owners want to sell the meat as quickly as possible, so they only cut enough meat to meet each day's demand. They wrap the meat in plastic wrap to help maintain the color of the meat. Then the product is put in display cases to keep the best color of the meat.

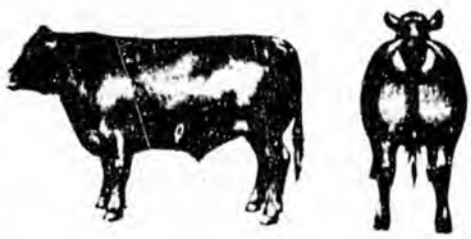
TABLE 1-A

# SLAUGHTER STEERS

## U.S. GRADES

## (QUALITY)

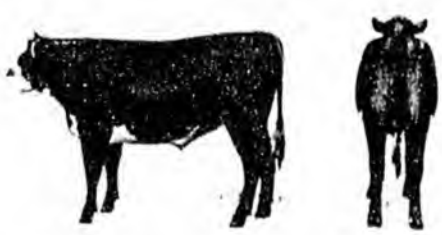
PRIME —



CHOICE —



GOOD —



STANDARD —



UTILITY —



COMMERCIAL, CUTTER, AND CANNER GRADES ARE OMITTED

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CONSUMER AND MARKETING SERVICE
LIVESTOCK DIVISION
WASHINGTON, D.C.

AUGUST 1969

TABLE 1-B

# SLAUGHTER STEERS

## U.S. GRADES

## (YIELD)

YIELD GRADE 1 —



YIELD GRADE 2 —



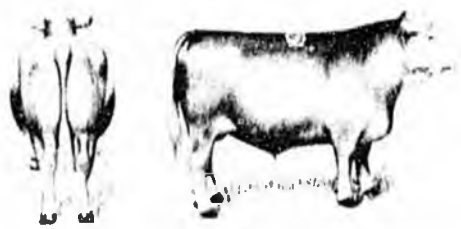
YIELD GRADE 3 —



YIELD GRADE 4 —



YIELD GRADE 5 —



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TABLE 1-C

# BEEF CHART

## Wholesale and Retail Cuts

Numerals in circles ◯ refer to wholesale cuts and major subdivisions of such cuts. Letters refer to retail cuts.

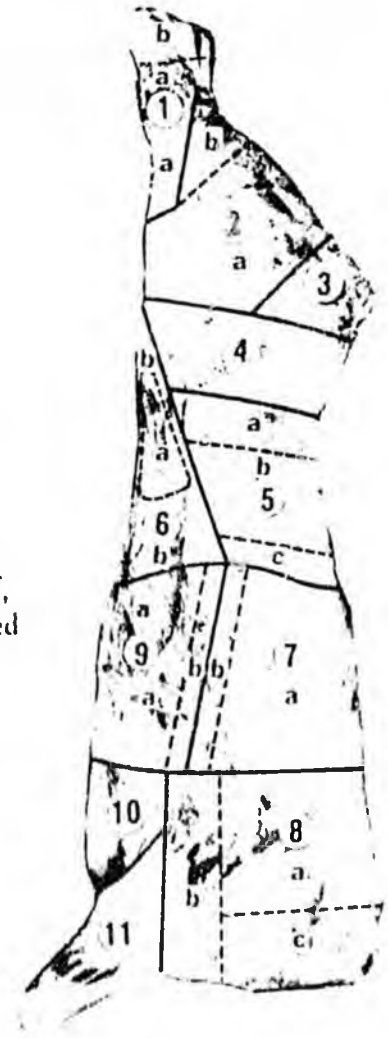
**(1) HIND SHANK**
a. Soup bones
b. Hock

**(6) FLANK**
a. Flank steak
b. Stew or ground beef

**(9) PLATE**
a. Stew, ground beef, or boned and rolled pot roasts
b. Short ribs

**(10) BRISKET**
Stew or boned and rolled pot roasts

**(11) FORE SHANK**
Soup bones or ground beef




**(2) ROUND**
a. Round steaks or roasts
b. Pot roast

**(3) RUMP**
Roasts or steaks

**(4) LOIN END**
Sirloin steaks or roasts

**(5) SHORT LOIN**
a. Porterhouse steaks
b. T-bone steaks
c. Club or Delmonico steaks

**(7) RIB**
a. Rib roasts or steaks
b. Short ribs

**(8) CHUCK**
a. Chuck rib roasts or steaks
b. Arm pot roasts or steaks
c. Stew or ground beef

## YIELDS OF WHOLESALE CUTS AND SUBDIVISIONS

### Percentage of Carcass Weight

| | |
|---|---|
| (1) to (6) HINDQUARTER | 48.0% |
| (1) to (3) Round and Rump | 24.0% |
| (1) Hind Shank | 4.0% |
| (2) Buttock | 15.5 |
| (3) Rump | 4.5 |
| (4) and (5) Full loin inc. suet. | 20.5 |
| (4) Loin end | 9.0 |
| (5) Short loin | 8.0 |
| Kidney Knob | 3.5 |
| (6) Flank | 3.5 |

| | |
|---|---|
| (7) to (11) FOREQUARTER | 52.0% |
| (7) Rib | 9.5% |
| (8) Chuck | 24.5 |
| (9) Plate | 8.0 |
| (10) Brisket | 6.0 |
| (11) Fore shank | 4.0 |

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**B. The Swine Industry**

Swine is a monogastric animal, which means they have a single stomach very much like man's. Hogs have to have a high energy feed that is low in fiber. The main feed source for swine is feed grains like corn, barley, wheat, milo, and oats in the midwest. Swine need a protein supplement to finish balancing the ration for amino acids that the grain is lacking. The protein supplement is made from soybeans or other protein rich material like rapeseed or fish meal. For a hog producer to survive he must have producing sows.

Each producing female is considered a unit. A sow is a female hog that has had pigs. A gilt is a female hog that has not had pigs. The boar is the male hog. One sow should have two litters of pigs per year. She should wean at least eight pigs per litter to pay for the cost of feed, labor, and facilities to care for her. The gestation period for sows is about 112 days after she has been bred. If she is not bred the first time she will come back into heat every 21 days until she is bred. The sow has a reproductive tract that is especially designed for having at least eight pigs at each farrowing.

The sows reproductive system is one of the most efficient. Once the sow is bred, her system changes to support the fetal pigs.

During the first 74 days of gestation the sow will be fed 5-6 lbs. of 12% ration (12% means the ration has 12% protein). The last 38 days the protein level of the feed will need to be raised to 14% and the quantity of the feed raises to eight lbs. You raise the proteins level and feed level because the fetal pigs will put on 70% of their body weight in this last period. A week before the sow farrows she should be fed a ration that is high in bulk and is a laxative. Oats are the best feed for this purpose. Three days before she farrows the sow should be moved into the farrowing house. One day before she farrows she should be given only water. The day she farrows she should be given only water, then she should be started back on feed gradually.

The temperature for the pigs needs to be 90° F. on the floor where the pigs are. The best way to obtain this is heat from the floor. The two most common ways to obtain this is either with heat boards or with heat in the floor. You should farrow the sows in farrowing crates. The crates provide a place for the pigs to get away from the sow. It is cheaper to heat the floor than try to maintain the air temperature at 90°F. inside a farrowing house. The pigs are a fast growing animal but they must have care to reach market profitable.

The six weeks that the pigs are on the sow is the cheapest gain you can have. Baby pigs are born deficient in iron. If the pigs are born on dirt they don't need additional iron but if they are born where they cannot get to dirt they will need iron. They can be given iron through injection or by feed. Little pigs start eating within one week of age, so feed should be in front of them two days after birth. To start pigs on feed you need a sweet feed (high in sugar) to get them started quicker on feed. This feed should be medicated (medicated feed has some type of antibiotic to fight diseases and viruses). The pig starter feed is sweet and also high in protein.

The high protein level is needed because the pigs are growing at a very rapid rate. The protein level is between 18-20%. When the pigs reach 5 lbs. the protein level is reduced to 16%. By the time the pigs are six weeks of age they should weigh 25-30 lbs. and they are ready to be weaned from the sow. When the pigs are weaned they are vaccinated for eraspilas. It is a very common and contagious disease in hogs.

When the pigs are a few days old the male pigs are castrated. Male pigs are called boars but after they are castrated they are called barrows. Pigs at weaning are called feeder pigs because they are ready to be put onto a feeding floor.

Feeder pigs are fed a 14 to 16% hog ration. The hog will take about four months to finish out. The ideal weight for a fat hog is 210 lbs. When the fat hogs have reached the desirable weight you now have to make the decision of how you will sell the animals. You have four ways to sell your hogs. They are auction, buying stations, direct buying and grade and yield.

Auction is one of the most common ways to sell hogs. You take the hogs to a sale barn. Then the hogs are put through a sale arena where livestock buyers bid on the animals. Whoever has the highest bid gets the hogs.

Buying stations are stations that are set up in the country by slaughter companies. These stations buy hogs on the bases of that day's hog market at the terminal markets. The price they pay for the hogs usually allows for transportation cost and the cost to operate the facility.

Direct buying you take the hog to the slaughter house. They buy the hogs and run them directly into the slaughter plant.

Grade and yield is a fairly new concept in selling hogs. You take the hogs to the slaughter house. The animals are slaughtered and the dressing per cent of the four lean cuts to the amount of fat is determined. The four lean cuts are the ham, loin, picnics, and boston butts. If a person has a heavy muscled animal you will get more money per pound of pork.

The United States Department of Agriculture (USDA) has set standards for grading fat hogs. The system is set upon the bases of the yield of the four lean cuts in comparison to the chilled carcass weight. The grades are set up by numbers with U.S. #1 being the best and U.S. #4 being the worst. Here is the chart with the percent of the four lean cuts to make each grade:

| Grade | Yield |
|---|---|
| U.S. No. 1 | 53% and over |
| U.S. No. 2 | 50 to 52.9% |
| U.S. No. 3 | 47 to 49.9% |
| U.S. No. 4 | Less than 47% |

These grades were set up so there is a standard way of grading hogs and when a person says a No. 1 hog you know what they are talking about. The hogs are now ready to start their journey through the slaughter house.

The hogs are fasted over night before they are slaughtered. This allows the stomach to empty out so there is less stomach material to handle. The pigs are run into a narrow alley where they are stunned. The hogs jugular vein in the throat, is cut so the hog can bleed. Then the hogs hind legs are shackled and hung upside down on a conveyor chain. The hog can either be dehaired or skinned. The animal is ready to be eviscerated.

The chest is split open and then the belly is opened to allow the viscera to come out. Then the head is removed. The hog is then split in half down the backbone. The carcass is put into the chill room for 24 hours. In that time the temperature of the carcass is brought down to 35°F.

The head and viscera must be worked up separately. The head is put onto another line where the tongue, brain and snout are removed as specialty items to be sold in stores or restaurants. The viscera is broken down with the heart, lungs, liver, stomach, and intestines are separated out and made ready for resale. The heart, lungs and liver are sold either to restaurants or stores. The intestines can be used for casings for lunchmeat or sausage.

The carcass, after chilling, is ready to be cut into salable cuts or to be cured. The carcass goes through 12 steps of cutting.

After the hog has been broken down into the separate portions they are ready to be shipped or cured.

The hams, bellies, and sometimes front shoulders are moved into the curing department where they are injected with a pickling solution. The next step for the meat is the smoking. The meat that is smoked must be heated to an internal temperature of 137°F. or 150°F. if it is to be ready to eat. The larger cuts like hams take 8 to 12 hours to smoke with the smaller cuts taking less time.

Sausage is made from meat and fat from hogs. The meat and fat are chopped or ground up into small particles. The meat is now a jelly like substance called emulsion. Spices are then added to the emulsion and mixed. The emulsion is now ready to be stuffed into casings. The type of casings vary from edible to synthetic casings. Some sausages are ready to be sold but others need to be cooked in order to finish the process.

Some of the by-products from the hogs are turned into money. The blood from the hog is dried and is used as a protein source in dog and hog feeds. The fat from hogs is rendered into lard that is used for cooking. The skin can be used for footballs or dressings for burn victims to prevent them from dehydrating. The stomach contents can be dryed and used as feed for animals. So, the only part of the hog that is not used is the squeal, but give them time.

TABLE 2-A

# SLAUGHTER SWINE

## U.S. GRADES



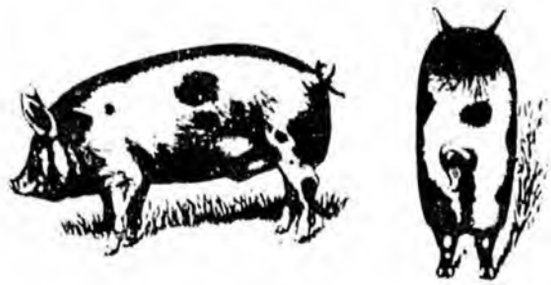
U.S. NO.1



U.S. NO.2



U.S. NO.3



U.S. NO.4



U.S. UTILITY

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
LIVESTOCK DIVISION
WASHINGTON, D.C.

COPIES OF THE OFFICIAL UNITED STATES STANDARDS FOR GRADE ARE AVAILABLE ON REQUEST

NOVEMBER 1969

TABLE 2-B

# PORK CHART

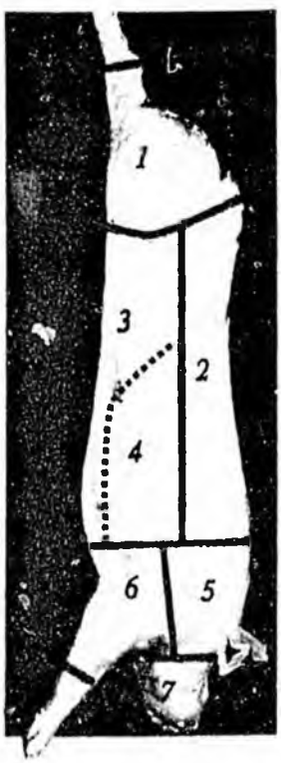
Wholesale and Retail* Cuts

**1 HAM**
- a. Butt end or half
- b. Shank end or half
- c. Center slices

**3 BELLY**

**4 SPARERIBS**

**6 PICNIC**
- a. Picnic roasts
- b. Arm steaks




**2 LOIN**
- a. Loin chops
- b. Rib chops
- c. Loin and rib roasts
- d. Canadian Style bacon

**5 BOSTON BUTT**
- a. Boston butt roast
- b. Blade steaks

**7 JOWL**
- a. Jowl bacon square

*Only some of the more common retail cuts are listed
Numerals refer to wholesale cuts. Letters refer to retail cuts.

## EXPECTED YIELDS OF CUTS

Percentage of Carcass Weight

| | | | |
|---|---|---|---|
| 1. Ham** | 19.8 | 6. Picnic** | 8.3 |
| 2. Loin** | 16.7 | 7. Jowl | 2.8 |
| 3. Belly | 14.6 | 8. Lean Trim** | 5.7 |
| 4. Spareribs** | 3.4 | 9. Fat | 16.4 |
| 5. Boston Butt** | 6.7 | 10. Miscellaneous** | 5.6 |

The expected yields shown above are an average for the U.S. No 2 grade. Yields for the cuts identified by ** would be higher for the No. 1 grade, lower for No. 3, and still lower for No. 4.

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
LIVESTOCK DIVISION
WASHINGTON, D.C.
1968

## SECTION II

## GENERAL ECONOMIC RATIONAL TO PROVE VIABILITY

It has been estimated that 98% of all meat consumed in Alaska is brought in from the Lower 48. The product arrives by barge and airplane and shipped intrastate by rail or truck to a central distribution point. If an Alaskan based meat processing facility produced that same product for distribution, that facility would serve as a central distribution point. Consequently, if the Alaskan facility can produce product ready for distribution for the same or less price than the present central distribution facility receives the product, the Alaskan facility can compete. In order for the Alaskan facility to produce that product it must purchase livestock and process that livestock and the resulting by-products for prices that permit suppliers to make a profit. The same logic holds true for the livestock producer to sell his animals, he must be able to buy his needed inputs at a price that permits his suppliers to make a fair profit.

The meat industry in the Lower 48 has existed since the advent of refrigerated rail cars in 1865. In that 115 year period the industry has developed to the point where American consumers spend the largest share of their food dollar on meat as compared to any other foodstuff. Over the years different segments of that industry have had good years and bad years but in the long run has survived and is presently viable.

If it is assumed that Alaskans respond to marketing and economic stimuli in the same manner as people in the Lower 48 and if an Alaskan processing facility can produce meat products for the same price as the central distribution facility presently receives that product, the livestock industry of Alaska would be considered economically viable. By thinking this way, one sees that the local Alaskan processor to be viable must have no greater additional costs to produce product than the transportation costs from Seattle to Alaska.

This consideration is only true if certain factors hold true. The first factor is the quality factor of the product. The local industry must produce the same quality product that the market presently demands. The second factor is that the local industry must consider all facets that are different from the Lower 48. The two biggest differences that must be considered is the cold climate and the relatively small market size. The third factor to consider is that the local industry must be a complete miccrocosm that needs little from the Lower 48. The more outside suppliers or buyers that are needed in order to compete, the more variables exist in determining viability, and the more chance for long run failure. The more world market pressures are reduced on the Alaskan livestock industry, the transportation factor to determine viability increases in validity.

To determine that transportation costs the six of the major retailers (Safeway, Market Basket, Foodland, McPeaks Badger, Northland Hub, and Quality Meat Co.) of Alaska were contacted. The stated cost ranged from $12.00 per hundred weight (cwt.) to $19.00 per cwt., with air fresh product costing $36.00 per cwt. An average for all meat products from all the stores was found to be $15.00 per cwt. In order to make this figure valid for the whole livestock industry the hundred weight costs should be converted into per head costs for consistency. To find per head costs the transportation charges can only be assessed to what is shipped to Alaska. The by-products, bones, and trimmings are removed in the Lower 48 resulting in only 450 lbs. per beef animal and 136 lbs. per swine being shipped to Alaska.

**Calculation of Shipping Weights**

| | Beef | Pork |
|---|---|---|
| Live Weight | 1,000 Lbs. | 220 Lbs. |
| Dressing (Carcass) Percentage | 60% | 62% |
| Dressed Weight | 600 Lbs. | 136 Lbs. |
| Fabricating Percentage | 73% | —— |
| Delivered to Store | 450 Lbs. | 136 Lbs. |

The resulting weights are multiplied times $15.00 per cwt. to give transportation costs per head of $67.50 for beef and $20.40 for pork. If the added costs of raising and processing these animals in Alaska is less than these figures the industry is considered to be as viable as the industry is in the Lower 48.

Before looking at each species to determine viability, the validity of this method of proof should be discussed. In a normal economy, transportation costs or advantages of one plant within an industry are considered to be short term and not valid for a long run decision. In Alaska, however, there is no competing domestic industry and transportation advantages of the local plant become long term. If competition between domestic plants should occur both would have the same costs (or disadvantages) and the same advantages compared to the present system of shipping product.

In a practical sense one must realize with increasing energy costs transportation costs are going to increase making the $67.50 and $20.40 advantage per head increase. Relatively little will have to be shipped from the Lower 48 to supply this industry and relatively little will have to be shipped to (or be consumed by) the Lower 48. To repeat, the more complete the microcosm of the livestock industry, the more valid the transportation advantage becomes in proving economic viability. Featherstone will attempt to develop (on paper) as complete a microcosm as possible considering the relatively small market existing in Alaska. In the following two sections of this report the economic proof for each species will be developed. Only the economic factors that increase or decrease costs because of Alaskan conditions will be discussed. The total development of the industry will be discussed in detail in subsequent sections.

## SECTION III

## DETERMINATION OF ECONOMIC VIABILITY OF A CATTLE INDUSTRY

The cattle industry in Alaska is a long term industry that has an economic cycle of approximately 10 years compared to 4 to 5 year swine cycle. Generally the long term nature of this industry has caused high inventory costs with lower margins but a more stable long demand has been created. Because of this long term low profit nature many new innovative techniques have been developed recently by the beef industry. Fabrication, improved by-product recovery, manure utilization, and increased size of diversified segments are some of the more significant innovations. All of these highly capital intensive techniques, however, have reduced the cost of processing and distributing beef by only $5.00 to $6.00 per cwt.[1] This fact highlights the extremely high cost by relationship that Alaskans are experiencing by having to pay $15.00 per cwt. for transportation costs.

Another interesting point is that even without these new modern techniques, smaller, older operations without some of these innovations have been able to overcome this relatively small cost advantage with good service and marketing techniques. Without the high costs of pioneering these innovations, Alaska's beef industry can start up using most of these techniques and have the advantage of the lower transportation costs and the better service of a small local operation. By starting the industry from almost the beginning Alaska even with its small market place should be able to take advantage of many techniques to make production costs relatively the same as in the Lower 48. In this section Featherstone will discuss only those techniques of the industry that Alaskans cannot use that will increase costs.

To determine total added costs experienced in Alaska in the beef industry Featherstone has broken those costs down into the following factors: weather related costs, labor related costs and technological and transportation related costs (as discussed previously above) that are applicable because of having a small market. Each of the four (4) phases of the beef industry (cow-calf phase, growing phase, finishing phase, and processing phase) will be reviewed using these costs areas. The total of these cost differentials (cost differentials will be established using the North Central and North Western sections of the Lower 48 as a base figure) on a per head basis must be less than the $67.50 transportation cost in order for the industry to be deemed viable.

**A. Cow Calf Phase** (Animal Weight Birth to 350 lbs.)

**1. Weather related costs**

Featherstone has not been able to find any significant cost differential in this area. The reader may want to refer to Table #3 related to the total cost of raising a feeder calf was $123.55 per cwt. Featherstone believes this cost will hold true for Alaska even with the increased costs of winter feeding on account of the efficiency of feed production due to the longer days and lower elevation of Alaska. Without improved pasture management techniques developed in the Lower 48, the Tanana Valley, Matanuska Valley, and the Kenai Penninsula areas have produced on an acre basis more hay and silage tonnage than is experienced in northwest sections of the Lower 48. This phenomenon is attributed to the fact that the Alaskan areas are lower in elevation and have more daylight hours. The increased feedstuff production Featherstone feels more than offsets the costs needed to winter cow herds in Alaska for an additional one month compared to the north central area.

The only other weather related costs that may be considered is the affect winter will have on the calf crop percentage. After talking to animal husbandry people in the Lower 48 and a few ranchers in Alaska now producing calves, Featherstone feels with good management the calf crop percentage should not differ from those experienced in the northern tier of the Lower 48.

**2. Labor Related Costs**

The average amount of outside hired labor shown in Table 3 is 0.91 hours which is figured into the charts at federal minimum wages. For practical purposes the minimum wage in Alaska is twice the federal standard. This doubling will increase the cost of the calf $1.00 per cwt. or $3.50 per head. The wages shown for the operator and family labor have not been increased on account of the technology discussed in the next paragraph.

[1] William F. Williams, "The Changing Structure of the Beef Packing Industry," TAMA, Inc., Lubbock, Texas. In "Small Business Problems in Marketing of Meat and Other Commodities, Part 4, Changing Structure of the Beef Packing Industry," hearings before the Subcommittee on SBA and SBIC Authority and General Small Business Problems of the Committee on Small Business, House of Representatives, Washington, D.C., June 25 and 26, 1979, pp. 68-69.

**3. Technological and Transportation Costs**

Most of the farm labor done by the operator and family members is related to harvesting of feedstuffs and winter feeding periods. Featherstone feels any increase in these labor costs will be offset by the use of modern silage and haylage techniques discussed in Section V. No present cow-calf enterprises in the Lower 48 has the advantage an Alaskan enterprise will have of starting with modern equipment. In the Lower 48 operators have inherited equipment with the enterprise or owned it for several years with only a few new pieces of equipment. With financing terms available to these operators similar to those afforded Delta barley farmers, these technilogically advanced pieces of equipment will be used to reduce on farm labor. Similarly, these financing arrangements should keep these operators interest charges similar to those shown for the Lower 48.

Once the cow herd is established in Alaska there will be no additional transportation costs for operating a cow-calf herd. Featherstone feels that the one time shipment of the "Grandparent" herd to Alaska should be considered a state investment and that cost should not be depreciated or costed out over the future life of the industry. The only applicable transportation cost would be for the feed supplement shipped from the Lower 48. Each cow-calf unit should consume 72 lbs. per year and shipping cost should be $8.00 per cwt. making the per head cost $5.76.

**B. Growing Phase** (Animal Weight, 350 to 750 lbs.)

**1. Weather related costs**

This segment of industry produces the cheapest weight gain at the lowest labor cost of the total industry. At this stage the animal is rapidly growing bone and muscle tissue, and is relatively self-sufficient. The 400 lbs weight gain is accomplished in 140 to 180 days on roughage feed, minerals, vitamins, salt and a very small amount of grain that depends on how fast the gain is desired and market conditions. As described in Section V this gain can be done on pasture or in confinement with silage. Featherstone is recommending that during the hard winter period between December 15th and February 1st, the area's cooperative feed lot should be used or shelter should be provided of some sort to preserve the animals body heat to reduce weight loss. The cost of confinement for cattle will be discussed in part C-1 of this section of the report. Since space should be figured for these feeder calves in the confinement units they must be considered one turn or a 100 day period in the confinement unit. The added cost per head per turnover in the confinement unit for Alaska in C-1 is $4.34/head. Since only one-third of the feeders will need confinement, the cost of $4.34 for the industry should be spread over all of the feeders or $1.45 per head for a yearly average.

**2. Labor related costs**

Of all phases of the livestock industry the growing phase of the cattle industry is the least labor intensity. Only during periods of winter feeding is any labor required beyond weekly inspections and periodic filling of self-feeders with salt, vitamin, and mineral supplement. The winter feeding costs will be the same as in C-2 of this section which is $1.66 per head per turn of the confined feed operation. This cost again should be spread over all the feeders for an industry average of $0.55.

**3. Technological and Transportation Costs**

All of the technological aspects of growing feeder cattle that are used in the Lower 48 are usable and feasible in Alaska. No additional costs should be assigned from a technological basis.

The only additional transportation costs should be for the shipment of the salt, mineral, and vitamin supplement from the Lower 48. Each head in this phase should consume 37 lbs. and shipment costs should be $2.96 per head.

**C Finishing Phase** (Animal Weight, 750 lbs. to market weight)

**1. Weather related costs**

All additional costs of finishing cattle in Alaska will center around the costs of the confined feeding units. The economics of confined feeding units in the Lower 48 will be proved in Section V to be viable. The additional costs of building in and for Alaska's weather conditions are the only costs that need to be considered. All other costs are the same as in the Lower 48. Corral Industries, Incorporated is the largest builder of confined cattle feeding operations in the world and has the most advanced technology available on the subject. Corral Industries President, Richard Bunger, was contacted regarding additional construction costs of units described in Section V built in Alaska. Mr. Bunger's firm has built a similar unit in Calgary, British Columbia, in Canada and using that as a reference point he extrapolated the additional cost to be $80. to $100. per head of capacity to build an operation in Alaska.

Using $100 as the added cost factor, the interest on that money and the depreciation must be determined to find working cost per head. The operation is designed to turn 3.6 times per year but on a practical basis 3.0 times is more feasible. Using the assumptions and figures from Table A the interest cost is $2.76 and the depreciation cost is $1.67 per head for a total cost of $4.34 per head.

## TABLE 3*

### COSTS AND RETURNS OF COW-CALF ENTERPRISES, ALL SIZES, NORTH CENTRAL, 1979[1]

(Amount in dollars)

| Item[2] | Costs and returns per cow | | | Costs and returns per hundredweight feedor sold[3] | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Supplementary enterprise, shortrun[4] | | Primary enterprise, shortrun[4] | | Primary enterprise, longrun[4] | |
| | Cash | Non-cash | Total | Cash[5] | Non-cash[5] | Cash[5] | Non-cash[5] | Cash[5] | Non-cash[5] |
| **RETURNS (per cow)** | | | | | | | | | |
| Feeder calves (1.706 cwt) | 150.53 | | 150.53 | 80.09 | | 80.09 | | 80.09 | |
| Feeder yearlings (1.386 cwt) | 96.96 | | 96.96 | | | | | | |
| Cull cows (1.312 cwt) | 67.92 | | 67.92 | 21.98 | | 21.98 | | 21.98 | |
| Gross returns | 315.41 | | 315.41 | 102.07 | | 102.07 | | 102.07 | |
| DIRECT COSTS (per cow) | | | | | | | | | |
| Improved pasture (2.301 acres) | 32.53 | 16.02 | 48.55 | 10.53 | | 10.53 | | 10.53 | 5.18 |
| Small grain pasture (0.017 acre) | .33 | .17 | .50 | .10 | | .10 | | .10 | .06 |
| Native pasture (1.604 acres) | 2.35 | 2.35 | 4.70 | .76 | | .76 | | .76 | .76 |
| Hay (1.480 tons) | 18.88 | 14.24 | 33.12 | 6.11 | | 6.11 | | 6.11 | 4.61 |
| Silage (0.581 ton) | 4.44 | 3.63 | 8.07 | 1.44 | | 1.44 | | 1.44 | 1.09 |
| Grain and concentrate (4.025 cwt) | 18.30 | | 18.30 | 5.92 | | 5.92 | | 5.92 | |
| Protein supplements (0.532 cwt)[6] | 5.14 | | 5.14 | 1.66 | | 1.66 | | 1.66 | |
| Salt and minerals (0.719 cwt) | 5.96 | | 5.96 | 1.93 | | 1.93 | | 1.93 | |
| Subtotal, feed | 87.93 | 36.41 | 124.34 | 28.45 | | 28.45 | | 28.45 | 11.78 |
| Veterinary and medicine | 4.29 | | 4.29 | 1.39 | | 1.39 | | 1.39 | |
| Livestock hauling[7] | 1.13 | | 1.13 | .37 | | .37 | | .37 | |
| Marketing[8] | 2.30 | | 2.30 | .74 | | .74 | | .74 | |
| Fuel, lube, and electricity | 12.12 | | 12.12 | 3.92 | | 3.92 | | 3.92 | |
| Machinery and building repair | 21.02 | | 21.02 | 6.80 | | 6.80 | | 6.80 | |
| Subtotal, other production items | 40.86 | | 40.86 | 13.22 | | 13.22 | | 13.22 | |
| Hired labor (0.91 hour) | 3.03 | | 3.03 | .98 | | .98 | | .98 | |
| Interest on operating capital[9] | 5.67 | 2.99 | 8.66 | 1.84 | | 1.84 | | 1.84 | .97 |
| General farm overhead | 8.71 | | 8.71 | | | 2.82 | | 2.82 | |
| Total direct costs | 146.20 | 39.40 | 185.60 | 44.49 | | 47.31 | | 47.31 | 12.75 |
| OWNERSHIP COSTS | | | | | | | | | |
| Machinery and equipment, RITI[10] | 1.18 | 15.62 | 16.80 | | | .38 | | .38 | 5.06 |
| Buildings and facilities, RITI[10] | 2.50 | 39.21 | 41.71 | | | .81 | | .81 | 12.69 |
| Livestock, RITI[11] | | 53.56 | 53.56 | | | | | | 17.33 |
| Total ownership costs | 3.68 | 108.39 | 112.07 | | | 1.19 | | 1.19 | 35.08 |
| OTHER COSTS | | | | | | | | | |
| Operator and family labor (12.13 hours)[12] | | 40.26 | 40.26 | | | | 13.03 | | 13.03 |
| Management | | 23.66 | 23.66 | | | | 7.66 | | 7.66 |
| Land taxes | 20.18 | | 20.18 | | | 6.53 | | 6.53 | |
| Total cash and noncash costs | 170.06 | 211.71 | 381.77 | 44.49 | | 55.03 | 20.69 | 55.03 | 68.52 |
| Total nonland costs[13] | | | 381.77 | 44.49 | | 75.72 | | 123.55 | |
| Returns to land and risk | | | −66.36 | | | | | −21.48 | |

[1]Prices are the averages received or paid by producers. See text for more complete information.

[2]Physical quantities per cow. Where applicable are shown in parentheses.

[3]Sum of returns or designated costs per cow divided by the hundredweight per cow of steer and heifer feeder calves and yearlings sold.

[4]See text for an explanation of the economic character of the enterprise and length of planning period.

[5]Cash costs are the cash outlays for production items, the market values of readily salable items such as grain and taxes, and insurance. Interest on direct expenses is apportioned between cash and noncash costs. Interest on all durable assets is listed as an opportunity cost, assuming full producer equity.

[6]Only the costs of providing fencing and livestock water, if needed to graze crop residues, are charged to the cow calf enterprise. These costs are included in equipment operating and ownership costs.

[7]Costs are for customer hauling only. Producer supplied hauling costs are included in labor and machinery operating and ownership costs.

[8]Marketing costs reflect the extent to which producers utilize direct or farm sales of feeder cattle.

[9]Interest is charged on the cost (or assigned value) of all direct inputs and arbitrarily divided between cash and noncash in proportion to their shares of total direct costs plus operator and family labor costs minus hauling and marketing fees.

[10]Replacement reserve, interest, taxes, and insurance. Repairs are included above.

[11]Depreciation is charged for herd bulls only. Brood cows are assumed to be raised from heifer calves born in the operation, and salvage values are recovered through the sale of cull cows.

[12]Operator and family labor is valued at the hired labor wage rate.

[13]Costs that need to be covered to justify operation under the assumed situation.

*Costs of producing feeder cattle in the United States — Final 1977, Preliminary 1978, and Projections for 1979. Prepared by the Economics, Statistics, and Cooperatives Service, U. S. Department of Agriculture for the Committee on Agriculture Nutrition, and Forestry, United States Senate. August 6, 1979.

**TABLE A**

| | Interest | | Depreciation |
|---|---|---|---|
| Cost | $100 | | $100 |
| Interest per year | x 8%* | Life of Unit | ÷ 20 |
| Cost per year | $ 8 | | $ 5 |
| Annual Turnover | ÷ 3 | | ÷ 3 |
| Cost per head | $2.76 | | $1.67 |
| Combined Cost per head | | $4.34 | |

*Assumed interest cost would be subsidized by state support similar to the Delta project. The 8% figure will be used throughout this report.

**2. Labor-related costs**

Four hired hands to operate the confined unit will be needed which will have an additional cost of $3 per hour over the minimum wage paid in the Lower 48. The total additional cost for the $3 per hour will be on an annual basis $24,960. The capacity of the unit on an annual basis is 15,000 head, making the additional labor cost per head $1.66.

By properly locating the confined feeding unit near the processing facility a great amount of labor can be saved that is traditional in the Lower 48. Labor used to transport finished cattle to the processing unit can be virtually eliminated with proper location. Also if accessibility to a railhead is available the purchase of vitamin and mineral premix in bulk or railcar quantities can create a labor savings. For short, any additional wage rate in Alaska for other than those four hired hands can be made up in reduced amount of labor needed by proper planning.

**3. Technological and Transportation Costs**

All of these costs were included in Mr. Bunger's estimate of construction of a confined unit in Alaska. The only additional transportation would be the unit itself. The animal transportation costs would be the same or less than the Lower 48. The technological costs of confined units over conventional open pen feed lots will be offset by improved efficiency as demonstrated in Section V.

Again the vitamin and mineral mix must be shipped from the Lower 48. At this phase an animal will consume 42 lbs. of the mix and shipping cost wil be $3.36 per head.

**D. Processing Phase** (Slaughtering)

**1. Weather-related costs**

The additional weather related cost of the processing phase will be in initial construction. The plant is to be built to process 100 head a day or 26,000 head per year for 20 years or 520,000 head. Again the added initial cost must be figured by the head plus the added annual interest cost per head. Featherstone with Ellerbe Alaska have estimated the construction cost of the shell building for the processing unit to cost $88 per square foot which is $24 per square foot more than the Lower 48. The total plant has 29,550 square feet for both cattle and swine and overhead costs are traditionally allocated on a tonnage basis. Consequently the beef will be allocated 62% of the construction costs which gives the following additional costs to the beef operation:

$24/ft.$^2$ x 29,550 ft.$^2$ x 62% = $439,704

The construction cost per head equals:

$439,704 ÷ 520,000 = 0.847

The additional construction interest per head equals:

($439,704 x 8%) ÷ 26,000 = 1.353

The resulting additional cost per head of the initial construction is $2.199.

**2. Labor-related costs**

To determine the additional costs related to labor Featherstone compared the labor contracts of the meat cutters in grocery stores in Alaska and the average contract of meat cutters in grocery stores in the Lower 48.

In the Lower 48 average hourly costs with fringe benefits was found to be $12.75 and in Alaska $17.50 or a difference of $4.75 per hour. In large efficient plants in the Lower 48 it requires 45 man minutes to slaughter a beef animal and 50 man minutes to fabricate that carcass. Featherstone has estimated from smaller plants the size proposed for Alaska the respective times will be 60 man minutes to slaughter and 60 man minutes to fabricate. The additional costs are shown in Table B:

**TABLE B**

| | Lower 48 | Alaska |
|---|---|---|
| Hourly Rate | $12.75 | $17.50 |
| Slaughter Time | .75 Hrs. | 1.00 Hrs. |
| Slaughter Cost | 9.56 | 17.50 |
| Fab. Time | .833 | 1.00 |
| Fab. Cost | 10.62 | 17.50 |
| Fab. & Slaughter Cost | 20.18 | 35.00 |
| Difference | | + $14.82 per head |

Obviously the 73% increase in labor costs is not due to hourly rate. Part is due to the smaller plant which is a technological cost and should be in the following part. For the sake of clarity, however, the total labor cost is shown here.

**3. Technological and Transportation Costs**

The major additional technological costs due to operating a processing plant in Alaska is the power costs. Using the power rates in the Lower 48 and the rates of Golden Valley Electric Authority a 50% differential was found, but that results in a cost differential of only $0.72 per head. Additional laboratory expenses for U.S.D.A. purposes will be $0.15 per head. If miscellaneous costs of $0.13 per head are added the total of this section will only be $1.00 per head.

In order to start an industry that is technologically equal with the Lower 48, Alaska must transport in the equipment that will be needed to operate that processing facility. Except for replacement pieces, however, once the equipment is in Alaska maintenance of the equipment can be performed locally. As a result the only transportation costs that need to be considered is the initial added costs of shipping the equipment to Alaska. To avoid damage much of the machinery should be shipped via truck directly to the construction site from the manufacturer. This added cost is estimated to be $100,000. Similarly the interest and depreciation cost of this added investment must be determined. The expected average life of processing equipment is 10 years.

**Depreciation Costs**

($50,000 ÷ 10 yrs.) ÷ 26,000 hd/yr. = $0.192/hd.

**Interest Costs**

($50,000 ÷ 8%) ÷ 26,000 hd/yr. = $0.154/hd.

Total transportation of equipment equals $0.346 per head added to the $1.00 per head for technological costs gives a total cost for this area of $1.35 per head.

The following is a summary of the additional costs per head of raising and processing beef in Alaska:

**SUMMARY OF ADDITIONAL COSTS**

| | Cost per Hd. |
|---|---|
| Cow-calf Phase | |
| Weather Related | -0- |
| Labor Related | $3.50 |
| Technological & Transportation Related | 5.76 |
| Growing Phase | |
| Weather Related | $1.45 |
| Labor Related | .55 |
| Technological & Transportation Related | 2.96 |
| Finishing Phase | |
| Weather Related | $4.34 |
| Labor Related | 1.66 |
| Technological & Transportation Related | 3.36 |
| Processing Phase | |
| Weather Related | $2.20 |
| Labor Related | 14.82 |
| Technological & Transportation Related | 1.35 |
| Total Additional Cost | $41.95 per Hd. |

The difference of the transportation costs of fresh beef per head to Alaska and the additional costs of raising and processing beef in Alaska is:

$67.50 – 41.95 = $25.55 per head.

The full economic impact of the beef industry on Alaska will be discussed more fully in the Conclusion — Section XI. At this point, however, the major concern of this section has been verified — the beef industry in Alaska can be economically viable.

## SECTION IV

## DETERMINATION OF ECONOMIC VIABILITY OF A SWINE INDUSTRY IN ALASKA

As described in Section III, Overview of the Industry, the swine industry has a relatively short economic cycle due to multiple births, a short gestation period, and a short period of time needed to raise a pig from birth to market weight. In response the swine industry has been a relatively profitable industry compared to the beef industry and has progressed technically at a faster pace. Where 15 years ago confined hog feeding operations were just being tested and all farrowings were done on dirt floors in farrowing houses, today it is estimated that between one-third (⅓) to one-half (½) of all swine brought to market come from confined units that farrow and finish the animal. This improved technology reduces the effects of weather changes and stress on the animal making costs and weight gain predictable and repeatable. By constructing these confined farrowing to finishing operations to withstand the climate of Alaska the same weight gains and cost of gains as expected in the Lower 48 should occur in Alaska. Consequently the additional costs in raising swine in Alaska will be related to the building costs, the higher labor rates to operate the unit, and the cost of transporting vitamin-mineral suplement to Alaska.

The standard confined unit that Featherstone recommends is a 144 sow unit built by Sands Livestock Systems, Inc. These units will produce on a practical basis 2,500 pigs per year and have a depreciable life of 20 years during which 50,000 pigs will be marketed. Using cost estimates from Ellerbe Alaska and Sands Livestock, Featherstone feels the additional cost of constructing such a confined unit in Alaska will be $100,000. The additional interest and depreciation costs are the following:

**Depreciation Costs**

$100,000 ÷ 50,000 pigs = $2.00 per pig marketed.

**Interest Costs**

($100,000 x 8%) ÷ 2,500 pigs per yr. = $3.20 per pig marketed.

This size unit was selected by Featherstone because it could be operated by a 2 person farm family very efficiently. The farm family, however, will have a full time job that goes on 52 weeks of the year with no time available for vacations. As a result, Featherstone recommends the cooperative related to swine maintain a person that can operate the confined units during periods of vacation, sickness, and emergencies. Such practices are becoming more common in the Lower 48 as the size of farm families have been decreasing. To have such a service in Alaska the additional costs will be $260 per week figuring an 8 hour day 6½ days a week at $5.00 per hour. Such a service will be used an average of three weeks per year for a total of $780 per year or $0.312 per pig marketed.

Featherstone has estimated the consumption of vitamin and mineral supplement consumed per head to be 3.19 lbs. per head. This material is not available in Alaska and must be transported in at a cost of $8.00 per cwt. Consequently the added cost related to the supplement is $.255 per pig marketed.

The cost of building a processing unit for the swine industry will have the same added cost as associated with the cattle industry since it will be a combined plant. The total square footage of 29,550 will have 38% of the space allocated to pork and will have the same additional cost of $24 per square foot. The total additional cost is:

$24/ft.² x 29,550 x 38% = $269,496

The plant will process 320 head per day or 83,200 head per year for its 20 year depreciable life. The related interest and depreciation costs are as follows:

**Additional Interest Cost:**

($269,496 x 8%) ÷ 70,000 = $0.308 per head.

**Additional Depreciation Cost**

($269,496 : 20) ÷ 70,000 = $0.192 per head.

The resulting total additional cost is $0.500 per head for weather related cost of the swine processing unit.

Again the labor related costs of processing swine will be determined in the same manner as beef was calculated.

| | Lower 48 | Alaska |
|---|---|---|
| Hourly Rate | $12.75 | $17.50 |
| Slaughter Time | .25 Hrs. | .35 Hrs |
| Slaughter Costs | $ 3.19 | $ 6.13 |
| Cutting Time | .20 | .30 |
| Cutting Costs | $ 2.55 | $ 5.25 |
| Slaughter & Cutting Costs | $ 5.74 | $11.38 |
| Difference | $5.64/Hd | |

Remember that part of this cost is higher labor rates and part is due to a decrease in efficiency on account of the small size of the plant. The next major additional cost area is power costs. In the Lower 48 the average power cost to process swine is $0.96 per head. With a 50% increase in power from G.V.E.A., the added cost is $0.48 per head. Due to the greater number of carcasses, even though the tonnage is less, Featherstone estimates the U.S.D.A. and laboratory additional costs will be the same as beef — $0.15 per head. Using the same miscellaneous cost of $0.13 per head the total additional processing cost without labor is $0.76 per head.

The processing unit for swine must also ship in the equipment from the Lower 48 which will be an added cost that must be considered. Pork equipment, however, is smaller and lighter weight and Featherstone estimates the added shipping cost to be $40,000 via truck. Similarly the interest and depreciation cost of this added investment must be determined. The expected life of processing equipment is 10 years.

**Depreciation Costs:**
($40,000 ÷ 10 yrs.) : 70,000 hd/yr. = $0.057 per head

**Interest Costs:**
($40,000 x 8%) ÷ 83,200 hd/yr. = $0.046 per head

The total additional transportation expense for the swine processing equipment equals $0.10 per head.

The following is a summary of all added costs for raising and processing swine in Alaska:

| | |
|---|---|
| **Confinement Unit** | |
| Depreciation Cost | $2.00 per head |
| Interest Cost | 3.20 per head |
| Labor Cost | 0.312 per head |
| Transportation Cost | 0.255 per head |
| **Processing Unit** | |
| Interest Cost | $0.308 per head |
| Depreciation Cost | 0.192 per head |
| Labor Cost | 5.64 per head |
| Power, Laboratory, Misc. | 0.76 per head |
| Transportation | 0.10 per head |
| Total Additional Cost | $12.767 per head |

The difference of the transportation cost of fresh pork per head to Alaska and the additional costs of raising and processing pork in Alaska is:

$20.25 – $12.77 = $7.48 per head

The full economic impact of the pork industry in Alaska will be discussed more fully in the Conclusion · Section XI. At this point, however, the major concern of this section has been verified — the pork industry in Alaska can be economically viable.

## SECTION V

## DEVELOPMENT OF A CATTLE INDUSTRY IN ALASKA

In this section of the report Featherstone will outline how a cattle industry should function in Alaska. It is from this example that the added cost factors were derived to prove the industry could be economically viable. Without a doubt some who read this section will say to themselves that it could be done another way. There are almost as many ways to produce beef animals as there are people in the industry. Undoubtedly, within a few short years after the industry gets started in Alaska, different methods will be tried and a great variety of techniques will be used in different parts of Alaska.

The methods described for each phase in this report, however, will be some of the most modern available in the Lower 48 and represent the condensation of thinking from successful operators (and suppliers of successful operators) of every segment. As is true in a lot of areas of agriculture, many of the most modern practical techniques used by the industry are passed on by word of mouth and little documentation from written sources are available. Most of what is written is from research done by suppliers and their data must be tempered. As a result Featherstone has little documentation beyond verbal discussions to offer. Featherstone, however, is confident the methods and figures shown here are reliable and if properly applied in Alaska will produce the indicated results.

In this section six main subjects will be discussed. The first subject will be the sizing of the industry for Alaska. The next three subject areas will be the three distinct phases of producing cattle — the cow-calf operation, the growing phase, and the feed lot finishing operation. To maintain and help the modern needs of the industry, next to be discussed will be the facilities that the University will need for good research and extension work. The final subject will be the time schedule and funds needed for the industry to develop in an orderly fashion.

### A. Size of the Industry

The American public including Alaskans consume an average of 105 lbs. of carcass beef per person per year. Carcass beef (600 lbs. per head) refers to the animal *after* slaughter but *before* fabrication, or any trimming or boning. Because carcass beef is traded between packers it is easier to track slaughtered (or carcass) weight than after it has been fabricated.

The per capita consumption times the population of the market will give the total market demand. The marketing of fresh meat in Alaska will be discussed in Section VII, Development of a Processing Unit, and in that section Featherstone gives its reason for why a local plant can obtain 50% of the market demand. Using the 50% and the 105 lbs. per captia as givens, the only remaining figure needed is the population of the market. Featherstone feels that the most readily accessible market is the rail belt area between Anchorage and Fairbanks. Although much of the Bush and Juneau areas is supplied from the rail belt area, a lot of special handling is required of the market. To set up the marketing, transportation, and handling structures for the Bush and Juneau areas in an infant industry for the state would be an unnecessary burden.

The 1980 U.S. Census[1] for the rail belt gives the following data:

| | |
|---|---|
| Anchorage | 173,992 |
| Kenai Borough | 25,072 |
| Mat-Su | 17,938 |
| North Star Borough | 53,799 |
| Total | 270,801 |

Adding an extra 10% for population not in boroughs, census error and growth for the next few years until the plant is constructed, a round figure of 300,000 market population appears to be appropriate. The following mathematics gives the resulting size of the industry:

| | | |
|---|---|---|
| Population | 300,000 | |
| Per Capita Beef Consumption | x 105 lbs | per year |
| Total Annual Beef Consumption | 31,500,000 lbs | per year |
| 50% of Market | 15,750,000 lbs | per year |
| Carcass Weight per Head | ÷ 600 lbs | |
| Head Slaughtered per Year | 26,250 head | |
| Days Worked per Year | ÷ 260 | |
| Head Slaughtered per Day | 101 head | |

In conversation with Scott Goldsmith of Institute of Social and Economic Research he has informed Featherstone that using projection models with different assumption of private and government activities, the population of the rail belt by the year 2000 is expected to be between 422,000 and 546,000. If the 422,000 figure is put into the previous calculations to determine daily slaughter rate a figure of 142 head per day is reached. As a result Featherstone feels the beef slaughtering portion of the processing facility should be built to handle 100 head per day and have capacity to expand to 150 per day.

[1] Anchorage Daily News, Dec. 8, 1980 p 1

As a result of these calculations the industry must be sized to raise enough animals to maintain an initial kill rate of 100 per day. A rough rule of thumb in today's industry is that 70% of the beef animals slaughtered are finished cattle that will grade U.S.D.A. Good or better. The remaining 30% are used for manufacturing purposes like sausage and hamburger. Normally this 30% comes from bull calves and cull cows of dairy herds and cull animals from beef herds. Although the figure varies over time, 30% is a good working figure. Initially this number of cows and other cull animals will not be available, but as the herds mature and the Point McKenzie dairy project grows the same ratios as found in the Lower 48 will be experienced in Alaska.

The average of 70 fat cattle killed per day creates an annual demand of 18,550 head. The normal calf crop that reaches maturity is 94% of the cow herd with good management. This means a herd of 19,734 or nearly 20,000 head of beef cows is needed in Alaska to keep the processing plant operating. The rest of the finished fat cattle industry (the growing and finishing operations) should be initially sized to handle 18,550 head per year.

**B. The Cow-Calf Operation**

**1. Size of Herd**

The cow-calf operations in the Lower 48 have had the most difficult time showing a profit of livestock related fields. There are a variety of reasons for low profitability. The biggest reason is the number of calf producers in the industry. Many farmers produce calves as a secondary income to their main crop. As a result the calf operation is rarely totally costed out and frequently the operator sells at a loss and does not realize it. These small operators also produce a small number of animals making the feed lot operator or the growing operation discount the animals in order to overcome the cost of getting a whole pen of cattle eating and gaining at the same rate. The handling costs of mixing small lots of cattle gets quite expensive. The big calf producers prices are driven down on account of these small operators, but he does have the benefit of lower costs through improved utilization of livestock handling equipment, of labor, and of handling practices by buyers.

The Alaskan cow-calf operation, as will be shown in this section, will be working against many weather related problems not experienced in the Lower 48. These added problems practically dictate that the Alaskan cow-calf operations be large operations to reduce costs and pay for the added problems. The following Table 4 shows the average investment needs broken down by sizes of operations in the Lower 48:

**TABLE 4*— AVERAGE ACQUISITION AND 1977 REPLACEMENT COSTS PER COW FOR SPECIFIED FACILITIES AND BREEDING STOCK USED IN COW-CALF ENTERPRISES BY AVERAGE SIZE OF ENTERPRISE AND BY REGION, 1977[1].**

(Dollars per cow)

| | Average acquisition cost[2] | | | 1977 replacement cost | | | | |
|---|---|---|---|---|---|---|---|---|
| All regions | Buildings and facilities | Machinery and equipment[3] | Total | Buildings and facilities | Machinery and equipment[3] | Total | Breeding stock[4] | Total plus breed stock |
| Herd size | | | | | | | | |
| All sizes | 154.90 | 67.50 | 222.40 | 345.76 | 118.22 | 463.98 | 340.39 | 804.37 |
| Less than 100 | 188.13 | 93.72 | 281.85 | 427.80 | 164.14 | 591.94 | 334.00 | 925.94 |
| 100 to 199 | 134.83 | 70.02 | 204.85 | 302.30 | 122.62 | 424.92 | 335.25 | 760.17 |
| 200 to 499 | 118.46 | 32.58 | 151.04 | 261.37 | 57.06 | 318.43 | 358.75 | 677.18 |
| 500 to 999 | 87.85 | 10.16 | 98.01 | 199.76 | 17.79 | 217.55 | 336.92 | 554.47 |
| 1,000 or more | 108.42 | .85 | 109.27 | 266.06 | 1.48 | 267.54 | 363.70 | 631.24 |

investments include [illegible] and have per cow initial costs of construction.

Average acquisition costs are estimated by adjusting 1977 replacement costs to per cow purchase prices using average [illegible] buildings range from 10 to 25 years of age, other facilities, machinery and equipment average 4 years of age for enterprises of all sizes.

Includes the [illegible] investment in [illegible] assets. Although [illegible] may be owned, the [illegible] investments in [illegible] rights, and [illegible] are not included.

Includes the [illegible] dairy cows per cow of breeding stock, including replacement heifers, bulls, and cattle [illegible] used in the feeder cattle enterprise.

**TABLE 5*— Costs of Cow-Calf Operations of Various Sizes in 1977**

(Amounts in dollar per cow unit)

| Size | Less than 100 | | | 100 to 199 | | | 200 to 499 | | | 500 to 999 | | | More than 1000 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item | Cash | Non-Cash | Total | Cash | Non-Cash | Total | Cash | Non-Cash | Total | Cash | Non-Cash | Total | Cash | Non-Cash | Total |
| Feed Costs | 87.97 | 30.62 | 118.59 | 80.42 | 17.85 | 98.27 | 73.03 | 10.65 | 83.68 | 59.17 | 8.50 | 67.67 | 45.16 | 4.61 | 49.77 |
| Production Costs | 34.53 | — | 34.53 | 24.75 | — | 24.75 | 19.46 | — | 19.46 | 13.41 | — | 13.41 | 10.18 | — | 10.18 |
| Direct Costs | 18.50 | 2.35 | 20.85 | 18.55 | 1.25 | 19.80 | 19.96 | .75 | 20.71 | 21.49 | .45 | 21.94 | 21.42 | .19 | 21.61 |
| Ownership Costs | 3.14 | 75.50 | 78.64 | 2.22 | 63.03 | 65.25 | 1.87 | 60.40 | 62.27 | 1.31 | 49.00 | 50.31 | 1.43 | 53.51 | 54.94 |
| Indirect Costs | 11.17 | 60.74 | 71.91 | 11.50 | 42.22 | 53.72 | 11.04 | 31.86 | 42.90 | 12.11 | 18.94 | 31.05 | 11.05 | 13.00 | 24.05 |
| Total Costs | 155.31 | 169.21 | 324.52 | 137.44 | 124.35 | 261.79 | 125.36 | 103.66 | 229.02 | 107.49 | 76.89 | 184.38 | 89.24 | 71.31 | 160.55 |

*Costs of producing feeder cattle in the United States — Final 1977, Preliminary 1978, and Projections for 1979. Prepared by the Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture for the Committee on Agriculture Nutrition, and Forestry, United States Senate. August 6, 1979.

In looking at the 1977 replacement cost data, one can see building and facilities investments per cow declined with increases in cow-calf operation herd size except at the largest herd size of 1,000 or more cows. Unit investments are higher for smaller enterprises, primarily because the percentages of capacity use are lower. Investments per cow in the largest enterprises are greater, however, due to more expensive specialized facilities are often used to reduce labor requirements and to expand the number of animals that can be managed by the operator.

Machinery investments per cow declines as herd size increases. The capacity of the machinery is seriously under utilized in small herds. For example, the least expensive tractor powered manure loaders and spreaders available probably are adequate for the needs of the largest operators because the cattle themselves distribute a large percentage of the wastes on the pastures or ranges as they graze. An operator that has to practice confined or semi-confined winter feeding must have some kind of manure handling equipment even if only used one or two times per year.

The value of the increased investment in equipment and specializing is apparent in the total cost summary shown in Table 5.

As can be seen from Table 4 and Table 5 in all cases (except investment for over 1,000 herd size) the larger operators had a small investment and total costs on a per head basis. The reduced cost of the over 1,000 herd size compared to the 500 to 999 herd size was $23.83 per cow and the investment difference was $76.77 which the reduced costs would pay off in 3 to 4 years. From these figures Featherstone has determined the minimum herd size for a cow-calf operation in Alaska should be 500 head and the best size should be around 1,000 head. This range allows for the best utilization of investments and still allows the majority of the labor to be handled within a normal family unit. For averaging purposes Featherstone will use a herd size of 750 for the rest of this report, which means 27 herds will be needed to have a total herd size of 20,000 in Part A of this section.

**2. Location of Herds**

The best land economically for a cow-calf operation is land that can be used for little else than a cow-calf operation. There are two types of land needed — grazing land and forage land that can yield a winter feed roughage. Both types of land need minimum fertility and need to be adequately cleared to permit sunlight to reach the ground. Generally land that is cleared, and fertile enough to produce a small grain crop is too good. The Class III soils in the Nenana area if cleared properly could be used.

The weather restrictions on the location are rather lose as well. The longer the growing season the less winter feed has to be put up which means less costs. The lower the precipitation in the spring calving season, the healthier the calf will be. The land in southern Missouri and northern Arkansas generally has the ideal type of land and weather for cow-calf operations which is why it is the second largest area (Texas being first) in the Lower 48 in producing calves. The weather of this area and different points in Alaska are compared month by month in Table 6

The extreme cold of January and February in Fairbanks, Delta and Nenana prevent calving, but does not preclude the growing and maintaining of a cow or a feeder calf. Feed consumption per pound of gain will be poor in these months but generally the calves will make up the slack in the first few months of warm weather. The areas around Palmer and Homer seem to have no special problems for a cow-calf operation.

The amount of land required per cow-calf unit will be around four (4) acres depending on fertility and management of the land. The rational for four acres will be discussed in Part 3 of this section of the report. By multiplying the four acres times 20,000 cow-calf units, 80,000 acres of land are found to be needed for the cow-calf operations of Alaska. With the size of the operations varying between 500 and 1,000 units, the acreage per operation will be between 2,000 acres and 4,000 acres.

There are many areas in Alaska in which 80,000 acres could be cleared for cow-calf operations and made to be economically viable. Featherstone, however, feels that with the big investment needed in breeding stock, the risk of cold weather injury to the herd would be reduced if the herds were spread up and down the rail belt instead of grouped together. The following areas have the following quantities of land that could be used for cow-calf operations according to local sources:

| | |
|---|---|
| Kenai* | 50,000 to 100,000 |
| Talkeetena | 10,000 |
| Matanuska Valley | 45,000 |
| Kodiak | 50,000 |
| Point McKinsey | 15,000 |
| Delta Creek | 25,000 to 50,000 |
| Delta Junction | 50,000 to 60,000 |
| Nenana | 250,000 to 300,000 |

*(Kenai Includes Deep Creek area, Homer, and Fox River area. This area has requested a survey to be performed on this subject through the Kenai Peninsula Rural Development Council.)

## TABLE 6 — Comparative Climatalogical Data

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ST. JOSEPH, MO** | | | | | | | | | | | | | |
| Extreme High | 40 | 42 | 74 | 77 | 84 | 93 | 94 | 95 | 90 | 92 | 71 | 63 | 95 |
| Extreme Low | – 18 | – 23 | 17 | 24 | 37 | 42 | 55 | 54 | 39 | 25 | 21 | 2 | – 23 |
| **FAYETTEVILLE, AR** | | | | | | | | | | | | | |
| Extreme High | 74 | 81 | 87 | 89 | 92 | 102 | 111 | 105 | 102 | 95 | 82 | 78 | 111 |
| Extreme Low | – 10 | – 8 | 2 | 18 | 28 | 41 | 48 | 46 | 34 | 18 | 5 | – 10 | – 10 |
| **SPRINGFIELD, MO** | | | | | | | | | | | | | |
| Extreme High | 44 | 66 | 73 | 82 | 87 | 91 | 93 | 94 | 91 | 92 | 76 | 69 | 94 |
| Extreme Low | – 12 | – 17 | 18 | 25 | 33 | 46 | 54 | 50 | 40 | 30 | 19 | 6 | – 17 |
| **FAIRBANKS, AL** | | | | | | | | | | | | | |
| Extreme High | 47 | 43 | 51 | 74 | 89 | 96 | 94 | 90 | 84 | 65 | 46 | 42 | 96 |
| Extreme Low | – 61 | – 56 | – 49 | – 21 | – 1 | 31 | 35 | 30 | 11 | – 27 | – 43 | – 62 | – 62 |
| **DELTA, AL** | | | | | | | | | | | | | |
| Extreme High | 48 | 51 | 53 | 71 | 90 | 92 | 91 | 86 | 79 | 66 | 50 | 48 | 92 |
| Extreme Low | – 63 | – 60 | – 49 | – 37 | – 1 | 31 | 32 | 22 | 7 | – 24 | – 46 | – 62 | – 63 |
| **NENANA, AL** | | | | | | | | | | | | | |
| Extreme High | 45 | 54 | 55 | 71 | 88 | 98 | 94 | 90 | 79 | 64 | 54 | 61 | 98 |
| Extreme Low | – 66 | – 63 | – 59 | – 33 | – 2 | 27 | 29 | 23 | 3 | – 28 | – 49 | – 69 | – 69 |
| **HOMER, AL** | | | | | | | | | | | | | |
| Extreme High | 51 | 51 | 53 | 63 | 69 | 80 | 78 | 78 | 68 | 64 | 52 | 50 | 80 |
| Extreme Low | – 18 | – 18 | – 21 | – 9 | 6 | 29 | 34 | 31 | 20 | 2 | – 7 | – 16 | – 21 |
| **KODIAK, AL** | | | | | | | | | | | | | |
| Extreme High | 54 | 56 | 57 | 64 | 80 | 86 | 82 | 83 | 71 | 61 | 54 | 54 | 86 |
| Extreme Low | – 8 | – 12 | – 6 | 7 | 20 | 30 | 37 | 36 | 26 | 10 | 0 | – 1 | – 12 |
| **PALMER, AL** | | | | | | | | | | | | | |
| Extreme High | 51 | 56 | 54 | 68 | 84 | 90 | 85 | 81 | 72 | 66 | 55 | 51 | 90 |
| Extreme Low | – 35 | – 33 | – 26 | – 17 | 3 | 33 | 38 | 29 | 17 | – 6 | – 18 | – 31 | – 35 |

| Station | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ST. JOSEPH, MO** | | | | | | | | | | | | | |
| Avg. Daily Max | 21.2 | 26.9 | 49.1 | 58.2 | 71.8 | 82.1 | 83.6 | 85.4 | 82.0 | 70.9 | 50.5 | 45.2 | 60.6 |
| Avg. Daily Low | .1 | 6.0 | 31.6 | 39.1 | 49.8 | 60.1 | 66.9 | 66.9 | 53.7 | 43.3 | 31.1 | 23.9 | 39.4 |
| **FAYETTEVILLE, AR** | | | | | | | | | | | | | |
| Avg. Daily Max | 48.0 | 52.2 | 59.1 | 70.8 | 77.9 | 85.5 | 90.1 | 89.8 | 83.2 | 73.1 | 59.2 | 50.7 | 70.0 |
| Avg. Daily Low | 25.9 | 29.7 | 36.2 | 47.4 | 55.2 | 63.7 | 67.6 | 65.5 | 58.9 | 48.0 | 36.7 | 29.6 | 47.0 |
| **SPRINGFIELD, MO** | | | | | | | | | | | | | |
| Avg. Daily Max | 26.7 | 38.2 | 56.4 | 65.3 | 73.8 | 81.5 | 85.1 | 86.7 | 82.6 | 74.2 | 54.0 | 52.4 | 64.7 |
| Avg. Daily Low | 8.4 | 16.0 | 34.2 | 41.8 | 50.8 | 59.4 | 65.0 | 64.5 | 54.8 | 47.5 | 33.4 | 30.2 | 42.2 |
| **FAIRBANKS, AL** | | | | | | | | | | | | | |
| Avg. Daily Max | – 2.2 | 9.3 | 23.3 | 40.4 | 58.8 | 70.7 | 71.8 | 65.8 | 54.4 | 33.5 | 11.7 | – 1.5 | 36.3 |
| Avg. Daily Low | – 21.6 | – 14.3 | – 4.3 | 17.3 | 35.7 | 47.2 | 49.6 | 44.9 | 34.4 | 16.9 | – 6.2 | – 19.3 | 15.0 |
| **DELTA, AL** | | | | | | | | | | | | | |
| Avg. Daily Max | | | | | | | Not Available | | | | | | |
| Avg. Daily Low | | | | | | | | | | | | | |
| **NENANA, AL** | | | | | | | | | | | | | |
| Avg. Daily Max | .8 | 5.9 | 14.9 | 38.5 | 57.7 | 69.9 | 71.7 | 66.1 | 53.4 | 34.0 | 10.0 | .7 | 35.3 |
| Avg. Daily Low | – 18.4 | – 11.4 | – 4.8 | 15.7 | 34.5 | 45.3 | 48.2 | 44.3 | 33.7 | 17.7 | – 3.3 | – 10.8 | 15.4 |
| **HOMER, AL** | | | | | | | | | | | | | |
| Avg. Daily Max | 28.0 | 31.8 | 35.0 | 42.3 | 50.3 | 55.7 | 60.1 | 60.1 | 54.8 | 44.4 | 34.5 | 27.6 | 43.8 |
| Avg. Daily Low | 14.7 | 17.9 | 20.2 | 27.7 | 34.2 | 40.7 | 44.5 | 44.6 | 39.2 | 30.3 | 21.8 | 15.2 | 29.2 |
| **KODIAK, AL** | | | | | | | | | | | | | |
| Avg. Daily Max | 34.5 | 35.7 | 36.9 | 41.6 | 47.9 | 54.6 | 59.1 | 60.1 | 54.9 | 45.6 | 39.0 | 34.3 | 45.4 |
| Avg. Daily Low | 26.3 | 27.0 | 27.2 | 32.2 | 38.5 | 44.7 | 49.1 | 49.7 | 45.0 | 35.8 | 30.5 | 25.5 | 36.0 |
| **PALMER, AL** | | | | | | | | | | | | | |
| Avg. Daily Max | 21.5 | 27.6 | 34.1 | 46.3 | 58.2 | 65.6 | 67.3 | 64.6 | 56.9 | 42.4 | 25.1 | 20.2 | 44.4 |
| Avg. Daily Low | 6.4 | 11.2 | 15.4 | 26.8 | 36.1 | 43.8 | 47.3 | 45.6 | 38.9 | 27.4 | 14.3 | 6.1 | 25.6 |

| Station | Jan. | Feb. | Mar,. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nev. | Dec. | Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ST. JOSEPH, MO** | | | | | | | | | | | | | |
| Normal Precipitation | 2.07 | 0.55 | 3.44 | 2.47 | 2.53 | 3.21 | 7.91 | 2.06 | 0.80 | 3.81 | 2.35 | 0.02 | 31.22 |
| **FAYETTEVILLE, AR** | | | | | | | | | | | | | |
| Normal Precipitation | 1.90 | 2.62 | 3.08 | 4.63 | 5.34 | 4.36 | 3.74 | 3.57 | 3.91 | 3.52 | 3.12 | 2.62 | 42.41 |
| **SPRINGFIELD, MO** | | | | | | | | | | | | | |
| Normal Precipitation | 2.35 | 1.66 | 2.85 | 7.19 | 7.42 | 8.49 | 5.54 | 3.61 | 2.06 | 3.26 | 3.16 | 1.35 | 48.94 |
| **FAIRBANKS, AL** | | | | | | | | | | | | | |
| Normal Precipitation | 0.60 | 0.53 | 0.48 | 0.33 | 0.65 | 1.42 | 1.90 | 2.19 | 1.08 | 0.73 | 0.66 | 0.65 | 11.22 |
| **DELTA, AL** | | | | | | | | | | | | | |
| Normal Precipitation | | | | | | Not Available | | | | | | | |
| **NENANA, AL** | | | | | | | | | | | | | |
| Normal Precipitation | 0.77 | 0.52 | 0.47 | 0.28 | 0.65 | 1.35 | 1.90 | 2.31 | 1.30 | 0.65 | 0.49 | 0.44 | 11.13 |
| **HOMER, AL** | | | | | | | | | | | | | |
| Normal Precipitation | 1.70 | 1.54 | 1.22 | 1.09 | 0.91 | 1.06 | 1.70 | 2.56 | 2.85 | 3.38 | 2.76 | 2.29 | 23.06 |
| **KODIAK, AL** | | | | | | | | | | | | | |
| Normal Precipitation | 5.01 | 4.89 | 3.85 | 3.81 | 4.35 | 4.12 | 3.54 | 4.30 | 6.11 | 6.29 | 5.41 | 5.03 | 56.71 |
| **PALMER, AL** | | | | | | | | | | | | | |
| Normal Precipitation | 1.01 | 0.65 | 0.58 | 0.54 | 0.69 | 1.61 | 2.36 | 3.20 | 2.65 | 1.37 | 0.94 | 0.90 | 16.50 |

As can be seen there is an abundance of land that has been identified as potential areas suitable for cow-calf operations. Featherstone only sees slight variation in the operation between these areas as will be discussed in the management part of this section. From a weather risk related standpoint Featherstone recommends no more than 25% of the herd be in any one part of the state. An allocation system through available state financing could be used to meet this recommendation.

**3. Feedstuff for Herd**

Feed for a cow-calf operation is obtained in two different operations. The first is in pasture operations during the summer grazing months. The second is stored feedstuffs that have been produced and stored for winter feeding months or periods when ground cover is inadequate. The pasture operation can be gleaning the stubble of row crop fields or grazing grasses from land that has too great a slope to be tilled properly. The harvested feedstuffs must be of the quality and quantity to supply the nutrient and energy needs of the cow-calf unit for the period of time the pasture land is not available. For the sake of simplicity Featherstone has assumed from the weather charts of the previous part that on an average Alaska's cow-calf operations will pasture their units for 3 months and feed them for 9 months. The length of the winter feeding period may be on the long side, but that builds a margin of safety into the estimates.

For proper growth all cattle feed must have the proper amount of T.D.N. (total digestible nutrients), the proper percent digestible protein, vitamins, minerals, and salt, and have an adequate quantity. If a properly balanced vitamin-mineral-salt pre-mix is made available to the cattle on a free choice basis, they will consume the proper amounts naturally. On a cow-calf operation the summer pasture grasses normally contain sufficient T.D.N. and percent Digestible Protein for proper growth of both the cow and the calf. A small amount of grain such as barley may be added to the vitamin pre-mix to stretch the available grasses in early spring and late fall to prevent over grazing. Featherstone estimates 1½-2 acres of pasture per cow-calf unit will be needed in summer.

During the winter feeding period the calf will be weaned (normally when the calf is 6 to 7 months old and weighs 400 to 500 lbs.) and the calf's nutritional needs are greater than a gestating cow. Thus having a feed material adequate for the calf is also adequate for the cow. Table #7 gives the nutrient needs and intake needs of growing heifers and steers:

**TABLE 7 Digestible Protein and TDN Requirements**

(Per Head Per Day)

| Type of Animal | Desired Daily Gain | Digestible Protein % | Digestible Protein (lbs.) | TDN % | TDN (lbs.) | Ration DM as % Body Wt. | Ration DM Intake lbs. |
|---|---|---|---|---|---|---|---|
| Growing Steer 500 lbs | 0.0 | 4.3 | 0.32 | 57 | 4.28 | 1.50 | 7.5 |
| 500 lbs | 1.1 | 6.8 | 0.69 | 61 | 6.22 | 2.03 | 10.2 |
| 500 lbs | 1.6 | 6.8 | 0.90 | 67 | 8.91 | 2.66 | 13.3 |
| Growing Heifer 400 lbs | 0.0 | 4.3 | 0.31 | 57 | 4.10 | 1.81 | 7.2 |
| 400 lbs. | 1.0 | 6.8 | 0.58 | 61 | 5.25 | 2.14 | 8.6 |
| 400 lbs | 1.4 | 7.1 | 0.62 | 67 | 5.90 | 2.21 | 8.8 |

(Values expressed on a dry matter basis and were adopted from the 1970 National Research Council - Nutrient Requirements of Beef Cattle).

## TABLE 8 — Average Digestible Protein and TDN of Various Forage and Grain*

| Item | Percent Digestible Protein | | | Percent TDN | | |
|---|---|---|---|---|---|---|
| | Low | Average | High | Low | Average | High |
| **Forage** | | | | | | |
| Alfalfa haylage | 8 - 9 | 11 - 12 | 13 - 15 | 52 - 54 | 56 - 57 | 58 - 60 |
| Cornlage | 3 9 - 4 1 | 4 3 - 4 5 | 4 7 - 5 1 | 67 - 68 | 69 - 70 | 71 - 73 |
| Oatlage | 8 - 9 | 10 - 11 | 12 - 14 | 57 - 60 | 63 - 66 | 69 - 75 |
| Wheatlage | 8 - 9 | 10 - 11 | 12 - 13 | 55 - 58 | 59 - 62 | 63 - 67 |
| Sudan-sorghum haylage | 7 - 8 | 9 - 10 | 11 - 14 | 55 - 56 | 57 - 58 | 59 - 61 |
| Coastal bermudagrass | 4 - 5 | 6 - 7 | 8 - 10 | 50 - 51 | 52 - 53 | 54 - 56 |
| Whole plant milo | 3 - 4 | 5 - 6 | 7 - 8 | 50 - 51 | 52 - 54 | 54 - 57 |
| Head chop milo | 3 - 5 | 5 - 6 | 6 - 8 | 55 - 60 | 60 - 65 | 65 - 70 |
| Corn stalklage | 1 - 1 8 | 1 9 - 2 9 | 3 - 4 | 45 - 51 | 52 - 62 | 63 - 70 |
| Corn husklage | 1 - 1 9 | 2 - 3 | 3 1 - 4 | 48 - 54 | 55 - 65 | 66 - 73 |
| Corn stover, dry | 0 5 - 1 3 | 1 4 - 2 2 | 2 3 - 3 2 | 38 - 44 | 45 - 51 | 52 - 55 |
| Milo stubble | 1 1 - 2 0 | 2 1 - 3 1 | 3 2 - 4 1 | 45 - 51 | 52 - 62 | 63 - 70 |
| Milo gleanings | 1 5 - 2 9 | 3 - 4 | 4 1 - 4 6 | 48 - 54 | 55 - 65 | 66 - 73 |
| Soybean stover | 0 7 - 1 1 | 1 2 - 2 0 | 2 1 - 2 7 | 32 - 36 | 37 - 47 | 48 - 55 |
| Sugar cane bagasse | — | — | — | 33 - 38 | 39 - 50 | 51 - 57 |
| Cotton stalks | 0 9 - 1 4 | 1 5 - 2 0 | 2 1 - 2 6 | 33 - 38 | 39 - 45 | 46 - 51 |
| Wheat straw | 0 - 0 2 | 0 3 - 0 6 | 0 7 - 1 0 | 35 - 40 | 41 - 50 | 51 - 60 |
| Oat straw | 0 3 - 0 6 | 0 7 - 1 5 | 1 6 - 2 1 | 39 - 44 | 45 - 54 | 55 - 60 |
| Rice straw | 0 3 - 0 5 | 0 6 - 1 0 | 1 1 - 1 5 | 36 - 41 | 42 - 50 | 51 - 56 |
| Rye straw | 0 - 0 2 | 0 3 - 1 0 | 1 1 - 1 5 | 17 - 27 | 28 - 49 | 50 - 55 |
| Barley straw | 0 - 0 4 | 0 5 - 0 9 | 1 0 - 1 5 | 30 - 36 | 37 - 45 | 46 - 50 |
| **High Moisture Grains** | | | | | | |
| Corn | 5 - 6 | 7 - 8 | 9 - 11 | 79 - 81 | 83 - 85 | 87 - 91 |
| Milo | 4 - 5 | 6 - 7 | 8 - 10 | 76 - 80 | 81 - 83 | 84 - 86 |
| Ear Corn | 5 7 - 5 9 | 6 2 - 6 3 | 6 4 - 6 8 | 78 - 79 | 80 - 81 | 82 - 84 |
| Barley | 6 - 7 | 8 - 9 | 10 - 12 | 83 - 84 | 85 - 86 | 87 - 89 |

*Values expressed on a dry matter basis and adapted from the following sources: Morrison's Feeds and Feeding; Soil Science Society of America; Penn State University Diagnostic Criteria for Soils and Plants; Ohio State University; Nu-Ag, Inc., Rochelle, Ill.; A & L Lab, Memphis, Tenn.; American Society of Agronomy and experimental observations for net energy made at University of California.

## TABLE 9
## Proper Stages of Maturity for Crop Cutting

| | % Crude* Protein | % T.D.N. |
|---|---|---|
| **Corn Silage** | | |
| Tassel | 10 7 | 64 4 |
| Milk | 8 0 | 66 9 |
| Glaze to early dent | 8 0 | 71 0 |
| Full dent | 8 0 | 68 9 |
| **Alfalfa Silage** | | |
| Bud stage | 22 1 | 61 7 |
| 1/10 to 1/3 bloom | 20 4 | 63 4 |
| 1/2 to 3/4 bloom | 16 2 | 58 9 |
| Past bloom | 12 3 | 49 6 |
| **Oat Silage** | | |
| Boot stage | 15 3 | 65 8 |
| Late milk to early dough | 8 5 | 65 9 |
| Late dough | 8 3 | 63 5 |
| **Grass Silage** | | |
| Pre bloom | 20 4 | 73 2 |
| Spike | 14 0 | 67 6 |
| Milk | 12 1 | 65 9 |
| Dough | 10 6 | 60 0 |
| Mature | 5 3 | 52 7 |
| **Wheat Silage** | | |
| Immature | 24 0 | 63 5 |
| Flower | 16 0 | 63 0 |
| Late dough | 6 7 | 51 3 |

*Related but not the same as Digestible Protein

The above average figures are from various analysis tables such as "Feeds and Feeding" by Morrison. Your crops may vary from this due to difference in fertility, watering practices and rainfall, weeds, insect damage and other factors.

From Table 8 one can see a variety of different feedstuffs can supply the nutrient needs of our growing calves. The forages with "lage" on the end refer to the crop in a silage form. Crops available in Alaska that are shown to be adequate feed on the chart are barley, oatlage, wheatlage. Featherstone has conferred with nutritionists in the Lower 48 and have assured brome grass, timothy clover grass, green chop barley in silage form are nutritionally adequate for a cow-calf operation.

Featherstone is recommending a winter silage feeding program for Alaska's cow-calf operations because of the above data. Such a program is presently not being used widely in Alaska and is being tested on an experimental basis at the Homer Experimental Research Center. Feather stone believes from investigating operations in the Lower 48, that a silage form of feeding is the key to a successful economically viable cow-calf operation.

A silage system is basically cutting the crop before it matures, chopping it, and storing that product in an upright air-tight silo. This system maximizes the nutrient value of the crop and through multiple cuttings in one season maximizes production on a per acre basis.

Table 9 shows the value of cutting the crop at different stages of maturity.

Presently, Alaskans are growing limited quantities of silage in the Tanana Valley and the Matanuska Valley. Over the years of 1977 to 1979 the average yield per acre harvested was over 4.9 tons to the acre. A working figure for areas of less fertility in the state would be 4.0 tons per acre.

In Table 7 it was found that 10 to 13 lbs. per animal per day would be needed, or 20 to 30 lbs. per day per cow-calf unit. For an average Featherstone figures 30 lbs. per day per cow-calf unit will be needed for 9 months or 270 days which equals 8,100 lbs. or 4.05 tons per winter feeding season. At present production rates in Alaska one acre of silage can support one cow-calf unit during the winter feeding months. Featherstone, however, is recommending that 1½ to 2 acres per unit be put into silage to provide a safety margin during periods of drought or poor production. If the excess is not needed the final cutting can be put into hay which has a commercial value in excess of its cost to produce. The hay also can be used as bedding for new born calves and other general uses.

In the Appendix of this report Featherstone has included three articles that cover the management technique and systems involved in making and storing silage. The first article is concerning how to produce a forage crop, the second is on why and when the crop should be harvested, and third is on how to store the crop to produce good silage. (See Appendix A, B & C.)

Combining the summer pasture needs with the silage acreage needs a range of 3 to 4 acres per cow-calf unit is determined. An average of 4 acres was used to calculate the needs per unit in Part 2 of this section.

In the last few years a new supplement to cattle feed has been found that improves feed efficiency and reduces health problems. The supplement is an extract of the fermentation of the Aspergillus Oryzae organism. This material is a dried enzyme. Enzymes are proteins that act as catalysts in most biological processes in man and animal. By adding additional enzymes to the rumen of cattle, the digestion process requires less energy and the metabolism is more complete. The addition of this supplement to the calf's creep feed can allow the calf to be weaned at an earlier age and weight because the calf will start chewing their cuds sooner (a sign they are able to metabolize roughage material). The earlier weaning weights could be important to Alaskan cow-calf operators who may be short on feed and want to sell his calves off early before winter. For the cattleman who may read this report, Featherstone has put research test results and some supporting letters from users in the Lower 48 in the Appendix - see Appendix D.

**4. Breeding and Development of Breed Stock**

In general the few cattle that Featherstone's representatives have seen in Alaska appear to be lacking genetic quality. Undoubtedly over the years inbreeding and lack of new stock has caused this deficiency. If the total herd size in the state is expanded from the outside, this problem will be self correcting in time. A few pure bred breeders will emerge in time and they can bring in any new blood lines needed through artificial insemination in a grandparent stock.

The best recognized breeds for colder climates are the British breeds — Herefords, Angus, and the Short Horn Hereford. The crossing of these breeds also yield good cold climate animals with good quality factors for finishing in feed lots. To begin the herd, half of the animals needed can be sent and after four years of careful selection of the offspring, the full desired size herd can be created.

The first two calf crops will produce 50% heifers which can be saved back for breeding once they are two years old. If the initial herd of cows delivered from the Lower 48 are bred to different good bulls prior to shipment, the blood lines will be even more diverse. The first calf crop also can produce the needed bulls for the herd. After two years the bulls can be used for breeding to a limited degree, and full time the third year.

The initial herd also should be a mixture of ages two through four years. Young two year old cows often have problems with their first calf and a full herd of two years old would be difficult to manage by an experienced operator and impossible for a beginning operator. Three year olds are sometimes difficult to breed back immediately after their first calf. Four year olds are established producers and give the operator a solid foundation to fall back on. The same senario is true for bulls and likewise a mixture of ages are needed. Mathematically there should be one bull for every fifteen (15) cows initially. As the herd matures, this ratio may shift to one for every 20.

The breeding records, facilities, and techniques will separate the good operators from the bad ones quickly. The attention paid to breeding the right cow to the right bull can pay dividends and reduce the costs of bringing in outside blood lines for producing good quality animals. Culling of the breeding stock is also important to maintain quality. Cull cows and bulls will amount to

10% of the breed stock once the herd matures. Some animals will last longer but the poor producers, poor mothers, or weak animals should be culled as soon as identified and not used for breeding.

**5. Routine management of herd**

The most difficult part of running a cow-calf operation is the spring calving period which to operators in the Lower 48 would be mid-winter calving. While reviewing existing literature on cattle in Alaska, Featherstone found the reprint of a speech given by John Milne, a cattleman from Alberta, Canada to the 2nd Annual Alaskan Agricultural Symposium. A section of that speech is reproduced in Appendix E and gives the details of calving from a very practical standpoint.

The balance of the management required is good breeding techniques (previously discussed) and providing proper nutrition for the herd. The bulk of the nutritional needs is discussed in Part 3 of this section. Vitamin, minerals, and salt make up the balance of the nutritional needs. Salt should make up between 0.25% and 0.50% of the total intake. The vitamins and minerals will vary with different types of feed and with different soils used to produce that feed. Standard pre-mixes are available that cover the fall range of needs. As an operator becomes more experienced in his feed management, he should have his feed analyzed to find his true needs and buy accordingly.

The management of the pasture and producing silage will take most of the operators time during the summer months. Every 20 to 25 days in the summer with the Alaskan long days the forage crop will need to be cut, chopped and stored. Self-feeders will need to be filled with vitamin-mineral-salt mix on a weekly basis. The herd once on pasture in the summer should be checked visually two or three times a week for medical problems, water needs (depending on watering system), and eating habits. If pastures are being rotated depending on concentration of animals on the pasture, they should be rotated monthly.

During harvesting for the silage and calving time an operator of a 500 to 1,000 unit herd will need some additional hired labor. For the rest of the time, however, a husband and wife team should be able to manage the operation fairly easily.

**6. Veterinarian Requirements**

Of the three phases of the beef cattle industry, the cow-calf phase has the greatest veterinary need. Pregnant cows and new-born calves are more vulnerable to medical problems. These medical problems, however, are reduced with the experience of the operator. With proper nutrition, clean water, and good handling techniques many problems disappear. An experienced operator, who is familiar with antibiotics and other oral medicines, can solve even the majority of the remaining problems. The final line is however, a veterinarian near by still makes a cow-calf operator sleep better at night.

With the herd broken up into four areas, there will be 5,000 units in an area. As will be seen in the balance of this report, the rest of the cattle industry and swine industry will be dispersed up and down the rail belt. With the increase in animal numbers the number of veterinarians will increase as well. Many of the existing vets are trained in large animals and would prefer such a practice. It is very difficult to have a small animal (pets) practice and a large animal practice because the times of the day required by each are different. A lot of cattle and pigs are worked at night and early in the morning because of the normal farm schedule. The small animal practice is daytime work. As can be imagined, the two schedules always conflict and the vet has to give up one or the other. The large animal is generally not as profitable because the operator learns to do much for himself since he often cannot wait for the vet to arrive and he cannot take the time to take the animal to town.

Featherstone was told in the initial phases of this study that vets were in short supply in Alaska and particularly in the Fairbanks area. A telephone survey of the eight known vets in the Fairbanks area produced favorable responses from four vets for more large animal work. In fact all four indicated they presently were doing large animal work on a part-time basis. After talking to these vets, Featherstone feels veterinarians will be available in adequate supply as the herds grow in size. Veterinarians are profit motivated individuals. The more valuable the animal, the more a vet's services are worth. In Alaska animals will be worth more because of the added costs discussed in the economic sections of this report. The more vets services are worth and the animal numbers grow, the more vets will be practicing on large animals.

**7. Investment requirements**

The largest investment the cow-calf operator has to make is in his land. A 750 unit operation needs 3,000 acres of land. Currently the State of Alaska is selling land at $100. per acre and rough rule of thumb clearing costs have been estimated to be $200. per acre. His total land cost is $300. x 3,000, or $900,000 costing $1,200 per cow-

calf unit. Table 10 below shows an interesting comparison with various regions of the Lower 48.

**TABLE 10*— Land Charge For Cow-Calf Enterprises, 1977**

| Acquisition date | Owned acres per cow (acres) | Land value per cow |
|---|---|---|
| All regions | | |
| 1942-76 | 5 80 | $ 563 |
| 1972-76 | 5 80 | 1,273 |
| 1977 | 5 80 | 1,950 |
| Southeast | | |
| 1942-76 | 3 67 | 578 |
| 1972-76 | 3 67 | 1,307 |
| 1977 | 3 67 | 2,002 |
| Southwest | | |
| 1942-76 | 7 20 | 512 |
| 1972-76 | 7 20 | 1,157 |
| 1977 | 7 20 | 1,772 |
| West | | |
| 1942-76 | 4 07 | 392 |
| 1972-76 | 4 07 | 887 |
| 1977 | 4 07 | 1,358 |
| Great Plains | | |
| 1942-76 | 10 56 | 484 |
| 1972-76 | 10 56 | 1,094 |
| 1977 | 10 56 | 1,676 |
| North Central | | |
| 1942-76 | 3 92 | 775 |
| 1972-76 | 3 92 | 1,753 |
| 1977 | 3 92 | 2,685 |

*Costs of producing feeder cattle in the United States — Final 1977, Preliminary 1978, and Projections for 1979. Prepared by the Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture for the Committee on Agriculture Nutrition, and Forestry, United States Senate. August 6, 1979.

In all regions, acquisition costs for land per cow-calf unit is greater than the projected $1,200 per unit in Alaska. The region supplying Alaska presently is the west region which had a cost of $1,358 per unit in 1977. Adding a 20% inflation factor to farm land prices for the four years since 1977, means a cost of $1,630 per unit in 1981 in the west region. The difference between this cost and the $1,200 in Alaska is $430 per unit less. Consequently the Alaskan operation will require $430 times 750 units or $322,500 less in land cost.

The next greatest cost is the initial animal cost. Starting with a purchase of half the herd size and raising the balance, the need is for 375 cows and 25 bulls. A good quality, bred cow presently costs $1,200/head and young good quality bulls cost $2,000 per head. The initial stocking cost is:

| | | |
|---|---|---|
| Cows - 375 x $1,200 | = | $450,000 |
| Bulls — 25 x $2,000 | = | 50,000 |
| Animal Costs | = | $500,000 |
| Est. Frt. Cost 400 @ $50/Hd. | = | 20,000 |
| Total Delvd. Costs | = | $520,000 |

The feed storage and handling equipment is the next highest cost. This equipment must be big enough to handle the 270 day winter feeding needs of 8,100 lbs. shown in Part 3 of this section. For 750 units this equals 6,075,000 lbs. or 3,037 tons of feed silage storage is needed. Three silage containers each with a 25 foot diameter and 88 foot height will handle this quantity. The silos with bottom discharge auger feed conveyors will cost $125,000 each or $375,000 per operation.

The balance of the equipment needed on the farm can be lumped together for this broad analysis. They would include a 100 HP tractor with manure spreader and attachments to plant and harvest a silage crop; a well and watering facilities, fencing, feed truck, barn and mechanical area, self-feeders for supplements, gasoline storage/facility, etc. Featherstone estimates these facilities and equipment will cost in the neighborhood of $300,000 to $400,000 for a 750 unit operation.

The following list summarizes the investment costs of a 750 unit operation:

| | |
|---|---|
| Land | $900,000 |
| Initial Stock | 520,000 |
| Feed Handling Equipment | 375,000 |
| General Facilities | 350,000 |
| Total Investment | $2,145,000 |

To supply 50% of the market demand 27 such operations need to be built for a total state-wide investment of $57,915,000. Of this figure $24,300,000 is for state owned land and the improvement of that land.

### C. The Growing Operation

#### 1. Types of Operations

Featherstone expects three types of cattle growing operations will develop in Alaska. The first will be the cow-calf operator vertically integrating his operation by pasturing his yearlings for an extra summer. The second will be the grain farmer who rotates his crop with a forage type product that can be harvested and fed easily. The third will be the feed lot operator desiring to insure his supply of cattle to finish. In the Lower 48 there are several other classifications but Featherstone doubts they will exist in Alaska to any significant degree. The growing operation takes the animal from a 400-500 lb. weight to 750-800 lb. weight and is the easiest weight gain to put on the animal. Normal, healthy animals require little attention and if the weather is above freezing, and they have adequate water and nutrition they will gain this weight in 3 to 4 months averaging 2.5 lbs. gain per day or better. This gain is the least expensive per pound and for that reason the operators on either end of the system usually integrate into this phase. Only when their facilities and resources are stretched to the limit do they permit others to enter this phase.

The *cow-calf operator* to extend his yearlings over has the simplest task he can use his present equipment in his pasture and separate the yearlings from the cow-calf units into different pastures. The self-feeders that are used for vitamin-mineral-salt supplements will need to have a small amount of grain (1 lb./hd./day) or protein supplement added to it. With this supplement and the roughage of 1 to 1½ acres the yearling will produce quite well. The cow-calf operator's only hazard is that he must not over graze his pastures and limit the nutritional intake from the pasture for his main operation — raising calves.

The *barley farmer* that uses a schedule of operations with ⅔ grain and ⅓ fallow in separated fields will find growing yearling cattle profitable. Using Lewis and Wooding's* scheduling for barley, the farmer could turn cattle out in the field that is to be fallow the following year in mid-September after combining. Yearling cattle would glean the field utilizing dropped grain and the straw left in the field. With a small amount of on farm grain storage and the barley straw for roughage, a grain farmer would have little trouble in September, October, and November of taking 500 lb. yearlings to 750 lbs. ready for the finishing lot. The only modifications he should make to his schedule would be to delay his September chisel plowing until the following year. These farmers should figure a yearling can gain the necessary weight from the gleaning of 2 to 3 acres of a barley field recently combined depending on how much straw is left in the field. The only additional expense will be the purchase of some self-feeders for supplement and some watering equipment.

The *feed lot operator* will find it necessary to grow out these yearlings when the others do not have the time or space to do it. All of the equipment he needs is already in place and basically the only change he has to make is to increase the roughage in the rations fed to his other stock.

By using too high a concentrated ration too soon he runs the risk of stunting their growth or making small, over fattened cattle. The feed lot operator should be the back-up market for these yearlings in order to assure his supply of cattle to be finished. By changing their feed, he can shorten up or lengthen out the time at which these cattle will ultimately be finished by as much as three months without too great an extra cost. This facility with a more uniform flow of cattle and making marketing beef by the processor more feasible.

**2. Location and Size of Operations**

Of the 18,000 to 19,000 head of yearlings annually produced, the feed lot operator will probably grow at least half of them out to be ready for finishing. The balance will be handled by cow-calf operators and barley farmers. This means the operations of this segment of the industry will be spread out up and down the rail belt and from Fairbanks down to Delta Junction. An additional 20,000 acres will be needed by cow-calf operators if they plan to grow the 9,000/9,500 head to a finishing weight. Most of this land can even be marginal land with little other value. For these reasons, Featherstone feels no definite areas should be set aside for this operation; feeling it will generally take care of itself.

**3. Feed requirements**

Beyond the roughage that is given to yearlings it is recommended 1 lb. of grain (barley) be given to each head per day in the supplement in the self-feeders. This extra shot of energy ration makes the yearling utilize the roughage more efficiently. This small amount of grain however will mount up. Each head will be at this stage an average of 140 days meaning each of the 19,000 head will consume 140 lbs. of grain or 1,330 tons of grain annually. The calcium and phosphorous supplement at this point in growing beef animals is critical and the operator should be sure his animals are getting their needs. By checking the amount consumed from the self-feeders on a regular basis and dividing by the number of animals having access to the feeder, the operator will know the amounts each gets.

**4. Management requirements**

As previously stated this phase is the easiest phase to manage. If an operator watches his self-feeders closely, watches to see their water is clean, and twice weekly inspects the animals for any disease problems, little else is needed. By following these three points and knowing what to look for, no problem should get out of hand.

**5. Veterinarian requirements**

Again this aspect is minimal compared to the rest of the cattle industry. Some shipping sickness can occur if any great distances are involved in transporting the cattle. A standard set of innoculations upon arrival usually ends this problem.

The one medical problem the operator will have to learn to combat in the Alaskan summers is the fly and mosquito problem. The marginal land often used in this phase may be wet lands that also breed mosquitos and flies. The sting of these insects can cause sickness, lack of weight

*"Barley Production in the Delta Clearwater Area of Interior Alaska" by Carol E. Lewis and Frank J. Wooding, Bul. 49, Ag. Experimental Station, Univ. of Alaska. April, 1978, p. 13.

gain and other stress type of problems. Warble flies have proven a problem with reindeer when they lay their eggs on reindeer and the larvae cause medical problems and also damage the reindeer hides. The same may happen with cattle. Prevention is the best remedy for this problem. The cattle should be in as dry an area as possible and if insects are around fumigation by dipping or spraying the whole animal regularly may be necessary. Cattle oilers with insect repellents can also be used. There are two types of oilers. One is a face oiler that hangs in front of the self-feeder and looks like a wet mop. As the animal puts his head in the feeder the mop crosses his face leaving an oily insect repellent on the head. This technique is especially good in preventing "pink eye". The second method of oiling is the use of a chain wrapped in canvass soaked with the oil solution and stretched between two gate posts leading to water. As the cattle are moving to the water they walk under the chain and the oil repellent is put on their backs. The veterinarian may be needed in extremely bad cases. The vets handling the cow-calf operator's problems and the feed lot operator's problems will have a little extra work from the growing operator but not enough to need a full time vet for them.

**6. Investment requirements**

The only investment for the growing phase is a few self-feeders, a water source, and pasture land. The only real cost is the land which at the most needed was determined as an additional 20,000 acres in Part 2.

If the value of this land cleared is $300 per acre, this would mean an investment of $6,000,000 would be needed. The other miscellaneous needs would be less than $100,000 for all 19,000 animals.

**D. The Feed Lot Operation**

**1. Ownership, size and location of the feed lot operation**

Throughout this report the reader will note Featherstone has recommended private Individual operations in the cattle industry and the same will be noted in the swine industry. The feed lot operation and the processing facilities however are being recommended to be owned by a cooperative. Both of these operations require a great deal of technical expertise, and a large amount of capital. The size of the market only dictates the need for two feed lots at the most and one processing facility if any efficiencies of scale are to be obtained. The small number of operations mean no real competition will ever exist and without these last two functions the rest of the industry will not develop in an orderly fashion. The risk of these operations failing and going out of business leaves the balance of the industry with a large capital investment that cannot be marketed. A cooperatively owned processing facility and feed lots for cattle seems to overcome this potential stumbling block that may restrict private capital investment in the industry. These cooperatively owned facilities can be operated directly by the members of the cooperative through a board of directors.

The size of the feed lot requirements will be difficult to gauge in the beginning of the industry. Approximately 18,200 head of cattle will be finished per year with each head requiring about 100 days. In the beginning part of the growing phase will be done in feed lots and each head will require 120 to 140 days and Featherstone has estimated the number may be as great as 9,500 head. In the long run however, Featherstone feels this growing operation will not be done in the feed lot. Young cull cows and bulls that do not produce satisfactorily will also be put into the feed lot for 30 to 60 days prior to slaughter since they gain economically in that short period. Dairy steer calves and cull heiferettes can be grown in the feed lot or if mature can be finished in 60 to 90 days to an economical degree for ground beef purposes. Dairy animals and cull beef animals initially will only supply half of the manufactured beef (or ground beef) needs of the plant.

The best feed lot size that can be used in Alaska is one that will hold 5,000 head. (This decision will be discussed more in following paragraphs. Such a sized lot can handle 1,620,000 head days with a normal 10% vacancy factor. The following is a list of the potential feed lot demands:

| Type | No. | | Acreage Days | | Head Days |
|---|---|---|---|---|---|
| Finishing Cattle | 18,200 | x | 100 | = | 1,820,000 |
| Growing Cattle | 9,500 | x | 130 | = | 1,235,000 |
| Cull Cows and Bulls (Beef and Dairy) | 750 | x | 45 | = | 33,750 |
| Cull Dairy Steers and Heiferettes | 2,500 | x | 75 | = | 187,500 |
| Total Head Days | | | | | 3,276,250 |

For the above indicated needs 2 feed lots with a capacity of 5,000 head each should be built. Recognizing that the growing phase may not ultimately take place in feed lots, the industry officials should see the extra 1,235,000 head day capacity as expansion capacity for when the industry is supplying more than 50% of the market. To maintain uniform feed efficiency and overall economy, Featherstone is recommending these feed lots have the capability of being enclosed (the layout of which will be discussed in Part 2 of this section.) To build an enclosed feed lot bigger than 5,000 head many problems are encountered. Presently Alaska is developing its grain base in the Delta area and

hopes to develop an area in Nenana even larger than Delta I and II into grain producing land. Because of the construction problems, the separated grain producing areas, the expansion needs of the future, and the potential mathematical head day needs, Featherstone is recommending two feed lots of a 5,000 head capacity to be constructed instead of one 10,000 head feed lot.

In the Lower 48, time has demonstrated that it is more economical to feed cattle close to the source of feed rather than feeding cattle near the consumer and shipping the feedstuffs to the cattle. The large livestock populations of Iowa, Nebraska, Kansas, Oklahoma, Colorado, Texas and Arizona prove this fact. The base economic reasons behind this trend is shipping costs. Cattle convert feed grains at a rate of 8 to 10 lbs. to make one pound of meat. Also to ship a 600 lb. carcass chilled or a 450 lb. fabricated carcass chilled is less expensive than a 1,000 live animal. The disposal of animal wastes on croplands is also an added economy. For these reasons, Featherstone is recommending the feed lots be located near the source of grain used to feed the cattle. One in the Delta area and one in the Nenana area appear to be the most logical.

**2. Design of the feed lot operation**

Featherstone reviewed a variety of feed lot systems before deciding on the enclosed system that is recommended. The decision stems from two economic considerations. The first consideration was the added land costs and feed and watering equipment needed for an open system. Because waste removal problems in winter months, open feed lots need at least ten times the square footage that an enclosed lot requires. This extra square footage requires more feed bunks, watering troughs, more fencing, and feed trucks must drive further. An enclosed system with a slotted floor with a continuous flushing system eliminates those added costs.

The second consideration was added cost of weight gain for the open system. Cattle in the finishing stages will stop gaining weight in the severe winter months of Alaska without protection. Those winter months may only be 4 to 8 weeks in duration but that is 8 to 16% of the year and represents an added cost of 8 to 16% for the industry. Table 11 shows a typical ration to finish cattle with barley in the lower 48 costing $138.50 per head making even an 8% increase in cost equal to $11.00 per head. The added cost of the enclosed feed lot was less than $5.00 per head.

The enclosed feed lot system being recommended by Featherstone is one designed by Corral Industries of Phoenix, Arizona. This system has a series of teardrop slats slip formed, in the concrete that have a continuous flow of water through the slats. The waste products are pushed into the slats by the animals and continuously flushing the slatted teardrop area removes that waste to nearby lagoons. The lagoon system should have two ponds with about 15 to 20 acre surface on both with a 25 to 30 foot average depth. The water on the top portion of the ponds will supply the continuous flushing system on an alternating week basis. By alternating the ponds, the sediment is allowed to settle more completely on a weekly basis. These ponds will need to be pumped in the spring and fall and the waste products can be used as fertilizer in fields of neighboring farms. Appendix F is a sales brochure from Corral Industries that shows how the waste system works and how the cattle are enclosed. A Featherstone represntative traveled to visit a 5,000 head feed lot constructed by Corral and found the system totally adaptable to Alaska. (For interested parties in Alaska a Corral System may be viewed in Calgary, Canada.) The nutrient recovery system discussed in Appendix F is not needed in the initial phases and should be viewed as a future addition to the feed lot system.

**TABLE 11 — Beef Ration To Finish Cattle Using Barley**

| Item | Cost per lb. | % of Ration | 100 day Consumption** | Total Cost |
|---|---|---|---|---|
| Barley* | 0694 (a) | 87 27 | 1745 00 | $121 10 |
| Roughage Hay | 0660 (b) | 9 09 | 182 00 | 12 01 |
| Limestone | 0135 (c) | 1 14 | 23 00 | 0 31 |
| Calcium Phosphate | 1486 (c) | 45 | 9 00 | 1 34 |
| Tracel Mineralized Salt | 05 (c) | 45 | 9 00 | 0 45 |
| Molasses | 0715 (d) | 1 59 | 32 00 | 2 29 |
| Vitamin A 50 000 IV/Day/Hd | 01 (c) | | 100 00 | 1 00 |
| Total | | | | $138 50 |

*Assumes 12% Protein Barley which will not need protein supplement Alaskan Barley in 1980 had a 12 6% D M Protein

**Feed from 750 lbs to 1000 lbs or 250 lbs times 8 0 conversion equals 2,000 lbs of ration

(a) Price Winnepeg Nov 25 1980

(b) Average price paid in Alaska in 1977 to 1979 for all hay June 1980 Alaska Ag statistics

(c) Prices furnished by Bio-zyme Industries 11-26-80

(d) Prices delivered Atchison Ks 11-26-80

The above average figures are from various analysis tables such as Feeds and Feeding by Morrison Your crops may vary from this due to difference in fertility, watering practices and rainfall weeds, insect damage and other factors

Although a lot of concrete is used in this system which is at a premium in Alaska, the structure is built with used oil field pipe which is reasonably priced in Alaska. The basic system can be built in 2 to 4 months depending on concrete and labor availability. The cost savings of using the Corral Teardrop System in the Lower 48 for a typical 12,000 head feed lot is summarized in Table 12.

**TABLE 12 Dollar and Other Advantages of Teardrops Over Conventional Pens**
**March 1980**
12,000 Head "Open" "Teardrop" Facility

| | Consideration | 1 Year | 10 Years | 20 Years |
|---|---|---|---|---|
| 1. Value of Acres Saved<br>Conventional Pens @ 350 Sq. Ft. = 100 acres<br>TEARDROP Pens @ 35 Sq. Ft. = (10)acres<br>90 acres @ $1000 | $ 90,000 | | | |
| 2. Tax Considerations<br>Investment Tax Credit | 140,000 | | | |
| Energy Tax Credit @ 80% Applicability | 112,000 | | | |
| Depreciation on 8 year double declining basis | 350,000 | | | |
| 3. Cost Savings of Caring for 10 Horse @ $150 per month x 12 months | | $ 18,000 | $ 180,000 | $ 360,000 |
| 4. Save 4 men in comparison of operation @ 15,000 year | | 48,000 | 480,000 | 960,000 |
| 5. Estimated Savings on Operation of Feed Truck @ $117 per day savings = $20 day x 3 trucks | | 21,900 | 219,000 | 438,000 |
| 6. Cost of Removing Manure and Maintaining Pens in Conventional Feedlot 12,000 Head @ $0.3 per head per day = $360 day | | 131,400 | 1,314,000 | 2,628,000 |
| 7. Savings on Mud Conditions 12,000 Head x 25# gain x 90 Days = 270,000 pounds gain x $.52 Cost | | 140,000 | 1,404,000 | 2,808,000 |
| | $692,000 | $359,300 | $3,597,000 | $7,194,000 |

### 3. Feed mill requirements

One advantage of a 5,000 head feed lot not discussed previously is the size of the feed mill operation. This size lot can be fed with a minimum of two people on a single shift with very little equipment. Using a high moisture barley in an oxygen limiting silo with a bottom unloader, a hay or silage grinder, a front end loader, and a mixer truck with mounted load cells for a scale this size feed lot can be easily serviced. The advantages in producing and feeding high moisture barley is documented in Appendix G, H and I. From a feed mill standpoint the advantages are: 1) no grinder flaker is needed, 2) no rolling or steaming is needed, 3) mechanical problems are minimized. Considering the harsh winter elements of Alaska, the great distances the feed mill will probably be from population centers, and the fact cattle must eat daily, minimizing equipment problems insures better efficiency.

The operation of such a system is very simple. The feed truck has mounted on it a mixer with an auger discharge. The mixer is mounted on load cells connected to a digital readout scale. The truck is driven under the mouth of the discharge conveyor for the high moisture barley and is filled until the scale tells the operator the proper weight is in the mixer. Next, the truck is moved to the hay grinder and the same procedure is followed for the roughage part of the ration. Four or five stalls or small enclosures (about the size of a one car garage each) built together would house the dry additives. The operator would drive the front-end loader and get a scoop of each ingredient and pour the ingredient into the mixer again using the scale. Return the unused portion and repeat with each dry ingredient. Any micro trace vitamins like Vitamin A or antibiotics to be added would be done by hand from premeasured packages for standard pen sizes. The mixer on the truck would be running while it is being loaded and within a few minutes after the last ingredient is added, the ration is ready to be augered into the feed bunks. With two people this process will take less than 30 minutes and the feed would be discharged in less time than that. A 5,000 head lot will use about 50 tons of ration a day. It is best to feed cattle twice a day so each feeding will be 25 tons in a full lot. The trucks hold 10 to 15 tons of ration, so three trips per feeding time or 3 hours per feeding at the most will be needed.

The feed mill should have two high moisture barley storage silos that each will hold 30 to 40 days ration needs for a full lot. By using two, the proper curing time is insured and a bigger back-up allows the operator to get over delivery delays. The one draw back of using a high moisture barley is that unless a whole season's worth of feeding is contracted with farmers who have their own storage (which is unlikely), high moisture barley is only available during harvest

time. The balance of the season, dried barley must be reconstituted which is a slight inconvenience.

A feed supplement available in Alaska is crab meal. Featherstone was quite interested in the swine feeding tests using crab meal locally produced in Alaska done at the Agricultural Experiment Station at Fairbanks. Cattle do not need the high protein ration required by swine but have a similar calcium phosphorous requirement. A locally produced substitute for calcium phosphate would seem to have a lot of potential and would seem to warrant research into the use of it in cattle rations.

**4. Management requirements**

The primary requirement for the manager of a feed lot is to have an animal nutrition background. This requires being familiar with the mathematics to balance rations to optimize nutrients for the least cost. The use of small computers programmed for such calculations have become common place in many feed lots. The next requirement is to have that intangible ability of knowing when and how to buy the ingredients at the most economical price. The next requirement is to know which cattle should be fed which ration and when upon their arrival. By talking to whomever sent the cattle to the feed lot and by a visual inspection, the feed lot operator must decide what ration schedule would produce the most economical gain. Often cattle from the same producer have gained differently on the same pasture and a good feed lot operator will tag certain ones and separate the animals according to their feed needs.

The final requirement may be one of the most critical and the most intangible. Since the feed lot is to be cooperatively owned, the manager of the operation must be diplomatic. Owners of cattle are proud people who feel their animals are the best ever produced and the manager has to decide what they are really worth. Often these two values are judged differently. Some cattle will be placed in the feed lot on a cost of feed basis and again the proud owner will have a hard time understanding why his cattle did not gain any better than they did. For short, the operator must be someone that all the producers trust and respect.

As the reader can tell the management of a feed lot is a difficult job requiring a qualified person. If Featherstone's recommendation of two lots is followed, only one qualified person is really needed to run both lots. Having a common manager would permit reduced overhead and greater utilization of economics of scale in purchasing ingredients.

**5. Veterinarian requirements**

The medical needs of cattle in confined feed lots is different from cattle on pasture. The possibility of transmitting disease between animals is much greater. A good operator must keep a good watch out for sickly cattle upon arrival. Sick animals and ones that become sick after on feed a while should be separated into a special pen for treatment. Often all that is needed is antibiotics to overcome shipping fever or pneumonia (if caught early). A good operator will review his cattle daily, looking for ones "doing poorly" or just look sick. Segregation early of these animals and early treatment can prevent epidemic type problems. A monthly visit by a veterinarian is advised just to review the cattle. A visit also may be advisable when a string of cattle arrive from a producer who has never shipped to that feed lot. Good preventative measures for a feed lot cannot be stressed too strongly.

**6. Investment requirements**

There are three (3) areas of investment in the feed lot operation: (1) the enclosed confinement structure; (2) the feed mill equipment; and (3) the land and miscellaneous equipment.

Featherstone has worked with Corral Industries in trying to determine the cost of building one of their structures in Alaska. Using a price of $100 per cu. yd. for concrete, the price is estimated to be $1,750,000 for the building without land. In addition are the two lagoons and the piping will cost approximately $50,000 if a site location is chosen properly with the construction of the lagoons in mind. This makes the structure total cost become $1,800,000.

The feed mill has been estimated as follows:

| | | |
|---|---|---|
| 1 | 2 Oxygen limiting silos 31 x 88 @ $150,000 | = $300,000 |
| 2 | Hay and silage grinder | = 15,000 |
| 3 | Weed stalls for additives | = 10,000 |
| 4 | Front end loader | = 70,000 |
| 5 | 2 Mixer trucks with load cells @ $30,000 | = 60,000 |
| | Total | $455,000 |

Featherstone has allowed for two trucks due to the critical nature of their function. If one truck is the only one and it fails the operation will stop. With two some labor can be saved but not enough to justify the purchase of the second unit. As a result, the second truck must be viewed as an insurance investment. The loader is critical but it will not receive the abuse that the trucks receive and should be relatively simple to maintain. Even if the loader is down, the trucks still could be loaded manually with shovels.

The land requirements for the feed lot and mill operations with lagoons should be 50 to 60 acres depending on the site location. Using $300. per acre for land, the cost is $18,000. Miscellaneous

equipment would include a maintenance barn, cattle scales, a shed in which the feed trucks are loaded and a pump house. These costs should be around $125,000.

The total of all the figures is $2,398,000 which needs to be doubled for the industry making a total investment of $4,796,000.

This figure looks high undoubtedly to many people reading this report. It looks high especially when one thinks all the facility is for is to put fat on the animal. In part and partial this is true but the ultimate market must be remembered. It will be tempting to by pass the feed lot and market cattle right off the pasture. The quality of cattle finished in this manner have a very limited market. Cattle finished properly in a feed lot are more marketable and the cost of finishing is readily paid by the market place.

**E. Need for experimental facility and staff**

While Featherstone personnel were in Alaska two Experimental Stations were visited, the one at Fairbanks and the one at Homer. Both of these facilities have competent and energetic people, but both are hamstrung for lack of facilities and funding. For the long term growth and development of a livestock industry in Alaska, a properly staffed and fully funded cattle research facility must be created. This report will give the applicable input to the industry that is available in the Lower 48. However, there undoubtedly are better ways to raise cattle in Alaska than have ever been tried in the Lower 48. The unique nature of Alaska requires many of the problems to be solved in Alaska. Without proper research facilities these solutions will be slow in materializing.

Such a facility should provide research for evaluating techniques developed in the Lower 48 when used in Alaska. The facility also should provide research on the use of local resources (like feeding crab meal) and can be used to train future livestockmen for an enlarged industry. As an educational tool, a "hands on" working herd of cattle for the students is the best method to teach students how to handle animals.

The facility that Featherstone thinks that the University needs is a pure bred cow-calf operation with a small feed lot attached. This pure bred herd should have 120 cows of each breed and Featherstone recommends that the herd should have a string of Angus, Herefords, Shorthorns, and Holsteins. With such a mixture in great enough numbers, cross breeding can be studied and a grandparent herd can be developed for each breed. By artificial insemination with semen from bulls in the Lower 48, new blood lines can be refined in Alaska with this herd of cows. The male and female offspring of this breeding should be sold to cow-calf operators round the state to improve their herds.

The inclusion of a dairy breed (Holsteins) was intentional. Such a dairy breed could help the dairy industry but also the meat industry. The cross breeding with these animals has become very popular especially since the lowering of the standards for the U.S.D.A. choice grade.

Although the number of animals at such a facility would be less than a normal 750 head cow-calf operation described in Section V, the cost of $2,145,000 is still applicable. The increased partitioning of pastures, the specialized breeding equipment, and the student facilities would add costs per head to the facility. Unlike the normal facility however more manpower would be needed to operate the facility to its fullest potential. Featherstone estimates two full time herdsmen, four part-time (student) herdsmen, a full time animal nutritionist, and a part-time animal genetics expert should be in the staff budget. To get accurate feed studies for example, hand feeding is necessary which requires a lot of extra personnel.

Another reason to build such a facility is that it will encourage private individuals to get into the industry. Knowing that a research facility is available that a cattleman can take his problem to, is very comforting when you are starting a herd in a different climate.

**F. Time Schedule for Cattle Industry**

Needless to say the grain industry has gotten a one or two year head start on the livestock industry. For this reason Featherstone has developed a very compact time schedule to put a cattle industry on stream in Alaska. The schedule has been developed on a calendar quarter basis. As long as each step is taken in order and the bred cows shipped to Alaska are due toward the end of the first quarter of each year, the schedule can be slipped back if found to be too compact.

Featherstone has made the assumption that if a processing unit is under construction, some of the presently cleared land will be converted to cow-calf production. The time schedue has labeled these potential operators as *primary* operations. The balance of the industry needed to make up the 20,000 head or 80,000 acres will be termed *secondary* operations. Further Featherstone has assumed that adequate financial incentives will be available to induce potential operations to develop as fully in size as possible as quickly as possible.

**1. Second Quarter 1981**

The primary inducement to prime the livestock pump in Alaska is the appropriation of money by the State to build a processing unit for cattle and swine. This appropriation must be made in this quarter and the site location and primary design must be approved.

The next crucial inducement is to appropriate money for the construction of a feed lot with a

feed mill as described. Knowing that a feed lot and processing facility are being built will induce cattlemen to buy quality stock that can finish out to make quality meat. Having such a facility will also induce cattlemen to market their cattle on an orderly economical basis. By trying to finish on their own, some economics will be lost and they will be less enthusiastic about expanding.

The last item that should be performed in this quarter is to start writing and publishing a capital financing program for the primary operators to start on presently cleared ground.

**2. Third Quarter 1981**

If all of the previous quarter's needs were accomplished, the first order of business for this quarter is to hire a feed lot manager. This person should be allowed input into design and location of the facility he will be responsible to operate. After the site location and design are done (in this quarter), the manager should function as an extension agent promoting the cattle industry and helping people just starting out in the cow-calf operation. This early public relations could pay some good dividends for when the feed lot opens in the fourth quarter of 1982.

The next hurdle in the time schedule is to select primary cow-calf operators. During this quarter the selected operators will be purchasing the extra equipment they will be needing, ordering stock to be delivered from the Lower 48 for the next quarter, and storing the needed silage and hay from their presently cleared ground. In the funding of these operators additional money should be available to start a livestock cooperative. This money can be used to pay the feed lot manager and the processing plant manager during this start up time.

In this third quarter the first tangible sign of real progress should be scheduled — ground should be broken for the processing plant. To meet this deadline much of the engineering and design will have to be done in the field on a fast track basis. The potential added costs of fast tracking is overshadowed by the psychological push it will give the fledgling industry and existing grain farmers. On a fast track schedule the plant should be finished in the third quarter of 1983. Nothing more on this schedule will be mentioned about the processing plant until it is completed but the various state agricultural publications should keep the public aware of the facility's progress. A quarterly update to the Alaskan Agricultural Action Council would serve this purpose well.

**3. Fourth Quarter 1981**

From this point forward progress moves rapidly. Delivery of the first cow herds for the primary operators should occur. These animals should all be pregnancy tested to give birth late in the first quarter of 1982.

To reinforce these new cow-calf operators the contract to build the feed lot should be awarded. With this contract announcement, the manager should be introduced publically at the same time.

By this quarter the number of people with cleared land and the number of beef cows potentially in the state will be known. Knowing these numbers, the state can determine where, how many, and what size they want in the secondary operations. In this quarter land should be identified to be cleared for this purpose.

**4. First Quarter 1982**

The only legislative action of this quarter is to write and advertise the grants available for the secondary operations. Featherstone imagines these grants will be similar to the Delta lotteries and can follow the same sequence. The lottery should be completed at the end of this quarter.

The feed lot building supplies should be arriving in this quarter to start work the next quarter when weather permits. Also arriving from the Lower 48 should be the first breeding bulls for the primary operations. These animals should be arriving in time for the cows on those operations to start calving. By using this schedule the bulls should be adjusted from the transportation in time for the first time the cows come into heat.

**5. Second Quarter 1982**

During this quarter the new cow-calf units are turned out on pasture and the cows should all be bred back for next year's calving. Construction will begin on the feed lot and accessory facilities. In this quarter also clearing should begin on the secondary operations.

**6. Third Quarter 1982**

This quarter will see nothing new started but will still be active. The construction of the feed lot should be finished as should the clearing of the land for the secondary operations. The calves from the primary operation will just about be ready for the growing stage on the operator's facilities or in the feed lot. By this time also the processing facility is less than a year away from completion.

**7. Fourth Quarter 1982**

The new operators on the secondary operations will order and be delivered their herd cows. Again these cows should all be pregnancy tested and bred to deliver late in the first quarter of 1983. The calves from the primary operations should all be weaned and on growing rations — some in the new feed lot facility.

**8. First Quarter 1983**

The first set of calves will still be on growing ration for part of this quarter and part on finishing rations. Both the primary and secondary herd cows will deliver late in this quarter. The bulls for the secondary operations should also be delivered in time to be ready for spring breeding.

**9. Second Quarter 1983**

By this period, all of the first set of calves from the primary herd should be in the feed lot on a finishing ration. The primary and secondary herd cows should all be bred to deliver in the early spring of 1984. The calves born this year also will be on pasture by this time.

**10. Third Quarter 1983**

If all is timed right as the first calves from the primary herd are ready in the feed lot, the processing facility should be ready to open. This event marks the culmination of the efforts to begin a livestock industry in Alaska. The work, efforts, and results of the new industry will be final in the market place for the consumer.

From this point on the schedule of the cattle will repeat itself generally. The time period in which the cattle are finished will be stretched and changed to meet market demands. Cows will come into heat late and a fall calf crop will start which soon will be recognized by some operators as a profitable time to calve if they have enough feed stored. The cull animals will arrive at the processing facility typically in the Third Quarter so they are not carried over the winter. The old ones will be slaughtered and the young one will be carried over for a few months in the feedlot. Dairy steers will also be on a separate schedule in the feedlot and will come out at different times. Within three years of opening the processing facility the marketing will be leveled out and by four years the industry should be fully developed producing the needed 18,000 head per year.

# SECTION VI
# DEVELOPMENT OF A SWINE INDUSTRY IN ALASKA

In section IV the swine industry was shown to be potentially economically viable due to confinement reducing the effects of the harsh winters of Alaska. The practice of confined farrowing and finishing of swine in the Lower 48 has grown in popularity to the point where between one-third and one-half of all pigs marketed come from some sort of confinement unit. As with the beef industry, the swine industry has moved so fast that the suppliers to the industry have the most current information. Featherstone feels that Sands Livestock Industries has ploneered the most ideas (for the longest period of time) in the swine confinement area. As a result they have built more confinement units than any other company and now those units produce over one million hogs per year. Although their data must again be tempered, the Sands, methods are well proven and applicable to Alaska. Swine feed conversion is consistant if the environment is properly controlled, and they are properly managed. Their environment can be properly controlled in Alaska, the feed is available, the management techniques can be learned, and as a result Featherstone feels swine can readily be raised in Alaska. Once a processing unit is available for swine, the capital required to build the needed number of confinement units should be the only restricted factor to the industry's growth.

**A. Size and Location of the Industry**

Where the American public eats 105 lbs. of beef, they consume 63 lbs. of pork per capita per year again on a carcass basis. Similarly Featherstone feels 50% of the local market can be obtained by a local processing unit. With pork (as will be discussed in Section VIII), the market penetration should be easier and the processing unit and the confinement unit should be planned for easy expansion.

Using the same population figures as the beef section the following mathematics gives the resulting size of the industry.

| | |
|---|---|
| Population | 300,000 |
| Per Capita Consumption | 63 per year |
| Total Annual Consumption | 18,900,000 |
| 50% of Market | 9,450,000 |
| Carcass wt per head | ÷ 135 |
| Head slaughtered per year | 70,000 |
| Days worked per year | ÷ 260 |
| Head slaughtered per day | 270 |

Using Scott Goldsmith's figure again of 422,000 projected population in the Railbelt by the year 2000 the slaughter figure increased to 378 head per day. Featherstone as a result feels the plant should be built to process 270 head per day now, with the capability of being easily increased to 380 head per day.

The swine industry does not have a market similar to the manufactured beef market in the cattle industry. The cull breeding animals are processed as required with only a relatively small discount if done at the proper time. The resulting cuts usually are absorbed by the market with few problems. Consequently, the industry must be sized for the confinement units to produce 70,000 head per year initially.

After due research on the size of the confinement units, Featherstone has determined that a 144 sow unit made by Sands is the most feasible size for Alaska. It is generally agreed that in a confinement system, each pig sold will require one man hour. A 144 sow unit will produce about 2500 pigs per year which means 2500 man hours will be needed. This amount of labor can be performed by one man with the occasional help of his wife. Such a "Mom and Pop" operation in the rural sections of Alaska seems wise considering the lack of hired hands available in these areas. If labor becomes available these units can be easily doubled in size to a 280 sow unit.

A 144 sow unit however, must be dependent on an outside feedmill since it is not large enough to support its own. Only the large units with 1000 sows or more can actually justify their own mill. To capture some efficiency in the milling operation Featherstone is recommending twelve (12) of these 144 sow units be grouped together in the Nenana area, another 12 in the Delta area and another four near Fairbanks. If each unit produces 2500 pigs per year, the 28 units will produce the needed 70,000 head annually. The four units near Fairbanks will not make the mill in that area economical but the other animal feeding needs of the area should provide enough business to make it viable. The 28 units were put in the grain producing areas of the state for the same reason the beef feedlots are put in those areas: Transportation of carcasses is cheaper than transporting the grain needed to feed the animals.

**B. Description of the Swine Confinement System**

To make a confinement system economically viable certain problems must be addressed and overcome. The unit must have high sanitation levels for the animals and for the people operating the unit. Sanitation in confinement is critical because swine communicate diseases rapidly in confinement. Labor and feeding efficiency is the next critical area for obvious reasons. Ventilation at proper levels is also critical. Waste products of the animals have a high ammonia content which can cause lung damage if breathed for prolonged periods. Such lung damage leads to many respiratory problems including pneumonia. The last problem is waste removal itself. The previously mentioned ammonia problem is one reason for the problem but also the unit must meet E.P.A. standards. By properly handling animal waste in some of the more modern system, it can add to the income of the system and economically justify the mechanization that may be required.

The Sands system that Featherstone is recommending has a six building complex in which the problem are handled as efficiently as presently known. The first building is an office complex and workroom area. The office area has room only for a desk and the filing system for the necessary records. The rest of the office area is dressing rooms, shower facilities and laundry. Before the manager or any visitor enters any other area of the complex, they should shower and shampoo their hair and put on sanitized coveralls. By paying such attention to sanitation of personnel many foreign disease problems can be avoided. The workroom is used for minor repairs of equipment and on site storage of supplies and equipment.

The first production building is the breeding and gestation area. This building for a 144 sow unit is 41 ft. x 86 ft. Each sow is individually handled and moved into this area and put in a separate stall for breeding. Throughout the 84 day gestation period the sows are fed by hand to insure proper fetal growth. This practice of separate stalls and hand feeding eliminates the stress of fighting and wasteful overfeeding. A slatted floor designed with an automatic flushing system reduces labor and keeps odors to a minimum. Because of the size and density of the animals in this area, this area of the unit has in-wall fans and water misters to maintain proper ventilation and proper conditioning of the air.

The next building connected to the Breeding Gestation Area by a covered walkway is the Farrow Facility. This room is 28 ft. x 60 ft. and is designed to keep baby pigs warm, dry, and free of drafts. Each sow is placed in a special farrowing crate just prior to delivery that provides adequate room for the sow to nurse the babies without the hazards of crushing or crowding them. The floor in this area has an inplace hot water heating system and a special surface to keep the babies warm without causing skinned up knees or scrapes.

Once the pigs become 13 to 15 lbs. they are weaned and moved to the Nursery Area (24 ft. x 40 ft.). The sows are returned to the breeding and gestation area. The Nursery is an environmental controlled area to eliminate weaning stress and promote early growth. The stalls in this area are designed with automatic feed filling equipment and automatic nipple waterers.

Next the pigs at 50 to 60 lbs. are moved to the Growing Area. For a 144 sow unit this area is 26 ft. x 52 ft. and each pen in this area holds a weeks production. The feeding in this area is totally automated to promote rapid gains at the time when swine have the most efficient feed conversion.

The final area is the Finishing Area where again a weeks production is moved in on an all-in all-out basis. This area is 24 ft. x 216 ft. and has an automatic feeding system. In each of these five production areas, there is a separate tank for the feed needed at each stage of development. In Alaska these tanks should be oversized to ensure sufficient feed during winter months when deliveries may be difficult.

The waste removal system under these areas is designed to use the optimum amount of water needed for each area and still reduce odors. The siphon flush system introduces water at the perimeter of the production areas flushing wastes into a center pit and out of the building. The system flushes when the tank is full so the rate of fill dictates how often each area flushes. This system has a minimum of moving parts and if it malfunctions, repair is simple.

In confined swine systems there are four ways to handle the waste products after they leave the buildings. The traditional way is to flush it to a lagoon where the waste settles to the bottom and the top water is recycled. In the Spring and Fall such lagoons can be pumped to irrigation systems to fertilize nearby fields. The second system is the use of storage pits where the wastes are disposed and the water is recycled. This system is like the lagoon system only the bacterial breakdown is retarded which can reduce the fertilizer value of the wastes. A third system is to screen the waste products for removing the solids which can be pressed, treated chemically, and recycled as feed for swine in the finished area. The fourth system drains the excess water from the waste (the water is recycled) and the residue is chemically treated mixed with grain silage and allowed to ferment, then feed to the growing and finishing animals. These last two systems are relatively new and still have a variety of problems to be worked out and

then proven, outside of test conditions, before they should be tried in Alaska. Featherstone recommends either of the first two systems depending on the proximity of the unit to crop land that will use the product for fertilizer. The closer the field is, the unit manager should tend to use the storage system. The farther away the field is the larger lagoon system should be used.

The labor of a modern confinement unit has been greatly reduced, improving efficiency many fold. The management system is designed for weekly continuous production which lends itself to scheduled labor activities. The following weekly schedule is typical of what must be done in a complete farrow to finishing operation.

Monday
1. Start breeding the sows that were weaned the previous Thursday.
2. Market the pen of animals that are ready in the finishing unit and clean that area making it ready to receive the next group of pigs from the grower on Tuesday.
3. Work up newborn litters that are four days old. This work up includes cutting tails, castrating, cutting needle teeth, and giving iron shots.

Tuesday
1. Continue breeding newly weaned sows.
2. Move pigs from grower area to the cleaned pen in the finishing area and clean their pen to receive pigs from the nursery on Wednesday.
3. Work up newborn litters that are four days old.
4. Perform any needed maintenance.

Wednesday
1. Continue breeding newly weaned sows.
2. Move pigs from nursery to the cleaned pen in the growing area and clean their pens to receive pigs from the farrowing area on Thursday.
3. Work up newborn litters that are four days old.
4. Perform any needed maintenance.

Thursday
1. Continue breeding until adequate number of sows are bred.
2. Wean one weeks worth of litters and move to nursery and clean their area to receive new group of sows.
3. Move newly weaned sows from farrowing area to breeding area.
4. Cull sows which are not adequately producing.
5. Work up any newborn litters that are four days old.

Friday
1. Continue breeding until adequate number of sows are bred.
2. Move new group of sows into farrowing rooms that have been cleaned.
3. Work up any newborn litters that are four days old.

Saturday and Sunday include checking on feed supplies and checking all animals. Breeding should also continue if needed. At daily feedings and at the close of the day, as is true with all livestock handling, the animals should be observed to detect any sickness or deviation from normal and proper preventive measures should be taken.

The added investment in the fixed cost of a confined swine unit has many advantages not available in an open feed lot that are obvious. In Alaska however, some are almost critical to the viability of the industry. Those advantages are:
1. Minimization of weather effects.
2. Increased sow productivity.
3. Improved labor efficiency (especially in waste removal).
4. Cost control management is practical.

**C. Nutritional Needs of Swine**

As compared to cattle, swine have a very complex nutritional need. Because they are monogastric animals and nonruminanting, they cannot synthesize many amino acids. Therefore the per cent protein in their feed is only one consideration in their protein needs. All 10 basic amino acids must be in balance. Fortunately for the animal nutritionist the value of most small grain and forage crops have a sufficient percentage of 8 of the 10 basic amino acids. Only Lysine and Tryptophan are the most likely to be deficient. In normal circumstances if these two are satisfied in the ration the other 8 are present in adequate quantities. Swine however do have one advantage over ruminates, they can utilize high energy low roughage materials such as the carbohydrates in starch and the lipids of fats. The total energy requirement of the ratior must be considered but generally the added energy that might be needed can generally be supplied inexpensively.

The mineral requirements of swine are similar to the needs of cattle but roughages generally supply a great percent of cattle's mineral needs. Swine are fast growing animals and require a lot of calcium and phosphorus for bone formation and these minerals generally must be supplied from their supplements. Other minerals are required for proper growth but are needed only in trace amounts. The rest of the swines needs are vitamins, salt, and water. These items can be supplied fairly simply.

To understand what feed sources in Alaska would best supply these nutritional needs, a chart of the energy and amino acid (and protein) requirements would be helpful. The following is such a chart:

**TABLE 13 - Amino Acid and Energy Requirements for Swine on a Dry Matter Basis***

| Weight Range | Avg. Days Fed | Avg. Daily Gain (lbs.) | Avg. Daily Feed (lbs.) | Energy Kcal./lbs. | Lysine % | Tryptophan % | Protein % |
|---|---|---|---|---|---|---|---|
| 15 - 30) | 42 | 0.75 | 1.5 | 1740 | 1.01 | .16 | 21 |
| 30 - 50 | | 1.10 | 2.2 | 1740 | .87 | .13 | 19 |
| 50 - 75) | 56 | 1.30 | 3.3 | 1635 | .87 | .13 | 19 |
| 75 - 125) | | 1.60 | 4.5 | 1635 | .87 | .13 | 19 |
| 125 - 175) | 56 | 1.80 | 5.8 | 1635 | .70 | .08 | 16.5 |
| 175 - mkt) | | 2.00 | 7.4 | 1635 | .70 | .08 | 16.5 |
| Gestation | 84 | 0.70 | 3.5 | 1635 | .54 | .08 | 14 |
| Lactation | 28 - 56 | — | 7.2 | 1635 | .70 | .14 | 16 |

*Based on National Research Council, seventh revised edition 1973 adjusted to dry matter basis

The balance of these requirements come normally from a grain source and a protein supplement. Both grains and different supplements have varying levels of these requirements as shown in Table 14.

Featherstone also suggests with swine the use of high moisture grain as a base for their feed. Some advantages will be discussed later in this part of the report and again in part D on Feed Mills

**TABLE 14 Nutrient Values for Certain Feedstuffs in Diets for Swine[1] (Dry Matter Basis)**

| Feedstuff | kcal/lb ME | % | Tryptophan |
|---|---|---|---|
| Barley, ground | 1510 | 60 | 20 |
| Corn, ground | 1750 | 27 | 11 |
| Milo, ground | 1730 | 28 | 11 |
| Oats, ground | 1320 | 41 | 21 |
| Oats, rolled | 1740 | 51 | 20 |
| Wheat, ground | 1720 | 31 | 12 |
| Alfalfa | 680 | 82 | 50 |
| Wheat bran | 1200 | 64 | 30 |
| Corn gluten feed | 1190 | 67 | 11 |
| Distillers dried grains with solubles | 1710 | 88 | 22 |
| Linseed meal | 1070 | 1.22 | 53 |
| Cottonseed meal | 1150 | 1.94 | 52 |
| Fish meal | | | |
| Menhaden | 1410 | 5.02 | 78 |
| Herring | 1450 | 5.55 | 61 |
| Meat and bonemeal | 800 | 3.19 | 37 |
| Rapeseed meal | 1320 | 2.30 | 50 |
| Soybean meal | | | |
| 49% crude protein | 1830 | [illegible] | 78 |
| 44% crude protein | 1800 | [illegible] | 70 |
| Linkage | 1060 | 4.35 | 71 |

[1]These values were selected on the basis of a compilation of results from several different determinations and estimates

for Swine. A standard table mixing high moisture grain with soybean meal used in the Lower 48 is shown in Table 15 below:

As can be seen in Table 14, barley has the highest percentage of Lysine and Tryptophan of any of the grain products. Featherstone feels if barley is used in Table 15 the amount of supplement needed will be reduced. Featherstone did not make these calculations due to their complexity and time consuming nature with only a short time to prepare this report. Besides for Alaska having the advantage of using barley, there is also abundant supplies of fishmeal available in Alaska which is a better protein supplement than 49% soybean meal. The use of fishmeal however may have to be restricted to 5 or 6 % of the total ration because of the palatability of the ration and of potential off-flavors it imports to the meat. Barley is a natural feed for swine and should be thoroughly researched with a variety of supplements. The barley itself should also be thoroughly tested, however because the feed value of barley varies depending upon the fiber content of the crop which varies on a regional basis. The feed value of barley in the midwest is about 85% the value of corn, while in the northwest the values of corn and barley are similar. The fiber content and available nutrients of Alaskan barley should be researched in depth.

As an addendum to Table 15 Featherstone would like to insert at this point the concentration needed in the TM Salt (trace mineral salt) in Table 16 and the vitamin mix needed in Table 17.

One last nutrient requirement for swine that needs special discussion is iron. The sow's milk is deficient in iron and within a few days after birth, baby pigs can become anemic if held in confinement. If the baby pigs have access to dirt, they will

**TABLE 15 Typical Rations Using Soybean Meal and Vitamin Mix**

| Weight Class | Rate Of Gain | Feed[1] Intake | High-Moisture Grain | | Soybean Meal | | Limestone | Dicalcium Phosphate | TM Salt | Vitamin Mix |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Daily | % Feed | Daily | In Feed | | | | |
| lb | lb | lb | lb | % | lb | % | % | % | % | % |
| 15 - 30 | .75 | 2.0 | 1.5 | 76.6 | 0.45 | 20.5 | 1.0 | 1.5 | 0.3 | 0.1 |
| 30 - 50 | 1.1 | 2.9 | 2.4 | 81.05 | 0.45 | 16.8 | 0.8 | 1.0 | 0.3 | 0.05 |
| 50 - 75 | 1.3 | 4.4 | 3.6 | 81.05 | 0.7 | 16.8 | 0.8 | 1.0 | 0.3 | 0.05 |
| 75 - 125 | 1.6 | 6.0 | 4.9 | 81.05 | 1.0 | 16.8 | 0.8 | 1.0 | 0.3 | 0.05 |
| 125 - 175 | 1.8 | 7.7 | 6.6 | 86.15 | 1.0 | 11.7 | 0.8 | 1.0 | 0.3 | 0.05 |
| 175 - mkt | 2.0 | 9.9 | 8.5 | 86.15 | 1.2 | 11.7 | 0.8 | 1.0 | 0.3 | 0.05 |
| Gestation | 0.7 | 4.7 | 4.3 | 90.55 | 0.3 | 7.3 | 0.8 | 1.0 | 0.3 | 0.05 |
| Lactation | — | 10.6 | 8.6 | 81.05 | 1.8 | 16.8 | 0.8 | 1.0 | 0.3 | 0.05 |

[1]Calculations made assuming 72.5% dry matter in grain and 85% dry matter in soybean meal

**TABLE 16 — Composition of a Trace Mineral Mixture That Will Meet the Needs of All Ages of Swine**

| Trace Mineral | Requirement PPM | Amount Added To Diet | Conc.[1] In Salt |
|---|---|---|---|
| | | (ppm) | (%) |
| Copper | 6. | 6. | 0.20 |
| Iodine | .22 | .4 | .012 |
| Iron[2] | 70. | 80. | 2.7 |
| Manganese | 20. | 20. | .67 |
| Zinc | 50. | 80. | 2.7 |
| Selenium[3] | .1 | .1 | .003 |

[1]Assume trace mineral salt will constitute 0.3% of the diet.

[2]Iron in ferrous sulfate, ferrous fumarate and ferric ammonium citrite preparations is quite efficiently utilized. The availability of iron from various ferrous carbonates is variable, but usually very low. The iron in ferrous or ferric oxide has essentially no nutritional value for swine.

[3]Added selenium must be in the form of sodium selenite or sodium selenate.

**TABLE 17 — Suggested Vitamin Mixture to Meet the Needs of Swine**

| Vitamin | Amount Per lb. of Premix[2] |
|---|---|
| Riboflavin | 1 gram |
| Pantothenic acid | 5 grams |
| Niacin | 15 grams |
| Choline chloride | 100 grams |
| $B_{12}$ | 16 grams |
| A | 3,000,000 IU |
| D | 300,000 IU |
| E[1] | 5,000 IU |
| K | 2 grams |

[1]If minerals or salt do not contain added selenium, vitamin E level should be doubled.

[2]Two pounds per ton should be added to the starter diet with one pound per ton in all other diets.

get the needed iron, but dirt is a source of disease in a confined unit and should not be used. The alternative is to give the baby pigs supplemental iron until they are on a grain ration. The iron supplement can be put in their drinking water and adjusted as they grow and begin to eat grain. The simplest method is to give a one time shot of 200 mgs. of iron in the neck muscle at four days after birth. This single treatment will provide adequate protection until the animal is eating grain.

For total consumption of feed the swine producer should figure from weaning to 50 lbs. the pigs will consume about 80 lbs. of feed. From 50 lbs. to market weight the animal will consume 560 lbs. of feed making the total consumption of a 210 to 220 lbs. animal 640 lbs. or about 3 to 1 feed conversion.

The boars which normally number 10% of the sow numbers have the same nutrient and quantity needs of a bred gilt. A bred gilt requires about 5 lbs. of feed per day while a sow requires about 4.5 lbs. per day for the 84 day gestation period. A gilt will gain 95 to 100 lbs. where a sow will gain 65 to 70 lbs. During late gestation and early lactation sows and gilts should be fed a high fiber laxative diet like oats. This prevents their stomachs from shrinking and a variety of problems at farrowing time. During lactation the sow should get 4.5 lbs. of feed per day plus 0.75 lbs. per day for each pig nursing. This amount can equal between 10 and 11 lbs. per day for the 28 to 56 day period during lactation.

An average figure for a total of all these consumption figures used by many producers is four pounds of feed is needed for every pound of finished pig marketed. The pig will need 3 pounds and the extra pound with his litter mates will support the boar and sow. Using this 4 to 1 figure for the 2500 head of 210 lbs. pigs marketed per 144 sow unit, the operator will need 2,100,000 lbs. of ration per year. On an average the ration will have 85% grain in it, meaning he will need 1,785,000 lbs. or 892.5 tons of grain per year. The total industry of 28 units will then require approximately 24,990 tons per year.

### D. Feed Mill Requirements for the Swine Industry

The complexity of swine rations demonstrated in the previous section, has led Featherstone to recommend for the state of Alaska to efficiently feed swine, a central feed mill should be built to supply groups of 144 sow units. For a single unit operator to be able to efficiently and accurately mix the eight different rations needed, seems virtually impossible. A centrally owned cooperative feed mill could mix on an optimum cost basis each ration and deliver it to a group of member operators on a routine basis. If the tanks on each area designed to hold a month's worth of rations they would vary from 8.5 tons to 13.0 tons in capacity. In the warm summer months only one or two weeks of feed should be carried to prevent moldy rations from being fed. In the winter however, bigger quantities can be carried safely and can prevent shortages during periods of bad weather when feed could not be delivered.

Earlier in this report Featherstone recommended the swine units be concentrated in the two new grain producing areas of Alaska - Nenana and Delta with twelve in each area and leaving four in the halfway point, Fairbanks. If each area has identical feed mills each must produce 10,710 tons per year or 206 tons per week or 41.2 tons per work day. This feedmill capacity is relatively small and (like in the cattle industry recommendation) should not be over mechanized when a simple system will still only require minimal labor. The system outlined in the cattle industry, however, is not practical in the swine industry because of the potential number of different items that may be needed to produce an optimum cost ration.

By using high moisture grain for swine, the only treatment the barley will require is grinding or rolling. The flaking and steaming that is eliminated with high moisture grain eliminates costly equipment that has high maintenance costs. To handle 12 units the feedmill will need two (2) silo each 31 ft. in diameter and 89 ft. high with bottom discharges. Each tank will hold a month's supply of

grain permitting the second tank to ferment the next month's addition of reconstituted barley or newly harvested barley when possible. The discharge auger from these silos should go to a central load out area that will be serviced by six overhead tanks. The silo and overhead tanks will discharge into a mixer on a batch scale which will dump into the delivery truck. An adjacent warehouse of 40 ft. x 40 ft. will be needed to store miscellaneous supplies. The majority of the system will operate using gravity and two people can easily receive all needed ingredients and ship out 60 tons daily. Such a capacity gives a 50% expansion factor to the industry before more sophisticated equipment will be needed.

**E. Development of Swine Breeding Stock**

In confined swine operations the breeding stock becomes very critical due to the intensity of use put on the animals. A gilt will produce her first litter before she is one year old and will be normally culled out by the time she is four years old. In that time frame she will produce about 10 litters of 8 to 9 babies each which, when all are grown out will weight a total of over 18,500 lbs. By comparison a cow will produce between 8 and 10 calves, which when grown out will weight a total of only 10,000 lbs. As a result of these figures, one can understand why the quality of sows and boars are so important. Good quality breeding stock in confined systems with the high fixed overhead becomes a must.

Because of the emphasis put on breeding stock in the Lower 48, it is rare that a confined swine operation produces their own breeding stock. Occasionally a large operator will create a small breeding herd within his larger herd. Normally breedstock is purchased from specialized breeders such as DeKalb or Pig Improvement Co. in the Lower 48. Such operations use the same 144 sow unit described in part B of this section and require nearly the same nutritional needs. The difference in these operations (which are referred to as grandparent herds) is that the sows usually are artificially inseminated and about one half of the gilts are selected for breeding and about 5% of the boars are selected for breeding. The animals selected for breeding are fed to heavier weights with a slighty higher protein ration. The selected sows can be sold to the individual operators either bred or not bred. The ones not bred are routinely put in the sow herd as culls are removed. The bred ones, however, may be treated as grandparents for the individual operator if he wants to take the time. The pigs from these sows first litters have totally new genetic material for the local operator. Good strong, healthy gilts that show the proper traits from these first litters can be used for breeding stock if the operator's boar has no common genetic heritage. The pigs from the second litter of replacement sows however, have a good chance (if used for breeding) of producing half sisters to themselves and this practice can cause problems. By producing as many as possible of his own sows, an operator will reduce his herd's exposure to outside contamination which reduces medical problems.

To reduce the genetic problems of confined operations Featherstone recommends on the initial operations started in Alaska that all 144 sows and 15 boars needed for each unit be purchased in the Lower 48 and shipped to Alaska. What seems like an added expense in transportation will pay off in making operations easier to start up and give the State a good base stock of animals with a good variety of genetic material. Once the State's herd is established and good records are kept, the specialized breeding companies can purchase baby boars in one part of the state and use them in another part through a good artificial insemination program.

Of the 28 confine operations needed in Alaska, Featherstone recommends at least two (2) should be of this specialized variety. The remaining 22 units of 144 will turn their sows over every 3 years, so in an average year the industry will need 1156. Each specialized unit will produce 2500 pigs per year of which 625 will be breedable gilts, so two will produce 1250 or 106 more than needed. In dealing with animals which are all different, having these specialized units so tightly scheduled could cause problems. Featherstone would see nothing wrong with a third specialized operation started if the management skills and capital were available. The pigs not chosen for breeding in these units are fed just as in a normal unit and sold for slaughter. Consequently, when the culls sold for slaughter are considered, these specialized units are counted as regular units in making up the total number of animals needed to be marketed per year in the State.

The two or three specialized units should be placed in close proximity to the halfway point of Nenana and Delta, and they should be close to an airport for when frozen semen or new sows are flow in from the Lower 48. It appears obvious to Featherstone that these units should be in the Fairbanks area. In part, this thinking is why Featherstone recommended four confined units be in the Fairbanks area.

**F. Veterinarian Requirements for the Swine Industry**

As the reader can tell from the narrative concerning the operations of a confined unit in section B of this report, the swine industry has reached a very highly technical point in the state of art. Good operators can predict the day that each sow will farrow as well as the weight progress for each litter. If

sanitation, good ventilation, and proper waste removal are handled properly, an operator has little need of a veterinarian. In the Lower 48 experienced operators normally have a vet on the project for a half a day per year just to review the operations and make recommendations concerning new developments in the industry.

A swine specialist with extensive training in confined operations should be hired by the cooperative to help get new operations started. Such a specialist besides working with new operators can review older operations to keep them updated. This practice by the Co-op will also relieve alot of the need for a veterinarian. Featherstone recommends, however, that a veterinarian be kept on retainer by the cooperative to make annual visits to member operations and disseminate any appropriate technical information. Such a veterinarian undoubtly already is in the State.

**G. Research Facilities Required in the Swine Industry**

The best research facility that Alaska could invest in would be one of the confined units recommended for the industry. This unit could be owned by the University of Alaska in Fairbanks becoming the fourth unit in that area. Such a unit, after initially financed, would be self supporting because of the revenue derived from the animal sales. The unit would have three major functions; training new owner-operators, giving "hands-on" experience to animal husbandry students, and testing new research ideas developed in the Lower 48 and in Alaska.

The new owner operator in Alaska has probably never operated a confined swine operation prior to his loan application. By having a state owned facility, a three or four week short course could be offered on management of a confined unit. This course being successfully completed could become a condition for receiving the loan. By having such a restriction the potential new operator would learn the management skills needed to begin operating the unit and whether he really even likes the business before he has to commit to a sizeable investment.

The animal husbandry students of the State represent the future expansion and continuation of the livestock industry in Alaska. By having a practical working operation to augment their academic work, these students are more likely to go into the private sector of the industry as opposed to the public sector. Also having such a facility with the cow calf operation would give the University of Alaska a livestock program that few state universities could match. By having such facilities qualified teachers in the subject would be more inclined to move to Alaska and students would see that the livestock is taken seriously in the State.

As discussed in the cattle section on research facilities, conditions in Alaska are different than in the Lower 48, and animals are going to respond differently to those conditions. The feeds are different, the amount of sunlight is different, the protein supplements are different, and the list can go on. Even though the animals are in a controlled environment which eliminates practically all of the weather related animal problems, the conditions will still be different than the Lower 48. Unforeseen problems will undoubtly occur that a research facility will be the prime entity for solutions. New techniques from the Lower 48 should also be tested before widely used in the State to prevent problems or wasted money and effort. Many ideas from the Lower 48 may just not work in Alaska and a State owned facility would be a natural place to find out if the ideas do work.

Without a doubt if the State invested in such a facility and properly staffed it, Alaska could have a facility that could be self-supporting for many years to come. Ten to twenty years down the road when the industry has matured in Alaska, this facility will be responsible for more of that growth than any other facet.

**H. Investment Needs of the Swine Industry**

Featherstone has been in contact with Sands Livestock Systems Inc., feedmill contractors, pure bred swine producers, and the manufacturers of high moisture grain silos to determine the costs of starting a livestock industry in Alaska. Prices used were from the beginning of 1981 and Alaska materials and prices used were feasible. Transportation and labor rates were estimated to the best of Featherstone's ability.

The confinement units are estimated to cost $450,000 apiece to build and 28 are needed making a total investment of $12,600,000. This price from Sands includes the use of one of their foreman directing local labor in the building of these units. They assumed that one foreman could oversee three job sites at one time. Time of construction would be seven months if all materials were previously delivered and adequate labor was available. Breeding stock could be introduced into the unit after 5 months of construction, to reduce construction interest if desired.

The sows needed for all 28 of the 144 sows units equal 4032 and will cost $400 apiece delivered on today's market. Fifteen boars in each of the units will make a total of 420 needed and each will cost $600 delivered on today's market. The sows will cost a total of $1,612,800 and the boars $252,000 making the breeding stock cost $1,864,800.

The feedmill designed as indicated in section D with the two high moisture grain silos are estimated to cost $632,000 each and each unit will

need a $60,000 specially equipped delivery truck. A total of three operations should be built for an investment of $2,076,000.

The following is a summary of the total investment needed in the swine industry:

| | |
|---|---|
| 28 confined units | $12,600,000 |
| Breeding stock | 1,864,800 |
| Feedmill and equipment | 2,076,000 |
| Total | $16,540,800 |

This figure will permit the industry to produce 9,450,000 lbs. per year on an on going basis. The total investment in the industry will only cost $1.75 for each pound sold in the store in its first full year of production. This figure seems relatively low when one considers that fresh pork is being shipped to Alaska for anywhere between $0.15 to $0.36 per pound.

**I. Time Schedule Required for the Industry**

The swine industry in Alaska should be timed to come on stream with finished animals at the same time as the processing plant is completed. If the readers will review the time schedule for the beef industry they will see the processing plant is scheduled to start up the Third Quarter of 1983. To meet this schedule sows should be bred in the confined units in the Fourth Quarter of 1982 and the Feedmill must be completed in order to feed those sows. Featherstone has derived the following schedule to meet these criterium:

**2nd Quarter 1981** — Legislative action is taken to permit the funding of the industry through the Alaska Agricultural Action Council. This funding should be for 12 confined units in Delta, for the clearing of land in Nenana, for the start of barley farms in Nenana, for 12 confines units in Nenana, and for feedmill operations in Delta and Nenana.

**3rd Quarter 1981** — Proposals should be solicited from people interested in owning confines units in Nenana, and Delta and in operating the feedmills (they will be cooperatively owned). The feedmill proposal for the Delta feedmill should have the shortest response time since it needs to be completed the earliest.

**4th Quarter 1981** — In this quarter the three lotteries should be conducted, one for the confined units in Delta, one for the grain farms in Nenana and one for the two feedmills. The feedmill, since it will be a cooperative operation, may not be a lottery but rather a selection of operators by the cooperative or the Ag Action Council. Again, the feedmill is the most time restrictive schedule and should be given the highest priority.

**1st Quarter 1982** — The operators that were drawn in the lottery for Delta swine units should be placing their equipment on order as should the feedmill operators. In Nenana the farms should be surveyed and made ready to clear the following quarter. Paper work and initial work up for the lottery for swine units in Nenana can start in this quarter.

**2nd Quarter 1982** — For the Delta site and the feedmills this quarter will be spent waiting on materials to be delivered. Some very initial site work can be started. The storage shed for the feedmills can be built with local supplies and the lagoons for the swine units can be started. In Nenana the land clearing for grain farms should be put into high gear. Also, the lottery for the Nenana swine unit should be advertised.

**3rd Quarter 1982** — The swine units in Delta should now be started and the initial breeding stock should be placed on order. The feedmills should also be under construction in this quarter. In Nenana the barley farms should be cleared as well as the land to be used for the swine units. The lottery for the Nenana swine units should be conducted in this quarter.

**4th Quarter 1982** — With good timing the feedmill should be completed early enough to receive grain directly from the harvested fields. The balance of their supplies should arrive in this quarter and the feedmill operations should begin because the gestation section of the Delta swine unit will be ready and the breeding stock will need to be fed. In the last month of this quarter the Delta swine units will be completed. In Nenana the cleared barley farms should be readied for next Spring's planting and the operators selected to operate swine units should place their equipment orders.

**1st Quarter 1983** — Delta swine units should farrow their first litters and they should reach the nursery before the quarter is over. The feedmills should now be fully functional and on line. The equipment for the Nenana swine units should be delivered in this quarter.

**2nd Quarter 1983** — The Delta swine units should have animals in the grower unit this quarter and some possibly just entering the finishing areas. The first barley crop should be planted in Nenana and the swine units should be put under construction. The breeding stock for Nenana will have to be put on order this quarter.

**3rd Quarter 1983** — The processing plant is now finished and so is the first litters from the Delta swine units. Another first will be the barley crop in Nenana which can be directly sold to the feedmill because the Nenana swine units will have gestation units ready and breeding stock delivered.

**4th Quarter 1983** — The Nenana swine units will farrow their first litters in this quarter and will progress as the Delta units did having slaughter weight animals ready in the second quarter of 1984. The remaining swine units for breeding stock production and the research facility can be scheduled to start anytime in 1983. The real demand for second generation breeding stock will not start until 1985, so there is adequate time to find experienced operators for these units.

As stated with the Cattle Industry, this swine time schedule can be slipped back a quarter or two if legislative or construction time schedules cannot be met. The only real loss will be the processing facility overhead costs due to a lack of animals to slaughter The few animals presently in Alaska that are ready to be slaughtered can be handled on a training basis for employees, but until a sizable number of confined units producing finished pigs is on stream, the processing unit will not be economical. This fact should not cause a lot of concern if only for a short period. The processing unit will be the least expensive segment of the industry and for it to have idle capacity is better than have livestock ready for market and no processing plant available.

## SECTION VII

## DEVELOPMENT OF AN ALASKAN SLAUGHTER AND PROCESSING PLANT

### A. Introduction

Upon arrival in Alaska one of the first comments that Featherstone representatives heard was that if a proper processing facility was available the state's livestock industry would take off on its own. By the time the reader has reached this point in this report, he should realize that a lot of work and capital is going to be needed to have a properly sized industry that is economically viable and that will perpetuate itself. It is very doubtful a processing plant alone will make the industry develop properly without a lot of planning on the producing side of the industry.

However, the idea that the processing facility is vitally necessary to get the industry started is probably a true statement. The present "chicken and egg" dilema of which comes first the live animals or the processing facility must be solved. To build a processing facility is the least expensive and will show the potential livestock producers the State is seriously behind them. The cost of underutilizing the processing facility, while the animal production is being built up, is not very expensive when compared to the cost of carry-over livestock waiting for a processing facility.

Alaska's livestock industry has another problem facing the processing plant that has been alluded in this report. The annual swine slaughter needs to be 70,000 head and the cattle slaughter 26,000 head. The total slaughter translates to only 369 head per day which, in the Industry's terms, is a small plant which is normally uneconomical. In order to have any economies of scale both species of livestock should be processed in the same plant. In the Lower 48 this practice was out of date by the mid 1960's with only specialized single species high volume plants being constructed. Featherstone however, feels that by combining facilities for by-product recovery, sharing welfare facilities, and producing pork sausage and hamburger in the same area, the inefficient aspects of the two small kill floors can be overcome. If the marketing scope of this plant is enlarged to encompass wholesaling other shipped-in meat products, the inefficiencies of the delivery system of small plants can also be overcome.

During the start-up years in the industry, having the two small kill floors together will probably ease the labor training problems that are inherent in the beginning. The even flow of animals available in the Lower 48 will take some time to develop in Alaska and the pool of trained people will take time to develop. By having the two floors together personnel can be cross-trained in both species allowing surges of animals to be handled more easily.

Another consideration favoring a dual species plant is when the time comes that a larger facility is needed for either species, the new plant can be built at a new location and the old plant can have room to expand with the other species. The equipment for slaughtering either species can be easily moved to a new facility and the space left behind will meet the requirements of expanding the kill floor of the remaining species.

In summary, Featherstone feels comfortable in recommending that Alaska break with the tradition of the Lower 48 and build a tandem kill floor plant to handle both cattle and hogs. The plant should be able to process 100 head of cattle per day and 270 head of hogs per day. In addition, the plant should process the resulting carcasses, the carcass animal cuts, the hides, and the remaining by-products to as full a degree as possible. The completeness of the facility will allow it to maximize its profit potential to overcome its inherent inefficiencies in size.

### B. Ownership and Location of the Processing Facility

The form of ownership that the processing facility takes will have an impact upon its costs for several years. The quicker the plant can reach an optimum production level, the start up costs will be reduced.Besides the owners of the facility, the people who have the most to gain or lose from the facility being in existence are the livestock producers. If the livestock producers and the owners were the same people in the form of cooperative venture, maximum effort would be made to reach the optimum level of production. The producers would also feel more confident in increasing their production when they own the plant. They might be reluctant if an outsider owned the plant realizing if

that owner did not make a profit the plant could be shut down. The closing of the plant could mean financial disaster to the livestock producer who had built up a large investment in animals and equipment. For the above reasons Featherstone feels a cooperative venture of livestock producers should own the plant.

Finding the right location for the processing plant is also a difficult problem to solve. Wherever the plant is located, the local economy will be enhanced and as a result the site location can become quite political. Featherstone will not address these issues but will give its ideas on where the plant should be located on a general basis. The criteria for the specific location will also be given for a basis to start a site location study if one is desired.

It is felt the best location for the processing plant is close to the production of the animals and the animals should be close to the source of feed. The two potentially biggest grain producing areas in the State are Nenana and Delta. These two areas are less than 200 miles apart and have a good highway system between them and into the major population center of the State, Anchorage. In the Lower 48 it has been found that a processing plant cannot reach out more than 300 miles for a source of animals and remain profitable. The economics of shipping a live animal greater than that distance and the cost of sending livestock buyers that distance are prohibitive. For these reasons, Featherstone feels the plant should be located somewhere between Nenana and Delta on the highway system.

Over the years that Featherstone has done consulting work, they have boiled the final selection for a processing plant down to five areas. The economics of each area needs to be determined to give a guideline to their relative importance. Often the costs of one aspect in one location is restrictive while in another area a different aspect is cost restrictive. The degree of the restriction in the two different areas must be compared to make the final decision.

The five areas and the key points of each are as follows:

**1. Labor**
- a. Available supply.
- b. Hourly rates.
- c. Quality available.

**2. Utilities**
- a. Energy source for power and steam production.
- b. Water purity and availability.
- c. Sewage disposal and availability.
- d. Related environmental consideration.

**3. Transportation**
- a. Access to major highways.
- b. Availability of a rail spur.
- c. Freight rate differentials for finished product.

**4. Land topography**
- a. Proximity to a flood plain.
- b. Elevation for proper sewage discharge.

**5. Community support**
- a. Compliance with local planning.
- b. Ownership and zoning problems.

Due to the critical need for a processing plant to get the livestock industry started in Alaska as quickly as possible, the political expedient decision may dictat foregoing the analysis of some of these areas. The potential procrastination of making the decision could cause more damage in ways which cannot be put in dollar terms than the error in selection could cause.

**C. Description of Cattle Slaughtering Facility**

The cattle slaughtering facility should be designed to slaughter 100 cattle per day and have room at least double in capacity. A corral area outside the slaughter floor is the beginning point for any slaughtering facility. This corral area should be simple built with a shell covering and positioned so little of the noise from the plant can be heard by the cattle. The Alaskan facility should have a capacity of 300 cattle and have heated watering facilities but no feeding bunks. Cattle can fast for 24 hours before slaughter with no harmful effects.

From the corral area is a chute leading to the kill floor which can hold six or seven head rather snug. One at a time the animals will be led into the plant, stunned, shackled, lifted up onto a bleeding rail, and the main throat artery cut, making the animal bleed to death in a stunned condition. Once the animal is finished bleeding. The head is removed and tagged with a number as is the carcass for the government inspector to be sure the carcass he is looking at down the line is matched with the proper head. Once the head has been inspected, a worker will remove the tongue, and cheek and head meat plus any glands that may be used locally for pharmaceutical purposes. The balance of the head is put into a bone grinder and put into rendering.

The carcass with head removed is moved on the rail system through a series of stations from which operators remove the hide from around the four legs and belly area. In a system operating at 100 head per day, the rail system used moves the carcass by gravity or is a manual system. (On kill floor of over 200 head per day this rail system can be mechanized to move the carcass at a predetermined rate.) The loose portions of the hide are attached by chains to a wench that pulls the hide up off the back of the carcass. The hide will weigh

7% of the live animal weight on an average and is the most valuable by-product. In good operations the hide is removed in one piece and has no cuts or scores. Once removed the hide is placed on a table and excess fat is cut off and loose ends are trimmed off.

The hides then go to a brine solution for curing. After curing they are drained, lightly salted, folded and stored.

The carcass without the hide is now opened up and eviscerated. These internal organs are kept with the carcass until they both have been inspected with the head. Before being inspected however, the carcass is split into halves using a large power saw to cut down the backbone. The carcass is then inspected with all the other parts and the carcass is washed and shrouded. The shrouding process is wrapping each half carcass with a bleached white muslin cloth. The cloth is used to pull up or pull in certain areas of the carcass and then pinned in place with skewers. By using shrouds the surface blood vessels on the carcass are bleached out to give the carcass fat a clean white appearance and by holding certain muscles in the proper position during chilling the carcass cuts out better. The shrouded side of beef is then pushed into a cooler.

The carcass is chilled for 18 to 24 hours. The shroud is removed and the carcass is ready to be graded. If the carcass is to be graded a cut is made along the seventh rib bone exposing the eye of the rib for the grader. The carcass is now ready to be sold to retailers, wholesalers or to be partially deboned in the fabricating and/or institution cuts area described in Part F.

On the kill floor, the carcass was inspected for sanitation and wholesomeness. This inspection must be done in accordance with Federal guide lines as set down by the Department of Agriculture (U.S.D.A.) Such inspection may be done by the U.S.D.A., or it can be done by U.S.D.A. approved local veterinarians supplied by a State inspection service. The standards and rules for this inspection are set out in the Wholesome Meat Act of 1968 and subsequent amendments. Featherstone strongly recommends the plant be under the inspection services presently offered by the State if for no other reason than to be able to sell the 10% plus of the Alaskan population in the military.

**D. Description of Swine Slaughter Facility**

The process that Featherstone recommends to use for slaughtering hogs is identical to the process used for cattle. Swine being smaller animals and easier to eviscerate should be kept on a gravity rail system instead of a mechanized rate even though the initial kill rate will be 270 per day. The stunning area will be slightly different in that two or three animals may enter the plant together to be stunned and bled at the same time. Another change is after evisceration the carcass is inspected whole, the leaf lard is pulled out of the carcass cavity, and the carcass is rolled into the chill coolers whole and without a shroud.

It has only been in the last few years that swine slaughterers have skinned the animals like cattle. Prior to that time the carcass was scalded and dehaired leaving the processor, retailer, or ultimate consumer to remove the skin. The hides from swine however can be brined and salted just like beef hides. The market for these hides is quickly growing. Appendix J is an article comparing the traditional method and the new method of handling hides from swine. The energy related factors in this article have led Featherstone to recommend skinning swine carcasses. The only real drawback is if it is desired to sell the cuts from the carcass to other packers which have traditionally dealt with skin on product. Since the Alaskan plant will handle all of its own cuts to the retail level that disadvantage does not exist.

Once the carcasses are chilled, the following day they are taken to a cutting area. Pork carcasses are not graded as a general rule. In the Lower 48, 90-95% of all pork carcasses are cut into their primal cuts by the same plant that slaughtered the animal. This pork cutting operation wil be discussed in Part F.

**E. Development of the By-Product Recovery System**

As stated earlier the hides are the most valuable by-product. In a separate room off the kill floor these hides have been pickled in brine solution, salted, and tied in bundles. From here most plants this size would ship these hides to tanners who further process the hides into leather. This option is open to the Alaskan facility and all that is needed is storage area to hold the hides until an appropriate quantity can be shipped. The Japanese and Koreans are relatively close and both have facilities to handle both cattle and swine hides. Featherstone, however, has learned some tanning facilities were built into the Reindeer Herders Association processing facilities at Nome. A Featherstone representative contacted Virgil Severns, the Co-Operative Extension agent for this operation. Virgil said that B.I.A. owns some tanning facilities but they have never been used or even set up for operation and he was not sure if they had all the equipment needed to make a finished product. Featherstone recommends that whoever operates the cattle and swine processing unit should learn what equipment is in Nome for the possibility of starting a joint venture with the Reindeer Herders Association. The added hides for the new facilities may make the set up and utilization of this equipment feasible.

The viscera saved on the kill floor represents the next biggest source of revenue from by-products recovery. The normal organ products like the heart, tongue, and liver will be washed, packed, and frozen. A local market for such products should be readily available to the plant. The remaining offal products like the brain, stomach, lungs, spleens, intestines etc. have no real retail market. These products are normally ground and cooked in large, steam heated vessles called melters. The results of this cooking produce tallows (or greases) and dried meat scrapes or tankage. The two are separated by a screening process and sold separately for soaps and animal feed respectively. The blood and bones produced from the kill floor and boning areas can be added to this cooking process. Cattle will normally produce 150 lbs. per head of products for cooking or rendering and swine will produce 35 lbs. per head. Featherstone recommends a standard 12' x 5' cooker that has a 5000 lb. capacity to handle the product. If all of the day's product is cooked, this piece of equipment will reload five times a day. This schedule is tight, but possible. Room for a second cooker for expansion should definitely be made.

During Featherstone's visits to Alaska, it was learned the state has a very large dog population, which is fed dog food shipped from the Lower 48 as well as fish and a variety of products. Besides for the bones and blood, the raw products that are normally cooked, could be ground or hashed in their raw state, bagged, frozen, and sold as dog food. If such a product could be sold for enough extra money to cover this expense, the energy saved from not having to cook the product and the relieving of the tight time schedule, would make the expense very worth while. If the plant were able to have time in its cookers to save all the blood for one extended cook, the dried blood meal has valuable markets as a specialty fertilizer and feed supplement. The plant will also need a specialized cooker to make lard from parts of the pork carcasses.

The final by-product recovery comes from the sewer system in the plant. During the carcass cleaning process on the kill floor and the various daily clean up processes a fairly large quantity of fats material get washed down the sewer. All washdown sewer lines in the plant should leave the plant through a series of baffels in a pit. The fat will rise to the top of the pit and can be skimmed off and cooked into tallows and greases. Besides creating a saleable product, this practice greatly reduces the sewage problems associated with a processing facility.

The amount of time describing the by-product recovery systems needed may have seemed a waste of time to most readers. Featherstone has gone into this detail to show its relative simplicity. This by-product recovery is very important and can significantly affect the bottom line of the processing facility if done properly. In the Lower 48 as a general rule of thumb, the cost of the live animal is returned in the sale of the carcass. All of the operating expenses, overhead, and profit are created from the sale of offal products. It's hoped this rule of thumb will make the reader appreciate the value of by-products.

**F. Development of Processing Facilities**

Prior to the by-product recovery section, the processing description had stopped with chilled carcass ready for cutting. Each specie will be described separately and then the potential processed meat (hamburger and lunchmeat type products) will be described.

1. **Beef processing** — upon entering the cutting room the cut made at the seventh rib is completed and the half carcass is cut in two making a forequarter and a hindquarter. In the Lower 48 a sizable percentage of the total beef carcasses are shipped in this form to retail stores and between beef processing plants.

   The next set of cuts usually performed on the quarters is to break out the primal cuts — brisket, rib, navel, flank, loin, round and shanks. These cuts are also sent to retail stores in the Lower 48. However, the largest percentage of carcass from finished cattle in the Lower 48 are being fabricated. Fabricating is the process of taking primal cuts and removing most of the bones and all excess fat, then placing the remaining pieces of meat in heavy plastic bags which are vacuumized and sealed. The U.S.D.A. reported in 1979 that 800,000,000 lbs. of fabricated boxed beef were produced from 11,900,000 steers and heifer carcasses, representing 46% of the total federally inspected steer and heifer slaughter.[1]

   Fabricated, boxed meat has been shipped to Alaska for years. The reduced weight with the high transportation costs have made fabricating beef shipped to Alaska almost a necessity. Featherstone's calculation of transportation costs to Alaska for beef was figured on an average 450 lbs. fabricated carcass instead of the conventional 600 lb. full carcass.

   In the Lower 48 fabricating has become popular for two reasons — reduced store labor and ease of working with the product at the store

[1]Preliminary data based on special reports received as of July 1, 1980 from all slaughters/fabricators of boxed beef except food chains boxing beef for their own stores as reported in National Provisioner December 13, 1980, p. 53-54.

level. The reduced store labor is done with more labor at the processing facility which can be more specialized and efficient on a factory assembly line basis. When the product reaches the store level it is in boxes that are easily handled when compared to carcass beef that must be hung on hooks from an overhead rail system. By being in a vacuumized bag the product has an extra two or three weeks of storage life in the store if properly refrigerated. This storage capability permits store owners to order more freely during advertized sales and not having as big a worry if the sale is not successful. Product left over in the bags can be carried for regular business in the following weeks.

Two cuts from the carcass are usually not fabricated. They are the navel and flank. These two cuts are normally ground up and mixed with lean ground cow meat to make hamburger. Normally the carcasses of cull breeding animals and dairy animals do not have enough finish or quality in the meat to be sold as cuts in retail stores. These carcasses are usually completely boned and ground up for the manufacture of hamburger or lunchmeat. If hamburger is being made, the flank and navel cuts from fabricated carcasses are used to adjust the fat level up in cow meat to give the desired eating quality in the hamburger.

Another marketing innovation of recent years is for the central processing facility to make a coarse ground hamburger mix and put it in large 10 lbs. bags for the retail stores. This product again has a longer storage life than normal ground beef at the store level. The central plant can adjust the fat level on more economical quantity basis. The resulting product is then reground in the retail store to the normal hamburger grind size and packaged for sale.

Due to the demographic nature of Alaska's population a disproportionately large percentage of the food business is done in by hotel, restaurant and institutions (the H.R.I. trade). Some of the reasons for this large percentage will be discussed in section G. The H.R.I. trade requires some very special handling which includes portion control cutting of meat. In the Lower 48 the central processor will often make primal cuts specially for the needs of this H.R.I. trade. The actual portion control cutting is normally done by a different operator close to the market being served. Alaska has a few relatively small H.R.I. meat cutting operations. Most of the H.R.I. trade is being supplied by cutting facilities in Seattle. Featherstone believes this market is relatively easy to enter as will be discussed in section G and if the present Alaskan H.R.I. operators show no inclination to enlarge, the central processing facility should have the space and equipment needed to supply this market. This operation is also recommended for pork processing. The central plant should be capable of taking a halved carcass down to individual H.R.I. cuts or anywhere inbetween if necessary.

2. **Pork processing** — the pork carcass is handled completely different from beef. Upon entering the cutting area the sides are cut into the shoulder (butt and picnic) jowls, belly, loin, spareribs, and ham. All of these cuts can be sold at retail but normally only the loin, spareribs and butt portion of the shoulder are seen in grocery stores.

   The picnic portion of shoulder, the jowl, belly, and ham are often injected with a curing solution and smoked making cured pork products that carry a long shelf life. Cured and smoked pork bellies become bacon. This process can be done in line with the cutting table and requires only the injection machine and the smoking units. The added profit from producing cured pork products more than offsets the costs of this equipment. The market for these cuts on an uncured basis is rather limited even in the Lower 48 which makes this investment almost a necessity.

   During the cutting operation some small pieces like the neck bones and backbones are trimmed of any usable meat. This product is mixed with the boneless product of any other pork cut, ground, and mixed with salt and cured to make fresh pork sausage. Often the jowl and pork shoulder are boned for this purpose if the retail market is slow on these products. The equipment used to make pork sausage is the same used to make hamburger that has the fat level adjusted.

3. **Lunchmeat processing** — an alternate use for the coarse ground beef trimmings and boneless pork cuts is to make various lunchmeats. The only extra machinery that would be needed is a cutter, a stuffer with a built-in linking device, and appropriate packaging equipment if consumer size packages are desired as opposed to bulk packs (which would use the fabricating vacuumizing equipment). To produce lunchmeat some specialized expertise is needed and some extra space. The profit margins in this area, however, are the largest in the industry making the investment in the equipment and space usually worthwhile.

   Another advantage to processing lunchmeat is the potential for using by-products that otherwise would be rendered. Some common examples of such uses are pork livers to make

braunschweiger, beef hearts to make chili, and pork snouts and pork hearts to make souse.

The distribution of such products as well as bologna, wieners, and salami are natural with fresh carcass meat. If the funds are not immediately available for this operation, Featherstone recommends that at least space be built to house the operation in the future.

**G. Development of the Marketing Systems**

The marketing needs of an Alaskan processing facility will be different from the needs of a plant in the Lower 48. The size of the population is small, the single population percentage is high, the military population percentage is high, and retailers are presently being served from warehouses putting vans together in Seattle. To Featherstone all of these factors point to the plant servicing as wide a segment of the market as possible. If the plant is to effectively sell local stores in the State, as many of the meat products as possible should be offered. By doing so, more tonnage is delivered on each stop of the delivery vehicle which can reduce delivery cost by as much as $0.05 per pound. To be viable and competitive in the market the plant must keep its sales and delivery costs as low as possible. By having both species of fresh meat available with smoked, cured pork items and lunchmeat, the plant has a good chance of having reduced delivery and sales costs. If the plant were to handle other products from the Lower 48, however, those costs could be reduced even further. Featherstone recommends the plant should investigate compatible products like chickens, canned hams, specialty sausage items not made locally and other chilled non competitive items sold in the meat department of a retail store.

The large percentage of single people in Alaska generally means more restaurant business. The military population is fed on an institutionalized basis. Both of these markets account for as much as 40 to 45% of the total meat consumption in the State. For this reason having H.R.I. meat products available becomes very important if the plant is to capture 50% of the market. Military bases have been directed to buy locally when at all possible if the price is competitive. The restaurant business is quality and price conscious and not label conscious like the retail market. To get all of the military business in beef and pork should be possible within a few years. The plant should get 75% of the restaurant business in the same time period. The retail market will have to be penetrated and the plant will have to get 22% in order to have 50% of the total market. To get this percentage will require a good product that is consistant, and priced at or below the present market, and sold by knowledgable salesmen. A retail butcher will resist adding a new supplier because of the added paperwork involved. A good salesman is needed to convince him that the local plant will be beneficial. Once the retail butcher in the store is convinced, the general manager or supervisor who makes the final decision is easier to sell. Besides resisting a new supplier, the salesman will have to compete with the Seattle suppliers who will not easily relinquish the business they have profited from for years. To obtain 22% of the retail market, however, is not an insurmountable goal and can be done with good management.

One of the first marketing decisions that the operator will have to make will be on whether or not the beef will be U.S.D.A. graded. Beef graded U.S.D.A. Choice is a standard in the industry and if supplied would eliminate many objections received by the salesman. The market in Alaska is also very familiar with Choice graded beef and only recently has Market Basket, Proctor, D & A, and Safeway introduced ungraded beef in a limited way. The cost of grading beef by the normal means as in the Lower 48 is almost prohibitive. Graders from the U.S.D.A. cost $20.20 per hour and must be guaranteed 40 hours per week. This means a cost of $808 per week must be paid by the 70% of the weekly kill that are feedlot finished cattle or 350 head. The cost would be $2.31 per head.

An average grader can grade 50 head per hour without a moving rail which means he will only have seven hours per week of work at the plant.

Featherstone contacted the grading service of the U.S.D.A. in Washington to find solutions to reducing this cost. Featherstone learned it takes two years to train a grader (if he has the proper background) which also became an obstacle. However, it was learned that several graders have requested transfers to Alaska if an opening should occur. The costs of training a designated person would be eliminated if such a grader was used. To relieve the cost burden the grading service has a 60-40 time sharing program that is used in Hawaii, Nevada, Virginia, and North Carolina. In these states the state government pays the graders actual wages and 60% of the normal overhead costs associated with providing the service. The federal government is paid the other 40% to provide supervisory personnel. This grader can then be used by the state in whatever capacity it sees fit and can charge whatever they want to the recipients of the grader's services. Besides grading cattle, the grader will also be qualified as a weights and measures inspector, be able to certify food products for state and federal purchases, provide a market news service, and grade a variety of dairy and poultry products. The operator of the plant and the division of Agriculture in Alaska will have to work out this program if grading service is desired.

**H. The Size and Cost of Plant and Equipment**

Without actually designing the plant, Featherstone has estimated the number of square feet needed in each section of the plant and the equipment needs. From the square footage in each section taking into account needed ceiling heights and possible insulation requirements, a cost on a square foot basis was determined. A manufacturers price list of equipment was obtained and the prices in it were marked up 30% to cover inflation until 1983. Areas that have the same general requirements are added together to reduce the number of repetitious calculations.

1. **Kill Floors** — both pork and beef and includes hide area and room to work up by-products prior to rendering.

| | | |
|---|---|---|
| Square footage | 6250 | |
| Cost per sq.ft. | $102 | |
| Cost for building | | $637,500 |
| Equipment costs | | 179,400 |
| Total for Kill Floors | | $816,900 |

2. **Rendering Area** — includes mechanical shop

| | | |
|---|---|---|
| Square footage | 2500 | |
| Cost per sq.ft. | $ 82 | |
| Cost for building | | $205,000 |
| Equipment costs | | 348,400 |
| Total for Rendering | | $553,400 |

3. **Cooler Areas** — includes area to chill carcasses, all boning operations, refrigerated warehousing area, curing and smoking area, and shipping facilities.

| | | |
|---|---|---|
| Square footage | 12,700 | |
| Cost per sq.ft. | $ 85 | |
| Cost of building | | $1,079,500 |
| Equipment Costs | | 343,600 |
| Total for Cooler Areas | | $1,423,100 |

4. **Employee Welfare and Offices** — includes dry storage and laboratory.

| | | |
|---|---|---|
| Square footage | 6200 | |
| Cost per sq.ft. | $ 55 | |
| Cost of building | | $341,000 |
| Equipment Cost | | 12,000 |
| Total Welfare and Office | | $353,000 |

5. **Lunchmeat Production Area** — equipment includes added refrigeration equipment.

| | | |
|---|---|---|
| Square footage | 1900 | |
| Cost per sq.ft. | $ 85 | |
| Cost of building | | $161,500 |
| Equipment Cost | | 169,100 |
| Total for Lunchmeat Production | | $330,600 |

6. **Miscellaneous equipment and supplies** $41,000

| | |
|---|---|
| Grand totals | |
| Building costs | $2,424,500 |
| Equipment costs | 1,093,400 |
| Combined | $3,517,900 |

These costs are estimates and the individual components will not cost out on a separate basis. Common walls and floors permit certain economies in construction. The concrete price used was $120 per cubic yard and construction labor wages were priced at $21.00 per hour. These two costs increase the price $24.00 per square footage on 29,550 or $709,200.

Featherstone in these figures has not allowed for any steam producing boilers (assuming outside steam can be purchased) and no sewage disposal facilities. Presently in the Lower 48 many slaughtering plants are closed and their equipment is for sale. From such plants used equipment can often be purchased at a fraction of the normal costs. This practice should only be done by an experienced person in such procedures or the equipment on a delivered installed, overhauled basis can cost more than original equipment purchased and delivered new.

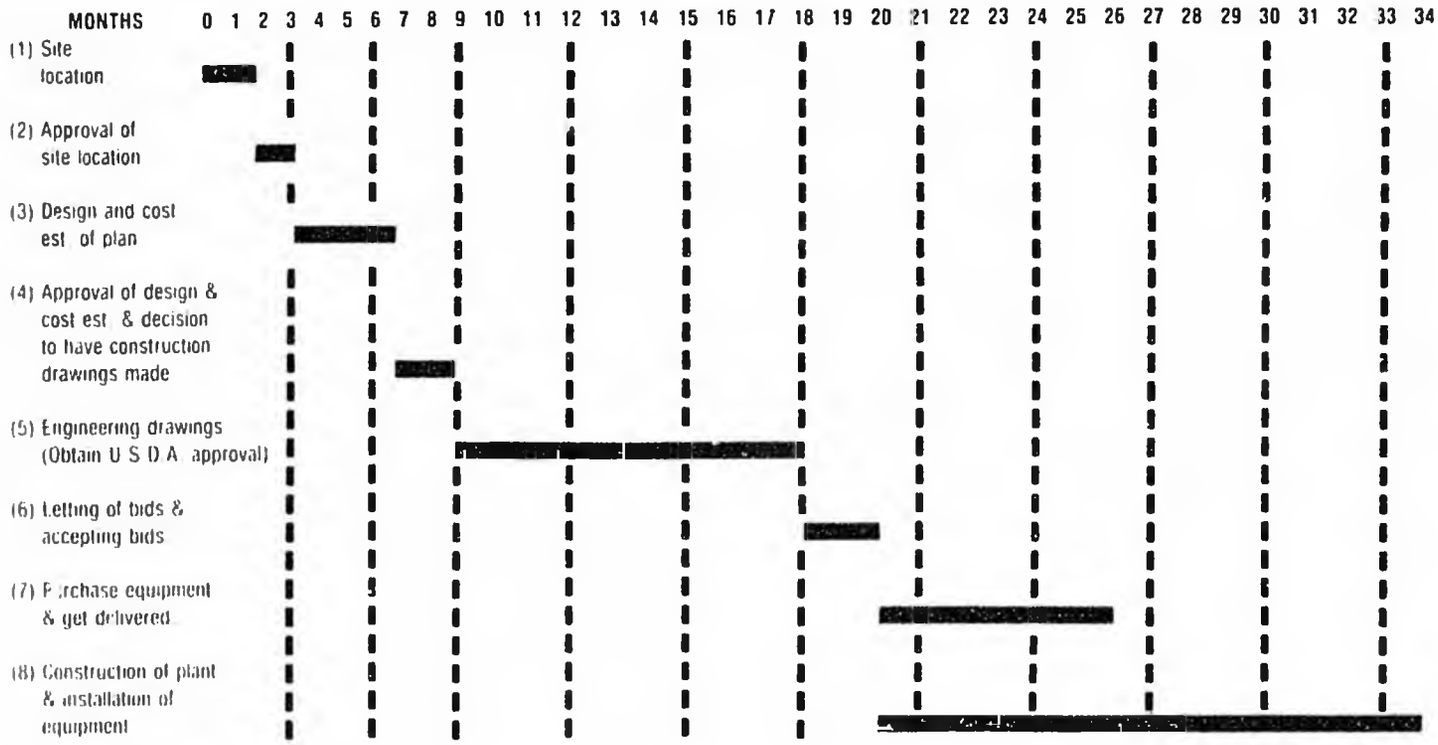
**I. Design and Construction of the Processing Plant**

Two methods of designing and constructing the processing plant can be used, a conventional method, and a fast-track method. The conventional method proceeds through each step of the process one at a time and has frequent decision points where changes can be made. The fast-track method provides for functions in the project to overlap reducing total time to build the plant. The fast-track method, however, precludes many decision points and normal construction bidding procedures must be greatly modified.

The following two tables (18 & 19) show the time frame involved with each method:

Featherstone is aware many people in Alaska, and especially people presently owning livestock want a processing facility built as soon as possible. The fast-track method will expedite the completion of the facility. Featherstone has had experience with both schedules and believes both can produce good functional plants. However, the fast-track method will increase the cost of the building 10 to 15% normally because competitive bidding is greatly restricted and overtime in designing is necessary. In reviewing the other areas of the industry Featherstone also sees the added time of the conventional method relieving the time pressures of building confined animal units, feedmills and the like. This decision, however, is in the hands of the legislature of Alaska, the funding body for such a project. Such a design and construction schedule decision should be carefully weighed.

## TABLE 18
## CONVENTIONAL CONSTRUCTION FLOW

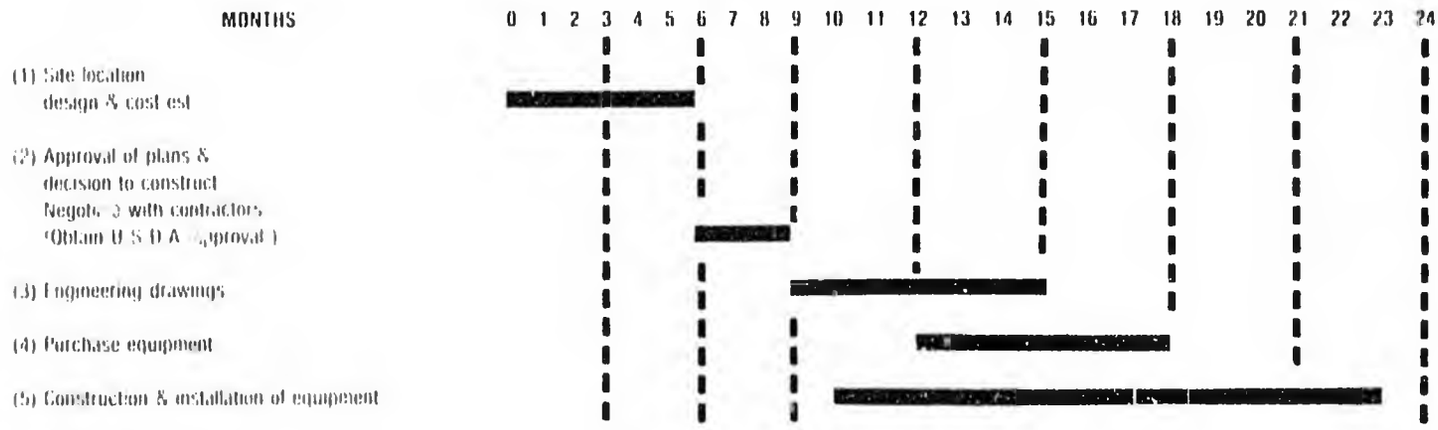



TOTAL 34 MONTHS

*Approval points or decision points

All market development, shipping requirements, and contract negotiations for sales can be done in last 12 months of construction

## TABLE 19
## FAST-TRACK CONSTRUCTION PLAN




TOTAL 23 MONTHS

*Decision point

All market development, shipping requirements, and contract negotiations for sales can be done in last 12 months of construction

This construction schedule has only one decision point and relys heavily on designers, engineers, and contractors to work as a team instead of separate entities. Bidding of project is normally only a guarantee not to exceed with time and materials priced on a cost plus mark up basis

## SECTION VIII

## NECESSARY INFRASTRUCTURAL NEEDS OF THE LIVESTOCK INDUSTRY

When Featherstone was first contacted about doing this report, there was considerable concern about having the needed infrastructure in Alaska to support a livestock industry. Hopefully this section will relieve that concern. The infrastructural needs of the livestock industry are very few in number and can be easily met. These needs can be separated into two classes; those needs which must be supplied to the industry, and those items which need to be sold by the industry to become viable.

*The needs which must be supplied to the industry* fall into two categories; those required by the animals and those required by the equipment. The animal needs are all medical and nutritional in nature. The medical needs must be supplied by a veterinarian. If a cooperative is formed in the livestock industry one of the first services it should supply is the use of a veterinarian. By hiring one veterinarian the needs of the 27 cow-calf operations, two feed lots, and 28 confined swine units could be supplied 90% of the time. The remaining 10% of the time the emergencies that occur when the coop vet is in the other part of the State — local vets could fill in with little problem. The desire of vets in the North Star Borough when interviewed to have a large animal or livestock practice was quite positive. The coop could probably hire one of these vets on a retainer basis initially until the industry was fully developed and then that vet could be hired on a full time basis.

The supplies that the vet will need are already being supplied to the State. The inventory of those supplies will have to be increased. If more information is desired on availability and lead time for veterinarian supplies, the reader can contact Jerry Rudisill in Anchorage at J.R. Distributing.

The nutritional needs of the animals are for feed grains, forage, supplements, vitamins, and minerals. The feed grains and forages are presently being grown in Alaska and the technology to expand that production is already available. The supplement needs of the animals are greatly reduced when barley is the prime crop fed, which is the case in Alaska. Two supplements are available from the fishing industry in Alaska — fish meal and crab meal. Both are presently available in abundant supply. Another potential supplement is meat and bone meal produced by the processing plant from its rendering operations. Presently, the Alaska Mill and Feed Co. owned by Don Donotello has a rendering operation in Anchorage which can initially supply meat and bone meal if the livestock producers want it. The last potential type of supplement is from rape seed which is used in Canada. Presently, this product is not permitted to be used in the United States by Food and Drug Administration. This restriction is presently being appealed and within a few years could be released for use which would be a practical protein supplement source that could be grown in Alaska.

The vitamins and mineral needs of the animals must be supplied with product supplied by the Lower 48. These materials are used in relatively small quantities and must be produced in large quantities to reduce costs. The shelf life of these products often is limited which precludes the possibility of their manufacture in Alaska. To obtain quantity purchase discounts and reduced transportation charges, the cooperative could purchase these materials for resale to members. The availability of vitamins and minerals on a pre-mix basis from the Lower 48 is not a problem.

The needs of the equipment in the livestock industry are in the livestock handling area and the processing plant area of the livestock. After the initial equipment for handling livestock is purchased, the maintenance and replacement needs are minimal. The problems with trucks in Alaska has been overcome in other industries and will be no different in the livestock industry. The confinement equipment requires only a few spare pieces and an electric arc welder. For the most part good farmers can maintain their own equipment fairly well. The parts that need replacing like motors and bearings are not exotic and can be replaced locally in most cases.

The maintenance and replacement needs for the processing plant however is different. The machine shop in the processing plant should have good lathe and lathe operator, with plenty of metal stock and manuals for all the equipment in the plant. Spare motors, bearings, rings, valves, etc. should be kept on hand for the refrigeration equipment. Supplies like ammonia (or freon), clean up soaps and sanitizing agents, knives, saw blades and the numerous miscellaneous items needed in a processing facility must be kept in adequate quantity to allow for delivery time from the Lower 48 if necessary. Many items used in the plant are warehoused in Alaska now but the larger items should be inventoried.

*The items which need to be sold by the industry* to make it viable primarily are produced by the processing facility. As mentioned in the by-product recovery section Part IX the sales of by-products are very important to the profitability of the plant. A market must be developed for the meat, blood and bone meal, various organ meats, and various glandular products. The meat, blood and bone meal as discussed above can be sold as a lievestock protein feed supplement. This product can be used by all livestock not just cattle and swine. Manufacturers of hard dog food, horse feed, chicken feed, and other animals can all use this product. The protein level of the meal will vary between 55 and 65% depending on the amount of blood meal use. Consequently, for all these different feeds, such a meal can be a cheap source of protein.

The various organ meats like tongues, hearts, spleen, lungs, etc. can be packed, frozen and sold in some cases. The labor to prepare these products is great and often the price received is not enough to justify the labor. The items which do not sell readily and profitability can be coarse ground, bagged and frozen for use as dog food to the many dog mushers in the state. What quantity cannot be sold in this manner can be put into the melters to make meat meal and tallow.

The remaining by-products that must be sold is the hides which have been brine cured and salted. As mentioned in Section VII the facilities in Nome may be an outlet for these hides. If these facilities are not available the hides can be stored almost Indefinitely and when a sufficient quantity is available a railroad car can be loaded and the hides sold on a world market basis. These hides are quoted daily and brokerage firms sell hides daily for packers. Although transportation must be paid to sell these hides in this manner, the value returned from them is more than worthwhile.

Featherstone hopes the reader can now understand how the industry is fairly self reliant and needs little infrastructure. The majority of what is needed is already in Alaska and does not have to be imported. The few outside suppliers and outside markets that are needed will probably develop rapidly once the industry begins to take on the size indicated in this report. The industry in the Lower 48 is in a mature point in the industrial growth cycle which means few facets of it are expanding and many are consolidating and contracting in size. As a result the suppliers and buyers in the industry are looking for areas like Alaska that are just starting a livestock industry. These people often are willing to put very attractive packages together for the industry if new accounts can be created. Alaska without a doubt will be taken seriously by these sellers and buyers because the world is very conscious of Alaska's need to invest their oil revenues. With a conducive atmosphere for the industry's needed infrastructure and the availability of money in Alaska, Featherstone sees little problem in developing those needs on an economically viable basis.

## SECTION IX

## THE TOTAL NECESSARY FUNDS NEEDED FOR THE LIVESTOCK INDUSTRY

This section is a summation of the cost estimates contained in Sections VII, VIII and IX. At the end of the listing is what is not included and a discussion of why it is not included.

**TABLE 20**
**TOTAL INDUSTRY COSTS**

| | Per Unit | For Industry |
|---|---|---|
| **Cattle Industry** | | |
| 1. Cow-Calf Operation | | |
| a. Land 3000 Ac./27 Units | $ 900,000 | $24,300,000 |
| b. Breed Stk. 375 Cows) 25 Bulls) | 520,000 | 14,040,000 |
| c. Feeding Equipment | 375,000 | 10,125,000 |
| d. General Equipment | 350,000 | 9,450,000 |
| Sub-Total | $2,145,000 | $57,915,000 |
| 2. Growing Operation | | 6,100,000 |
| 3. Feed Mill - 2 units | 455,000 | 910,000 |
| 4. Confined Feed Lots | | |
| a. Building - 2 Units | 1,800,000 | 3,600,000 |
| b. Land - 60 Ac. | 18,000 | 36,000 |
| c. Miscellaneous Equipment | 125,000 | 36,000 |
| Sub-Total | $1,943,000 | $ 3,886,000 |
| Total | $4,543,000 | $68,811,000 |
| **Swine Industry** | | |
| 1. Confined Units - 28 Units | $ 450,00 | $12,600,000 |
| 2. Breeding Stock 144 Sows) 15 Boars) | 66 C00 | 1,864,000 |
| 3. Feed Mill - 3 units | 692,000 | 2,076,000 |
| Total | $1,208,600 | $16,540,800 |

| **Processing Plant** | **Building** | **Equipment** | **Total** |
|---|---|---|---|
| 1. Kill Floors | $ 637,500 | $ 179,400 | $ 816,900 |
| 2. Rendering-By-Products | 205,000 | 348,400 | 553,400 |
| 3. Coolers-Chill, Cut,Smoke, Ship | 1,079,500 | 343,600 | 1,423,100 |
| 4. Office and Welfare | 341,000 | 343,600 | 1,423,100 |
| 5. Lunch Meat Production | 161,500 | 169,000 | 330,500 |
| 6. Miscellaneous Supplies | | 41,000 | 41,000 |
| Total | $2,424,500 | $1,093,400 | $ 3,517,900 |
| Total of Cattle, Swine and Processing | | | $89,869,700 |
| Total Without Land | | | $59,533,700 |

There are some very pertinent cost areas that have been omitted from these figures that should be discussed. Featherstone considers these costs as double entering investments made in other sections of agriculture in Alaska. The first cost area is the feed supply for both the cattle and swine. The total grain that needs to be stored and that is needed to raise that animal have been omitted since the grain farmer has been loaned money or has invested his money in that crop previously . When the livestockman pays for the feed the investment in the grain farmer's working capital account is reduced until he reinvests that money the following year. This investment in agriculture should only be shown once.

Similarly the stock of animals in the growing stage, in the confined units and held in the processing unit, have not been shown. The price paid to the cow-calf operator would again be recorded as an investment two or three times and now in the same industry.

The land costs have been left out of the swine industry and processing plant because they are relativley small compared to the cattle industry. The land costs were subtracted out of the final industry total so the reader can see what is invested in animals, equipment, and buildings in the industry. The land is presently owned by the state or has already been purchased from the state. Featherstone feels for the state to consider the land and cost to clear that land the same as investment in an industrial building is wrong. An investment by definition is the act of committing funds or assets for business purposes with the expectation of making a profit. The state by funding land purchases and the cost to clear that land should not expect the profit from that land that the farmer makes by using it. From a political standpoint the state lands are owned by the people and the purchase is a method of redistributing that land back to the people on a valued basis. If the land were to be used for a state wildlife park, the state would consider the buildings and other assets on the land as an investment but the land itself would not be included in that investment.

The final cost that has been left out is the cost of supplying electrical power, steam power, and sewage facilities to the processing plant and the livestock producing units. Contained in the livestock units are lagoons but the cost of pumping and spreading the sludge are not and should be borne by the recipient of the fertilization material. The processing facility will need all three utilities and can be purchased from municipal utilities or the plant can build their own systems. The municipal utilities have adequate back-up systems in case of failures which would be expensive and wasteful for the processing plant to build. Featherstone definitely recommends as many of these three utilities be purchased from local municipalities and not be invested in by the industry.

## SECTION X

## RECOMMENDED LEGISLATIVE AREAS FOR DEVELOPING A LIVESTOCK INDUSTRY

The state of Alaska in August of 1978 sold about 60,000 acres of state lands in a lottery. Since then, lotteries have been set up for the Point MacKinsey project and Delta II project. The lotteries were detailed in accordance with the provisions of AS38.05 from chapter number 176 of the 1978 session and chapter number 85 of the 1979 session. A study was made in 1977 by Hanson Associates called "Financial Assessment of The Delta-Clearwater Barley Project-Phase III: How to Meet Financing Needs Report." In this study is a review of all possible financing methods and recommendations on how and where to get what kind of financing. Featherstone has reviewed all of these documents and feels the methods and expertise to start the livestock industry in Alaska legislatively and financially is already in existence. An outside consultant would be hard pressed to improve on techniques that have been reviewed and modified which function as well as the lottery system already in use. A few of the financing techniques Hanson described have changed but more will change in 1981 and new methods will be devised with the change of Administrations in Washington this year.

Featherstone, however, does want to make some recommendations in some different legislative areas. Livestock production and agriculture in general is difficult in Alaska and people with the needed expertise and investment capabilities have a tendency to write off Alaska and look elsewhere. If agriculture in general is to survive in Alaska, it must be supported and be in an atmosphere conducive to long term development. The initial shove or push, given by the present Legislature and Governor are just a start and more base or ground work must be built. To create this base Featherstone has three recommendations that need to be implemented as quickly as possible.

The first recommendation is to extend price supports for locally produced barley and dairy products until prices received on the open market at least equal costs to produce. The present barley price support is due to expire soon and the dairy industry has only two years of help. The livestock industry will need a price support system for hogs, feeder cattle, and finished cattle. By putting a set time at which the supoorts are removed is to assume that market conditions have generally been profitable and new operations anywhere could have succeeded. Market conditions in agriculture, however, are not always profitable and loss conditions can exist for years. In the Lower 48 the good established farmers are stable enough to weather these bad periods and poor farmers or new farmers usually go bankrupt in these periods. For the legislature to assume they can predict when these profitable periods will be in advance and then have the industry start during that period is a very questionable assumption. If a well established stable base in agriculture is really desired, a review of the present price supports and price supports for other products like livestock should be made. A system tied to profitability rather than time would appear to be more realistic.

The second recommendation has been alluded to in the main descriptive body of this report. The livestock industry deals with live animals that have unique characteristics and they change with their environment. How livestock will change in the Alaskan environment cannot be predicted when raised on a mass scale as developed in this report. A research and development facility must be created for the industry. The natural insititution to direct the needed facilities is the University of Alaska. The facilities must be realistically sized to simulate commercial conditions in order to deal with problems livestock producers will encounter. The present facilities at Fairbanks, and Homer are badly understaffed and under financed serving little real purpose. Featherstone recommends that the legislature purchase a confined swine operation and cow-calf operation (with small feed lot capabilities) and give them to the University. These operations must be specially equipped for teaching needs and research needs. Class rooms must be available in them and enlarged animal shelters for students to observe and handle the animals. Special stall for controlled breeding and feeding are needed in order to give valid research data. Well trained students in animal husbandry capable of putting research data into practical applications represent the real future in livestock production in Alaska. A mass infusion of funds into the industry now will give it a good start but the students of tomorrow must keep it going after the money runs out.

The third recommendation is an administrative one on the state level. Agriculture should be promoted to a full department with its own commissioner as found in all state governments in the Lower 48 that have any

agricultural base at all. The present situation with the Division of Agriculture having a director that is under the Department of Natural Resources is burdensome. The farmers, who are struggling to get started in the state, should feel they have a person in the state capitol who has the Governor's attention, and the respect of the legislature, and whose primary concern is agriculture. Such an elevation to department status would tell the people of the State and farmers that everyone in government is behind agriculture and for the long term. The department should be adequately funded and staffed to direct and promote agriculture in the state fully. This would involve from securing funding for special developmental projects to conducting state fairs.

All of these recommendations are long term in nature and supportive of an agricultural base in Alaska. The overall benefits of these moves may never be fully appreciated and someday will be taken for granted. If they are done however, in twenty years from now the people in agriculture and the state legislators in the know will wonder how agriculture could have existed in the 1980's without price supports, research facilities, and a Department of Agriculture. The price supports may go by the wayside but the last two will become indispensable institutions.

# SECTION XI
# CONCLUSION

This report has shown how a livestock industry can be made to function in Alaska. In the process, it has been shown how the local industry will be able to more economically supply the Alaskan market than the industry in the Lower 48. As the local industry is described, an investment of between $60,000,000 and $90,000,000 (depending on your viewpoint on land) will be needed to get the industry started. This concluding section will show what benefits economically will be derived by the state as a whole and then, through an example of how the Nenana area can be developed, will show how individual areas of the state can become prosperous, economic assets for the entire state.

The primary benefit that will have the biggest economic impact on the entire state is the number of jobs created by the livestock industry. As described in the report, there will be 27 cow-calf operations, two feed lots for cattle, 28 confined swine units, and three swine feed mills. Each of these operations are designed in size to be handled by a husband and wife family unit with some part-time help needed during peak times. Consequently, 60 family units or 120 people will be employed from just the producing side of the industry. The processing facility when operating at optimum production levels will employ another 65 people on a full time basis. On a regular part-time basis the industry will also require truck drivers to transport animals, suppliers of animal health care products, veterinarians, livestock auctioneers, and commodity traders. The full time employees by the industry will total 125 people or families. If the average income from the North Star Borough of $11,252 is used times 60 for the livestock producing units, the annual payroll will be $675,120. For the 65 jobs in the processing plant the average hourly rate union rate would be $17.94 which on an annual basis would be $37,315 or an industry total of $2,425,488 per year. The producing segment of the industry will provide few, if any, susequent jobs in the economy due to the independent nature of the operations. The processing plant will have an employment multiplier effect similar to the fish processing industry of Alaska which has a recognized multiplier of 6.03.[1] The projected table shows the potential effect of the industry.

| | | |
|---|---|---|
| Livestock Producing Units | 60 | |
| Average Income | x $11,252 | |
| Sub-Total | $675,120 | |
| Multiplier | 1.0 | |
| Total for Producing Units | | $675,120 |
| Processing Plant Units | 65 | |
| Average Income | x $37,315 | |
| Sub-Total | $2,425,475 | |
| Multiplier | 6.03 | |
| Total for Processing Unit | | $14,625,614 |
| Total for Industry | | $15,300,734 |

[1]Charles L. Logsdon, *A Structural Analysis of the Alaska-Washington Trade: An Input-Output Study*, Unpublished Master of Arts Thesis, Department of Agricultural Economics, Washington State University, Pullman, Washington, 1975.

The next economic impact to be looked at is the gross sales of the industry which will now stay in the state. The industry will be sized to generate 26,000,000 lbs. of live cattle presently worth $65.00 per cwt. and 15,400,000 lbs. of live swine presently worth $50.00 per cwt. These figures give a gross sales figure in the state of $24,700,000 annually. In addition to the value of the live animals the state is also paying $15.00 per cwt. shipping costs on the fresh meat of 21,150,000 lbs. which amounts to $3,172,500. The total value lost by the state is $27,872,500 in gross sales at today's livestock prices and shipping costs.

In order to demonstrate the economic impact of these large figures (especially the freight figure) on the individual consumer, Featherstone has found these comparative figures from the same day's newspapers for Safeway stores advertised sales:

| Item Dec. 10, 1980 | Seattle Post-Intell | Anchorage Daily News |
|---|---|---|
| Choice Bnls. Chuck Roast | $1.99/Lb | $2.09/Lb |
| Bnls. Pork Butt Shldr | 1.39/Lb | 1.79/Lb |
| Smoke-A-Roma Sliced Bcn | 1.49/Lb | 1.89/Lb |
| Scotch Buy Bologna | 1.49/Lb | 1.89/Lb |
| Lean Ground Beef | 1.99/Lb | 1.79/Lb |

The local industry will still have higher costs than in the Lower 48, however the added costs as well as the base cost will all stay in the state's economy and will not be shipped to Seattle. There is one last figure that

Featherstone learned about Alaska's meat industry that the average consumer should be aware of, that he can relate to easily. The state has an inventory of only four (4) days of red meat in the retail stores. A breakdown in shipping products to Alaska for even a short period will quickly change consumer buying patterns within the state. For this reason alone the investment in a livestock industry becomes a type of insurance to protect present life styles.

The livestock industry will be able to have a large impact on small rural communities in Alaska where the actual production will occur. Villages and areas in the grain producing sections of the state and in areas that have good soils for pasturing cattle will be able to gain an industry that will stabilize their economy. Rural communities have little chance of supplying the big utility needs of a manufacturing concern and as a result are passed over during site location work for new expansions. Livestock production however is well suited to these areas and can produce a long term solid economic base to such areas.

One such area in Alaska that from a soils standpoint could take advantage of the livestock industry is Nenana. This local community has identified two connected townships containing all Class II and Class III soils and the townships have been patented by the state making them eligible for lotteries under the laws governing disposal of state lands for agricultural purposes. The two townships from the Fairbanks Base Line and Fairbanks Meridian Line are T4S, R11W, and T4S, R10W, the east border of which is within ten (10) miles of Nenana. The two townships represent 46,080 acres of land. Featherstone has determined that this parcel of land could be made to support seven (7) cow-calf operations (25% of the industry) twelve (12) confined swine units (of the 28 needed), one (1) confined feed lot for 5,000 head of cattle (of the 2 needed), and all of the grain needed for these operations.

The cow-calf operations were sized at 750 cow units per operation and each operation would need 3,000 acres to produce enough forage for winter feeding. The seven cow-calf operations together would need 21,000 acres.

The confined swine units will need forty (40) acres maximum for their operations. Each unit will need 935 tons of barley per year and if one acre produces one ton, then each unit will need barley farms in the area of 935 acres. Multiplying this figure times twelve the hog operations and supporting barley farms will need 11,700 acres.

The confined cattle feeding operation itself will require 100 acres with proper waste disposal. If the lot is turned twice a year with only finishing cattle (each consuming 1,745 lbs. of barley), the 10,000 head of cattle will consume 8,725 tons of barley which again will need 8,725 acres of barley farms.

The following totals the acreage needs for the Nenana operations:

| | |
|---|---|
| Cow-Calf operations (7) | 21,000 Acres |
| Confined Swine Units (12) | 480 Acres |
| Feed for Swine (935/unit) | 11,220 Acres |
| Confined Cattle Feed Lot | 100 Acres |
| Feed for Cattle Feed Lot | 8,725 Acres |
| Total | 41,525 Acres |

By using 41,525 acres of the two townships, 4,555 acres (or 10% of the total) are left for roadways, houses, and miscellaneous uses like the growing phase of cattle. If the 19,945 acres of barley farms were in 2,400 to 2,500 acre farms there would be 8 operations. Then if the cattle feed lot was operated by one family, this agricultural base would provide jobs for 28 families plus a variety of part-time jobs throughout the year. Part-time help would be needed during calving season, during the planting and harvesting seasons, while the confined swine unit operators are away from their operations, and, of course, for transporting product to market.

To Nenana and the Totchaket area this primary level of activity would greatly spur the local economy and create the need for a secondary level of supply for the industry. Such secondary supply needs are wholesale implement and supply dealers. and maintenance and repair functions. If the proper atmosphere is created by Nenana, this secondary level could be economically as important as the primary level. Local communities that supply agriculture in the Lower 48 have a lower level of unemployment, lower cost of living, and smaller fluctuations in their general economy than their neighboring or regional metropolitan area.

These same general comments are true of whole states in the Lower 48 which have a strong agricultural base. In the full potential of Alaska's agriculture is realized, the state's economy would be greatly enhanced. The industry described in this report is small by many standards but is sized to handle 50% of the market of the rail belt. Other states with larger operations in the industry however, developed over a long period of time. What the state of Alaska is proposing to do has never been done anywhere in the Lower 48 or any part of the free world that is known to Featherstone. The complexity of the project and the large sum of capital to start such a project would be impossible for any other state.

Featherstone commends the state of Alaska in its effort and forethoughts, and is proud to be able to be part of the initial planning.

# SECTION XII
# APPENDICES

APPENDIX A

# Establishing A Quality Forage Crop

## —How To Put All The Pieces Together

*by Dr. William F. Hueg, Jr.*

A successful forage program does not come about by chance. It develops from careful planning. These plans include the right specie and variety, adequate lime and fertilizer, and appropriate use of herbicides and insecticides. Properly put together and with a helping hand from nature, these individual items assure success. Leave out a single one and you flirt with failure and disappointment.

The establishment of a successful forage stand can be compared to a jig-saw puzzle. If any piece is missing, the puzzle cannot be completed. Let's look at the puzzle pieces and see whether you will complete the picture — establishing a quality forage crop.

1. The soil is a vast reservoir of nutrient elements, organic matter and microorganisms when supplemented by good water if irrigation is planned. One cannot tell what reserves of nutrient elements are in the soil just by looking at it. A soil test is the best tool to determine the level of soil nutrients present and what additions are needed. Similarly, available water should be tested to ascertain its chemical content with respect to both irrigation and animal consumption.

2. The soil is an important part of the growing plant's environment. To assure good stands, prepare and plant in a good seed bed. A good seed bed for forage grasses and legumes is well pulverized, smooth and firm.

Lime and fertilize by soil test. The soil test should serve as a guide. Good legume establishment cannot be expected if soil acidity is below pH 6.0. Alfalfa does best on soils of pH of 6.5 to 7.0. The nodule-forming bacteria work more efficiently in soil where the pH is near the neutral point, pH 7.0. In addition, phosphorus and potassium are more available within the range of pH 6.0 to 7.0.

**About the author . . .**
WILLIAM F. HUEG, JR. is professor of agronomy and plant genetics, deputy vice president and dean of the Institute of Agriculture, Forestry and Home Economics at the University of Minnesota. He served as director of the University of Minnesota Agricultural Experiment Station from 1966 until June, 1974. His specialization in forage physiology and seed production resulted in a management system for improved forage harvesting

3. It is preferable to apply lime one year ahead of seeding. Mix it well with the surface soil. Additions of lime should increase forage yields.

Legumes respond to fertilizer treatment at seeding time. Phosphorus is needed for early root development; potash for thrifty plants; and nitrogen boosts grass seedlings, and may benefit legume seedlings, especially on sandy soils. The proper placement of fertilizer aids establishment. Band seeding assures good forage stands due to efficient seed and fertilizer use.

4. Use high quality seed. Most state experiment stations and extension services provide information based on their evaluation of a wide range of forage species and varieties now available from public and private research programs. Purchase the highest quality seed — germination, varietal purity, disease resistence — of the specie desired. Select the specie that when grown in mixture, will have similar maturity stages. Also, for mixtures, select species that will not compete too vigorously with one another.

5. Nitrogen-fixing bacteria are essential for good forage legume establishment. These bacteria are in most soils but may not be the right type or in sufficient quantity to assure good nodulation. Two methods of inoculation are commonly used: (1) fresh treatment of seed immediately before planting, or (2) use of pre-inoculated seed. With possible shortages and higher prices for nitrogen fertilizer, the combination of legumes and grasses can provide part of the nitrogen for the grass species in the mixture.

6. Several methods are available: broadcast, drilled, cultipacker or band seeding. Do not plant more than one-half inch deep for best results on fine textured soils (clays and silts), and one inch deep on coarse textured soils (sand). Grain drills can be modified for or can be purchased with band seeding equipment. The important thing is to have the small forage seeds drop behind disk openers in order to avoid deep planting. The cultipacker seeder assures good forage stands by placing seed close to the surface and in a firm seed bed.

7. Good management of the companion grain crop is important. Small grain crops compete with the forage seedings for light, moisture and nutrients. Reduced seeding rates often reduce this competition. Removal of the grain crop as haylage gives the new

seedings a better chance and results in more feed production per acre than if harvested as grain only. If the companion crop is harvested as grain, cut the remaining stubble and remove after harvest. This reduces competition from weeds during the year of seeding and the year after.

8. To have thrifty productive stands of forage, weeds must be controlled. This can be done either at seeding time or at early growth stages of the forage stand. Other management practices, such as removal of the companion crop as haylage, serve as a useful weed control method. If chemicals are used, check with the state extension service and other agricultural field services for recommendations on the chemical to be used, its rate and time of application.

9. Forage seedings can be made either in the spring or in the fall, depending on environmental conditions and your management plan. Spring seedings are usually made with a companion crop although some report good results with herbicides in the seeding year. Fall seedings are generally made in those areas where moisture is assured from rainfall or through irrigation. Fall seeding can spread the labor load and reduce weed problems. It also provides the opportunity to manage the forage seeding as one crop as compared with planting a companion crop where management for two crops must be considered.

10. You must manage your forage stand for yearly maintenance and high forage production. Once the stand is established, it must be managed to maintain it for the desired number of years. Time of cutting in the spring and fall and fertilizer additons through the year are important factors to consider.

(A) Harvesting the first crop in the bud to earliest bloom results in a higher proportion of protein and energy (TDN) in the forage. Utilizing the forage as haylage assures getting as much of those nutrients into storage as possible.

(B) Allowing the second or third crop to reach ¼ to ½ bloom each year helps to maintain the stand in a more thrifty condition.

(C) Additions to potash fertilizers after the first cutting or in the fall will assure a more thrifty stand.

(D) Planning the harvest program to have all desired cuttings made before killing frost also aids in stand survival. The number of cuttings will vary by the location in the country and the availability of good water supplies. However, at some point prior to cold weather, the forage stand should have an opportunity to build root reserves to carry through the non-growing season.

Forage crops are an economic crop and if managed appropriately they can give high returns to livestock farmers. The methods described above to assure good forage stand establishment are the beginning of a profitable forage (haylage) program.

When all of these management practices are used, the chances of completing the puzzle successfully are improved. Leave one of them out and you will have difficulty knowing which "piece" is missing.

APPENDIX B

# Harvest Forages For Profit And Convenience

*by Dr. Robert Suter*

"Make hay while the sun shines" is a well-known adage. It is more than that — it's a basic rule of successful operation. Rainy, cloudy or cool weather has frequently made it necessary to put off haying until the crop is too mature and the hay is of poor quality.

Also, between the time of harvesting and feeding, 25 to 30% of the feed value can be lost due to: (1) harvesting at a late stage of maturity, (2) permitting hay to dry too long in the field, (3) rain, and other inclement weather, and (4) handling in and out of storage.

Putting hay crops up as haylage in an oxygen-limiting storage system allows farmers to harvest and store their various crops not just when the weather permits, but at their *very best stage of maturity*. Also, with an oxygen-limiting system hay and other feedstuffs may be reconstituted in the off-season.

A major challenge to farmers has been to reduce the high level of moisture of the freshly cut hay to a safe level for storage in as short a period as possible. Haylage solves this problem. It consists of any legume, grass, or cereal grain that is (1) harvested at the peak nutritional stage of maturity, (2) wilted to 40 to 55% moisture and chopped with a ¼-inch cut or as fine as possible, and (3) processed through an oxygen-limiting storage system.

Hence, haylage contains more moisture than dry hay, yet considerably less than grass silage. For this reason, it has overcome the problems inherent in both.

Haylage can be cut, wilted, chopped, and put into storage in 10 to 15 hours as contrasted to 30 to 50 hours of drying time normally required in many areas for field cured hay.

The greatest change in producing alfalfa, for example, has been in harvesting. Earlier cutting, wilting the crop, and chopping and storing at 40% to 55% moisture have led to many efficiencies.

Farmers now like to cut their alfalfa in the *bud stage* when there are not blossoms (maybe one or two) showing in the entire field. They may let the crop wilt one full day. Or, when a conditioner is used, this time may be reduced to four or five hours, depending on the day.

They chop the crop as short as possible (¼-inch or less). This requires maximum chopping speeds, and with a heavy windrow (sometimes several are rowed together), slow travel. The fine cut increases storage capacity and reduces the amount refused by cattle.

**Earlier cutting with haylage**

Haylage makes the earlier cutting of alfalfa easier. The crop can be cut, chopped, and in storage in one or two days, as compared to three, four, sometimes five days or more when it is baled. For this reason, first-cutting haylage is typically cut 10 to 12 days before first-cutting hay. This early cutting allows a quicker recovery of the alfalfa plant. The second cutting or crop gets more of the early June moisture and grows during a longer daylight period. Hence, farmers who harvest their alfalfa crop as haylage not only tend to cut earlier, but they reduce the interval between cuttings from 45 down to 35 days. They thus obtain three, sometimes four, cuttings.

| Approximate dates | Haylage | Hay |
|---|---|---|
| Second cutting | July 3-5 | July 24-28 |
| Third cutting | Aug. 7-9 | Sept. 7-11 |
| Fourth cutting | Sept. 11-13 | |
| Cutting interval | 35 days | 45 days |
| Number of cuttings | 3 or 4 | 2 or 3 |

The dates, of course, vary from year to year depending largely on the growing season, and the amount of moisture available. They also vary from area to area.

**About the author . . .**
ROBERT C. SUTER is professor of advanced farm management, farm finance and farm appraisal at Purdue University and the author of two books, "The Courage to Change" and "The Appraisal of Farm Real Estate." He is also an agricultural consultant working directly on agri-business and bank problems, farm partnerships and corporations, and farm capital accumulation.

APPENDIX C

# How To Cut Harvesting And Storage Losses

*by Howard Voelker*

You'll read later in this Research Bulletin how haylage will produce more energy (TDN) than silage, a faster rate of gain, more milk, more meat, more profit.

While haylage can do all that, it needs help from the farmer. To take *full advantage*, the farmer must:

•Follow the proper steps to *produce* quality forage. (See Dr.W.F. Hueg's "Establishing a Quality Forage Crop" on pages 20 and 21.)

•Make sure he *harvests* and *handles* his haylage crop for maximum benefits.

Storing is only one step to producing excellent forage. Other equally important steps are harvesting for maximum nutritional value, wilting to the proper moisture level, and chopping to sufficient fineness without losing protein-rich leaves.

One of the most common mistakes is waiting too late to cut the crop. When the alfalfa plant reaches full bloom, the nutritional value has greatly decreased. *Alfalfa should be cut at the boot stage or no later than 10% bloom.* By cutting earlier, many farmers are able to add an extra cutting to the growing season.But don't measure your crops by tonnage; quality is more important than quantity.

Alfalfa as a major forage crop produces high yields and has a high protein content. A multi-billion dollar forage, it is important we harvest efficiently to reduce field and storage losses.

Research conducted at South Dakota State University* gives us the following information about silage losses and what the causes are.

In early research with wood bunker silos it was found that carotene (which provides Vitamin A) in silage was higher at a 60.2% moisture level than at 73.8%. Here quality of feed was compared at two different moisture levels. (Moisture level of haylage is the lower). The higher moisture silage had a foul odor. Also, carotene values were higher in the bottom of bunkers than in the top after 5 to 7 months of storage, which sugested better preservation where there was less air.

Crude fiber and ash also increased at the higher moisture level. It was estimated that alfalfa silage preserved in a wood bunker lost 32.5% of its weight between filling and feeding.

*However, in the oxygen-limiting Harvestore system, after several months there was a total loss of only 1.7%.* In a repeated trial, the weight loss was approximately 6%.

In another experiment, alfalfa-brome was cut and left to dry. The plan was to dry half the crop to 50% moisture for concrete silo storage and the other 50% to a slightly drier level for the Harvestore. After each structure was only partially filled, rain delayed harvesting.

After the crop was stored in the concrete silo there was an overall loss of 16.1% of the dry matter in the rain damaged haylage. The dry matter loss in the bottom of the concrete silo, not rained on, was 11.6%.

In the Harvestore there was a loss of 4.2% of the material not rained on. In total weigh-ins and -outs, there was a 4.9% loss.

What about loss due to the formation of acids?

The acids which developed in the two systems were estimated. Moisture levels were 33% to 51%. Also, glass jars were used to prevent alfalfa silage at these levels and at 76% moisture. Note the results in Table 1.

As you can see there was no evidence of undesirable butyric acid development in the Harvestore. However, lactic acid (which gives haylage its good taste and pleasing odor) values were the highest!

Now let's look at a comparison of storage losses.

Alfalfa silage and haylage losses are summarized in Table 2.

Samples of the alfalfa from the above test were taken for chemic alanalysis. Averages of the compositions are listed in Table 3.

From Table 3 you will see that the greatest differences in the types of storage occurred in the ash and the nitrogen-free extract portions.

As the carbohydrates were used as energy in the silage fermentation, the proportion of ash increased. A storage loss of 11.6% occurred in the bunker over a three month period. *The Harvestore produced a loss of only 4%.*

What about losses in the field? Remember, it is important to get the alfalfa to the storage structure with maximum benefits.

Losses in the field as alfalfa dried were determined and samples were taken for chemical and dry matter analysis.

The alfalfa for haylage was chopped at 30% moisture. In mid-afternoon some of the hay was baled resulting in high leaf losses with a recovery of only 77.2% dry matter. Waiting until evening to bale the hay resulted in toughter leaves and a 90.2% recovery of dry matter.

One fact emerges — the higher the moisture content, the higher the percent of recovery. The recovery of dry matter in harvesting was 94.6% when moisture levels were 40.4% or higher.

Analysis of the field recovery indicated significant differences in dry matter recovery. Haylage and green alfalfa were significantly higher than hay in recovery of dry matter.

How about nutritional values? Samples were analyzed for carotene and protein.

The carotene decreased as the alfalfa dried. Protein was highest in the slightly wilted alfalfa.

What about non-protein nitrogen content?

Samples were taken as the alfalfa was harvested. The samples were sealed in glass jars and analyzed for ammonia, nitrates and nitrites. Nitrites may be toxic to animals. The moisture levels did not have a consistent effect on ammonia values.

Nitrites appeared to be lowest when there were no rains and the weather was favorable to drying alfalfa. A further test showed that green cut alfalfa tended to be highest in nitrites, with some trends towards reduced nitrites as the alfalfa dried.

**Table 1. Average Acid Content of Hayage and Silage.**

| Type of storage and alfalfa | Kind of Acids | | | | | |
|---|---|---|---|---|---|---|
| | Butyric | Propionic | Acetic | Formic | Lactic | Succinic |
| Harvestore, haylage | 00 | 04 | 2 57 | 11 | 8 90 | 1 60 |
| Concrete silo, haylage | 14 | 05 | 1 84 | 08 | 5 30 | 00 |
| Jars, silage | 77 | 09 | 2 51 | 09 | 3 79 | 51 |

**Table 2. Alfalfa Losses in Bunkers and Harvestore.**

| Structure | Moisture | Carotene as fed | Total weight losses |
|---|---|---|---|
| | (%) | (Mcg/g) | (%) |
| Bunker | 66 6 | 38 | 32 4 |
| Harvestore | 48 9 | 72 | 3 4 |

**Table 3.**
**Changes in composition of alfalfa during preservation.**

| Structure | Ether extract | Crude fibor | Crude protein | Ash | Nitrogen free extract |
|---|---|---|---|---|---|
| | (% of dry matter) | | | | |
| Bunker | | | | | |
| as ensiled | 3 0 | 23 3 | 21 1 | 8 9 | 43 7 |
| as feed | 2 9 | 26 0 | 21 2 | 12 0 | 37 9 |
| Change | – 1 | + 2 7 | + 1 | + 3 1 | – 5 8 |
| Harvestore | | | | | |
| as ensiled | 2 9 | 22 0 | 22 6 | 9 7 | 42 2 |
| as fed | 3 2 | 25 3 | 21 2 | 9 0 | 41 3 |
| Change | + 3 | + 3 3 | – 1 4 | – 7 | – 9 |

**About the author . . .**
HOWARD VOELKER is a professor of dairy science at South Dakota State University. He received his B S from Iowa State University, majoring in dairy production, and his M S from Kansas State University in dairy science. He received his doctor's degree from Iowa State in 1955. He has conducted research in forage preservation and published numerous articles relating to dairy production.

APPENDIX D

# RESEARCH TEST - VITA FERM COW CALF

TO: Bio-Zyme Enterprises, Inc. St. Joseph, Missouri
FROM: Dwight Albers, Hazen, North Dakota
SUBJECT: 282 day feed trial with 15 head Simmental cross steers.
RATION: Barley & Oats, Alfalfa Haylage, and **VITA FERM COW CALF.**

| DATE | AVG. WT. | TOTAL 15 HEAD | AVG. DAILY GAIN | TOTAL LBS. FEED | TOTAL FEED COST | AVG. COST PER LB. GAIN |
|---|---|---|---|---|---|---|
| 11-23-76 | 474 | 7,110 | —— | —— | —— | —— |
| 9-01-77 | 1,126 | 16,890 | 2.3# | 175,559 | $2254.59 | 23.05¢ |

| KIND OF FEED | COST PER LB. | TOTAL LBS. | TOTAL COST | COST PER HEAD |
|---|---|---|---|---|
| Barley and Oats | 3.4¢ | 39,000 | $1326.00 | $ 88.40 |
| Alfalfa Haylage | .5¢ | 135,360 | 676.80 | 45.12 |
| VITA FERM COW CALF | 21.0¢ | 1,199 | 251.79 | 16.79 |
| | | 175,559 | $2254.59 | $150.31 |

| | |
|---|---|
| Selling price | 39¢/# |
| Avg. cost per pound gain | 23.05¢ |
| Total pounds gained | 9,780# |
| Total lbs. feed to produce one lb. of beef | 17.957 |
| Total profit on gain | $1559.91 |
| Avg. profit per head on gain | $ 103.99 |

The health record on this pen of steers was excellent. There was no evidence of runny or droopy eyes. The cattle did it all.

I feel that the proper vitamin-mineral balance provided by the **VITA FERM COW CALF** was a great factor in the feed efficiency in this high roughage ration.

Dwight Albers

Dwight Albers

For further information on the elements on the Vita Ferm System - nutrition, management and genetics - consult your Bio-Zyme representative or write to:

BIO-ZYME RESEARCHED PRODUCT

**BIO-ZYME ENTERPRISES, INC.**

TOLL FREE 1-800-821-3070 IN MISSOURI CALL COLLECT (816) 236-3326
1231 ALABAMA ST. JOSEPH, MISSOURI 64504

# Outstanding Accomplishments of SMITH and MARSHALL HEREFORDS

NORCATUR, KANSAS

## with VITA FERM SYSTEM

SMITH and MARSHALL HERFORDS have combined genetics management and the VITA FERM STEM to produce a herd of registered cattle that produce and preform the way every cattleman hopes to attain.

**- fertility, calving ease, sound udders**

Previous to the VITA FERM SYSTEM, the usual problems plagued the SMITH and MARSHALL herd, — dead calves, retained placenta, calf scours, late cycling after calving, poor conception, not enough milk, and weaning weights that were unsatisfactory. SMITH and MARSHALL started using the VITA FERM SYSTEM in May, 1978 and listed below are some of the results and benefits attained as of September 10, 1980:

1. Have completely eliminated calf scours.
2. Stronger calves at birth. They get up quicker and get to the colostrum milk.
3. Have had no retained placenta.
4. Cows cycle early after calving.
5. Good conception and cows calve on time.
6. Have eliminated 80% of the Veterinarian bill. Vet now concentrates on preventive medicine and vaccinations.
7. 30% better conversion of the grass and hay.
8. A herd bull that worked both fall and spring crops, weighed 2240 lbs. as a 3 yr. old in working conditions, off grass and VITA FERM. (JOE, a living replica of his famous sire L.1 Domino 735.)
9. Superior development of replacement heifers and bull calves.
10. Even with 1980 adverse weather, cows had good hair coat and top bloom condition at all times.

### PRODUCTION ACCOMPLISHMENTS on the VITA FERM SYSTEM

A. Produced bull calf weaning weights of 660 lbs. in 1979.
B. Produced 100 percent calf crop in 1979.
C. Produced 97% calf crop date in 1980.
D. Produced the heaviest and highest weight per day of age Senior Bull calf ever shown in Denver.
E. First calf heifers showing full development, good fleshing with large calves at side.
F. Fertility, calving ease, sound udders,and good milk production are now a trademark of SMITH and MARSHALL COWS.

*"COMMENTS BY ROGER SCHLICK, Morland, Kansas Vita Ferm. Serviceman:*
*"Smith and Marshall have used the Vita Ferm products as they should be used. They used Vita Ferm 6:2:2 with poor quality roughage available to winter cows. They kept Vita Ferm Cow Calf 5 out free-choice at all times. The results are an outstanding herd of Hereford cattle.*
*OUR CONGRATULATIONS TO SMITH AND MARSHALL HEREFORDS!"*

Vita Ferm System brings out the Genetic Potential -
Write or call -

BIO-ZYME ENTERPRISES, INC.

TOLL FREE 1-800-821-3070 IN MISSOURI CALL COLLECT (816) 238-3326

1231 ALABAMA ST. JOSEPH, MISSOURI 64504

September 25, 1978

Attn: Max Pearl
Ehlert's Feed & Supply Co.
Fairport, MO 64447

Dear Max:

In 1963, I first became acquainted with your Vita Ferm products. Having done business with you for many years, I decided to try this new product that you were so high on. I would like to pass on the results I have had feeding it continually for 15 years.

My beef-cow herd has averaged about 50 head in these 15 years. Up until the time I started feeding Vita Ferm, my calf crop percentage was about 85%. For the past 15 years, my average has been 97%. I have very little trouble with cows breeding, calving or cleaning. My face fly problems have been considerably less and my calves have averaged over 50# per head more at weaning time.

This herd has used from ¼ to ⅓ less grass in the summertime, and also less hay in the wintertime. The calves at 30 days of age are already eating out of weather vane salt feeders and because of this the cows stay in much better flesh the year around. I am able to utilize much poorer roughages, such as stock fields and milo stubble. My cattle are contented and easy to handle.

I used to feed blocks and cubes at a cost of 12 to 14¢ per head per day. The past 15 years my investment has been from 5 to 6¢ per cow/calf unit. I feed this product the year around, and my consumption per cow/calf unit runs about 4 oz. per day. I'm completely satisfied with the Vita Ferm System. If anyone would like to contact me, I'd be glad to answer any questions.

Sincerely,

Signed: Leland Warner
Maysville, MO 64469
Ph: 816 449-5878

*Blume Polled Hereford Farm*

**GORDON BLUME**
**Phone 472-0619**

**Redfield, S. Dak. 57469**



August 21, 1978

Dear Mr. Ehlert:

We began feeding Vita Ferm nearly two years ago and we are amazed at the results that we have obtained. In our annual sale last February, we had so many people compliment us on how good the cattle looked. These bulls have received seven pounds of grain plus ½ pound of Vita Ferm 6:2 plus hay and silage.

We creep fed our calves last year on oats and Vita Ferm and then used Vita Charge when we weaned them. We never treated a calf (In a fall when death losses for many neighbors were running high). After two weeks on Vita Charge we put the bull calves on ½ pound of 6:2 plus 5 pounds of grain, 4 pounds of alfalfa, and corn silage. From when we weaned in October until we weighed again in April, we had several bulls gain over 3 lbs. per day, in one of the coldest and worst winters on record.

We feel that we have nearly eliminated any eye problem or breeding troubles since we began on the Vita Ferm System. I would truly recommend it to anyone.

Sincerely,

BLUMED POLLED HEREFORD FARM

*Gordon + Thordys*

Gordon & Thordys Blume

Larry Ehlert
Biozyme Enterprises
St. Joseph, Mo. 64504

Dear Larry:

I apologize for not taking the time earlier to tell you what we have been doing with Vita Ferm and how satisfied we are with the results.

As you know, this is about our 10th year on the Vita Ferm System. Dad was in the grocery business and trying to take care of our cow herd while my brother and I were in college and spending time in the service. Dad was feeding 2 lbs. of cottonseed per day which was time consuming and expensive.

Then he heard about the Vita Ferm System and started feeding Vita Ferm at the rate of 2 oz. per head per day free choice and only had to put it out every 14 days, rather than feeding every day. The economics was much better also as it cost 5¢ for Vita Ferm and salt and about 10¢ for the 2 lbs. of cottonseed. Dad felt the cattle wintered just as good as ever and the herd health was excellent. He definitely felt he got more good out of 2 oz. of Vita Ferm than he did the 2 lbs. of cottonseed.

For over a year my Dad marketed our heifers through his grocery store. He took 700# heifers and fed them for 60 days a ration of ground milo, 2 oz. Vita Ferm per head per day and alfalfa hay.

I have been home for two calving seasons and can give you some excellent results.

Our cows have been on the Vita Ferm total nutritional system year around with no other supplementation or additional minerals or vitamins. Our herd health is excellent. In 1973 out of 125 cows and first calf heifers we had one open cow and 2 open heifers. The calves were strong, including the heifers, and the calves got up within a 30 minute average time and got the colostrum milk. The cows gave ample milk and cleaned very well. They bred back easily as is evidenced by our 1974 calf crop. We had 120 of 125 calves leaving 5 open cows and 43 of 47 replacement heifers calved. There were no retained placentas. There was a small percentage of the calves getting pneumonia and scours with no death loss on the cows' calves, but lost 2 calves from heifers. If we count our 9 open cows and heifers and our 2 head death loss, we will wean a 94% calf crop in the fall of 1974. This is excellent when you figure our cost per cow calf unit at $19.00 per year for the Vita Ferm feeding system. Our cows run on native grass in the summer and fall and run on wheat and milo stubble in the winter.

Larry, we have just concluded one test with Vita Ferm and alfalfa hay in confinement and we are still conducting a test with cattle grazing alfalfa and having access to Vita Ferm.

We put 93 steers weighing an average of 670 lbs. in confinement on a ration of straight alfalfa hay free choice and Vita Ferm and salt mixture free choice for 51 days. On May 13 we weighed the steers and they averaged 735 lbs. for a gain of 1.27 lbs. per day. We killed two steers that dressed out 54% and graded High Good. They were killed at Caviness Packing Company in Dalhart and graded by a grader from Swift Packing Company in Guymon, Oklahoma. The grader said they would just about go Low Choice because of the youthful eye appealing carcass.

We are eating one of the steer carcasses now and it is tender and had a good flavor and my wife likes not having all that fat you find on grain fed cattle. We have even eaten cattle fed on the Vita Ferm System and found a great adventure in eating beef.

We haven't completed our grazing season on alfalfa yet, but we have 140 heifers on 50 acres of alfalfa and the Vita Ferm System and it looks like they are gaining over 2 lbs. per day and are carrying the flesh of grain fed heifers of comparable weight (650#).

Since we have been on this program there have been many cattlemen switch to the Vita Ferm System just by looking at our cattle.

The Vita Ferm M.O. has provided nutrition and Magnesium Oxide for cattle on wheat pasture from which cattle have experienced poisoning in the early spring. Mr. Jimmy Summerour, Manager of Summerour Ranch (one of the biggest in the Texas panhandle) is completely sold on using the M.O. on wheat pasture. Two years ago he lost 5 head on wheat before he started using M.O. He hasn't lost any since.

Come see us.

Yours truly,

(s) Ralph Poter & Sons
Dalhart, Texas

## APPENDIX E

## Excerpt From A Speech by John Milne,

# "Beef Production"

## 2nd Annual Alaskan Agricultural Symposium

Our cattle operation is basically a cow-calf feedlot operation. We calve them in February or March, put them on the grazing lease during the summer, wean them in October, winter them over, and then in the spring we decide whether we will sell them as feeders, leave them in the feedlot and finish them out or put them back on grass and finish them next year. In the spring we have these options that, depending on market, determine just what we'll do with them from that point on.

Another requirement for these winters is a good supply of straw. I am a firm believer in having a lot of straw. When we start baling in the fall, we bale until the snow flies. We get all the straw we can. It is absolutely essential if you're going to winter calves. It is necessary for bedding. Good barley straw is good for stretching your feed supply, and you can actually get by with itif you run out of hay. You canmake do by feeding barley straw and barley grain. It will pull you through short periods quite nicely.

Another point in this cold weather is that you have a reliable system of feeding your cattle. If you haven't, you can really run into trouble. It always seems like you'll run into trouble on days when it's – 40F. We get – 40F weather too, maybe not as often and long as here in Alaska, but we always get one or two shots every winter. There is nothing worse in the winter when it's – 40F, than having a frozen water system or tractor that won't start. We had some experience with small tractors, and this sort of thing, tryirg to feed large numbers of cattle under these cold conditions in the snow. I think you should try to look ahead a little bit. Ask yourself all kinds of "what if" questions. What if the water freezes? What if the tractor won't start? Try and anticipate some of these problems you can have. When it gets cold and things get out of control, they seem to get really out of control.

We use the big round bales and feed with a 100 horse tractor with a big loader on it. It is a new tractor. You need something like this that you can handle.

We do keep track of the forecast, and if the forecasters are predicting a long cold period (a week of cold weather or something like that), we've got a few extra, small pastures around the place that can be used to ease the feeding chore. We will pile out enough bales in each of these pastures to feed the cows for two or three days, shut them into one pasture, and then we just turn them from one pen to the other. We can actually stock up a little bit and get ahead so that we can keep these cows and the calves and all our other cattle going for probably a week. You don't have to start up in the cold weather.

These are things that don't sound like much of a problem when you're talking about an hour in the middle of the summer. When you hit the wintertime though, they can become a very big problem.

We have a problem with water, but it is my understanding that this area has good ground water. We have to rely on dugouts which can cause a problem either by freezing up or by going dry. I think that if you have large numbers of livestock, you're going to have to look at automatic electric heating bowls to handle your water situation.

For years in the Peace River area, over 40% of the cattle north of the river did not have water. They wintered on snow. There is no problem wintering cows on snow. In fact, the research people in Alberta in the last couple of years have done some work on wintering cattle on snow and have found that there is no significant difference in the weight of the cow or that of the calf or of the general health of the cow (between cows wintered on snow and wintered on water up until calving). I personally like water but mostly because of tradition Once they calve, they need a lot of extra water and a lot of extra feed. You can no longer depend on snow alone; water must be available.

In our area, very few cattle are actually housed inside buildings. Your housing requirements can range all the way from a completely controlled environment, right through to spruce brush. If you have a lot of cattle to get into a completely controlled environment, you're looking at a "heck" of a capital investment. That is one that I don't think the cattle operation, particularly the cow-calf operation, can handle. The only alternative, as I see it, is to go to an open housing situation.

We winter all our cattle in the open. There are no sheds for the cows or calves or anything else. They are all out in the open. They have got shelter from the wind, either in bush or windbreak fences. We bed them down and use a lot of straw. They do fine out there. In fact, you'll have less problems with pneumonia if they are out in the cold. They are better off being cold and dry than they are even in open front sheds, where they will crowd and try to take some protection.The moisture accumulates in there and will cause them more problems than having them in the open. We keep them outside.

The other thing that you must have if you are going to run a cattle operation is well designed handling facilities. You will need corrals and shutes to make it easy to take a cow that is a little bit sick, run her into a corral, put her in a shute and give her a needle or do whatever else is needed. If you don't have these facilities and the weather is cold and miserable, you will find yourself saying, "It's too big a problem to wrestle her down. Maybe she'll get better tomorrow." Build yourself a simple set of handling facilities but a good set. It will save you a lot of problems when it comes to handling the cattle in the winter.

I think that you should use corrals. We have big corrals and we use lots of space. Not too many of our corrals are less than an acre in size. That way, over the long feeding period, your build up of straw and manure will be better scattered around. Also, if you don't get those corrals cleaned out in the summertime, you can bed them in one corner for one winter and bed them in the next corner the next winter. At least they are big enough that you have some options. Use lots of room and make your corrals big.

Now I would like to say a word about calving into February and March. We calve in February and March, and we do this for a number of reasons. One is to do all the work that has got to be done. Sometimes, the summers just get away on you. It's sort of like the bumble bee that was flitting around the forest, from flower to flower one day. The sun was shining and the skies were blue. He landed on a daisy and an elk ate it. A bumble bee has got an awful temper. So on the way down to the stomach, he said to himself. "When I get to this stomach I'm going to sting this elk." When he got down to the stomach, it was so nice and warm and comfortable, he thought, "Well, maybe I'll have a little sleep first." When he woke up, the elk was gone. That is what our summers are like. You sleep too much, they're gone. You know where you find yourself.

We calve in the wintertime because that is one job that we can do in the winter. We've got time, and we don't have to mess around calving cows when spring seeding starts in May.

The other thing is that April is a bad month for us. It is cold, windy and damp, and newborn calves end up running around in the muck and the manure and have problems with scours. We don't have much of a problem in February and March with scours since things are still frozen. These little calves can get well started before the scour season really starts, and they sail right through with no problem.

The other thing about it is the February and March calves are big. When we put them on the lease, they are big enough that they're not baby calves out on that rough lease; they can eat the grass and get their milk. By fall, we've got big, rangy calves. Last fall, our steer calves averaged 596 pounds and our heifers 564 pounds when we weaned them in October. By early calving like this, they're big enough that we can wean them off. They'll go into the next winter with some size on them, and they handle easily. By spring, we've got an 800 pound animal , and the option to sell it, to finish it, put it up on grass, or whatever.

If you're going to calve in the wintertime, there are a couple of things that I think you've got to take a good look at. You've got to be prepared to check these cows regularly. If it is less than – 10F, you've got to go out every two hours. When it's – 40F their ears are frozen in about 15 minutes, and in a half an hour their feet are frozen. We calve them out in the open, because with a number of cows like this, it's impossible to know completely which cows you should be putting in the barn. We put the cows in the straw piles, check them, and when a calf is born, put it on an old piece of mat or a little sleigh, especially built for that and drag it across the yard to the cabin barn. The cow follows along behind you. We put it in a stall in the cabin barn where it can stay a little warmer and get a chance to dry off. If it's real cold, we put a heat lamp on it. After it's dried out, we make sure that it's sucking the cow and everything is all right. Then we can dump it back out again.

When you turn your calves out, we've found that using calf hutches is a help. We take 4x8 sheets of plywood, put some 2x4s on and around the edges and across the middle, just to stiffen them up a little bit and bolt these things together to make a hutch that is 8 feet wide and 16 feet long and throw a few sheets of plywood up on top to cover it off. We put some bedding in the hutches, and these little calves will go right in. They've got a creep area by themselves, and they can get away from the cows. They stay nice and comfortable in there. If you've got one of those little hutches for about every 20 calves, scattered around in the pens that you've got your cows in, it makes quite a bit of difference.

APPENDIX F

# CORRAL INDUSTRIES INCORPORATED

# CONFINEMENT BUILDINGS FOR BEEF CATTLE

CONFIDENTIAL EDITION

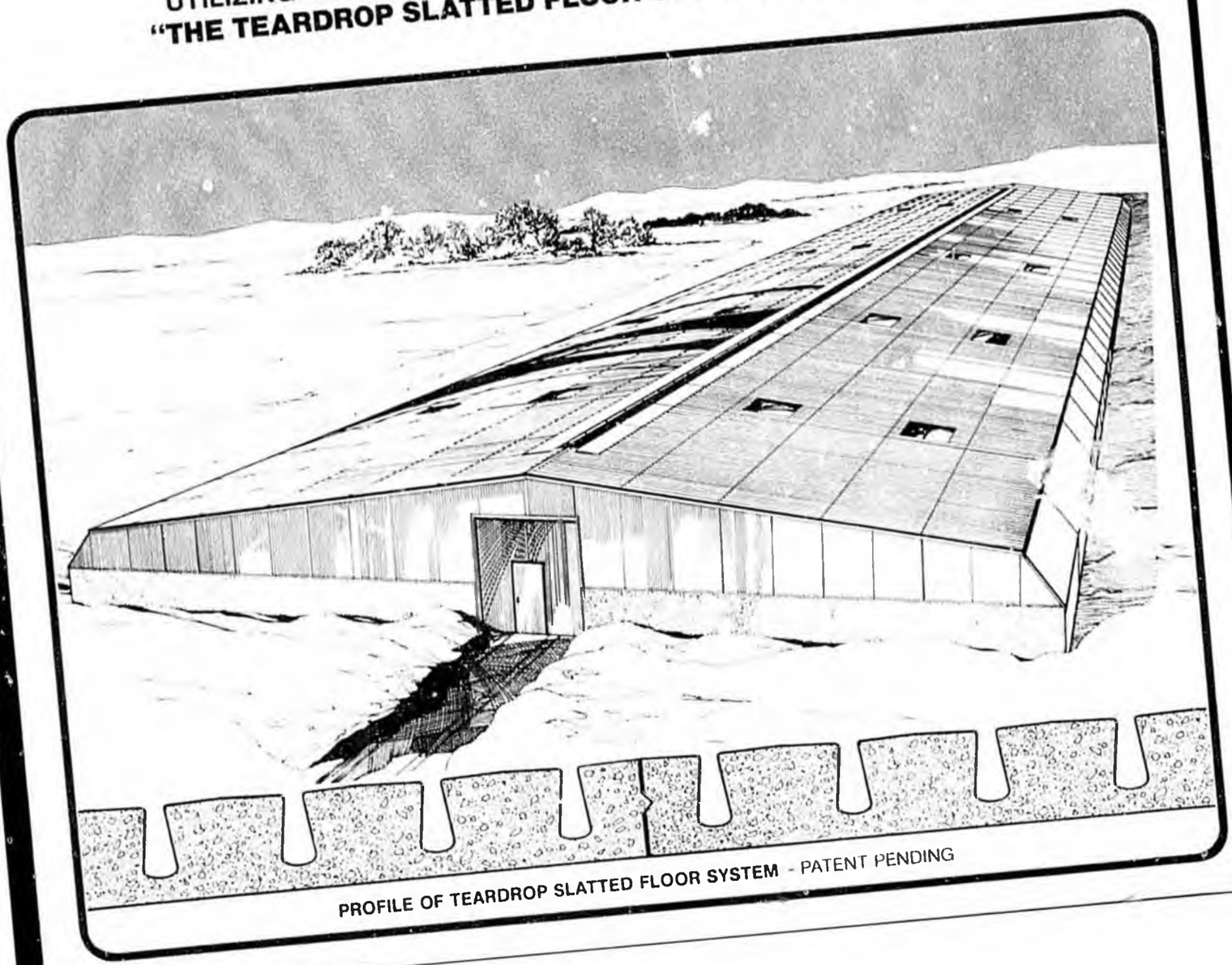
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A TOTAL DESIGN FOR EFFICIENT, ECONOMICAL, MORE PROFITABLE BEEF PRODUCTION

DESIGNS FOR ALL WEATHER CONDITIONS

OPTIONAL WASTE RECYCLING SYSTEMS

UTILIZING CORRAL'S LATEST ENGINEERING ACCOMPLISHMENT **"THE TEARDROP SLATTED FLOOR SYSTEM"** FOR WASTE REMOVAL



PROFILE OF TEARDROP SLATTED FLOOR SYSTEM - PATENT PENDING

# COLD WEATHER DESIGN

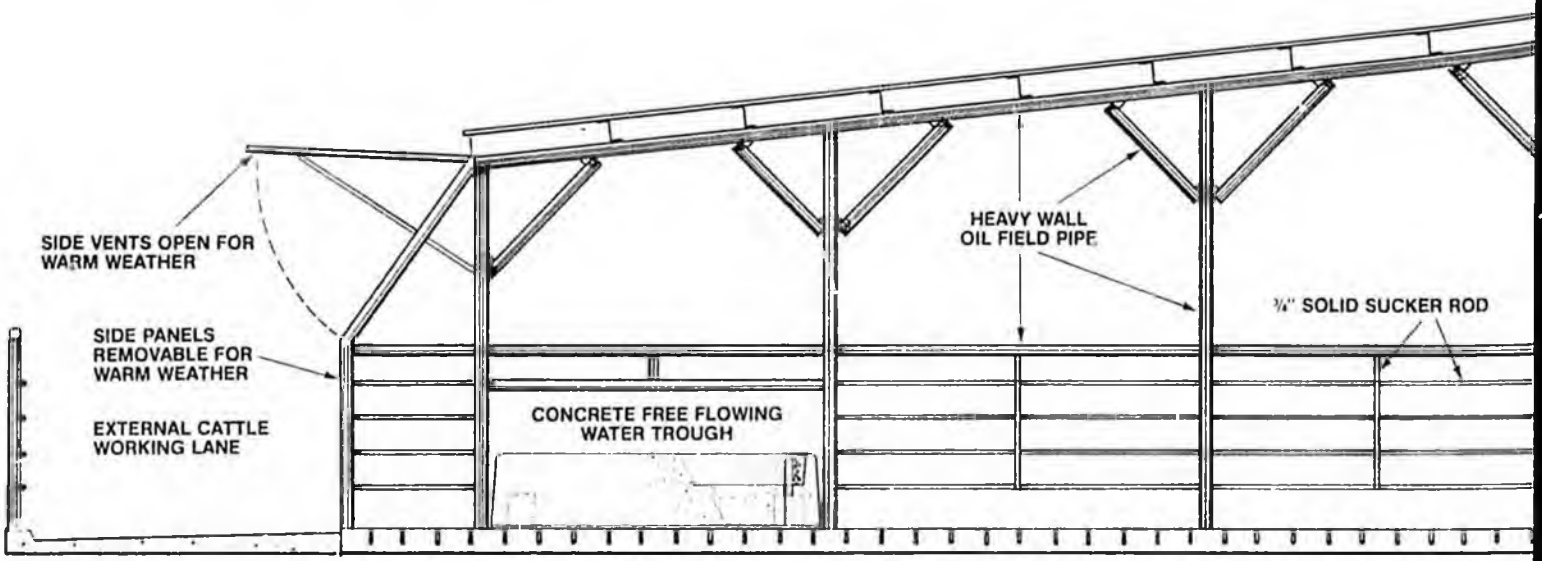
## "THE INFINITELY VARIABLE BUILDING"

The cold weather building with the "Laminar Flow" roof design is the product of research conducted in Canada by the world's foremost snow and wind specialists.

This exclusive roof and panel arrangement allows wind to flow smoothly over the roof without turbulence producing projections or shapes, thereby practically eliminating snow drift build-up on the roof.

Ventilation and animal heat containment can be precisely regulated by adjusting the roof vent and side flaps, to suit all seasonal weather changes.

All Corral buildings are custom adapted to the particular area, the type of cattle confined, type of feed used, special budget problems, etc.




### SUMMER CONDITIONS

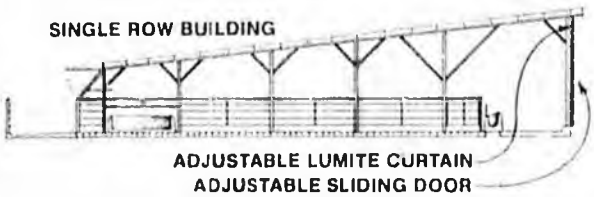
In summer the building becomes a giant sunshade. The roof vent at the center is opened to the maximum. All side vent panels are removed and stored. The side vent flaps are raised to full open position. This allows moving air to flow freely through the building and out through the roof vent. When wind is of low velocity, an area of negative pressure is formed at the roof ridge vent, and air flows down through the vent. This provides for equal air distribution in the down wind building.

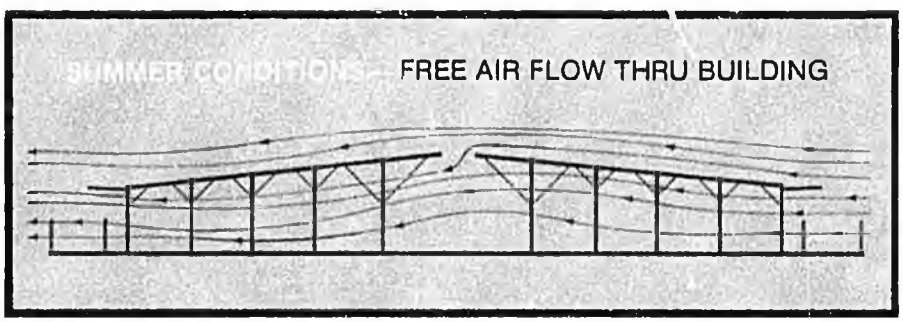
### LOW WIND CONDITIONS

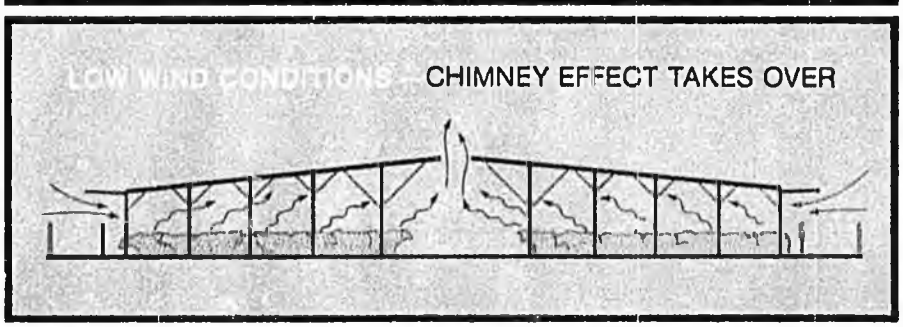
When the weather is calm and there is very little air movement, the chimney effect takes over. Rising heat from the cattle and the natural draft at the roof vent draws air through the building and out through the roof vent (convection effect)

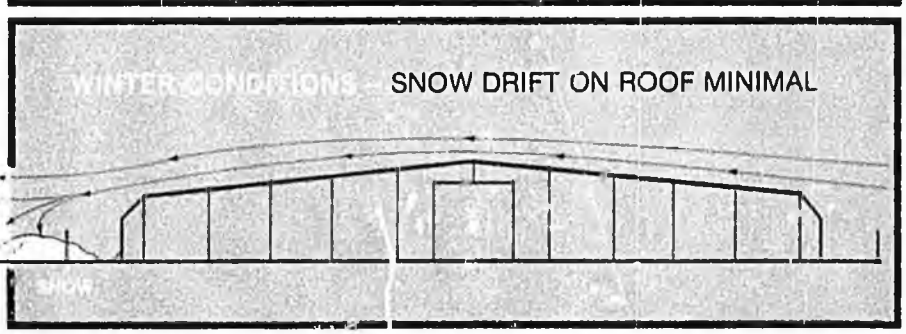
### WINTER CONDITIONS

When cold weather returns, the side panels are reinstalled in the guides along the outer walls, the side vent flaps are closed and the roof vent is closed to its minimum 2" opening. This allows for proper cold weather ventilation, while enclosing the building and providing maximum weather protection for the cattle. To create the most ideal conditions within the building, one or more flaps may be raised or lowered to any degree necessary, and the center roof vent regulated accordingly.



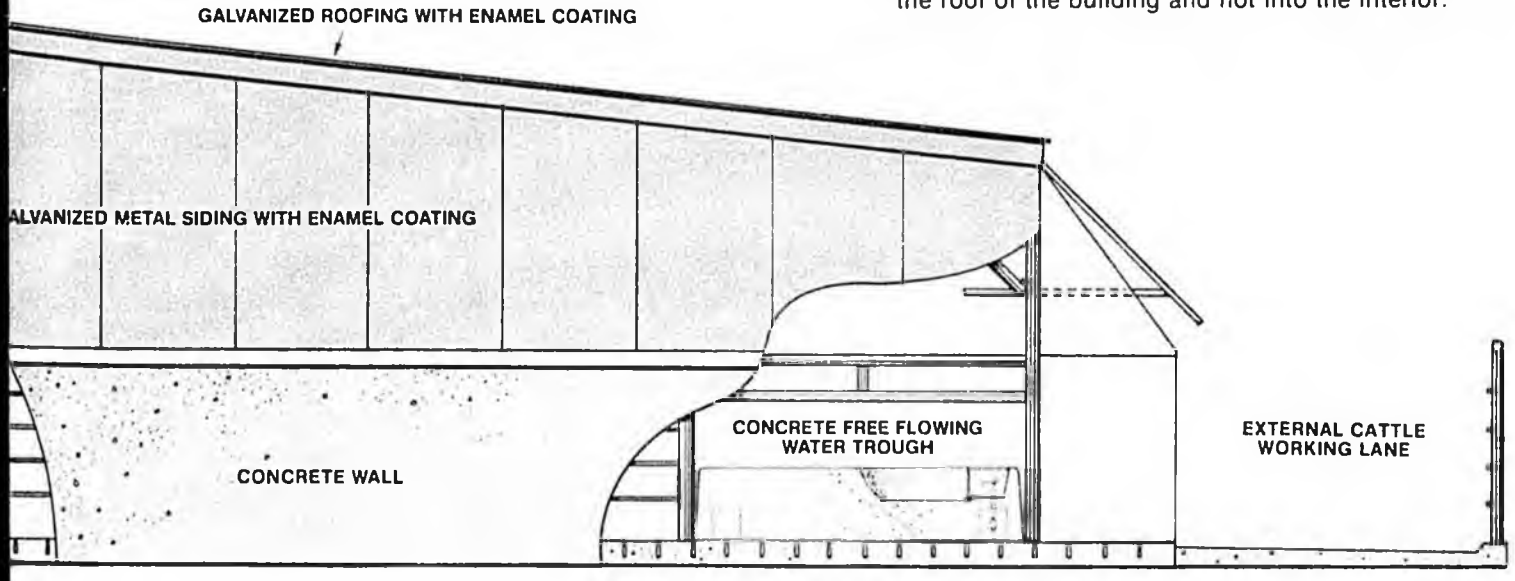



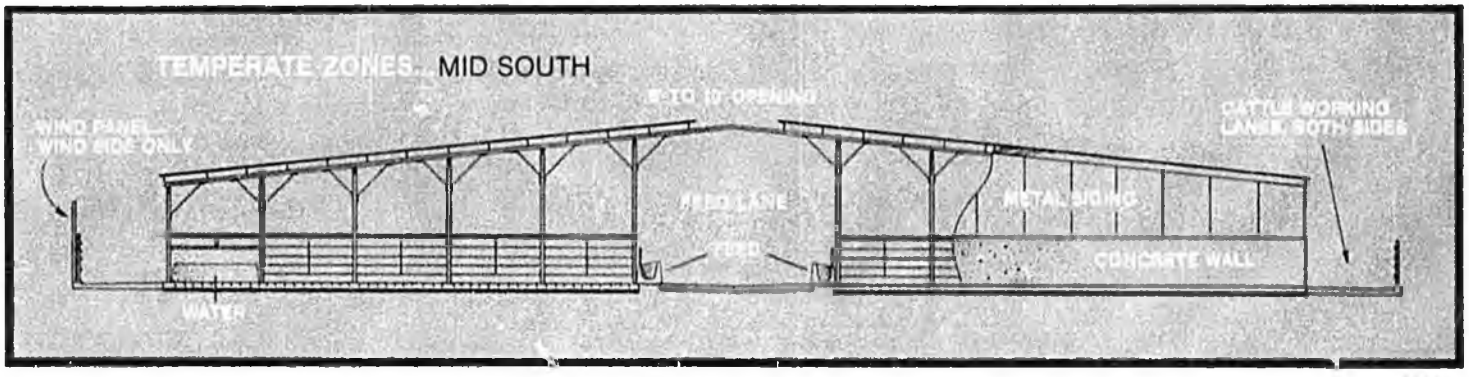
# INTERMEDIATE WEATHER DESIGN

For areas of the country where weather extremes are not a problem, Corral has designed a building compatible with these moderate temperature conditions.

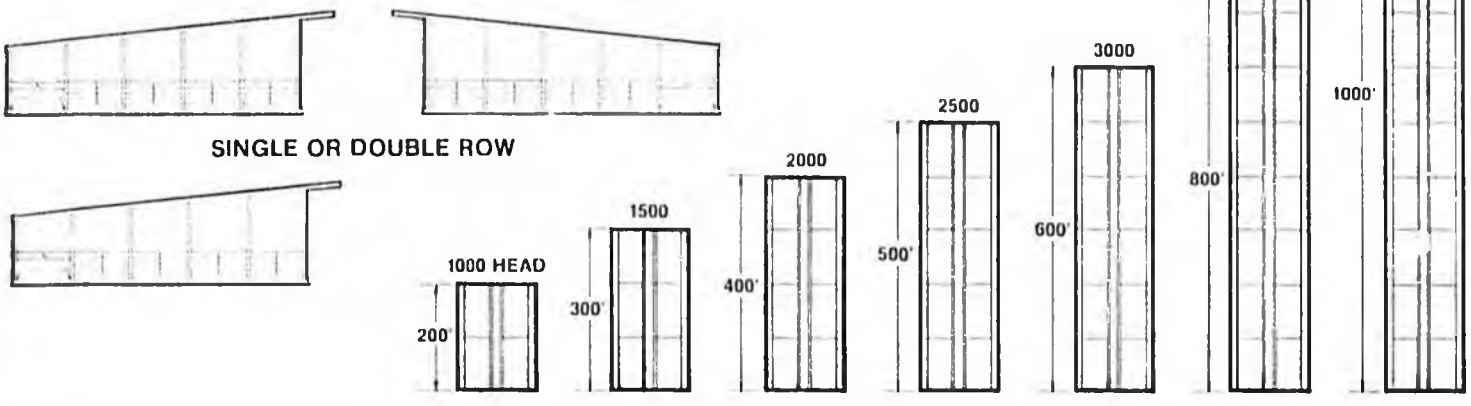
This building is well suited to areas where occasional snow and ice conditions exist, and even to the extent that snow or cold may at times be excessive. For this reason we use the same roof construction as for the cold weather design, but without the vents and wind flaps along the exterior fence line.

For this building, 8' windbreak panels are installed on the cold wind side for added winter protection. This panel causes the wind to be deflected "up and over" the roof of the building and not into the interior.



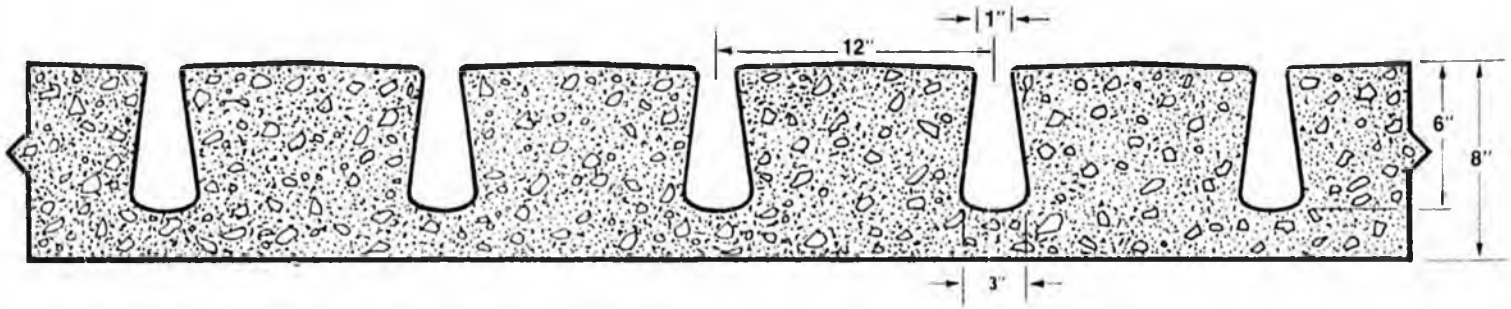

## ALL CORRAL BUILDINGS CAN BE CONSTRUCTED TO ACCOMMODATE FROM 1000 to 5000 HEAD OF CATTLE

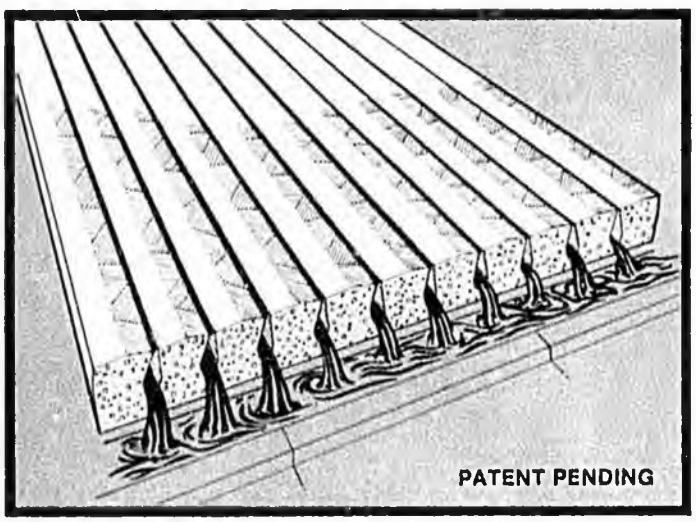



ALL BUILDING DESIGNS COPYRIGHTED - PATENTS PENDING

# THE TEARDROP SLATTED FLOOR SYSTEM

**Corral's newly developed slip-form technique for laying concrete greatly reduces original construction costs.**




This totally automated procedure allows us to make long continuous runs, building the sub-grade as we go. The equipment is accurately controlled by a laser beam for straight line guidance, lateral alignment, and proper angle or slope for the finished floor.

The **TEARDROP** slatted floor becomes a very effective flush system for animal waste, without the conventional removal pits beneath the floor. Each **TEARDROP** slot serves as its own waste removal conduit. The **TEARDROP** shape provides a narrow opening at the top where the animals walk and widens to form a rounded trough below. Each **TEARDROP** carries from 3 to 5 gallons of water per minute on a gently sloping floor which provides the flushing action. The waste is worked into the slots by animal traffic as it is with all slatted floor designs. The water flow carries the waste the length of the building to the collection ditch and from there to the holding pond. The liquid fraction is returned to the flush cycle either from the nutrient recovery center or directly from the anaerobic pond.

The liquid is constantly being diluted with fresh water additions from a make-up line. At the beginning of the cycle water enters through the manifold injection system. Each **TEARDROP** has its own flexible manifold valve which is pre-set for proper water flow at all times.

The surface of the **TEARDROP** slatted floor is a special design. The slightly raised centers between slats provide run-off of all liquids to the **TEARDROP** channels. Smoothly rounded, extruded corners at **TEARDROP** openings provide for cleaner run-off and prevent chipping and breaking of these edges. The floor surface is specially textured to retain small fibrous manure particles which build up to a thin carpet-like surface on the concrete. This finish, as well as the fiber pack, eliminates wet or slippery conditions which result in injured or dirty animals. The texture and shape of the surface and animal loading are carefully balanced to minimize any excessive build-up of manure.

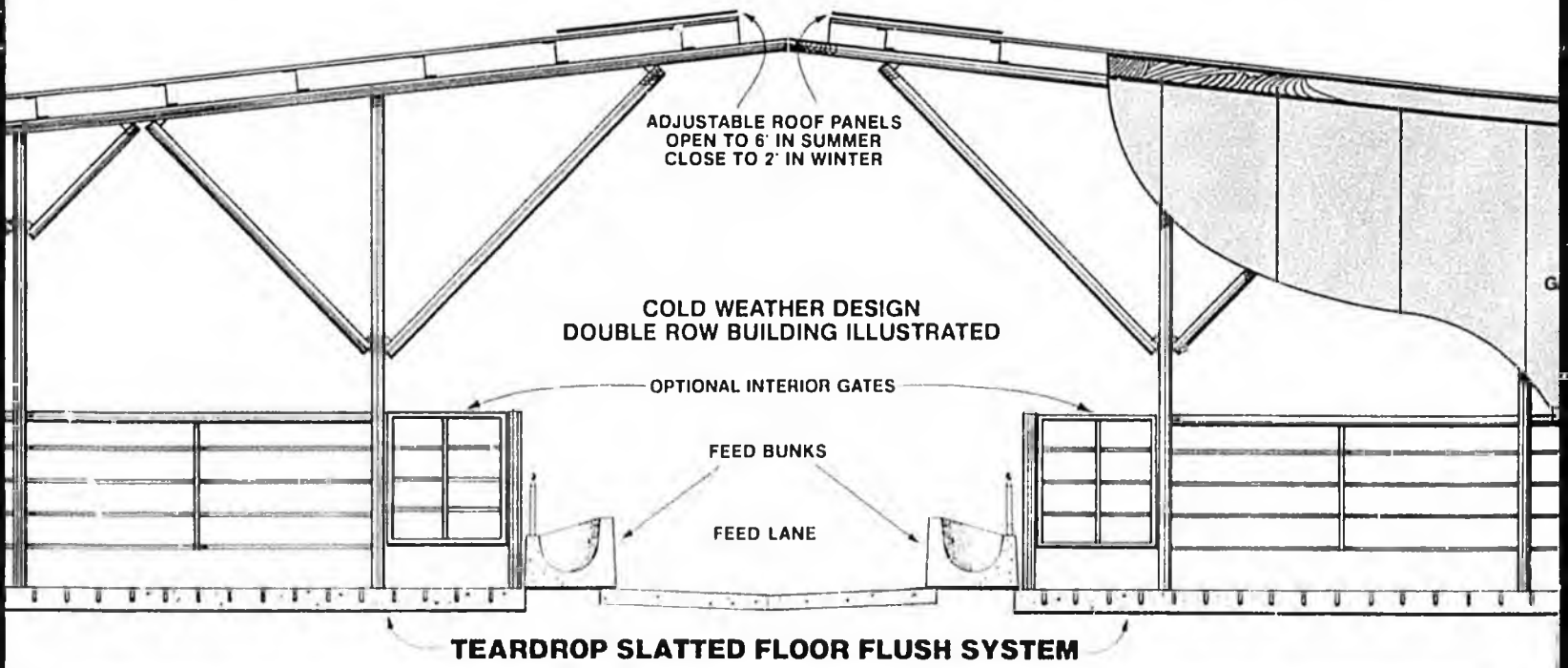
Water flow may be continuous in winter, as running water is difficult to freeze and running water with manure in it acts like "anti-freeze". Also remember that the building flaps in the cold weather design are closed partially or completely in winter to contain animal heat which helps prevent freezing. In summer the flow may be intermittent or as necessary.

The running water through the system will create a mild "aerobic" condition (accumulation of oxygen) that reduces gas and odor release within the building. This condition will aid in the management of any subsequent irrigation or pond systems. Chemicals can be introduced into the main pump line to eliminate ammonia gas release within the buildings.

# HOT WEATHER DESIGN

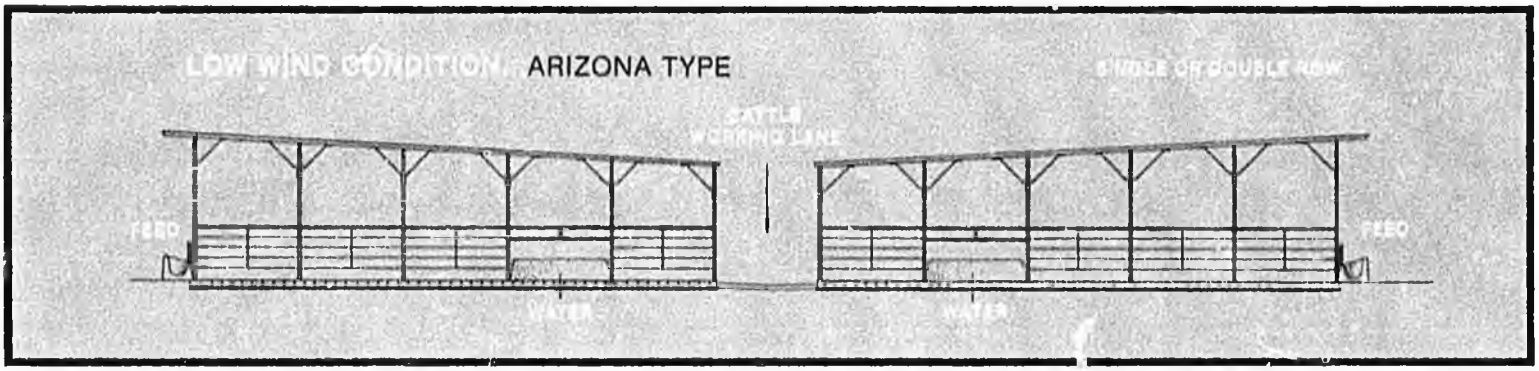
Careful attention to air flow patterns is one of the keys to the success of the hot weather building. These buildings have proven successful in the hot dry desert regions of Arizona and California and also the hot humid areas of central Florida.

Cattle are protected from sun or rain by the large galvanized sunshade roof. This Corral exclusive cable supported wire roof is stressed for no sag and high wind resistance. The pitch and careful spacing of the shades provide for maximum air flow through the building and for proper run-off of rain. Again these buildings are custom adapted to any unusual or special conditions.

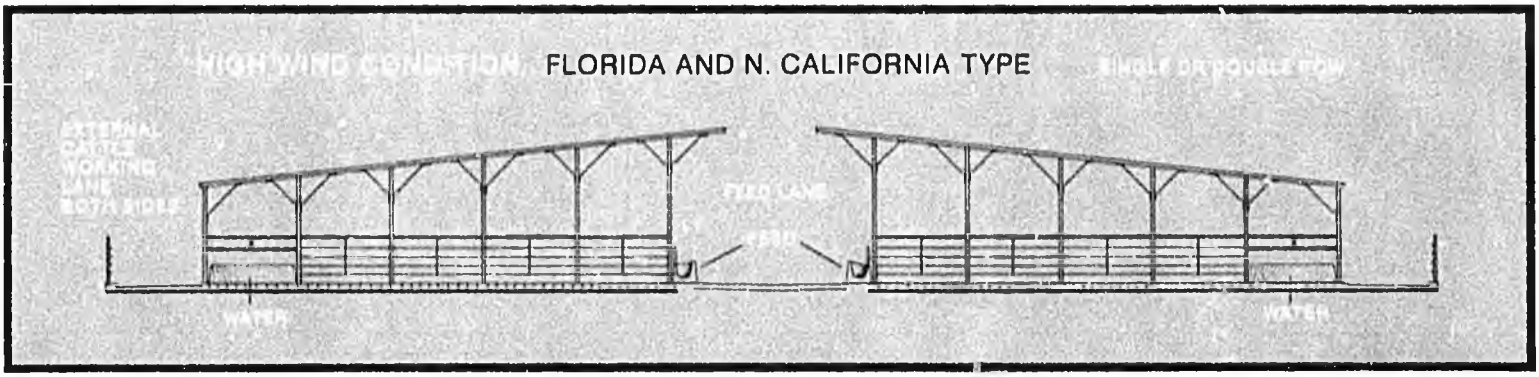



**COLD WEATHER DESIGN**
**DOUBLE ROW BUILDING ILLUSTRATED**

**TEARDROP SLATTED FLOOR FLUSH SYSTEM**




In desert climates like Arizona and Southern California where there is very little rainfall and wind conditions are normally very calm, the roof design slopes to the center rather than the outside. This provides more moving air pick-up at the outer perimeter and some air squeeze for maximum air movement through the building.




In warmer climates where rainfall is greater and winds much stronger, the roof slopes to the outside to facilitate proper run-off and prevent water from entering the building area.

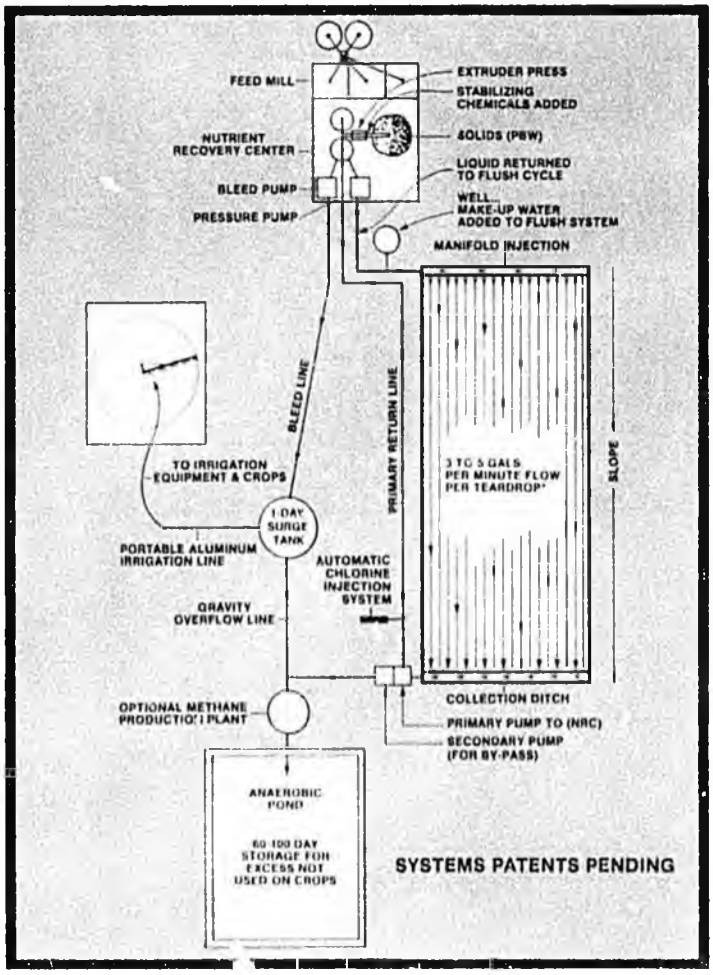
8' wind break panels may be mounted on the outer railings for cold winter wind protection.

# WASTE HANDLING

## RECOVERY SYSTEM

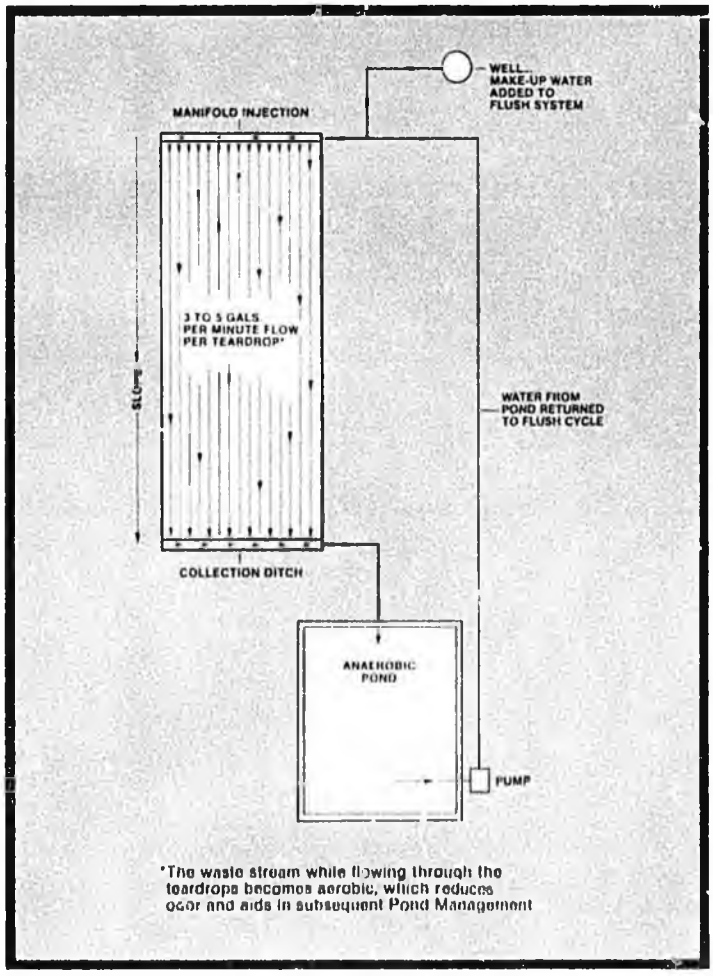
**SOLIDS RECYCLING (PBW) PROCESSED BOVINE WASTE**
**LIQUID FERTILIZER FOR IRRIGATION**

**RECOMMENDED FOR 2000 HEAD CONFINEMENT FACILITIES AND LARGER**




## DISPOSAL SYSTEM WITH ANAEROBIC POND

**RECOMMENDED FOR SMALLER BUILDINGS, 2000 HEAD OR LESS**




**SPECIAL NOTE ON CHLORINE INJECTION:** This accurately controlled, automatic system is a very fast and inexpensive method of bacteria kill. Though this does not kill all bacteria...growth is greatly suppressed and holds the PH to a slightly acid condition. With bacteria growth at a minimum and the PH at this slightly acid state, we are able to prevent major amounts of ammonia release--which can be detrimental to the general health of cattle.

Corral Industries is the recognized leader in the design and construction of confinement systems for cattle, and conventional feed lots as well. We are also the world's leader in the area of animal waste recycling systems.

Corral can custom design and turnkey build these systems from start to finish, including feed mill. We can start by helping with site selection and land acquisitions. We have considerable information pertaining to in-depth projections and feasibilities as well as detailed interpretations of investment tax credit applications. We also help in the acquisition of EPA and zoning permits. We can develop detailed financial projections and feasibilities that fit your requirements.

We can also custom design an irrigation system to accomplish either "disposal" or maximum "utilization" of the liquid fertilizer.

**For immediate information please write or call: Dick Bunger for construction or John Fuller--waste processing.**


CORRAL INDUSTRIES INCORPORATED

5202 E. Washington, Phoenix, Arizona 602-275-7603


112078

MULTI-STATE RESEARCH SUMMARY

# High moisture grains have superior feeding value

Prof. F.S. Baker, Jr.

Ensiled (fermented) high moisture grain is now widely used in beef, hog, and dairy rations with consistently superior results when the feed is properly handled. The grain may be harvested with a combine as high moisture grain before it dries in the field, or dry grain may be reconstituted to high moisture content by adding water before ensiling.

Best results are obtained with shelled or threshed high moisture grain when stored in whole form in an oxygen-limiting structure. The grain should be ground or rolled when removed from storage for feeding. Ground ear corn can be successfully reconstituted and stored in ground form.

Here is a summary of research from over the country which quickly tells the story of high moisture grain:

**Advantages of high moisture grain**

**1. In cattle finishing rations, ensiled high moisture corn** or sorghum grain, processed as described above, has consistently shown better feed conversion than dry grain.

**Table 1. Improved feed conversion with high moisture (HM) grain**

| Location | Number trials | Grain | % Moisture HM grain | Form stored | Form fed | % improvement total ration feed conversion, HM over dry grain |
|---|---|---|---|---|---|---|
| Agri Res and Ed Ctr., Quincy, Fla | 4 | Shelled corn | 23 to 26 | Whole | Rolled | 12 |
| Texas A &M Univ | 7 | Milo grain | 23 to 32 | Whole | Ground | 11 |
| Univ of Arizona | 2 | Milo grain | 27 | Whole | Rolled | 14 |
| Okla State Univ | 1 | Milo grain | 30 | Whole | Ground | 9 |
| Iowa State Univ | 3 | Shelled corn | 26 | Whole | Rolled | 8 |
| Purdue Univ | 2 | Ear corn | 32 | Ground | Ground | 10 |
| Iowa State Univ | 2 | Ear corn | 31 | Ground | Ground | 10 |

**About the author . . .**

F. SLOAN BAKER, JR. is professor (beef cattle) Agricultural Research and Education Center (AREC), IFAS, University of Florida, Quincy, Fla. He is a native of Texas, received his B.S. from Texas A&M and M.S. from University of Florida. He has been a member of the faculty at Quincy 20 years. Among his research projects have been active programs with growth and finishing of young cattle and high moisture grain.

It should be pointed out that the percentage improvement shown is for the **total ration.** Calculations for the Texas, Florida, and Arizona trials show high moisture grain itself was utilized 19% more efficiently than dry grain.

**2. Digestibility of high moisture grains.** Several studies indicate that high moisture grain is more digestible than dry grain. In Oklahoma studies, it was shown that the non-protein portion of rolled high moisture milo was more digestible; Texas experiments showed both the protein and non-protein portions more digestible. With corn, the improved feed conversion found with the high moisture grain is also likely due to greater digestibility.

**3. Faster gains with high moisture grain** have been proven in several experiments. Two examples come from Agriculture Research and Educational Center (AREC) at Quincy, Florida and University of Arizona:

**Table 2. Increased gain with high moisture (HM) grain**

| | Average daily gain (lbs.) Dry grain | Average daily gain (lbs.) HM grain | Difference Lbs. | Difference % |
|---|---|---|---|---|
| Quincy, Fla (4 trials) | 2.28 | 2.60 | 0.41 | 18 |
| University of Arizona (2 trials) | 2.04 | 2.48 | 0.44 | 22 |

Dry matter feed intake was slightly greater with the high moisture grain at both locations. Carcass weights were not reported in the Arizona trials, but chilled carcass weight was significantly greater for cattle fed high moisture corn in the Florida experiments.

| | Chilled Carcass Weight | | |
|---|---|---|---|
| | Dry corn | High moisture corn | Difference |
| Avg. 4 trials, Quincy, Florida | 597 lbs. | 622 lbs. | 25 lbs. |

Generally, results of feeding trials indicate little difference in cattle gain with dry and high moisture grain, with improved feed conversion of high moisture grain due to smaller dry matter feed intake than with dry grain. Whether due to greater gain with about the same feed intake, or about the same gain with smaller feed intake, there is a **consistent** improvement in feed

conversion with high moisture over dry grain (Table 1).

**4. Economic advantage of high moisture over dry grain** was demonstrated in Florida tests. At AREC in Florida, improved gain and feed conversion resulted in a marked economic advantage. With shelled corn priced at $89.29 per ton ($2.50/bu.) on a No. 2 (15% moisture) basis, improvement of 12% in total ration dry matter feed conversion of high moisture over dry corn resulted in feed cost per 100 pounds gain of $5.70 less with high moisture corn, and an increase in value of the corn of $19.08 per ton (No. 2 basis), or 53c per bushel. One filling of a 20'x60' oxygen-limiting storage structure with 13,820 bushels of high moisture corn was worth $7,383 more than feeding the same quantity of corn as dry grain. Table 3 on this page shows feeding value advantage of high moisture corn in an oxygen-limiting structure (not including any cattle grade increase) with No. 2 corn at various prices.

**Table 3. Advantage One Filling of Oxygen-Limiting (Harvestore) Structure**

| Price No. 2 shelled corn | | Size and capacity structure | | |
|---|---|---|---|---|
| Bushel | Ton | 2027 (6,220 bu) | 2060 (13,820 bu) | 2565 (23,390 bu) |
| $1.26 | $ 45.00 | $1843 | $4094 | $ 6929 |
| 1.75 | 62.50 | 2713 | 6029 | 10204 |
| 2.00 | 71.43 | 2922 | 6493 | 10990 |
| 2.25 | 80.36 | 3121 | 6934 | 11736 |
| 2.50 | 89.29 | 3323 | 7383 | 12496 |
| 2.75 | 98.21 | 3624 | 8052 | 13627 |
| 3.00 | 107.14 | 3832 | 8513 | 14408 |

APPENDIX H

# What makes high-moisture grain special — and how to use it for best livestock returns

Dr. E.E. Hatfield

**About the author . . .**
E.E. HATFIELD is Professor of Animal Science, University of Illinois, Urbana, Illinois. He received his B.S. in Agriculture at the University of Arkansas, his M.S. in Animal Nutrition from Oklahoma State University, and his Ph.D. in Animal Science from the University of Illinois. Special professional appointments include Chairman, Committee on Standard Reference Diets for Ruminants, Animal Nutrition Research Council.

There are several factors influencing the producer's decision on time and method of harvesting grains. If the grain is to be stored and fed near the production sites, there appears to be several advantages in early harvesting.

Physiological maturity is a factor to be considered. According to University of Illinois Blight Report of July 27, 1971, corn ear development is generally as follows:

12 days from silk stage to blister stage
24 days to advance to the dough stage
36 days to the beginning of the dent stage (last stage)
12 days to complete denting — "At 60 days after silking, corn is generally physiologically mature — at 30 to 35 percent moisture."

Other factors for consideration are field losses and storage losses. An experiment was reported by the University of Illinois in 1959 in which one variety of corn widely used in central Illinois was planted on 120 acres. The field was divided into strips that contained two rows for harvesting each of four moisture contents — 35%, 30%, 25%, and 18%. Table 1 shows the field losses.

**Table 1. Field losses of corn harvested at different moisture contents**

| Moisture content | 35% | 30% | 25% | 18% |
|---|---|---|---|---|
| Loss (bushels per acre) | | | | |
| Ear loss (machine and delached) | 0.8 | 0.8 | 2.7 | 5.4 |
| Shelled lo. (snapping rolls and separation) | 2.6 | 1.6 | 2.3 | 2.1 |
| Cylinder loss (on cobs) | 5.2 | 2.4 | 2.4 | 0.4 |
| TOTAL | 8.6 | 4.8 | 7.4 | 7.9 |

Losses of grain during storage may be divided into the following:

1. Respiration (aerobic) losses in the silo
2. Fermentation (anaerobic) losses
3. Losses due to discarding unacceptable feed (usually minimal under most conditions in most storage units)

The respiration losses will be directly correlated with the availability of oxygen. These losses will continue as long as oxygen is present and until the pH is drastically lowered. These losses are accompanied by a substantial rise in temperature of the stored grain mass. Excluding the oxygen is the practical method of reducing these losses.

Fermentation losses are due to microbial activity under anaerobic conditions. These losses should be predictable from knowledge of biochemical pathways of the micro-organism involved. The net losses due to silo fermentation is less than suggested if one considers that the carbohydrates, organic acids (mainly malic and citric), and amino acids fermented would undergo similar fermentation in the rumen and assuming the main exogenous end-products of silo fermentation — formic, acetic, and lactic acids — will be used in similar manner as rumen produced formic, acetic, and lactic acids.

Losses due to discarding spoiled or damaged surface material are probably the major losses on many farms. Several factors will influence these losses — type of storage facility, frequency of removing material during warm weather, additives, and others.

As shown in Table 2, a considerable amount of variation in feedlot performance from the different stations has been reported. However, as more data becomes available the advantages of high moisture grains over dry grains is more apparent — particularly the advantage in feed efficiency (units of feed per unit of gain). In most of the trials in which the daily gains were higher for the dry grains, the feed efficiencies were essentially equal or favored the high moisture grains.

The 32 trials with high moisture corn reported in Table 2 show an unweighted average of 7.2% improvement in feed efficiency over dry corn; in the 11 trials with reconstituted high moisture corn the unweighted average was 7.7% improvement over dry corn; in the 11 grain sorghum trials the unweighted average was 16.5% improvement over dry grain sorghum.

Voluntary feed intake is often used as a criterion for evaluating feeds. Although many producers have indicated higher acceptability of high moisture grains over comparable dry grains, the reported data does not indicate as much increase in dry matter intake as one might expect. For example, Oklahoma State reported an experiment in which they compared dry milo with reconstituted milo as the main constituent (84%) of the diet for growing heifers. The feed consumption of the reconstituted milo was not increased, but both daily gains and feed efficiency were improved. Feed efficiency was improved 12.9% with milo stored at 30% moisture for only 10 days, and improvement was 15.6% for either 30% or 38% moisture milo stored 20 days.

The increase feed efficiency with equal or less feed intake is likely due, in part, to increased digestibility.

The accumulation of the performance data summarized in Table 2 increases the level of confidence in high moisture grains (harvested or reconstituted).

APPENDIX I

# High Moisture vs. Dry Barley for Feedlot Cattle

by Dr. Harvey F. Windels

Two separate years' trials with groups of yearling steers fed rations with dry or high moisture barley, and housed either in a slatted floor cold confinement or conventional open pole barn, were conducted at Northwest Experiment Station at Crookston, Minnesota.

Results show that the cattle fed high moisture barley in either type of housing gained faster, and on less feed dry matter, than those on dry barley.

A two-year summary of the feeding trials reveals that cattle fed high moisture barley gained an average of 2.52 lbs. per day, compared with 2.32 lbs. per day for dry barley-fed cattle, an advantage of 8.6%. (See Table 1).

Also, the high moisture barley cattle required significantly less feed dry matter per pound of gain than cattle fed dry barley.

Feed required per 100 lbs. of gain with the high moisture barley-fed animals was 805 lbs. total feed, as opposed to the dry barley-fed animals requiring 888 lbs. of total feed. Daily feed consumption, on a dry matter basis, was not significantly different between the groups. Also, there were no important differences in carcass characteristics.

Economic calculations indicated that cattle fed high moisture barley returned more money per head than those fed dry barley.

Considerable bloat problems were encountered in cattle fed dry barley in both types of housing and in both years. All animals affected with bloat received treatment and none were lost. The moderate to severe cases were treated by stomach tube evacuation of air and/or drenched with poloxylene or mineral oil using a 4-oz. dose syringe. Individual access to mixed hay for a couple of hours relieved the bloat on most, but not all, medium to slight bloat cases.

Bloat proved to be of only minor importance in cattle fed high moisture barley.

**Feeding procedures used**

The high moisture barley was harvested and stored in an oxygen-limited (Harvestore) structure both years. The first year of the trials, moisture content of the barley coming out of the Harvestore was 39.5%; the second year's crop was lower in percent of moisture at 33.5%. Crude protein (dry matter basis) of the high moisture barley the second year was 15.5%, compared with 12.8% the first year.

The high moisture barley was removed from the Harvestore and rolled just prior to feeding. The dry barley was ground. Complete mixed rations were fed once daily.

When on full feed, the cattle were fed 3 lbs. of alfalfa haylage dry matter per head per day and either high moisture or dry barley free-choice.

**About the author . . .**
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**Table 1. Influence of dry and high moisture barley on the performance and carcass characteristics of yearling steers — two year summary.**

| Item | Dry barley | High moisture barley | Significance |
|---|---|---|---|
| No. of steers | 105 | 108 | |
| Avg. initial wt., lb[1] | 777.2 | 777.8 | |
| Avg. final wt., lb[2] | 1092.2 | 1117.6 | |
| Avg. daily gain, lb[2] | 2.32 | 2.52 | P .01 |
| Avg. daily feed, lb. dry matter | | | |
| Barley | 14.8 | 14.5 | |
| Haylage | 4.9 | 4.9 | |
| Supplement | 0.9 | 0.9 | |
| Total | 20.6 | 20.3 | NS |
| Feed/100 lb. gain, lb. dry matter | | | |
| Barley | 638 | 575 | |
| Haylage | 211 | 194 | |
| Supplement | 39 | 36 | |
| Total | 888 | 805 | P .01 |
| Carcass characteristics[3] | | | |
| Marbling score[4] | 5.10 | 5.22 | NS |
| Conformation score[5] | 13.4 | 13.4 | NS |
| KHP, % | 3.14 | 3.16 | NS |
| Rib eye area, sq. in. | 12.0 | 12.1 | NS |
| Fat depth, in. | 0.63 | 0.69 | P .05 |
| Quality grade[5] | 11.6 | 11.8 | NS |
| Yield grade[6] | 3.44 | 3.54 | NS |

[1]Shrunk weight.
[2]Adjusted to a dressing percentage of 61.2.
[3]All carcass data adjusted to an equal carcass weight of 676.2 pounds.
[4]Marbling scores: 4 is slight, 5 is small, 6 is modest.
[5]Conformation scores and carcass grades: 9 is low good, 10 is average good, 11 is high good, 12 is low choice, 13 is average choice.
[6]Values near 1 indicate a high yield of boned and trimmed retail cuts and values near 5 indicate a low yield.

**Advantages of High Moisture Barley**

1. No artificial drying expense.
2. No field losses due to delayed combining.
3. Harvest 5-10 days earlier.
4. Can harvest with dew or light rest.
5. Reduce weather risks — hail, wind, rain.
6. Increase yield — less shattering loss.
7. Easier to combine — less powdering and mealing.
8. Reduced lodging losses — increase cutter bar height.
9. Green patches not a problem.
10. Weeds are better controlled — cut before mature.
11. Harvest wild oats before shattering.
12. Decreases competition for new seedlings.
13. Eliminate swathing — direct combining.
14. Combine more hours in a day.
15. Increase after harvest time.
16. Less dusty.
17. Results in high quality feed — higher protein.
18. Better feed conversion.
19. No bloat problems.
20. No nutritional disorders — very palatable.

APPENDIX J

# Hog Scalding vs. Skinning Costs

The pork industry is in a period of transition between scalding and skinning, and within 10 years it appears that everybody will be skinning, providing a few problems can be solved.

This is the belief of at least one expert in the field, and *Meat Industry* queried him and other packers and processors around the country to compare the two methods of removing hair from slaughtered hogs.

Here is how the methods compare in cost and product quality:

•On the basis of capital investment, scalding requires an initial capital outlay of $563,080 for purchase and installation of equipment to process 600 hogs an hour, whereas the capital investment for skinning is $135,030. The cost per hog is estimated at $.047 for scalding and $.011 for skinning.

•In terms of energy costs, scalding uses larges amounts of hot water and natural gas, and the estimated cost for utilities for scalding is $.054 per hog, compared to $.019 per hog for skinning.

•In skinning, the loss of drop items like feet, tails, jowls, snouts, ears, and skin for gelatin, represents an estimated $1.94 per hog. That can be more than offset by the sale value of the hide. If it can bring $5, there can be a net gain of more than $3.

•Surface contamination doesn't differ between skinned and scalded carcasses, though the distribution of organisms varies and seems to depend on the degree of handling of various carcass areas by workers.

•The shrinkage of skinned carcasses is extremely low, but this is not necessarily an advantage over scalded carcasses because they take up water in the scalding tank which is later lost during the chilling period.

•Scalding carcasses also cool at a slightly faster rate than skinned carcasses, though the cooling of skinned carcasses is not accompanied by increased shrinkage.

**WHO USES WHICH METHOD?**

For the packer who has already made the capital investment in conventional scalding, it can be a fast and efficient process which requires less kill floor labor than skinning. It also means that the skin is left on, and this is important to fresh pork operations that process skin-on hams themselves or sell them to others for processing.

For packers who make whole hog sausage, having the whole skin removed is an advantage. It's also an advantage for packers who don't need skins left on because they make boneless products, for they can benefit from energy savings and lesser capital investments. One of their concerns, however, is with the gouging of fat during pulling so that bellies are damaged for use as bacon.

George A. Hormel & Co. scalds because it is efficient for a big plant, such as its one in Ottumwa, Iowa, and because skin-on cuts have greater marketability.

"There isn't an established market for skinless hams," comments Donald Hittner, manager of industrial engineering for the Ottumwa plant. To justify Hormel's switching from scalding to skinning. "There would have to be adjustments made to meet market requirements. When a big packer sells to others, he sells a board of trade ham. That's what most are familiar with."

Sugardale Foods, Inc., in Canton, Ohio, scalds, though it switched to that method from hide pulling several years ago.

"We used to have two hide pullers out on the kill floor, and that didn't work out very well," says kill floor superintendent Tom Stratil. "There was a big loss of yield and added labor."

One Midwest packer says that if he could build a plant from scratch, he would hot skin. "Because the bulk of the carcass is going to be skinned anyway, sooner or later." He says at his Iowa boning plant he buys hams from the outside and has to take the skin off anyway.

"If you get a combo bin filled with hams on Friday and don't skin them until Monday so that they sit in the cooler over the weekend, the skin stiffens up, and it takes a greater length of time to skin it. If you pull that skin off when the hog is hot, it comes off easily.

"If you're a further processor, you save the steps of skinning individual hams when they're cold, and you're saving and getting a better yeield. You lose more fat if you skin when cold," he says.

Jimmy Dean Meat Co. makes whole hog sausage and has hide pullers at both its Osceola, Iowa, and Plainsview, Tex., plants.

"The reason we went into hide pulling," says Vince Bernard, vice president of engineering and production, "is because we don't want the hide on. We want the increased drop rate from the hide, and it's easier to bone without the hide." The company hot bones hogs.

"In large plants, on a commercial fresh pork operation, some cuts still need to be sold with the skin on," says Bernard. "However, today, if you were to build a new plant, I don't know why anyone would scald. It takes additional labor to remove skin after scalding, and you can only get 80 to 90 cents for the skin, compared to $5 for a hide."

Reprint from Meat Industry - Nov., 1978, p. 22

Gibson Packing Co. in Zanesville, Ohio, is an example of a full line processing plant that switched from scalding to hide pulling. One of the reasons is that, like a whole hog sausage maker, Gibson doesn't need skin on its hams. "The market has changed," says Carl Gibson, "and our market is predominantly going to boneless now."

Two other reasons that Gibson turned to hide pulling are contamination to animals during scalding and the desire to reduce energy consumption. Gibson estimates his energy costs have dropped by one-third since the changeover.

Hillshire Farm Co., New London, Wis., which makes boneless hams, went into skinning more than five years ago. The company scalded prior to that, but Max Kennedy, superintendent of pork operations, says that there were problems with inadquate cleaning — hair not being removed.

Hillshire's volume is 800 to 1100 hogs a day — primarily heavyweight and midweight butchers — but the company also buys hams. "We can't produce enough hams off of our cut line," says Kennedy. "We buy commercial hams with skin on and trim to our own specifications."

Kennedy feels that even though scalding and dehairing use a lot of energy, the method is more efficient on a hog per man hour basis for the big packers. But Hillshire does not intend to be a fresh pork operation, he says, and is satisfied with the 110-115 hogs per hour that it processes now comfortably.

An example of a large processor that has changed to skinning is Farmland Foods which has a Jimmy Dean hide pulling system in operation at its Crete, Neb., plant, and one of the reasons for the change is the energy savings resulting from the lower use of hot water and power equipment, says plant manager Jim Jeffers. The other reason is the savings in capital investment.

**Product losses and credits in skinning**

(Based on $/hog)

| | Losses |
|---|---|
| Feet 3 lb. @ $.16 | $ .48 |
| Tails 0.25 lb. @ .13 | .03 |
| Partial jowls 0.5 lb. @ .24 | .12 |
| Snouts 0.5 lb. @ .19 | .10 |
| Ears 0.5 lb. @ .21 | .11 |
| Fat removed with skin 1 lb. @ .20 | .20 |
| Gelatin skin value 8.0 lb. @ .10 | .80 |
| Belly damage (5-10% incidence) | .10 |
| Total | $1.94 |
| | **Credits** |
| Inedible feet, fat, etc. 5.75 lb. @ $.04 | $ .23 |
| Leather skins | 5.00 |
| Total | $5.28 |
| Net Gain | $3.29 |

## LABOR

Labor costs are similar in both processes, according to a study, *Hog Skinning vs. Scalding*, conducted at Purdue University by M.D. Judge, C.P. Salm and M.R. Okos. The study, which compares capital investment, energy costs, drop loss and other characteristics of the two systems, was presented this year at the Meat Industry Research Conference at the University of Chicago.

The study reasons that the skinning procedure probably requires more labor for slaughter and less for carcass cutting, as compared to the scalding process.

The way Donald Hittner looks at it is that the costs of capital investment vs. labor costs constitute a trade-off for Hormel.

There is general agreement among the processors we talked to that skinning requires more labor to prepare a hog for hide pulling, so that on the kill floor alone, scalding is more efficient for a large operation on a hog per man hour basis.

However, there is also general agreement that there is a labor savings in the cutting room when the skin does not have to be removed. One packer also observes that it is more difficult to remove skin from a chilled carcass than from a freshly slaughtered animal.

There are two double hide pullers at Jimmy Dean's Osceola plant. Vince Burnard, vice president of engineering and production, says that the double puller can process 300 hogs an hour with a total work gang of 11 to 12 men. Two operate the puller, one does front legs and transfer, and the rest operate rotary air knives to do skinning.

Preparation involves removing feet, opening the skin on the fore and hind legs and belly. Rotary air knives are used to skin the front, hind legs, belly and shoulder. The head is skinned out with a straight knife. Then workers skin around the shoulders and head and attach the puller, anchoring the jaw, so that the hide is pulled upwards and away from the carcass, then dropped into the basement where it is trimmed.

The ears, snout and head skin go to rendering. The hide is sold to a broker who will flesh it, dehair it, salt it and freeze the hides in bales.

At Hillshire, workers clear the skin of the hog over the shoulder, break it across the hams, and then attach a chain to the hide puller.

Max Kennedy says the company has 11 men in its skinning and dehiding operations and four in the hide room, and he feels that's not as efficient for a big fresh pork operation as a scalding and dehairing system which can operate at 700 an hour with about 13 men, he estimates.

## HIDE VALUES

The value of pulled hides, which can be sold to the leather industry is greater, of course, than the value of scalded skins.

But in order to receive a top price, a pulled hide has to have come from a quality 200 lb. or more animal and must have been removed with a minimum amount of damage.

## Capital Investments for scalding and skinning

Rate is 600 hogs per hour

| SCALDING | | SKINNING | |
|---|---|---|---|
| **Slaughter** | | **Slaughter** | |
| Scald tank | $ 49,800 | Dehider knives (8) | $ 5,600 |
| Dunkers | 25,000 | Hock cutters (2) | 4,600 |
| Platform | 22,600 | Platforms | 2,250 |
| Conveyor (pull through) | 27,000 | Skin pullers* (4) | 42,000 |
| Unshakler | 1,400 | Washer and pump | 15,000 |
| Dehairer | 151,000 | Conveyor | 27,000 |
| Hair conveyor | 2,500 | Subtotal | 96,450 |
| Platforms | 14,300 | Installatin (40%) | 38,580 |
| Conveyor (gambreling) | 18,000 | **Grand total** | **$135,030** |
| Singer | 19,000 | | |
| Polisher | 22,000 | | |
| Platforms (shaving) | 2,600 | | |
| Rail washer | 1,500 | | |
| Slide and hopper | 4,500 | | |
| **Cutting** | | | |
| Skinners | | | |
| Bacon | 8,750 | | |
| Jowl, fat back | 9,750 | | |
| Butt (2) | 12,200 | | |
| Ham (2) | 10,300 | | |
| Subtotal | 402,200 | | |
| Installation (40%) | 160,880 | | |
| **Grand total** | **$563,080** | | |

*Alternative is four vertical drum skinners: 12¢/hog, 2000 hrs./yr.; 10 yrs. = $1,440,000 less maintenance.

These tables were compiled by M.D. Judge, C.P. Salm and M.R. Okos, Purdue University, Lafayette, Ind., for their study, ***Hot Skinning vs. Scalding,*** presented at the Meat Industry Research Conference, University of Chicago, in March.

## Processing costs for scalding and skinning

(Capital outlay and operational costs estimated on a $/hog base)

| | SCALDING | | SKINNING | |
|---|---|---|---|---|
| | Utilities | $ | Utilities | $ |
| **Capital Investment*** | | .047 | | .01 |
| **Operational costs**** | | | | |
| Water, gal. | | | | |
| Scalding | 2.6 | | | |
| Dehairing | 2.7 | | | |
| Washing | 4.0 | | 22.5 | |
| Cleanup | 2.3 | | 0.1 | |
| | 9.6 gal. | .002 | 22.6 gal. | .00 |
| Steam, lb. | | | | |
| Scalding | 3.2 | | | |
| Dehairing | 1.8 | | | |
| Cleanup | 0.3 | | 0.1 | |
| | 5.3 lb. | .016 | 0.1 lb. | .00 |
| Electricity, kw hr | | | | |
| Dehairing etc. | 0.24 | | | |
| Polisher | 0.03 | | | |
| Skin pullers | | | 0.02 | |
| Washing | | | 0.06 | |
| Skinners | 0.01 | | | |
| | 0.28 kw hr. | .007 | 0.08 kw hr. | .00 |
| Gas, cu. ft. | 13.75 cu. ft. | .024 | | |
| Sewage, gal. | | .005 | | .01 |
| | **Total** | **$.101** | **Total** | **$ .03** |

*Assumes 10 yr. equipment life; does not include maintenance.

**Utility costs: water, 25¢/1000 gal; electricity 2.5¢/kw hr; steam $3.00/1000 lb; gas, $1.75/1000 cu ft; sewage, 50¢/1000 gal.

The first two years after Carl Gibson switched from scalding to hide pulling, he couldn't find a good market for his hides, but then his by-products outlet found a foreign market — both Europe and Taiwan — and he has been able to receive from $4 to $5.50 a hide.

The hide market has fluctuated from $5 to $8 each for top hides from 200-240 lb. animals, according to Bernard, and he says most of his company's hides are sold for the garment trade.

Jim Jeffers of Farmland has not seen a hide market as good as the one Bernard describes. However, he does agree that in comparing the two systems, loss of the drop items has to be balanced against the value of the hide.

Scalded skins can also be pulled by means of skinning equipment, and the skin can be sold for use as shoe leather, glove leather, shoe lining, and for hat stock.

Scalded skins produce leather that is 10% thinner and has 10% to 23% less tensile strength than leather from unscalded skins, according to the Purdue study.

However, not all scalded skins are suitable for use in shoe leather, and one study shows that more than 50% of them are not. Most of the reduction of value of scalded skins is due to mechanical damage, such as damage to the skin grain layer caused by scraping to remove hairs retained within their follicles.

Scalding temperatures can also damage the grain layer of pigskins, but this damage can be minimized. Scald temperatures of from 132°F to 137°F are considered safe, though these temperatures are too low to effectively scald during some periods of the year.

"We have to watch scalding temperatures so that we don't scorch," says Donald Hittner at Hormel, "and we would not scald for more than five minutes at a temperature higher than 140°F.

Hormel has a Wolverine full side skinner and sells its skins to Wolverine. The full side skinner skins both sides of a scalded hog and removes the skin in one piece, because the back has not been split all the way through on the kill floor. Thus, the two sides have been kept together through the cooler and the hams and shoulders have been cut off, the loin pulled and the ribs lifted out, the remaining part of the carcass going through the fullside plate skinner.

Sugardale also uses a Wolverine full side skinner, and Tom Stratil says the temperature of the company's 4800 gallon scalding tub is kept at 138°F in order to protect the skins.

**SCALDING TANK**

The scalding tank is considered a potential source of microbial contamination because of the hair, dirt, feces and other materials contributed by the long line of hogs dipped into the tank.

A 1978 study shows that, judging by microbial counts, the total surface contamination does not differ between skinned and scalded carcasses, though the distribution of organisms varies.

For instance, the total plate count on hams was nearly four times as great for scalded hams as for skinned hams. Bellies were almost equal in total plate count, but shoulders reflected four to five times the total plate count for skinned shoulders as for scalded ones.

The amount of surface contamination seemed to depend on the degree of handling of carcass areas by workers.

"We feel ultimately that USDA will outlaw scalding," says Vince Bernard, "because in plants you can't intermingle the hogs until you get to final inspection, but at the same time they let you dip 3000 pre-rigor hogs in the same vat of water. This water can be ingested into the animal's lungs, and if it gets into the lungs, it can reach the internal organs."

**GOUGING**

One of the problems in hide pulling is in yield loss. As the hide is pulled upwards from the animal, sometimes patches of fat are pulled loose, especially in the flank of the belly.

Even with good preparatory trimming and follow-up as the hide is removed, globs of belly still can be torn off.

There is no problem with gouging, says Bernard, if the animal is properly prepared for hide pulling.

Hillshire acknowledges there is a problem with gouging. "We will have gouges in our bacon production," says Max Kennedy, "and we will have lighter weight bellies. But we trim our bellies severely. We trim to meet the width specifications of our slicing machine.

A recent development in hide pulling is Wolverine's new drum skinner for unscalded hogs. According to John Krause, who helped develop the machine, it skins sows so closely that anywhere from 10-20 lbs. of fat normally left on the skin is kept on the carcass. The rate is 5-10 lbs. for butcher hogs.

This skinner is being used at three plants in the Southeast. Kentucky Sausage Co., Nashville,Tenn., *(see story in this issue)* reports that the company is getting no fat on its hides now. They also say that about the same amount of labor is needed to operate the drum skinner as the hide puller it replaced at the company's plant.

The drummer skinner, which slants at an 8° angle, revolves against a carcass to peel off the hide. There is a ditch that runs the length of the drum, and into it is inserted a seven-inch flap that has been skinned the length of the hog on the belly side.

This long flap is gripped in the ditch by grippers which work on air cylinders that pull. The clamp bar is closed, and the drum rotates past a dull scraper. Behind the scraper is an air bag like a fire hose that maintains pressure on the scraper to move it in close to the drum or away from it depending on the thickness of the skin that is being removed. When the cycle is completed, the skin drops.

It operates similarly to a European skinner used in Poland *(see April '78 MI, page 25),* but removes the whole hide, not just the croupon.

**CUTTING**

Butcher methods have also been dictated in scalding by the fact that the skin is left on the cuts.

This, when the skin is removed, cutting procedures need to be adjusted in operations that cut primals.

The pull the loin, for instance, Carl Gibson says he uses four hooks instead of two to compensate for the fact that the skin has been removed and can't be used as a stronger anchor than fat.

One advantage that he sees is that he has been able to take a couple of men from cutting and put them on the kill floor. Because the skin has already been removed — the ham capped, the rind removed from the bacon, no feet to work on — there is labor needed in the cutting room.

Like Gibson, Hillshire is not a fresh pork operation, so it is an advantage to have the skin removed.

Pulling the loin is more difficult now, Max Kennedy agrees, because the skin is not on the fat back to hook onto a conveyor. However, they maintain their pace of 135 hogs per hour by basically pulling the loin the same as before, the weight of the hog holding it down, and the worker using a knife guard and pulling it against the belly guard.

Since Hillshire uses its fresh pork primarily for further processing, the company bones all of its picnics, trims bellies severely and uses the fresh trimmings for sausage. Bacon is trimmed to conform to the company specifications, and the trimmings are recovered. The firm also is a large buyer of trimmings.

**THE FUTURE**

The industry is in a period of transition between scalding and skinning, according to Charles Wallace, senior technical consultant for ITT Gwaltney, Inc., Smithfield, Va., a company that scalds.

He feels that in 10 years all hogs will be skinned, because of the savings in capital outlay and energy costs, but in the meantime the innovators in fresh pork operations will have to deal with the problem of marketing skinless hams. He also sees yield loss, caused by gouging, especially in the belly, as a problem, because it reduces the value of fat and can damage bellies so that they can't be used for bacon.

What he thinks slows down the big fresh pork operations from switching to skinning from scalding is that even though the boning of hams has increased dramatically so that the need of skin-on hams is lessening, the big packers still sell their hams to other plants and the established market is for skin-on hams.

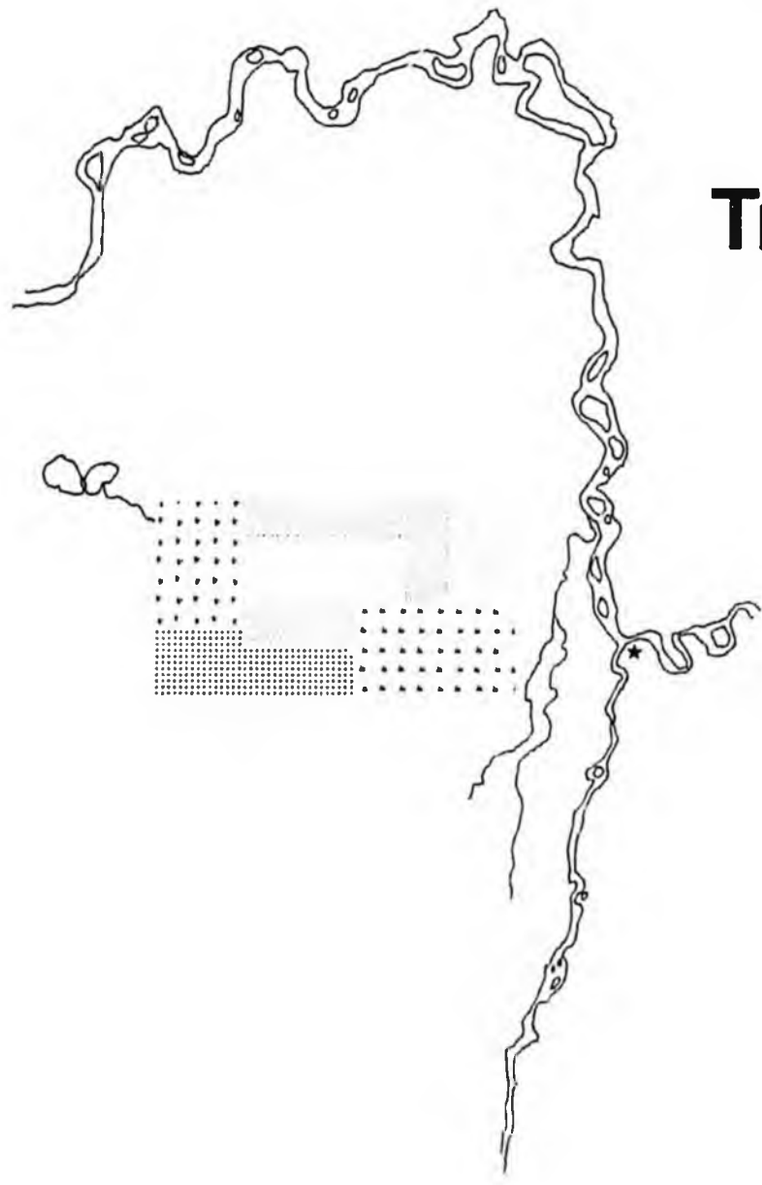
"The pioneer is likely to find himself with a marketing problem to overcome -- the resistance of a buyer who wants to buy a ham to smoke, and he doesn't want to smoke it derind." There's also the price resistance in the market place.

"Skin is worth 10 cents a pound, and the housewife should be very happy to be rid of it, but when she goes to buy a smoked ham, bone-in, she wants that rind on the way it's looked to her for years. Plus the fact that she won't like being told she's got to pay more money for it because the skin is off."

The transition will be aided by the increase in boneless hams and more convenience cuts, he feels.

# NENANA

## Agricultural Transportation Systems



Project No. AG101

FEBRUARY, 1981

HDR ATC

Henningson, Durham, & Richardson, Inc.
Alaska Transportation Consultants, Inc.

# NENANA AGRICULTURAL TRANSPORTATION SYSTEMS

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February 1981

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# CHAPTER I
## INTRODUCTION

Transportation is an important aspect in rural development. To quote current research:

> "If rural development is to proceed in an orderly and efficient manner, adequate performance of the transportation infrastructure and regulatory structure is mandatory. Highway, water, rail, and air transportation investments should be closely coordinated with those state and federal agencies directing the various rural development programs."[1]

Efficient and competitive routing of goods to and from a rural center is the key in providing social and economic benefits to that area. A well designed and constructed farm to market road network is essential in any agricultural development as it will be servicing the aggregation of grain, machinery, fertilizer, feed, seed and chemical hauling.

This report provides a proposed roadway network in the Nenana agricultural area starting with an initial phase of two townships expanding to several townships in future phases. Commodity routing systems in the Nenana area were examined to maintain a flexible, multi-modal system in the area. Alternative processing site locations are compared in relation to the City of Nenana, the initial phase of the project, and existing commodity routing systems. Cost analyses were done on alternate access routes to the initial area and the farm to market transport system.

Roadway development and construction includes an examination of soils, land ownership, parcelization and climatic conditions. Alternative roadway section designs are based upon the location of gravel, and wet or permafrost areas. A roadway layout is proposed that takes advantage of section line easements and allows for flexibility in final parcelization. Estimated costs for construction and maintenance of this layout are also presented.

---

[1] Richard K. Hart, Transportation and Rural Development: Some Policy Considerations.

It is our understanding that the project development schedule is for land disposal in 1981 or early 1982 at the latest. In order for the transportation system to be in place, construction must occur in the 1981 construction season. For this to happen, the project planning and design must be fast tracked. Because of this, the consultant team has initiated permit procedure for field work this winter and early spring. This includes bridge-borings, site surveys and borings, plus material site investigations.

Below is a list of total costs for the Nenana Phase I access road. These costs include engineering and construction costs, and are reasonable order-of-magnitude costs for work as of Spring 1981. When more thorough soil testing is complete, costs may be actually lower.

| | |
|---|---|
| **Three (3) bridges, 23 miles of primary access road (secondary standards) and 14 miles of secondary and tertiary roads connecting farm lots: | $ 15,319,700.00 |
| **Right-of-way Aquisition: | $ 30,300.00 |
| **Contingency: | $ 1,840,000.00 |
| **First Year Maintenance: | $ 115,255.00 |
| T O T A L | $ 17,305,255.00 |

## CHAPTER II
## OVERVIEW OF COMMODITY ROUTING SYSTEMS

There are three potential commodities being considered for the Nenana Agricultural Area. Studies to determine the viability of livestock raising and vegetable production are presently being undertaken. However, with the imminent success of the Delta Barley Project in mind, grain production must be given the major consideration. Thus, of the three (3) alternatives, grain production will be considered in this report as the primary user of any routing system established. This is due in part to the information available concerning grain production in Alaska (Delta Junction); the predominance of Class III soils in the project area, which are well suited to grain production; and the present lack of information regarding vegetable and livestock production.

This section will provide an overview of the routing systems that exist in the Nenana area. To remain within the scope of the overall report, no analysis of routing economics will be undertaken here. Rather, the focus will be on how the roadway network and processing area within the project might impact the various routing systems. It should be noted however, that the agricultural industry relies on economically competitive transportation modes. Thus, every effort should be made to maintain maximum flexibility of the routing systems available to various agricultural areas in Alaska. Figure 1 illustrates the commodity routing systems available to various agricultural areas in Alaska. Nenana has a distinct advantage in being on all four modes of routing. This, coupled with its central location within the state, makes it a focal point for the distribution of agricultural goods both within the state and for export.

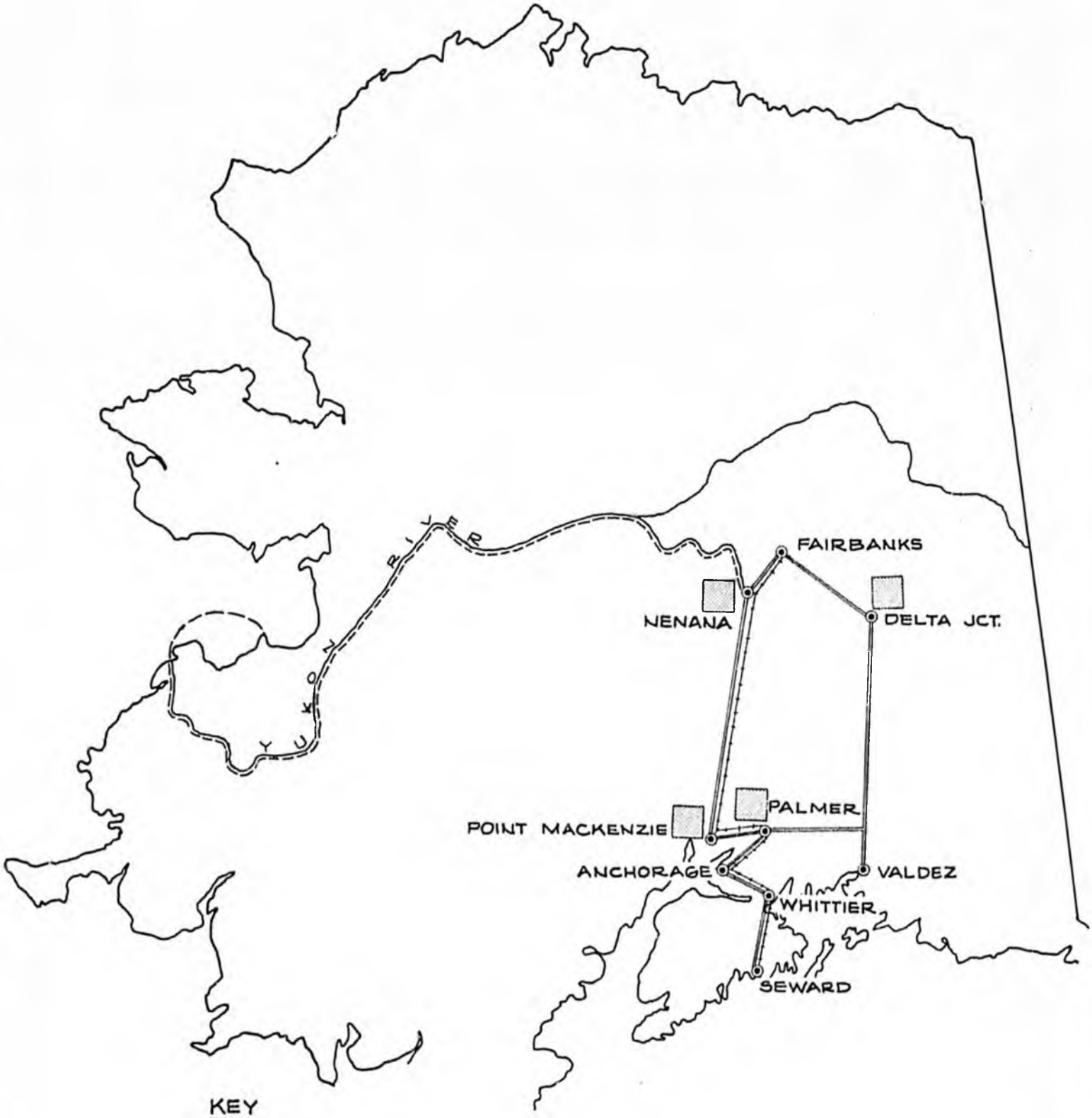
Though there are four systems available for use (air, truck, rail, and barge), raw agricultural goods generally move using the bulk facilities, low operating costs, and proximity to markets available on truck and rail modes.

### 1. Truck Routing

Routing agricultural commodities by truck is most efficient over short hauls and when backhaul possibilities are definite. Thus, truck routing

# FIGURE 1

## COMMODITY ROUTING SYSTEMS



would most likely be used in local/intra-state distribution of vegetables grown in Nenana and livestock processed there, having Fairbanks and Anchorage as the two major points of transfer. The hauling of grain by truck, while possible, is not likely due to the large number of trucks needed to haul the grain and the more economical use of rail in hauling such bulk quantities.

Starter herds for livestock would be most effectively transported by truck up the Alaskan highway. Ultimately, red meat for export would be transported by truck to Fairbanks International Airport and flown to foreign markets.

2. Rail Routing

Routing of agricultural commodities by rail is most efficient in bulk handling and long hauls due to its low operating costs and established routes. Currently, problems exist in the availability of equipment to handle grain. As agriculture continues to develop in Alaska basic routing necessities such as these will become economically viable and therefore these are seen as only initial or short term problems.

If fertilizer is to be brought to Nenana from plants on the Kenai, the use of truck routing is most efficient. There is only one transfer required in this mode while there would be three in the rail mode. Rail would be most effective in bringing fertilizer produced in the Lower 48 to Nenana as there is a direct rail link between most ports and Nenana.

Due to high construction costs involved in establishing new rail lines, ($1.4 million/mile) no additional routes are seen in the immediate future and short spurs into the agricultural area seem unlikely at this time.

3. Barge Routing

Though barge routing has low operating costs and relatively large bulk handling capacities, certain restrictions make the use of this mode unlikely in the routing of grain for export. There is potential local

routing of fresh and processed vegetables, processed red meat, and some grain.

Three restrictions to barge routing of export grain are the short season available to both barge operation and agriculture, which often times are not compatible, the more feasible routing of grain by rail, and the difficulty in establishing a scheduled shipping route into the St. Michaels area.

4. Local Air Routing

At the present time, Nenana Air Service, Inc., is the only scheduled air service based in Nenana. They fly supplies to Tanana, and offer charter services to other communities in the bush. Alaska Central Airways, Inc., uses Nenana as a flag stop on flights to Galena and Tanana. It is possible that air service could provide various bush communities with the agricultural commodities grown and processed in the Nenana area (primarily vegetable and red meat).

5. Port Facilities

Currently, the Alaska Agricultural Action Council has Requests for Proposal out to various ports in Alaska with the intention of establishing a permanent facility for the exploration of Alaskan produced grains. Appendix 1 is a copy of the RFP sent to Anchorage, Palmer, Seward, Valdez, and Whittier. Seward was to be utilized for the 1980 barley crop from Delta Junction, though due to a shortened harvest season, no grain was exported this year.

## CHAPTER III
## PROCESSING AREA LOCATION

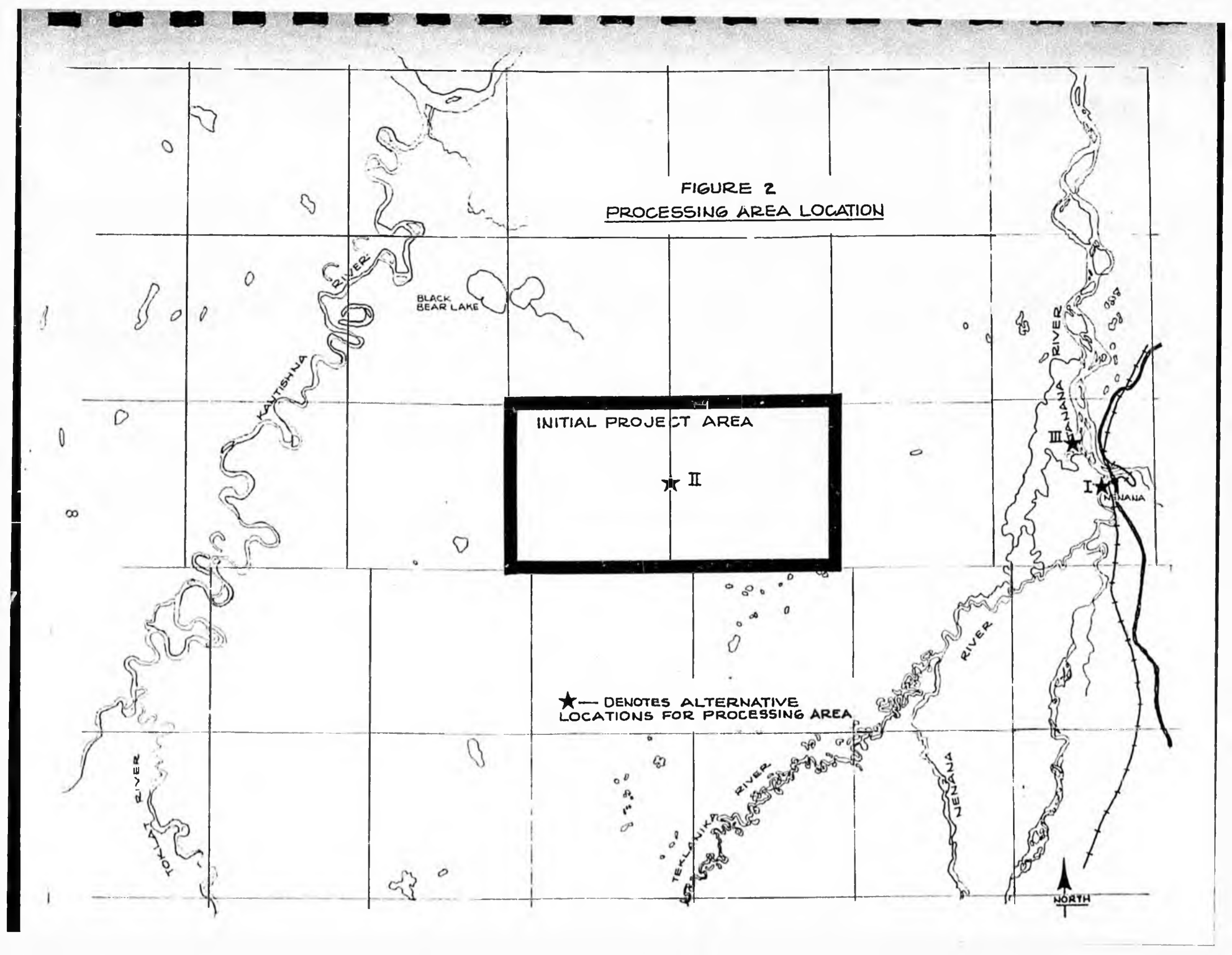
Any project area impacts on the routing systems center on the location of a processing area as this is where the major unloading, loading and any processing and packing would take place. To maintain the flexibility desired, this processing area should be located where all routing systems are readily available, or to somehow allow for efficient routing of commodities. The end three locational concepts were developed for the processing area and presented below. Advantages and disadvantages for each concept are identified and impacts on existing routing systems discussed. These should be addressed in making a decision on the location of the area.

### 1. Concept 1 - Processing Area in City

Figure 2 illustrates a possible processing area in, or adjacent to, Nenana. This location is ideal from a transportation standpoint as all modes of routing are available within a corridor, meaning virtually no capital improvements to reach the area, the area is close to the residences of people who would be working in the processing area; and a source of water is close at hand for processing purposes. Impact from possible noise, smell, and air output could pollute the surrounding area and cause ice fog problems for the airport, though wind data indicates that the direction of prevailing winds might mitigate any air pollution problems within the community boundaries. A potential flood hazard exists due to the areas' proximity to the rivers; and soils maps indicate heavy permafrost in some areas.

### 2. Concept II - Processing Area Centered in Project Area

In this concept, the processing area would be located along a rail spur in the center of the project (Figure 2). This would cut down the distance between the field and the processing area; reduce the area's impact on the community of Nenana; and, if the spur were to connect Nenana and Tanana, it would create another access to the Tanana area and reduce travel time for


FIGURE 2
PROCESSING AREA LOCATION
BLACK BEAR LAKE
KANTISHNA RIVER
INITIAL PROJECT AREA
II
III
I
NENANA
NENANA RIVER
TOKLAT RIVER
TEKLANIKA RIVER
JENANA RIVER
★— DENOTES ALTERNATIVE LOCATIONS FOR PROCESSING AREA
NORTH

commodities traveling by barge. However, this concept would entail considerable capital expense in terms of a transportation corridor linking the processing area with the existing modes; water would not be as readily available for industrial use; commodities, if shipped by barge to the final destination, would have to be handled twice (load rail/load barge); and locating the area in the center of the project would take up a considerable amount of valuable agricultural land. Workers driving to the area pose potential traffic congestion problems on the bridge and main roads, and the commuting cost is the largest as this location is the furthest from Nenana.

3. Concept III - Processing Area Downstream from Nenana (Figure 2)

In this concept the processing area would be located approximately a mile down the Tanana River from Nenana. Being a distance from the community would alleviate possible incompatability and pollution problems associated with being near other activities. Locating the area here would allow for only a moderate capital investment in terms of a transportation corridor. All modes of routing could still be available; though, as the major expense in linking the areas with the main rail system would be a railroad bridge across the Nenana River, an expenditure of this magnitude is unwarranted unless the spur continued on to the community of Tanana.

# CHAPTER IV
## PRELIMINARY ROADWAY NETWORK

Before establishing a roadway network for the project area, several factor· were reviewed which affect its layout. Soil in the area was reviewed for its agricultural capability and the location of permafrost and bogs. Land ownership was reviewed to determine location of state-patent lands and boundaries of other ownership which might affect roadway layout, (easements and rights-of-way are discussed in Chapter VII). A parcelization scheme was put together based on agricultural capability of the soil and present land ownership.

Various phases of road development are proposed linking the project area with Nenana and the Parks Highway at Rex. The initial phase would provide access from the project area to a central processing point and loading point in Nenana (as discussed in Chapter III). Other phases would continue expansion into areas adjacent to Phase I and would include the development of a road to Rex. Layout, design and estimated costs of this development are discussed in this section.

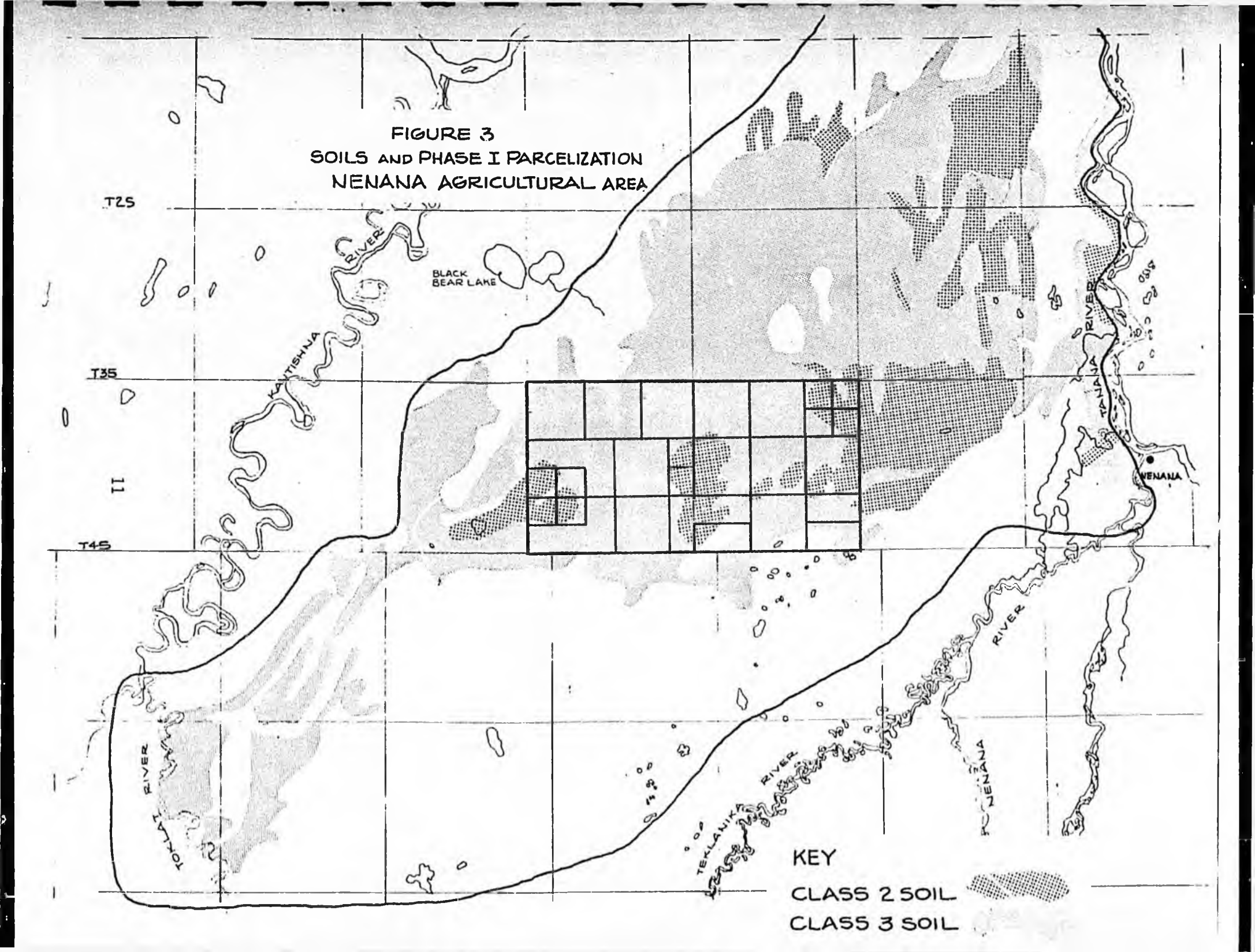
### 1. Soils and Parcelization

Figure 3 indicates the soil characteristics in the project area. Class II and III soils are highlighted and are the only soils considered adequate for agricultural production. Class IV and below are being considered for grazing purposes. Areas of permafrost and bog are also identified, as these areas must be avoided both in agricultural activities and roadway construction.

It has been recommended that Class II soils be put into parcels of 640 acres and under for purposes of vegetable production and Class III soils into parcels of 2,560 acres and over for purposes of grain production.[1]

---

[1]Interview with Bob Pollock, Agricultural Action Council, October 8, 1980.


FIGURE 3
SOILS AND PHASE I PARCELIZATION
NENANA AGRICULTURAL AREA
T25
T35
T45
11
KANTISHNA RIVER
BLACK BEAR LAKE
TANANA RIVER
NENANA
TOKLAT RIVER
TEKLANIKA RIVER
NENANA RIVER
KEY
CLASS 2 SOIL
CLASS 3 SOIL

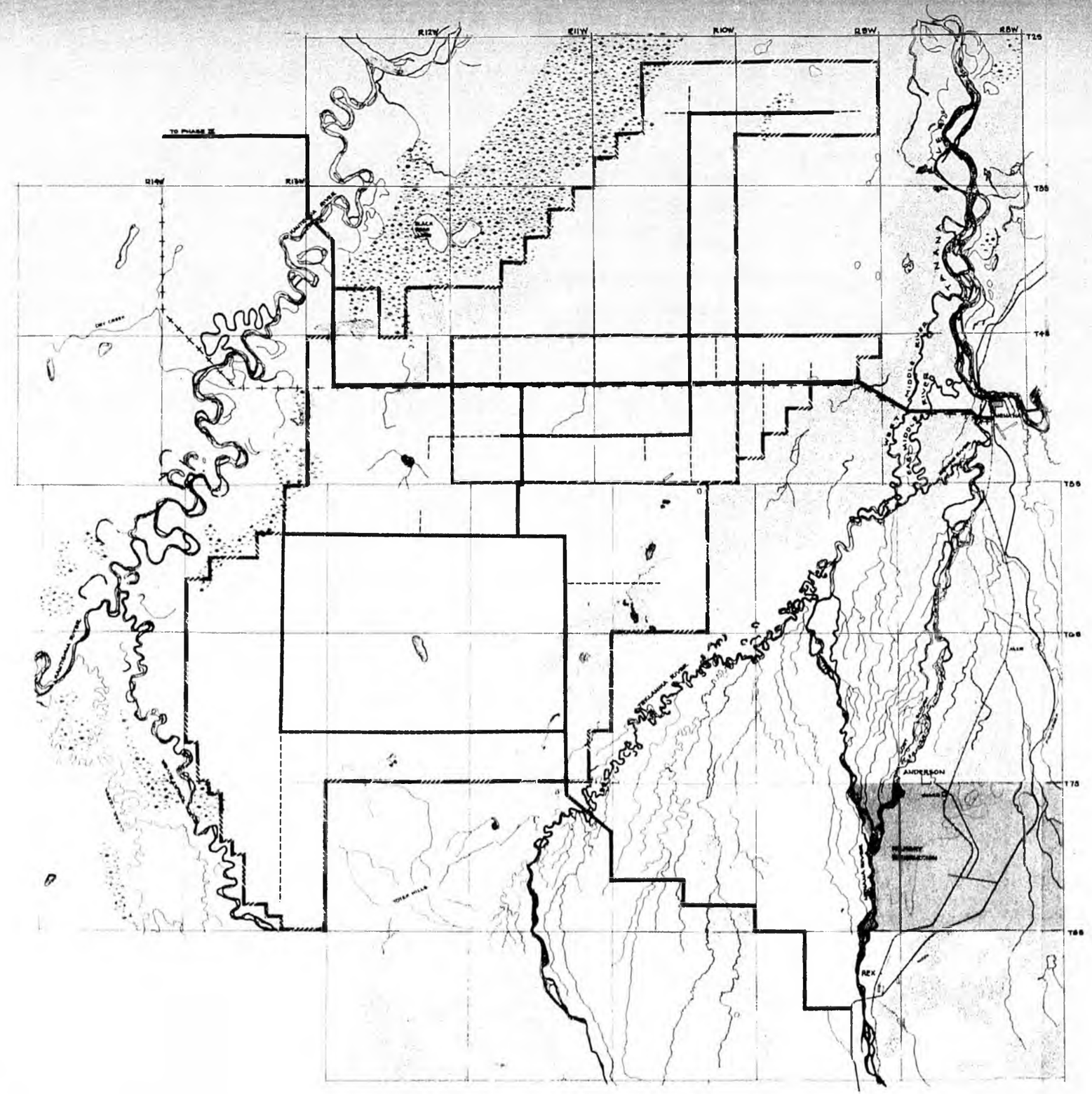
It was also assumed that several small lots (5-10 acres) would be made available to increase the population base and reduce utility costs. Figure 3 illustrates a possible parcelization of the initial project area based on the above information.

2. Layout

Figures 4 and 5 illustrate the proposed roadway network providing access to the initial phase of the project. This network attempted to follow section lines for two reasons: First, to take advantage of section line easements; and second, parcelization will most likely be in aliquot parts. This roadway layout is flexible in that it can be modified fairly easily once the final parcelization is made. This network also lends itself to future branching out from the initial phase in a wheel and spoke manner. Collector and feeder roads were laid out to provide access to parcels and where traffic was estimated to be primarily local.

3. Roadway Design and Estimated Costs

Preliminary soils studies indicate a more economical alternative than the standard pit borrow method of building roads may be utilized for the Nenana Agricultural Project. The combination of minimal overburden with suitable structural material directly beneath lends itself to the roadside borrow concept of construction. This method utilizes the structural material from within the right-of-way to build the road, eliminating the more expensive remote borrow-haul method. The organic overburden is stripped and stockpiled at the edge of the right-of-way for use as backfill to bring the sideslopes and ditches to grade. This method of construction will require rights-of-way in excess of the 100 foot section line easements that may be available. In areas where adequate right-of-way is not available or where pockets of unsuitable structural material exist, the pit borrow method will have to be utilized as an alternate construction method. Tables A and B show estimated 1981 cost comparisons indicating that approximately $35,000.00 per mile may be saved by utilizing the roadside borrow method of construction. Figure 6 illustrates typical roadway sections for all types of roads in the project using both alternatives




LEGEND

PHASE I - 46,080 ACRES

PHASE II - 256,000 ACRES

ROADS

ARTERIAL

COLLECTOR

FEEDER

RAILROAD

AREAS OF LOW RELIEF AS INTERPRETED FROM AERIAL PHOTOGRAPHS - POSSIBLE ICE LENSES.

SWAMPS AS PORTRAYED, INDICATE ONLY THE WETTER AREAS, AS INTERPRETED FROM AERIAL PHOTOGRAPHS - POSSIBLE ICE LENSES.

0 1 2 3 4 5 6 7 8 MILES

FIGURE Nº 4

FEBRUARY 1981

LAYOUT DRAWING
OVERALL PROJECT ROADWAY
NENANA

| | | |
|---|---|---|
| SCALE 1" = 1 MILE | APPROVED BY: | DRAWN BY WHALEY |
| DATE 2-10-81 | | REVISED 2-10-81 |

Alaska Transportation Consultants, Inc.

SHT 1 of 3

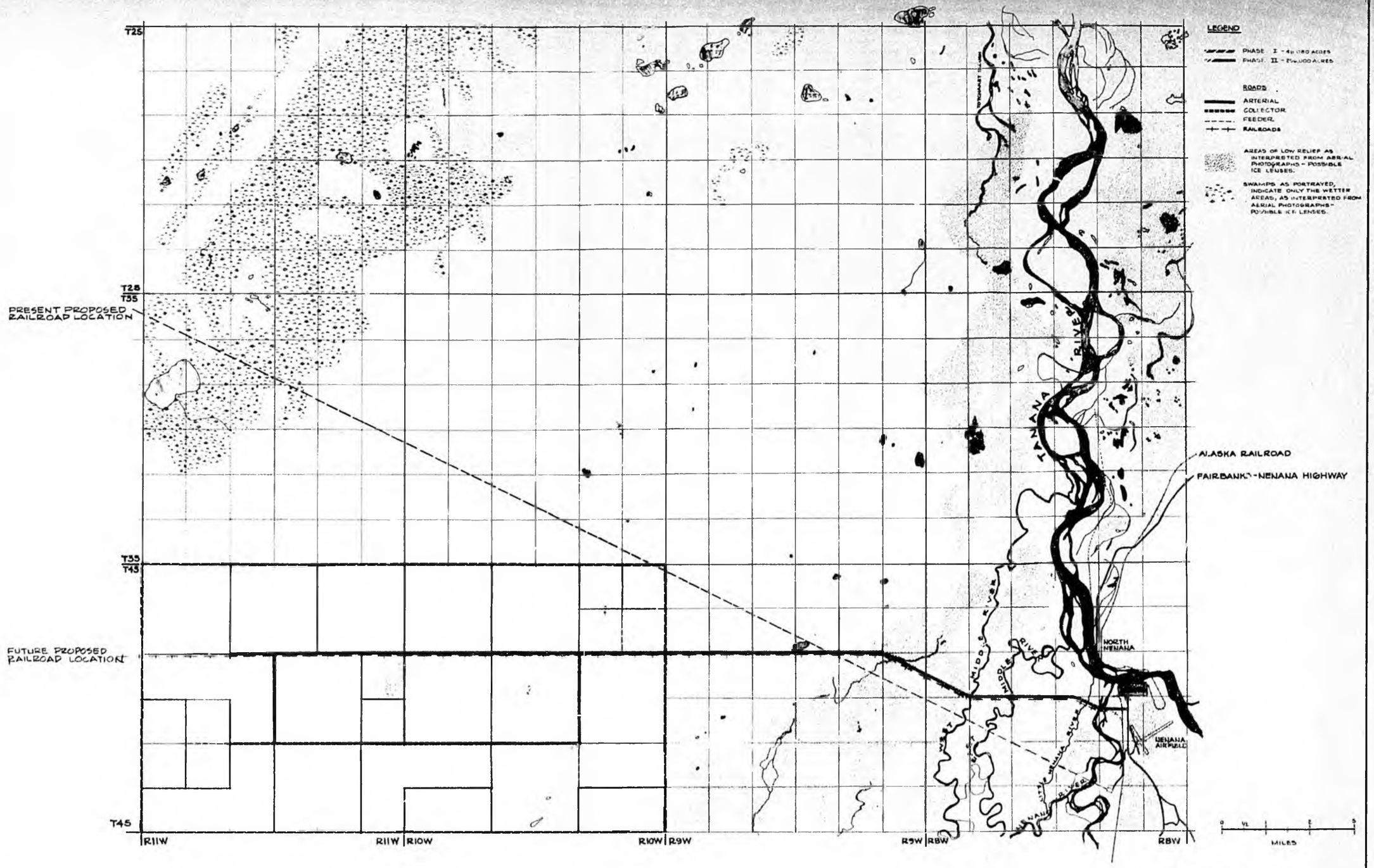



FIGURE Nº5

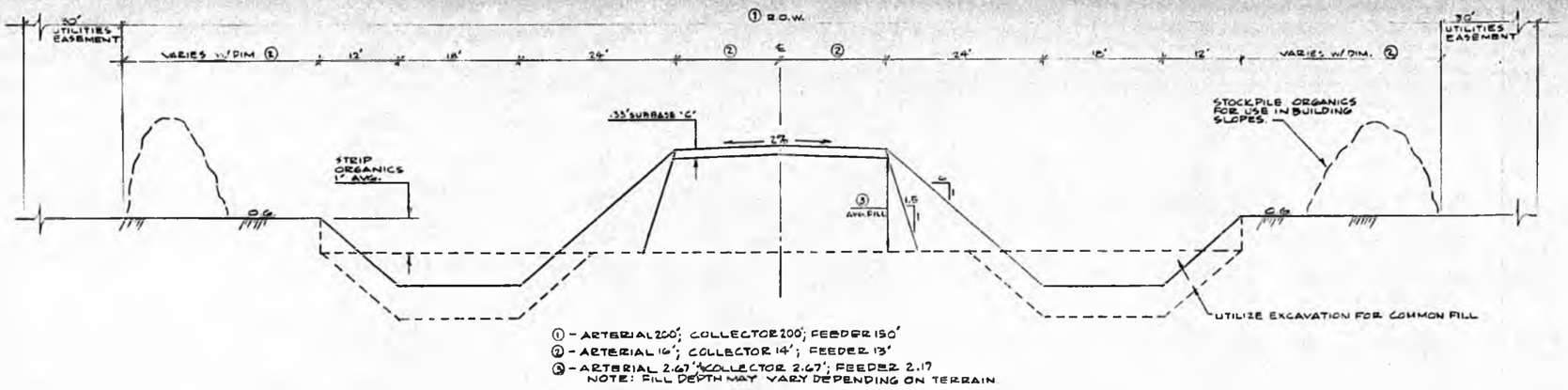
FEBRUARY 1981

LAYOUT DRAWING
INITIAL PHASE ROADWAY SYSTEM
NENANA

SCALE: 1" = 1 MILE
DATE: 2-10-81
APPROVED BY:
DRAWN BY: WHAIEN
REVISED: 1-19-81

Alaska Transportation Consultants, Inc.

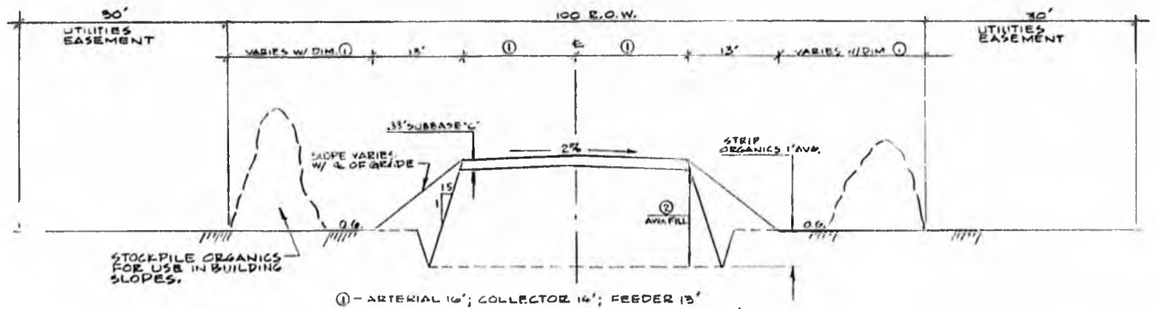
DRAWING NUMBER
SHT. 2 OF 3




① - ARTERIAL 200'; COLLECTOR 200'; FEEDER 150'
② - ARTERIAL 16'; COLLECTOR 14'; FEEDER 13'
③ - ARTERIAL 2.67'; COLLECTOR 2.67'; FEEDER 2.17'
NOTE: FILL DEPTH MAY VARY DEPENDING ON TERRAIN

## TYPICAL FARM ROADSIDE BORROW

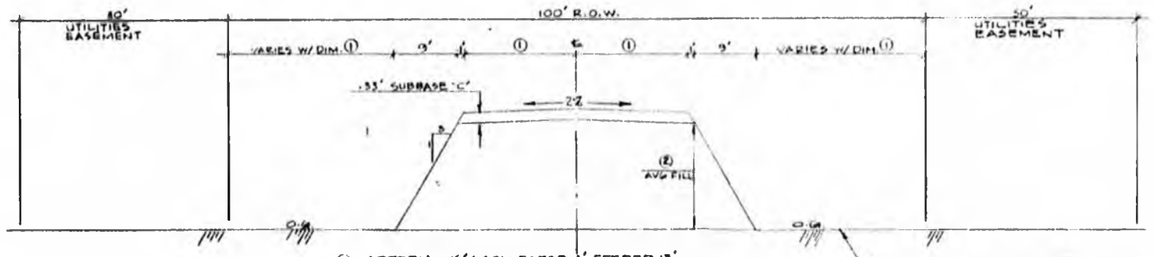
SCALE: HORIZ. 1"=10'; VERT. 1"=2'




① - ARTERIAL 16'; COLLECTOR 16'; FEEDER 13'
② - ARTERIAL 2.67'; COLLECTOR 2.67'; FEEDER 2.17'
NOTE: FILL DEPTH MAY VARY DEPENDING ON TERRAIN.

## TYPICAL FARM PIT BORROW

SCALE: HORIZ. 1"=10'; VERT. 1"=2'




① - ARTERIAL 16'; COLLECTOR 16'; FEEDER 13'
② - ARTERIAL 3' AVG.; COLLECTOR 5' AVG; FEEDER 3' AVG
NOTE: FILL DEPTH MAY VARY DEPENDING ON ROADBED SOILS CLASSIFICATION.

0 1' 2' 3'

## TYPICAL FARM UNSTABLE ROADBED PIT BORROW

SCALE: HORIZ. 1"=10'; VERT. 1"=2'



# GENERAL NOTES

FIGURE No. 6

FEBRUARY 1981

SECTION DRAWING TYPICAL ROADWAYS NENANA

SCALE AS NOTED | APPROVED BY: | DRAWN BY STATON

DATE 2-10-81 | REVISED 1-19-81

Alaska Transportation Consultants, Inc.

SHT. 3 OF 3

as well as a typical section for roadway through unstable areas or permafrost. The proposed gravel road system within the Nenana Agricultural Project will be quite similar to the existing gravel roads that service the Delta Barley Project with respect to usage and climatic influences. State Department of Transportation figures indicate that the Fiscal Year of 1979-1980 average maintenance cost per mile per year for 41.36 miles of gravel road near Delta was $2,490.00. Assuming a 25% inflation factor from 1980 to 1982, surface maintenance and snow removal costs for gravel roads in the Nenana Agricultural Project should average approximately $3,115.00 per mile for the Fiscal Year of 1982.

TABLE A

TYPICAL CROSS SECTION QUANTITIES - PIT BORROW

| | | | UNIT PRICE | COST/MILE |
|---|---|---|---|---|
| Cleared Grub | 100 LF | | $2,000/acre | $ 24,242.42 |
| Unclassified Exc. | 41.5 sq.ft. | | $2.50/yd. | $ 20,288.89 |
| Borrow | 104.1 sq.ft. | | $3.75/yd. | $ 76.340.00 |
| Subbase "C" | 10.83 sq.ft. | | $19.75/yd. | $ 1,827.27 |
| Side slopes | 35.28 sq.ft. | | $2.50/yd. | $ 17,248.00 |
| Seeding | 68 LF | | $11.75/1,000 sq.ft. | $ 4,218.72 |
| 18" Culverts (82 LF) | 1 pr. 2500 ft. | | $35.00/LF | $ 6,061.44 |
| Culvert markers | 2 pr. 2500 ft. | | $50.00/EA | $ 211.20 |
| Monument cases | 4/miles | | $200.00/EA | $ 800.00 |
| Open borrow pits | 1 pr. 2 miles | | $64.60/EA | $ 3,230.00 |
| Road Signs | 10 sq.ft/mile | | $40.00/sq.ft. | $ 400.00 |
| | | Subtotal | | $ 194,868.55 |
| Dust control | | | $7.50/1,000 gal. | $ 550.00 |
| Equal Employment Opportunity | | | N/A | $ 100.00 |
| | | Subtotal | | $ 194,868.55 |
| Contractor Engineering (5%) | | | | $ 9,775.93 |
| Contractor Costs | | Total | | $ 205,294.48 |
| Consultant Engineering (20%) | | | | $ 41,058.90 |
| | | Total | | $ 246,353.38 |
| Assume 25% inflation 1979-1981 | | | | $ 307,941.72 |
| | | Use | | $ 310,000.00 |

* rounded numbers

TABLE B

TYPICAL CROSS SECTION QUANTITIES - ROADSIDE BORROW

| | | | UNIT PRICE | COST/MILE |
|---|---|---|---|---|
| Cleared grub | 200 LF | | $2,000/acre | $ 48,484.85 |
| Unclassified exc. | 132 sq.ft. | | $2.50/cu.yd. | $ 64,533.33 |
| Subbase "C" | 10.83 sq.ft. | | $19.75/cu.yd. | $ 41,827.27 |
| Seeding | 168 LF | | $11.75/1,000 sq.ft. | $ 10,422.72 |
| 18" Culvert (92 LF) | 1 pr. 2500 ft. | | $35.00/LF | $ 6,800.64 |
| Culvert markers | 2 pr. 2500 ft. | | $50.00/EA | $ 211.20 |
| Monument cases | 4/miles | | $200.00/EA | $ 800.00 |
| Road signs | 10 sq.ft./mile | | $40.00/sq.ft. | $ 400.00 |
| | | Subtotal | | $ 173,480.01 |
| Dust control | | | $7.50/1,000 gal. | $ 550.00 |
| Equal Employment Opportunity (EEO) | | | N/A | $ 100.00 |
| | | Subtotal | | $ 174,130.01 |
| Contractor Engineering (5%) | | | | $ 8,706.50 |
| Contractor Costs | | Total | | $ 182,836.51 |
| Consultant Engineering (20%) | | | | $ 36,567.30 |
| | | Total | | $ 219,403.81 |
| Assume 25% inflation 1979-1981 | | | | $ 274,254.76 |
| | | Use | | $ 275,000.00* |

* rounded numbers

# CHAPTER V
## STREAM CROSSINGS

The roadway network which will serve the agricultural development in the Tanana Valley will originate in Nenana. Nenana has rail, highway, and river transportation facilities, and is the logical focal point for this transportation link.

Direct access to Nenana does require a major river crossing structure over the Nenana River, as well as several other smaller structures for the West Middle and East Middle Rivers and for the Little Nenana River. Since Nenana will be the origin and destination for much of the traffic generated in this valley, the optimum cost benefit ratio for users would dictate that the river crossing be placed in close proximity to Nenana.

A reconnaissance of the Nenana River Valley upstream from its junction with the Tanana River was made by air. The general mapping of the region was reviewed and using the air reconnaissance and the mapping, it is possible to determine the general characteristics of the river in this area. For an extended distance upstream from the river junction, the Nenana River flows through a broad, flat flood plain. Generally, the stream is highly braided, with evidence of a shifting stream occuring through the years. There is evidence that the erodable nature of the river valley, coupled with periods of high stream flow, due to the source of the stream in mountainous terrain, results in frequent shifts in the river course and in general instability of the river channel.

Although it is not clear cut, there appears to be some higher degree of stability of the river in the vicinity of its junction with the Tanana River. Because of the general development in this region, some minor bank control has been done in the past. Future development of this area would warrant additional stabilization measures in the vicinity of Nenana, and these measures would not only benefit the community, but could also serve to protect the roadway link to the Tanana Valley.

Limited geological information is available for the area. It is assumed that the river is of sufficient size for a thaw bulb to exit in the

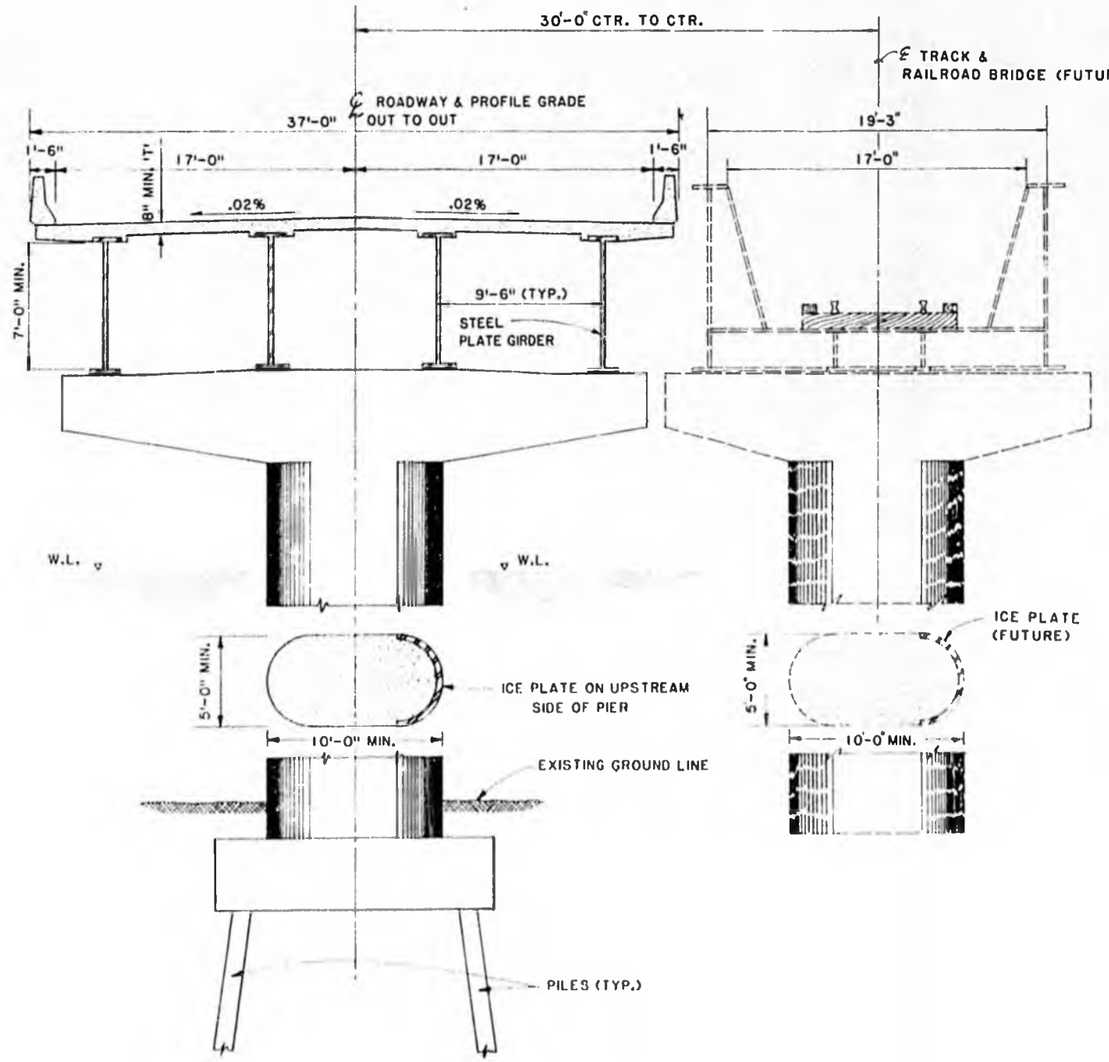
general vicinity of the river. Generally, it is understood that unconsolidated gravels and sands which are an outwash from the mountains prevail through the area. Since these underlying materials are unconsolidated, it is anticipated that piles will be required for the foundation support. In accordance with local practice and also as a general appropriate application, it is anticipated that steel H piles will be used for all foundations. Soil borings will be required at the location of the substructure units along with a geotechnical report to more accurately identify actual insitu conditions.

At the West Middle and East Middle River and at the Little Nenana River, it appears that the stream flow is minimal. Thus, there is a possibility that permafrost does exist in these locations. The presence of permafrost would be determined by future soil borings.

There is not a gaging station in the vicinity of Nenana on the Nenana River and as a result, there is limited hydrological information available. Generally, the approximate ground elevation of Nenana is 351.0 feet. A high water elevation on the Tanana River at the railroad bridge is 358 feet for a 50 year flood. The proximity of the bridge crossing to the railroad bridge justifies the use of this elevation for the high water elevation in the development of the bridge concept plan.

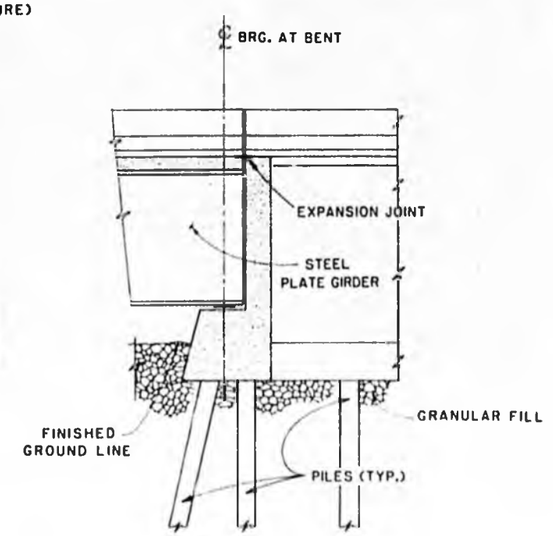
A tentative location for the river crossing has been set at a location approximately 3,000 feet upstream from the Tanana River. This location will permit the roadway to connect with Tenth Street, which has been extended by the City across the railroad. At this location, the river channel is relatively well defined and a crossing can be made without skewing the structure, which will optimize the structural length and result in minimum costs.

The proposed structure is a three span stucture with a length of 560 feet having spans of 172'-6". 215"-0". 172'-6". (Figure 7,8) The superstructure consists of four steel girders using composite action with a concrete deck. The concrete deck has a clear roadway width of 34'-0" with concrete barrier curbs.



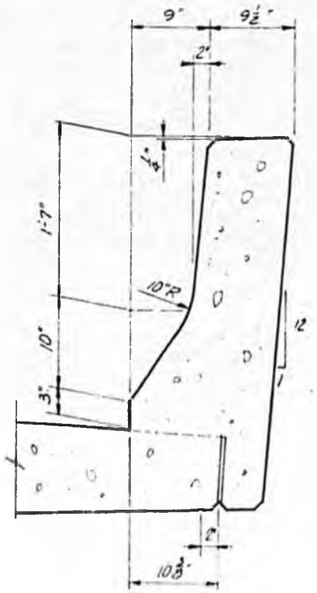

## TYPICAL PIER ELEVATION

SCALE: 1/4"=1'-0"




## TYPICAL BENT SECTION

SCALE: 1/4"=1'-0"




## BARRIER DETAIL

SCALE: 1 1/2"=1'-0"

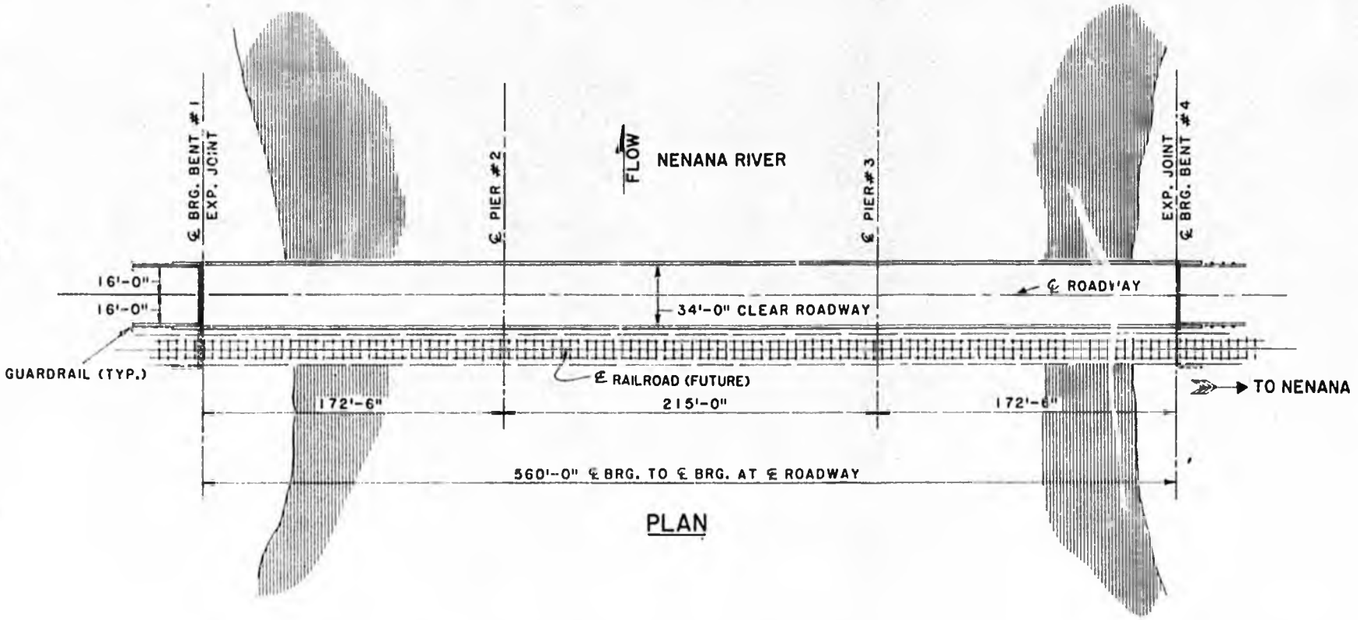
FEBRUARY 1981

NENANA RIVER BRIDGE

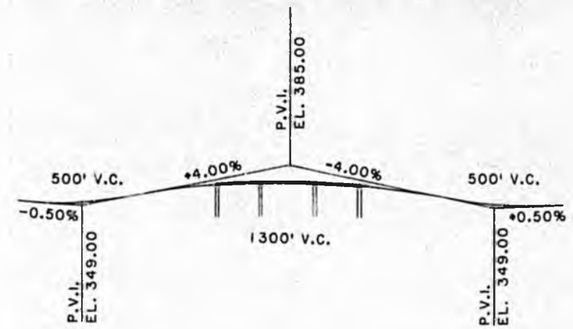
| | | |
|---|---|---|
| SCALE AS SHOWN | APPROVED BY | DRAWN BY BB/RC |
| DATE 11/12/80 | | REVISED |

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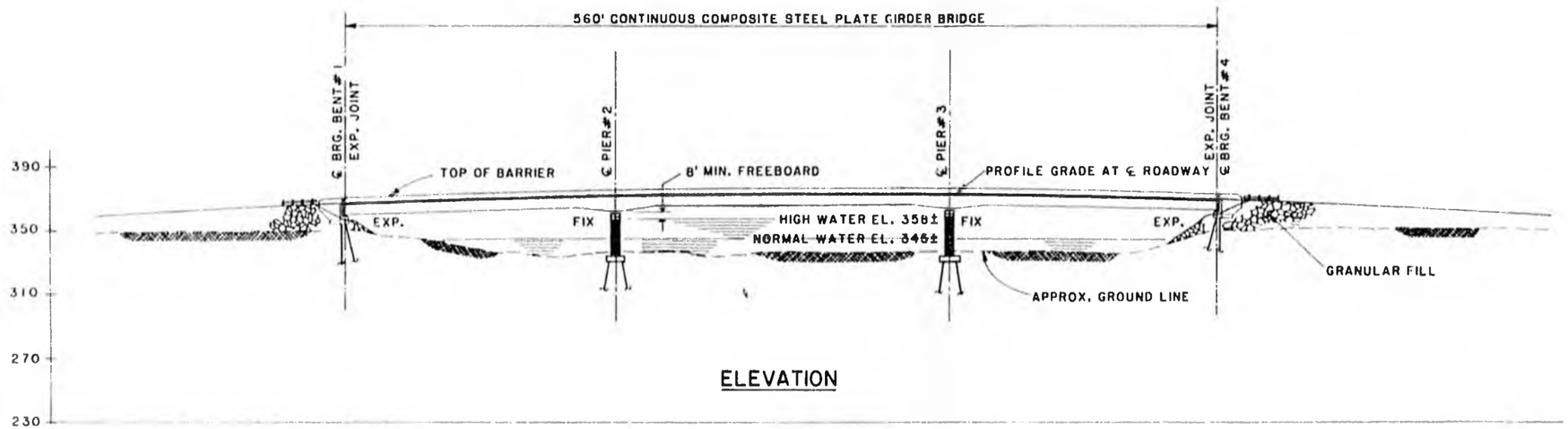



PLAN




PROFILE GRADE

NO SCALE




ELEVATION

**NOTES:**

LIVE LOADS: HS20-44
COOPER E80
DESIGN SPEED: 60 MPH
STREAM DATA: ASSUMED

FIGURE Nº 7

FEBRUARY 1981

NENANA RIVER BRIDGE

SCALE 1:40'-0" | APPROVED BY | DRAWN BY BB/RC
DATE 11/12/80 | REVISED
HDR
ALASKA TRANSPORTATION CONSULTANTS, INC.
DRAWING NUMBER 1 OF 3

Using a high water elevation of 358 feet, a minimum clearance of 8'-0" is indicated above high water to low steel, which exceeds the suggested 6'-0" clearance by AASHTO Bridge Specifications. The necessary clearance over high water, and the depth of the superstructure will elevate the roadway above the approach roadways. The roadway elevation will be achieved by using a gradient on the approach roadways from each direction, and with a vertical curve on the structure with its apex near the center of the structure. The vertical curve will be designed for a speed of 60 mph.

A three span bridge will require the placement of two piers in the stream flow. The velocity of the stream, heavy water volumes, and thick ice will require large massive piers. Presently, it is contemplated that these will be single shaft concrete piers with steel ice plates. Footings will be located below the stream bed sufficiently to be below anticipated scour depths, and will be supported on steel H piles.

The abutments would be concrete stub abutments supported on steel H piles. These abutments will be located on embankment and the material for the embankment in the vicinity of these abutments should be non-frost susceptible soils to prevent frost heave.

Without specific information on water volumes, it has not been ascertained that the indicated waterway opening is sufficient to accomodate the flows. However, with low profile approach roadways, the approach roadways would be inundated during periods of flooding with flow crossing over the roadway.

Initially, it was contemplated that rail service to the area was a consideration. There presently does not exist justification for rail service to the study region based on cost-benefit ratios. However, should the ultimate development of the area occur with the addition of agri-processing plants, there may well be the economic need and demand for rail service to the area. This rail link would logically tie to the existing rail line at Nenana. To avoid the establishment of an additional and independent transportation corridor, the future rail line would closely parallel the roadway corridor. As a result, the river crossing of the Nenana would be

parallel and adjacent to the highway crossing.

The railroad bridge would preferably be a through girder steel bridge structure on the upstream side of the highway bridge. The superstructure and substructure would be independent of the highway bridge. Some overall cost savings would be achieved if the substructure for the railroad bridge was constructed with that of the highway bridge, but this would require a substantial investment for a structure which may not be constructed at any time in the near future.

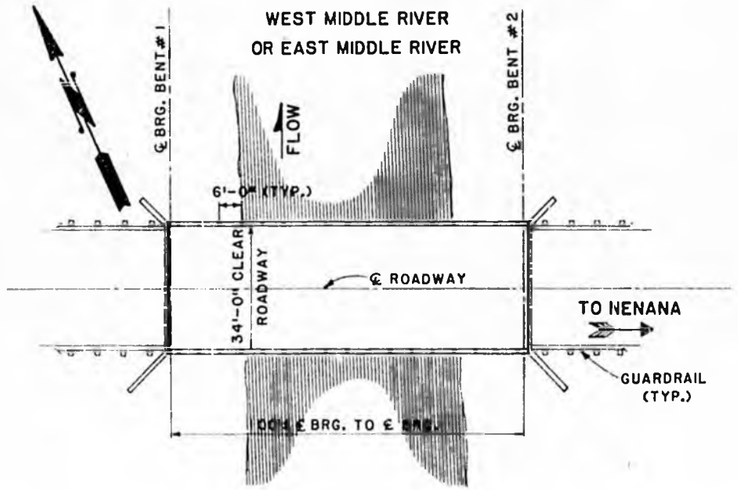
In recognition of the severe lateral forces imposed on the substructure, the railroad would have an identical span arrangement with that of the highway bridge. This is also necessary to avoid impeding the flow of water and ice which would occur if non-aligned piers for the two structures were used. The superstructure would be designed for a Cooper's E-80 loading. It is assumed that the rail line would be a low speed operation and that the structure could be a non-ballasted deck.

The approach grades to the railroad structure would have gradients not exceeding 2% and would be somewhat longer than the roadway approaches.

With some inherent instability of the stream, stabilization of the river banks may be required upstream from the structure. It is not expected to be a major undertaking, but it will be necessary to inspect the upstream banks in the vicinity of the proposed structure to ascertain if any revetments are required.

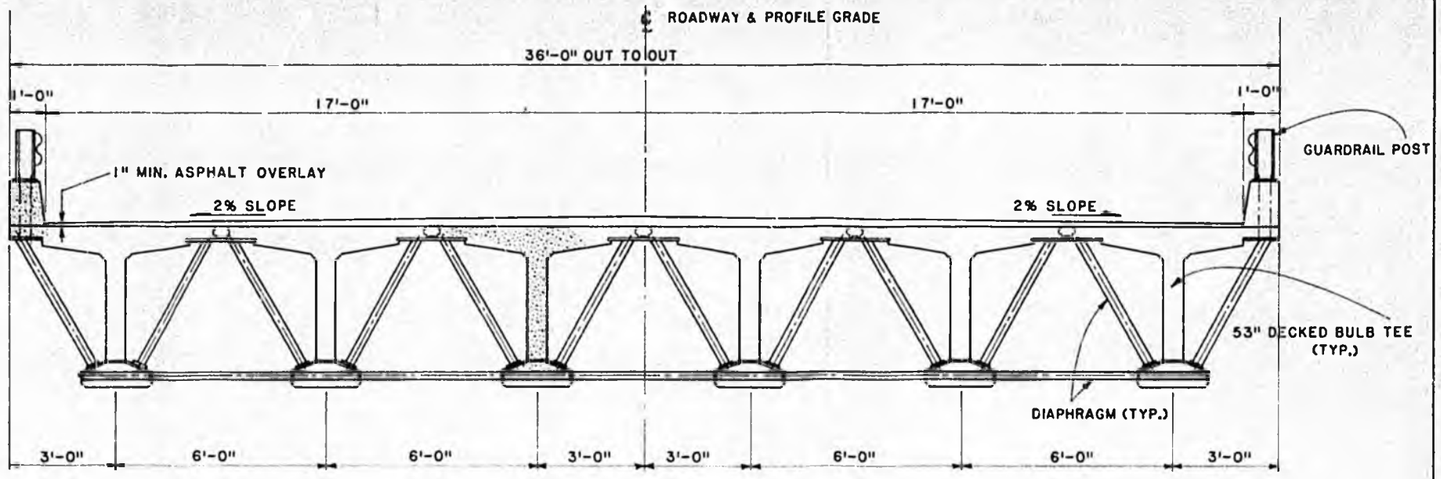
For purposes of development of a concept, a clear span of 100 feet was assumed for the West Middle and East Middle River. (Figure 9) These structures would consist of concrete bulb T superstructures, supported on concrete stub abutment with steel H piles. For the Little Menana River Bridge, it was assumed that a large culvert could be used to contain the flow in this stream.

No site specific information was available in the form of surveys, geological information, or hydrological data, and these concepts for the



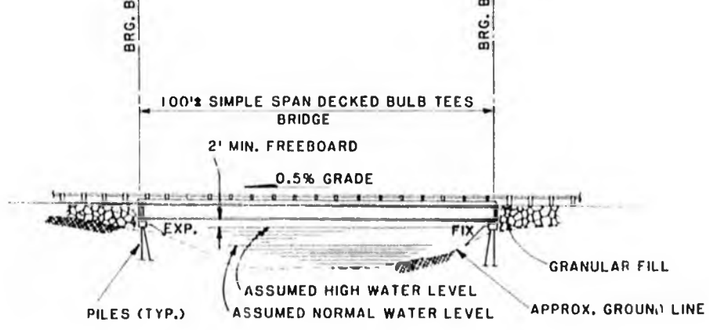

PLAN

SCALE: 1"=20'-0"



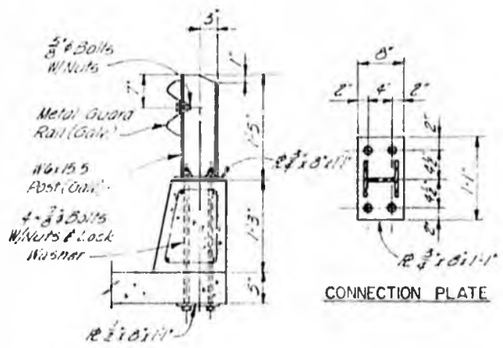

SECTION

SCALE: 1/2"=1'-0"




ELEVATION

SCALE: 1"=20'-0"




GUARD RAIL POST CONNECTION DETAIL

SCALE: 1"=1'-0"

**NOTES:**

LIVE LOADS: HS20-44
DESIGN SPEED: 60 MPH
STREAM DATA: ASSUMED

FIGURE N=9

WEST MIDDLE RIVER BRIDGE
EAST MIDDLE RIVER BRIDGE

SCALE: AS SHOWN | APPROVED BY | DRAWN BY SB/MP
DATE: 11/12/80 | REVISED

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DRAWING NUMBER 3 OF 3

structures were developed using aerial photographs and other undocumented data. As more specific knowledge is gained, the proposed structures may change in concept and size.

Other minor structures will be required to provide flow for drainage areas lying in the path of the proposed roadway. Presently, it is contemplated that round culverts will be adequate for this purpose.

The following is a list of total costs, including soil exploration, engineering, construction inspection, and construction cost for each of the bridges over Nenana River and its tributaries. Costs related to various items such as right-of-way, utilities, bridge embankments and inflation factors are not included in the estimate. Costs presented are to be reasonable order-of-magnitude costs for work as of Spring 1981.

| | NAME | TOTAL COST |
|---|---|---|
| A. | Nenana River Bridge | $ 4,040,400 |
| B. | Little Nenana River Bridge | $ 97,500 |
| C. | East Middle River Bridge | $ 608,400 |
| D. | West Middle River Bridge | $ 608,400 |
| | TOTAL | $ 5,354,700 |

## CHAPTER VI
## PERMITS

Permits are required from both state and federal agencies. Use of land and environmental concerns will involve the state in all stages of the project; construction stages will also require federal permits. The application process has been divided into four (4) stages, based on anticipated work progress. A separate application for state permits will be made for each of the four (4) stages, which are:

1. Survey and Boring-Bridges
2. Survey and Boring-Road (Phase I)
3. Bridge Construction
4. Road Construction

For state permits, Master Applications will be used (as detailed below); and, the staged application procedure will more effectively identify required state permits. Federal agencies are easier to identify, as fewer are directly involved; however processing time is six (6) months or longer. The federal government is now in the process of making a wetlands determination, the outcome of which would identify the need for any federal permits.

### State Permits

A Master Application has been made to the Alaska Permit Information Center in Fairbanks. The Master Application serves as a notice of intent to the state of a proposed project. The Center notifies state agencies (about 200), and they have fifteen (15) days to respond. All responses including necessary individual department permit applications are returned to the center. The process is outlined in the attached Master Application Information Sheet, (See Appendix 2). The applicant is responsible for completion of all applications and payment of fees.

Key state departments are Fish & Game, and the Department of Environmental Conservation (DEC). State Division of Lands will be concerned about right-of-way. Fish & Game is primarily concerned with stream crossing and will issue a Title 16 Permit; first stage boring work will be

subject to Fish & Game requirements. DEC requires Water Qaulity Certification under Section 401 of Public Law 92500. The Master Application process will identify all state agencies requiring permits for the individual stages. Agencies not responding to the Master Application within fifteen (15) days, may not later require a permit.[1]

With the state agencies, as with federal departments, preliminary review of the application prior to submission will expedite approval.

Federal Permits

Application to the Corps of Engineers is the principle step in the federal process. The Corps assures public notice of a proposed project; other agencies then respond to the Corps. Statutes that apply are:

1. "River and Harbor Act of 1899", Section 10.
2. "Clean Water Act", Section 404, covers use of fill material.
3. Permits required for use of areas defined as Wetlands and Floodplains.

A key agency that should review applications prior to filing is the U.S. Department of Fish & Wildlife Service. The Fairbanks office will work closely with the applicant; recommendations will be made so that proposed project will be within Fish & Wildlife guidelines. An important part of the review will be definition of Wetlands, if any in the project area. Time frame for the review will be 3-4 weeks and is now in progress.

The Environmental Protection Agency (EPA) and National Marine Fisheries Service will be concerned; but, individual contact at present does not appear to be needed prior to Corps application. Their reaction and progress concerning the Corps application, should be monitored however.

The Coast Guard grants permits to cross navigable rivers under Section 9 of the "River and Harbor Act of 1899".[2]

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[1]Section 46.35.030, Water, Etc., Conservation (See Appendix 3).

[2]Interview with Mark Millea, Aids to Navigation Section, U.S. Coast Guard, Juneau, Alaska.

The Nenana River is classified in the Advanced Approval Category and requires no permit. The East and West Middle Rivers were determined to be distributaries of the Nenana River, thus being classified in the Advance Approval category as well, (Appendix 4).

No federal permits are required for preliminary survey and geotechnical work along the proposed roadway routing.

Additionally, a permit is needed to cross Alaska Railroad Terminal Reserve on the east bank of the Nenana River. The process to obtain this permit has been initiated though final results are still pending.

# CHAPTER VII

## LAND ACQUISITION FOR RIGHTS-OF-WAY

There are various methods available to acquire land for the roadway and utility rights-of-way in this project. The most straightforward of these methods is the use of section line easements granted through both state and federal statutes.[1] For the most part, the proposed roadway network follows section lines to take advantage of this easement. Other methods of acquiring land are included in the power of eminent domain. The use of eminent domain and section line easements, project rights-of-way requirements, and recommendations pursuant to the acquisition of those rights-of-way are detailed below.

### 1. Eminent Domain

According to Title 9, Article 4, Section 9.55.240, the power of eminent domain is available for use in acquiring land for the building of the roads, telephone lines, and power lines in this project. Proceedings instituted under the power of eminent domain are accompanied by a declaration of taking. This declaration must contain items describing the authority under which the property is taken, the public use for which it is taken, a description of the property, an estimate of just compensation, etc.[2] It has been stressed that the most important item to be contained in the declaration of taking is "a statement that the property is taken by necessity for a project located in a manner which is most compatible with the greatest public good and the least private injury."[3]

---

[1] Basis for section line easements: Act of July 26, 1866, (RS 2477), (43 CFR 2822, 43 USC 932); Chapter 19 SLA, April 6, 1923; Chapter 123 SLA, March 26, 1951; Chapter 35 SLA, March 21, 1953; Taken from workbook on Section Line Easements put together by Bill Newman, Fairbanks North Star Borough, Planning Department, 1978.

[2] A.S. 09.55.430.

[3] Ibid; Interview with Bill Satterberg, Department of Law, Highways Section, October 28, 1980.

The power of eminent domain could be utilized where section line easements are not already established and in the acquisition of land required beyond that granted in section line easements. This power is granted to both the state and first class cities such as Nenana.[1]

2. Section Line Easements

As detailed in Chapter IV, the roadway network has been laid out to take full advantage of section line easements. Following is a brief outline of the federal and state laws concerning section line easements and a method for determining which laws might apply to a certain piece of property.

(A) History[2]

The Mining Law of 1866 made an offer of free right-of-way over unreserved public land for highway purposes. This offer became effective on April 6, 1923, when the territorial legislature passed Chapter 19. Any lands in Alaska appropriated and patented after April 6, 1923 were subject to an easement along all sections, 4 rods (66 feet) wide.

The section line easements law remained in effect until January 18, 1949. On this date, the legislature accepted the compilation of Alaska law which also repealed all laws not included. The section line easement law was repealed.

On March 26, 1951, the legislature passed an easement law which dedicated a section line easement 100 feet wide along all section lines on land owned by or acquired from the territory. This was modified on March 21, 1953, to include an easement 4 rods wide along all other section lines in the territory.

To have an easement on a section line means that the section line must be surveyed under the normal rectangular system. On large areas such as State or Native selections, only the exterior boundaries are surveyed

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[1]A.S. 09.55.420 (a).

[2]Taken from Workbook on Section Line Easements put together by Bill Newman, 1978.

hence, there are no section line easements in these areas (until further subdivisional surveys are carried out).

Since all federal land is reserved in Alaska at this time and since the section line easement will have any applicability on any finalized D-2 land since the land will be reserved at the time of any survey.

Land surveyed by special survey or mineral survey are not affected by section line easements since such surveys are not a part of the rectangular net.

Section line easements relate solely to highway or road use by the public. They cannot be used for powerlines or restricted private access. The date of survey and appropriation of the land must be considered in determining the presence of a section line easement.

(B) Methodology[1]

Using the date of entry and the date of survey plat approval, an analysis of section line easements would proceed as follows:

A. If date of entry predated survey plat approval there is no easement.

B. If entry predated April 6, 1923 (date of enabling lagislation for section line easements) there is no section line easement.

C. If survey plat approval predated April 6, 1923, but date of entry is after April 6, 1923, but before January 18, 1949, there is a section line easement.

D. If survey plat approval is during the period of January 18, 1949 and March 21, 1953, and date of entry falls within this period, there is no section line easement.

E. If survey plat approval is during the period of January 18, 1949 and March 21, 1953, and date of entry falls after March 21, 1953, there is a section line easement.

F. If the land is in state ownership, there is a section line easement.

G. If the land was disposed of by the state or territory during the period of January 18, 1949 and March 26, 1951, there is no section line easement.

H. United States Surveys (U.S.S. and Number) and Mineral Surveys (M.S. and Number) are not a part of the rectangular new of survey. If the rectangular new is later extended, it is established around these surveys. There are no section lines through a U.S.S. or M.S., therefore, no section line easements can exist on such areas.

[1]Taken from "Section Line Easement Research Technique" put together by the Fairbanks North Star Borough, Planning Department, 1979.

There may be many other situations which would require evaluation and decision on a case by case basis.

3. Project Right-of-Way Requirements

Figure 4 presents existing land ownership in the project area. Land in the initial phase of the project was chosen because it is state patented. The proposed roadway traverses a township which has been tentatively approved for state patent and a township including both state patent land and private property. The bridge crossing the Nenana River crosses private land along the river's west bank. Property along the east bank is currently classified as railroad terminal reserve. The entire township in which Nenana lies is being claimed for private use under the Alaska Native Claims Act. Thus, rights-of-way will have to be acquired from state, federal, and private ownership.

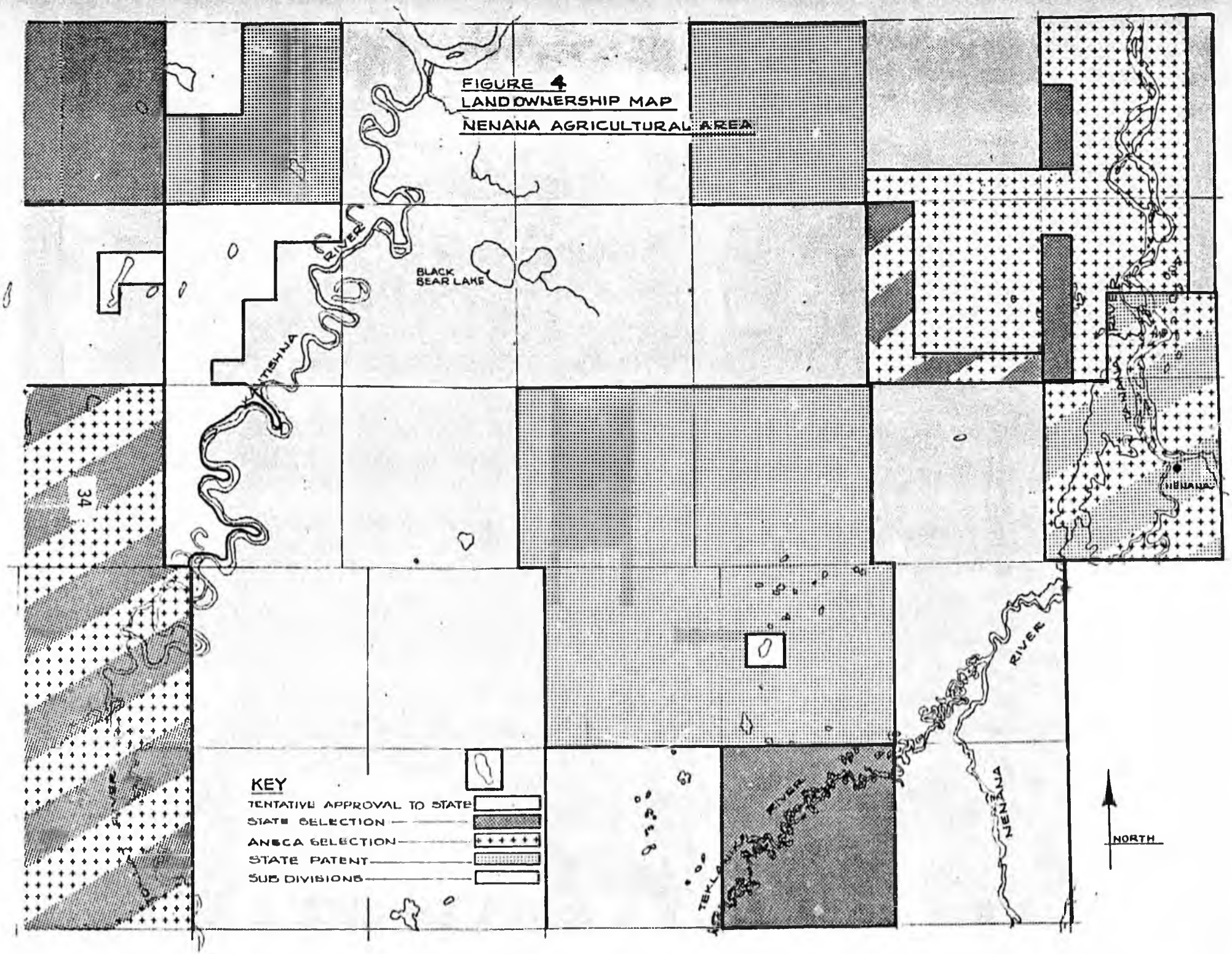
As discussed in Chapter IV, a right-of-way 200 feet wide is required for the main and collector roads in addition to a 30 foot utility easement on either side of the roadway easement. Within the roadway easement are 32' and 28' of traffic lanes for the main and collector roads respectively; 52-54 feet of ditch on either side of the traffic lanes; and 30-34 feet of space for storage of organic to be used in the building of slopes. Feeder roads require 150 feet of roadway easement with a 30 foot utility easement on either side. (See Figure 6).

4. Conclusions and Recommendations

Acquiring rights-of-way can become a complex issue with the potential to slow-up or even stop a project. In the foregoing sections it was found that the proposed roadway would traverse state, federal and private property. It was also found that required rights-of-way were greater than easements available along section lines. It has been recommended that use of "blanket condemnation" for necessary right-of-way might be a way of avoiding many problems.[1]

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[1]Interview with Bill Satterberg, Department of Law, Highways Section, October 28, 1980.


FIGURE 4
LANDOWNERSHIP MAP
NENANA AGRICULTURAL AREA
BLACK BEAR LAKE
RIVER
34
KEY
TENTATIVE APPROVAL TO STATE
STATE SELECTION
ANCSA SELECTION
STATE PATENT
SUB DIVISIONS
NENANA
RIVER
NORTH

Though this is an area which definitely requires legal expertise, current Judicial practice is that an Engineers' expertise will not be substituted for Judiciary opinion if it is clear that the Engineer has exercised his or her judgement in roadway layout.[1] This expertise and many other resources could be made available should the road be built under the umbrella of the Local Service Roads and Trails Act (LSR&T).

Development and construction of the roadway network under LSR&T appears to be the most expedient approach to the acquisition of rights-of-way and many other developmental requirements discussed in this section. Under LSR&T the state can use its mechanisms and powers to acquire necessary right-of-way in accordance with AS 19.05.080-.9.05.120.[2] The current revision of the act would provide funds for purchase of rights-of-way and gravel. However, this revision is yet unsigned by the governor and there remains some controversy in the legislature regarding the specific provisions for the purchase of right-of-way.[3] Until the issue is resolved however, funding for the purchase of right-of-way will have to come through some other legislative vehicle.

Construction of the roads under LSR&T would also guarantee maintenance either through the Department of Transportation and Public Facilities or local government by way of revenue sharing.[4]

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[1]Interview with Bill Satterberg, Department of Law, Highways Section, October 28, 1980.

[2]AS 19.30.171.

[3]Interview with Donovan Ronkin, LSR&T Engineer, Department of Transportation and Public Facilities, November 13, 1980.

[4]AS 19.30.211.

## CHAPTER VIII

## Cost-Benefit Study of Phase I Access Routes

Two options are availalbe for the access road to Phase I of the Nenana Agricultural Project. Option One is a 22.2 mile route from Nenana to the Center of Phase One that requires four bridges to be built. Option Two is a 34.7 mile route from near the Rex siding that requires one bridge across the Teklanika River. A cost analysis, reduced to a per-year basis, indicates that the Nenana route will cost $1,472,913.12 per year while the Rex route will cost $1,517,365.48 (Tables C - G). User costs are estimated to be $3,218,713.50 for the Nenana route and $9,167,753.50 for the Rex route. These figures indicate that the Nenana route will result in a net savings to the general tax payer of approximately $44,500.00 per year and a net savings to the user of approximately $5,949.000.00 per year for a total savings of $5,993,500.00 per year.

A cursory review indicated that freight costs per metric ton from the center of Phase I to the siding will be $3.66 per ton (utilizing rail from Nenana) for the Nenana route and $4.15 per ton for the Rex route resulting in a net savings of $0.49 per metric ton from the Nenana route.

Table C

Capital Costs Projected to 1981

Estimated project center: 1/4 corner common to sections 13 and 14, T4S, R11W, F.M.

Planned road life - 20 years, structures - 40 years, Right-of-Way - 60 years

Estimated Right-of-Way Costs - $5,000/Acre

Estimated Road Costs - $275,000/mile - Type "RB", $310,000/mile - Type "PB"

Estimated Maintenance Costs - $3,115/mile

Estimated Bridge Costs - Nenana Route - $5,354,700, Rex Route - $608,400

Estimated Interest Rate - 10%

| | Nenana Route | Rex Route | |
|---|---|---|---|
| | 22.2 Miles Gravel<br>0 Miles Paved | 34.7 Miles Gravel<br>28.9 Miles Paved | |
| Right-of-Way Costs | $1,345,454.55 | $2,254,545.46 | 0 |
| Capital Recovery Cost | 134,989.45 | 226,198.55 | 0 |
| Construction Costs | $6,140,000.00 | $9,542,500.00 | 0 |
| Capital Recovery Cost | 721,204.40 | 1,120,862.05 | 0 |
| Bridge Costs | $5,354,700.00 | $ 608,400.00 | 0 |
| Capital Recovery Cost | 547,566.27 | 62,214.38 | 0 |
| Maintenance Cost/Year | $ 69,153.00 | $ 108,090.50[1] | |
| Total Costs/Year | $1,472,913.12 | $1,517,365.48 | 0 |

[1] Traffic from the Nenana Agricultural Project would approximately double the average daily traffic on the paved section of the George Parks Highway from Rex to Nen-ana. Current maintenance costs are primarily climate-related with negligible traffic-related costs. For this reason it is assumed that project-related traffic would not appreciably affect maintenance costs for this section of highway.

Table D

User Cost: Dollars-Per-Year

| | Nenana Route | Rex Route | |
|---|---|---|---|
| | 22.2 Miles Gravel | 34.7 Miles Gravel | 23.9 Miles Paved |
| **Operating Costs:** | | | |
| 76,405/Yr/Mi Gravel | 1,696,191 | 2,651,253.50 | |
| 50,940/Yr/Mi Paved | | | 1,472,166 |
| 29,100/Yr-1 Stop | 29,100 | 29,100 | |
| **Travel Costs:** | | | |
| 25,385/Ry/Mi | 563,547 | 880,859.50 | 733,626.50 |
| 8,155/Yr-1 Stop | 8,155 | 8,155 | |
| **Fuel Consumption:** | | | |
| 27,730/Yr/Mi | 615,606 | 962,231 | 801,397 |
| 9,455/Yr-1 Stop | 9,455 | 9,455 | |
| **Comfort and Convenience:** | | | |
| 11,635/Yr/Mi Gravel | 258,297 | 403,734.50 | |
| 3,880/Yr/Mi Paved | | | 112,132 |
| **Accident Costs:** | | | |
| 1,705/Yr/Mi Gravel | 38,367.50 | 59,163.50 | |
| 1,044,480/Yr Paved | | | 1,044,480 |
| Sub Total | $3,218,713.50 | $5,003,952.00 | $4,163,801.50 |
| Total | 3,218,713.50 | 9,167,753.00 | |

Table E

Roadway Operating Cost Comparisons

A. Operating Costs: Assume level grade - 55 MPH - 1 Stop

$$\frac{(76.23)(1.723)(850)(365)(1.25)}{1000} = \$50,936.96 \text{ use } \$50,940/\text{Yr/Mi (Paved)}$$
gravel (1.5)(50,936.96) = 76,405.44
use 76,405/Yr/Mi

$$\frac{(30.75)(1.627)(850)(365)(1.25)}{1000} = \$19,402.36/\text{Yr use } \$19,400/\text{Yr (Paved)}$$
gravel (1.5)(19,402.36) = 29,103.53
use $29,100/Yr

B. Travel Time:

$$\frac{(850)(365)(3.60 \text{ average wage})(1.25/NF)}{55} = \$25,384.09 \text{ use } \$25,385/\text{Yr/Mi}$$

$$\frac{(5.84)(850)(365)(1)(3.60)(1.25)}{1000} = \$8,153.37 \text{ Use } \$8,155/\text{Yr}$$

C. Fuel Consumption: Assume $1.30/Gal - $1.25 Inflation

$$\frac{(55)(850)(365)(1.30)(1.25)}{1000} = \$27,728.59 \text{ use } \$27,730/\text{Yr/Mi}$$

$$\frac{(18.75)(850)(365)(1.30)(1.25)}{1000} = \$9,452.93 \text{ use } \$9,455/\text{Yr}$$

D. Comfort and Convenience: $.03/vehicle mile for gravel $.01 for pavement

Gravel (.03)(850)(365)(1.25) = 11,634.38 use $11,635/Yr/Mi

Paving (.01)(850)(365)(1.25) = 3,878.13 use $ 3,880/Yr/Mi

Table F

Traffic Data

Accident Data: (Use 13.2 Mile Delta Clearwater Road for similar comparison) DOT/PF monetary equivalents: injury - $9,490; fatality - $260,000.

Gravel Roads

| | Fatalities | Injuries | Property Damage/$ |
|---|---|---|---|
| 1977 | 0 | 3 | 7,775 |
| 1978 | 0 | 0 | 2,350 |
| 1979 | 0 | 1 | 6,150 |
| 3 Year Total | 0 | 4 | 16,275 |
| Total Costs | 0 | $37,960 | $16,275 |

Cost/Yr/Mi (37,960+16,275)/(3)(13.25) = 1364.4 x 25% Inflation = $1705.50 use $1705

George Parks Highway Rex to Nenana

| | Fatalities | Injuries | Property Damage/$ |
|---|---|---|---|
| 1977 | 1 | 16 | 90,095 |
| 1978 | 1 | 8 | 44,250 |
| 1979 | 1 | 8 | 35,350 |
| 3 Year Total | 3 | 32 | 169,695 |
| Total Costs | $780,000 | $303,680 | $169,695 |

Cost/Yr (780,000+303,680+169,695)/3 Year = $417,791.67 x 25% Inflation = $522,239.58 x 2 for approximately doubling traffic = $1,044,479.17 use $1,044,480.00

Note:

| | |
|---|---|
| Design Speed | 55 MPH |
| Volume | 850 ADT |
| Stops | 1 |
| Slowdowns and Idling | N/A |

Table G

Freight Costs

Projected to 1981: (.035)[1](1.25% Inflation) = $0 44/metric ton mile rail
(.046)[2](2)(1.25% Inflation) = $.115/metric ton mile

| | |
|---|---|
| Railroad miles Rex to Nenana | 25% (approximate) |
| Road miles Nenana Railroad to Project | 22 (approximate) |
| Road miles Rex to Project | 36.1 (approximate) |

| Nenana Route | Rex Route |
|---|---|
| RR Road | Road |
| 1.13 + 2.53 - $3.66/ton | $4.15/ton |

[1]Rail $035/metric ton mile (based on Delta Barley Project Costs).

[2]Commercial Truck $046/metric ton mile (one-way) (based on Delta Barley Project Costs).

# CHAPTER IX

## COMMERCIAL VIABILITY OF THE AGRICULTURAL TRANSPORTATION SYSTEM

Commercial viability of a roadway network can be defined as how the system lends itself to an increase in benefits to the primary commercial user. In this case the grain producers will be considered the primary users initially; and it is assumed that, while the other agricultural industries may have different transportation needs, costs and analytical approach would be similar.

As stated in the introduction to this report, transportation is an important aspect in rural development. A commercially viable transport system is a major cog in the success of agricultural development in Alaska. The Final Report of the Rural Transportation Advisory Task Force states that it is vital to assure the efficient movement of agricultural products and farm inputs, "both because of the geographic dispersion of farming, and because of export of agricultural products has become essential to the nation's balance of payments."[1] This statement holds true in Alaska especially when considering the present marketing plans for Alaskan barley and the transportation problems unique to Alaska's emerging agricultural industry.

This section presents an analysis of alternative methods for the transport of grain between the initial project area and Nenana. The purpose of this analysis is to provide a flexible range of options by which the transportation system can be made commercially viable.

A roadway is commercially viable if commercial user costs are low enough to provide for a competitive profit margin. This is accomplished through the design of a system which most effectively reduces costs essential to the transport of a commodity from farm to market.

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[1] "Agricultural Transportation Services: Needs, Problems, Opportunities", The Final Report of the Rural Transportation Advisory Task Force, January, 1980., p. 11.

Four transport schemes were evaluated for transportation of grain from farm to market:

I. Home Storage, farmer hauls to Nenana
II. Home Storage, transfer point other entity transports to Nenana
III. No Home Storage, transfer point
IV. No Home Storage, no transfer point

To analyze the various alternatives for transferring the grain from farm to market, several assumptions of conditions and calculations of costs were made for the initial project area. The following is a brief description of estimated project area activity along with an outline of assumptions used to determine costs of the transportation system.

## Project Area Activity

The initial project area is two townships in size, lying 13 miles west of the City of Nenana. There are seventeen (17) grain farms and ten (10) smaller farms within the project under proposed parcelization. Additional 5 acre home sites are being recommended to increase the population base in the area. An estimate of grain production is based on a 1/3 fallow system and 42 bushels/acre, average harvest of barley. There are 39, 680 acres within the 17 grain farms. This would put 26,450 acres into barley at any one time. At 42 bushels/acre there would be approximately 1,111,000 bushels per harvest. This grain would be transferred to the railhead in Nenana and shipped from there to port. Additional transportation would be required by commodities originating on the smaller farms.

## Assumptions

Several assumptions were applied to the analysis of the grain transport system. These assumptions, which should be modified to fit individual farm situations, were:

1. Average Farm Size: 2560 acre
2. Combine Capacity: 2,000 bushels/day
3. Combine bin capacity: 65 bushels requiring unloading every twenty (20) minutes
4. Truck capacities: 250 bushels, 700 bushels, 1,050 bushels
5. Average Speed of Trucks: 35 mph

6. Ten (10) hour workday
7. Average Harvest on 2560 acres = 71,680 bushels

Following the conclusion of Chapter VIII, it was also assumed that the proposed roadway between the initial project and Nenana would be the road used by the farmers in the initial project area.

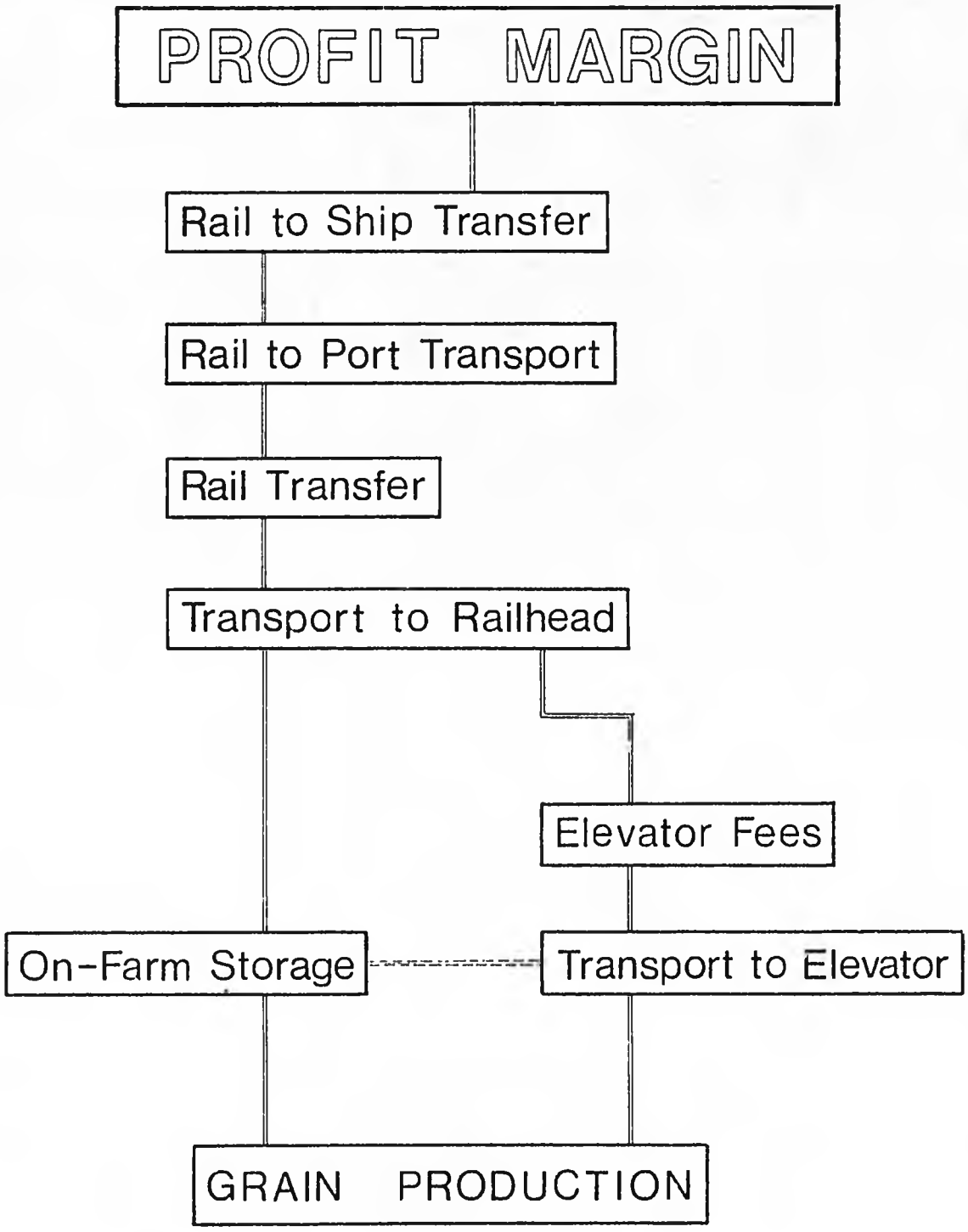
Essential costs for Nenana grain transport were determined to center in the areas outlined in Figure 11. This report focuses on costs involved in transporting grain from on-farm storage to railhead. Roadway quality, location of possible transfer facilities, choice in method of transport are factors which affect essential costs. An examination of the relationship between these factors and essential costs is used in determining a framework for a commercially viable road. These will be discussed following an analysis of the essential cost components.

## Essential Cost Components

On-farm storage offers flexibility to the grain producers in a number of ways. First, it allows them to hold their crops until they can sell at the best price. Second, storing the grain on the farm allows the farmer to transfer the grain to the railhead using the mode most economical to him. Third, on-farm storage reduces or eliminates storage costs elsewhere.

It was estimated from experiences in Delta Junction that grain storage in Alaska costs about $0.25/bushel/year.[1] While agriculture is in its developmental stages in Alaska grain receives certain price supports which nullify the advantages of on-farm storage. As Alaskan grain becomes subject to world market prices the advantages of on-farm storage will increase considerably. As a result, it is assumed that the majority of the farmers in the Nenana area will have on-farm storage for a large portion, if not all of their harvest. Costs involved in on-farm storage are made up in

[1]Agricultural Action Council, December 1, 1980.




ESSENTIAL COST COMPONENTS-GRAIN MARKETING

Figure 11

savings resulting from increased flexibility; though the rate of savings depends on distance between farm and elevator, labor costs, elevator fees, etc.

If the farmer does not have on-farm storage, or if the time is right to market the harvest; it is possible that a transfer site could be located between 1 and 7 miles of his farm. One such transfer site would be adequate for the initial project area, though others might be necessary as agriculture expands outward from there. Once the grain is transported to this site it would be loaded onto larger trucks and taken to the railhead in Nenana.

Grain would be transported either from a centralized transfer site or directly from on-farm storage to the railhead in Nenana. Once the grain reached the main elevator there would be additional handling and storage fees.

Evaluation of Alternatives

The alternative transport schemes were analyzed in terms of the costs of their essential components. Thus, Scheme I - home storage of grain, hauled directly to the elevator in Nenana; was evaluated on a cost per bushel basis using the following formula:

H + A + E = Scheme I Costs

H + B + E = Scheme I Costs

H + C + E = Scheme I Costs

where:

H = Home Storage Costs

A = Costs of 300 bushel truck hauling direct to Nenana (Calculated with and without labor)

B = Costs of 700 bushel truck hauling direct to Nenana (Calculated with and without labor)

C = Costs of tractor/semi-trailer (Both commercial costs and with/without labor)

E = Costs of storage and handling at elevator.

Scheme II was evaluated using the following formula:

H + A + T + C + E = II

H + B + T + C + E = II

Where 'T' equals costs of handling at transfer point. Scheme II also compares 2.5 ton truck and 5 ton truck haul costs to transfer point.

Scheme III was evaluated using the following formula:

A + T + C + E = III

B + T + C + E = III

Scheme IV was evaluated using the following formula:

A + E = IV

B + E = IV

C + E = IV

Operating Costs

Costs involved owning and operating the three alternative trucks were obtained from local sources and are presented in Table H. For the 2.5 ton and 5 ton trucks, 25% of the annual fixed costs were assigned to the hauling of grain. As the larger 10 ton truck is not as versatile as the 2 smaller trucks might be, 69% of its fixed costs were assigned to grain hauling. Home storage costs were utilized from a recent study in Washington state.[1] These costs were adjusted for inflation and higher costs in Alaska and were approximated at 13¢/bushel. Elevator handling costs are currently 12¢/bushel in the Delta project the elevator costs and costs at the possible transfer site in the initial project area.

Formulas listed in Figure 12 were utilized in determining the various transport costs of the four alternative schemes. These formulas were obtained from a similar study done in Washington state.[2]

Findings

It was found that while Scheme IV had the lowest costs of all the alternatives, Scheme I offered the most flexibility at the least costs to the

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[1]Hately, Rogers, Casavant. "Evaluating Transportation and Storage Alternatives Available to Whitman County Grain Growers". Washington State University, College of Agricultural Resources Center, May, 1976.

[2]IBID.

Table H

Operating Costs/Mile - Alternative Grain Hauling Vehicles

| | A<br>2.5 Ton (300/Bu) | B<br>Ton (700/Bu) | C<br>10 Ton Tractor/Semi (1,500/Bu) |
|---|---|---|---|
| **Fixed Costs** | | | |
| Interest on Investment | 708 | 1654 | 4536 |
| Depreciation | 1583 | 3325 | 9120 |
| Insurance | 600 | 1050 | 1350 |
| License and Fees | 30 | 30 | 240 |
| Total Fixed Costs | 2921 | 6059 | 15,246 |
| 25% assigned to Grain | 730.25 | 1514.75 | |
| 65% assigned to Grain---C | | | 9,909.90 |
| **Variable Costs** | | | |
| Gas | 0.108 | 0.185 | .29 |
| Repairs | 0.131 | 0.131 | .80 (includes tires) |
| Tires | 0.030 | 0.050 | --- |
| Total Variable Costs | 0.269 | 0.366 | 1.09 |

- License Costs:
  Alaska Motor Vehicles Dept.
- Insurance:
  Butch Stein, Alaska 100
  - A: New Cost
  - B: New Cost-35,000
    Salvage value 1,750
  - C: New Cost-96,000
- Repairs:
  U.S.D.O.T. formula and local interviews
  - A: Tires:
    6 @ 200.00
    ÷ 40,000 mile
  - B: Alaska Sales
    in Anchorage
  - C: Gene Javette, K&W Trucking
- Gasoline:
  Price/Gal: ÷ MPG
  - B: Tires:
    10 @ 200.00
    ÷ 40,000

Figure 12

Formulas Used to Determine Grain Transport Costs

Fixed Costs/Per Bushel:

$$\frac{\text{Fixed Costs} \times \text{Number of Trucks}}{\text{Total Harvest}}$$

Variable Costs/Per Bushel:

$$\frac{\text{Variable Costs} \times \text{Trip Miles}}{\text{Bushels Per One Trip}}$$

Trips Possible:

$$\text{Hours in Workday} \div \frac{\text{Trip Miles}}{\text{Avg. Speed}} + 20 \text{ Minutes (Loading and Unloading)}$$

Labor Costs/Per Bushel:

$$\frac{12.50 \times \text{Hours in Workday}}{\text{Bushels Hauled/Per Day}}$$

Home storage costs were adjusted for inflation in the following manner:

Cost in 1976 (Washington State) = 8¢/Bu
x1.61 (rate of inflation 1976 - 1980)
12.88¢/Bu or approximately 13¢/Bu in 1980

farmer. It was also determined that use of the 5 ton truck under Scheme I was the most cost effective vehicle, particularly when the farmers' labor replaced hired labor.

Scheme I examined the costs involved in hauling grain direct, farm to elevator. Costs were determined for distances of 14, 18, 22 and 26 miles. Costs of commercial trucking were found to be competitive and were much lower than costs involved in hiring a driver. With the flexibility of home storage and the options of commercial hauling, farmers labor, or hired labor; this scheme offers the most economical and cost effective method in transporting grain from the farm to the market. Table I presents the results of analysis under Scheme I.

Scheme II included a transfer point in the middle of the project. In this instance, costs were determined for the 2.5 and 5 ton trucks for distances of 1, 3, 5 and 7 miles from the transfer point. From that point, the grain would have to be transported 19 miles to the railhead in Nenana. It was determined that, at least initially, commercial trucking would be more cost effective for the 19 mile haul. If, in the future, cooperatively owned trucks could be utilized for activities other than grain hauling; fixed costs assigned to that purpose could be significantly reduced. Overall, Scheme II had drawbacks causing its higher costs. The transfer point offers no real advantage to a farmer with home storage as transportation costs direct to Nenana are still less after paying the additional transport costs and main elevator handling fees. Table J presents the results of analysis under Scheme II.

Scheme III was basically the same as Scheme II but in this instance, there was no home storage. Without home storage several constraints are placed on the farmer. Assuming a combine operating 10 hours per day, 4,000 bushels of grain could be made available for transport. This grain would have to be transported to either the transfer site or the main elevator in Nenana. The farmer would not be able to take advantage of any price fluctuations and would most likely have to hire labor. The results of analysis under Scheme III are presented in Table K.

Scheme IV assumed no home storage and no transfer site. Under these conditions two 2.5 ton trucks would be required to handle the daily harvest.

This would increase both fixed and labor costs if those vehicles were used. At distances of 22 miles for 2.5 ton trucks and 26 miles for one ton trucks, the daily harvest would have to be limited to the trucks daily hauling capacity. Again, while this is the least costly of the alternatives analyzed, it offers no long term economic advantages or flexibility and severely constrains the farmers harvest operations in ways similar to those outlined in Scheme III. The results of analysis under Scheme IV are presented in Table L.

## Summary and Conclusions

The analysis of alternative transportation schemes indicated a wide range of methods and equipment handling grain between the field and main elevator in Nenana. It was determined that a 5 ton truck hauling from home storage directly to Nenana, using the farmers own labor most effectively reduced transport costs, while offering the greatest long term economic benefits and flexibility to the farmer. A transfer point in the initial project area was found to be uneconomical and direct haul with home storage was still more cost effective at distances up to 50 miles from the main elevator.

It should be noted that road quality is significant in its affect on vehicle operating costs. AASHTO studies indicate that there is a 30% savings between vehicle operation on pavement and crushed gravel and up to 60% savings between pavement and unsurfaced roads.[1] It is imperative therefore, based on user economics, that a good quality access road be built and maintained in the project area.

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[1] American Association of State Highway and Transit officials, "A Manual on User Benefit Analysis of Highway and Bus-transit Improvements", Washington, D.C., 1960. Assume 0-3 percent grade, 35 mph vehicle running speed.

Table I

Scheme I - Direct Haul: Farm to Elevator

| Vehicle | Distance | Trips Per Day | Bushels Hauled/ Day | Fixed Costs | Variable Costs | Labor Costs | Home Storage | Elevator Fee | Total ¢/Bu | Total Without Labor |
|---|---|---|---|---|---|---|---|---|---|---|
| A | 14 | 9 | 2700 | .01 | .025 | .046 | .13 | .12 | 33.1 | 28.5 |
| | 18 | 7 | 2100 | .01 | .032 | .059 | .13 | .12 | 35.1 | 29.2 |
| | 22 | 6 | 1800 | .01 | .039 | .069 | .13 | .12 | 36.8 | 29.9 |
| | 26 | 5 | 1500 | .01 | .047 | .083 | .13 | .12 | 39 | 30.7 |
| B | 14 | 9 | 6300 | .021 | .015 | .020 | .13 | .12 | 30.6 | 28.6 |
| | 18 | 7 | 4900 | .021 | .019 | .025 | .13 | .12 | 31.5 | 29.0 |
| | 22 | 6 | 4200 | .021 | .023 | .030 | .13 | .12 | 32.4 | 29.4 |
| | 26 | 5 | 3500 | .021 | .027 | .036 | .13 | .12 | 33.4 | 29.8 |
| C | 14 | 9 | 9450 | .14 | .029 | .013 | .13 | .12 | 43.2 | 41.9 |
| | 18 | 7 | 7350 | .14 | .037 | .017 | .13 | .12 | 44.4 | 42.7 |
| | 22 | 6 | 6300 | .14 | .046 | .020 | .13 | .12 | 45.6 | 43.6 |
| | 26 | 5 | 5250 | .14 | .054 | .024 | .13 | .12 | 46.8 | 44.4 |

| | Distance | Trips | Bushels | Bush-els/Hr. | Hours/ Harvest | Cost/ Harvest | Cost/ Bu. | Home Storage | Elev. | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| Commercial | 14 | 7 | 7350 | 919 | 78 | 4992 | .07 | .13 | .12 | 32.0 |
| | 18 | 6 | 6300 | 788 | 91 | 5824 | .08 | .13 | .12 | 33.1 |
| | 22 | 5 | 5250 | 656 | 109 | 6976 | .097 | .13 | .12 | 34.7 |
| | 26 | 4 | 4200 | 525 | 137 | 8768 | .122 | .12 | .12 | 37.2 |

Table J

Scheme II - Home Storage With Transfer Point in Project

| Vehicle | Distance to Transfer | Trips | Bushels/ Day | Fixed Costs | Variable Costs | Labor | Home Storage | Transfer | Commercial Haul | Elevator Fee | Total ¢/Bu | Total Without Labor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | 25 | ,500 | .01 | .002 | .017 | .13 | .12 | .08 | .12 | 47.9 | 46.2 |
| | 3 | 20 | 6,000 | .01 | .005 | .021 | .13 | .12 | .08 | .12 | 48.6 | 46.5 |
| | 5 | 16 | 4,865 | .01 | .009 | .026 | .13 | .12 | .08 | .12 | 49.6 | 46.9 |
| | 7 | 13 | 3,900 | .01 | .013 | .032 | .13 | .12 | .08 | .12 | 50.5 | 47.3 |
| B | 1 | 25 | 17,500 | .021 | .001 | .007 | .13 | .12 | .08 | .12 | 47.9 | 47.2 |
| | 3 | 20 | 14,000 | .021 | .003 | .009 | .13 | .12 | .08 | .12 | 48.3 | 47.4 |
| | 5 | 16 | 11,200 | .021 | .005 | .011 | .13 | .12 | .08 | .12 | 48.7 | 47.6 |
| | 7 | 13 | 9,100 | .021 | .007 | .014 | .13 | .12 | .08 | .12 | 49.2 | 47.8 |

Table K

Scheme III - No Home Storage, Transfer Point in Project

| Vehicle | Distance to Transfer | Trips | Bushels/ Day | Fixed Costs | Variable Costs | Labor Costs | Transfer | Commercial Haul | Elevator | Total ¢/Bu |
|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 | 13 | 4000 | .01 | .002 | .016 | .12 | .08 | .12 | 34.8 |
| | 3 | 13 | 4000 | .01 | .005 | .02 | .12 | .08 | .12 | 35.5 |
| | 5 | 13 | 4000 | .01 | .009 | .025 | .12 | .08 | .12 | 36.4 |
| | 7 | 13 | 4000 | .01 | .013 | .03 | .12 | .08 | .12 | 37.3 |
| B | 1 | 6 | 4000 | .021 | .007 | .016 | .12 | .08 | .12 | 36.4 |
| | 3 | 6 | 4000 | .021 | .009 | .02 | .12 | .08 | .12 | 37.0 |
| | 5 | 6 | 4000 | .021 | .012 | .025 | .12 | .08 | .12 | 37.8 |
| | 7 | 6 | 4000 | .021 | .014 | .03 | .12 | .08 | .12 | 38.5 |

Table L

Scheme IV - No Home Storage, No Transfer

| Vehicle | Distance | Trips | Bushels Hauled | Fixed Costs | Variable Costs | Labor Costs | Elevator Fee | Total ¢/Bu |
|---|---|---|---|---|---|---|---|---|
| A | 14 | 14 | 4000 | .02 | .025 | .046 | .12 | 21.1 |
| | 18 | 14 | 4000 | .02 | .032 | .059 | .12 | 23.1 |
| | 22 | 12 | 3600 | .02 | .039 | .069 | .12 | 24.8 |
| | 26 | 10 | 3000 | .02 | .047 | .083 | .12 | 27 |
| B | 14 | 6 | 4000 | .021 | .015 | .02 | .12 | 17.6 |
| | 18 | 6 | 4000 | .021 | .019 | .025 | .12 | 18.5 |
| | 22 | 6 | 4000 | .021 | .023 | .03 | .12 | 19.4 |
| | 26 | 5 | 3500 | .021 | .027 | .036 | .12 | 20.4 |
| C | 14 | 4 | 4000 | .14 | .029 | .013 | .12 | 30.2 |
| | 18 | 4 | 4000 | .14 | .037 | .017 | .12 | 21.4 |
| | 22 | 4 | 4000 | .14 | .046 | .02 | .12 | 32.6 |
| | 26 | 4 | 4000 | .14 | .054 | .024 | .12 | 33.8 |

# APPENDIX I

## REQUEST FOR PROPOSAL SENT TO VARIOUS ALASKAN PORTS

REQUEST FOR PROPOSAL

FOR

GRAIN EXPORT TERMINAL

The State of Alaska, Special Projects Office, is submitting this request for proposal. Our intention is to construct a permanent facility for the exportation of Alaskan produced grains.

The following information will be required in the proposal for our analysis:

1. Financial committment possibilities
    a. development incentive on real estate taxes
    b. direct complete or partial financing of the facility
    c. Bond issuing authority for construction costs
    d. moratorium on interest and other payments until facility becomes economically viable
2. Location
    a. acreage of proposed site
    b. availability
    c. site development cost
    d. expansion area
    e. site accessability
    f. proximity to available dock space
3. Water depth
    a. at dock
    b. in approach channel
4. Wharfage charges

5. Labor-longshoreman and facility personnel

   a. availability

   b. charges

6. When construction could be initiated

7. Competing dock users

8. Utilities

   a. sufficient electrical power available

   b. other energy forms available

9. Is port served by

   a. rail

   b. truck

   c. air

10. Any potential use of existing equipment and/or facilities

11. Distances from present and future agricultural production areas.

   a. Delta Junction

   b. Nenana

   c. Point MacKenzie

12. Public opinion of facility

13. Safeguard from earthquake damage

14. Possibilities of using flat house facility for importing and exporting other products

See attachments for preliminary plans of this $4.2 million facility. Please return your proposal no later than ~~11-28-80~~ 12-31-80 to:

Alaska Agricultural Action Council
1514 South Cushman Room 210
Fairbanks, Alaska 99701

# APPENDIX II

## MASTER APPLICATION-ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MASTER APPLICATION - INFORMATION SHEET
Environmental Procedures Act, AS 46.35

GENERAL INFORMATION

The master application serves as a notice of intent to the State of a proposed project by an applicant. This form was designed to include a broad range of State and local government interests, therefore, many of the questions may not apply to your proposed project. Please read this application before completing it. Answer all questions pertaining to your proposed project. Any missing or misleading answers may delay the processing of your application. Complete a site diagram of the project and submit it with your signed application to one of the Permit Information Centers listed below.

Alaska Permit Information Center
Department of Environmental Conservation
437 "E" Street, Second Floor
Anchorage, Alaska 99501
Telephone: (907) 279-0254

Alaska Permit Information Center
Department of Environmental Conservation
675 7th Avenue, P.O. Box 1601
Fairbanks, Alaska 99707
Telephone: (907) 452-2340

Alaska Permit Information Center
Department of Environmental Conservation
Pouch O, 3220 Hospital Drive
Juneau, Alaska 99811
Telephone: (907) 465-2615

GENERAL PROCEDURES FOR PROCESSING APPLICATIONS UNDER AS 46.35

Upon receipt of the master application in a permit center, the following steps are taken:

Master Application

1. Copies of the master application and the site diagram are sent for review to all State departments and any municipality where the project is located. A statement is requested regarding agency jurisdiction and any permits that may be required for the proposed project.

2. These agencies must respond to the permit center within 15 days. If the agencies have any jurisdiction over the project and require a permit, they will submit their individual applications to the permit center with a statement of whether a hearing is required.

Individual State & Local Permit Applications

1. The permit center will send the individual applications to the applicant for completion. Completed applications and required fees should be returned to the permit center.

2. The returned applications and fees will be sent to the proper agencies. The permit center will make the arrangements for public hearing on the project, if a hearing is required. Within 30 days receipt of the permit applications, the permit center will have a notice published once a week for three consecutive weeks. The applicant will be required to pay for the publication of these notices.

3. The public hearing will be held in or near the municipality where the major part of the proposed project is located. This hearing will be held within 20 to 30 days of the last publication of the notice. Members of the public and the applicant may be present. Any State agency that requires a permit for the project shall be represented at the hearing.

4. At the close of the hearing, the chairman will establish a date (within 90 days from the hearing date) for the final decisions on all applications on the project. The final decisions will be submitted to the Department of Environmental Conservation. They will be incorporated into one document and submitted to the applicant personally or by certified mail.

INTERIM MASTER APPLICATION

Permit Information Center
Alaska Department of Environmental Conservation

MASTER APPLICATION

NO. _____

CERTIFICATION

(to be completed by local government)

I hereby certify the project described herein is in compliance with all zoning ordinances and associated comprehensive plans administered by

CITY OF NENANA, ALASKA

_____
(Local Government Official's Signature)

Mayor, City of Nenana
(Title)

_____
(Date)

I hereby certify the property described in Section II is not under the jurisdiction of any zoning ordinance or associated comprehensive plan administered by _____.

_____
(Local Government Official's Signature)

Mayor
(Title)

11-13-80
(Date)

I. Applicant Information

A. Name of Applicant: CITY OF NENANA, ALASKA

Address: _____
(Street Number or R.F.D.) (City) (State) (Zip Code)

Phone Number: 832-5441

B. Consultant or Contact Person: ALASKA TRANSPORTATION CONSULTANTS, INC.

Address: 212 C Wedgewood Drive, Fairbanks, Alaska 99701
(Street Number or R.F.D.) (City) (State) (Zip Code)

Phone Number: 456-1967

II. Activity Location

A. Location of Work (smallest legal subdivision): West of the City of Nenana at the Nenana River, East Middle River, and West Middle River bridge sites.

Within Section 15-23, Township 4 S, Range 8 W.

B. Distance and direction from nearest incorporated town or city:

Four and one-half (4½) W. of City of Nenana

Right-of-way, 200 feet wide to the West Middle River bridge site per project diagram.

III. General Activity Description

A. Beginning Construction Date: January 1, 1981 Completion Date: February 15, 1981

B. Description of Project (describe the project objectives, purpose and need):

Determine alignment of bridges across the three (3) above rivers; also alignment of road between bridge sites.

C. Description of Work (describe the project construction and operation):

Drilling test holes 10-20 feet deep, each one-fourth (¼) mile, along road alignment. Drilling test holes at bridge piling sites, one of which will be at least one hundred (100) feet deep. Survey alignment of road with bridge.

IV. SPECIFIC ACTIVITY DESCRIPTION

A. The construction or operation of this project involves: (check all appropriate boxes).

[ ] Commercial development
[ ] Industrial development
[ ] Institution
[ ] Residential development

Above checked development includes:
[ ] Electrical
[ ] Plumbing
[ ] Elevator
[ ] Mechanical equipment in structures
[ ] Boiler
[ ] Pressure vessels
[ ] Pressure piping
[ ] Prefabricated structures

Sewage disposal:
[ ] Septic tank and drainfield installation or alternative disposal system
[ ] Connection to municipal sewer system
[ ] Develop or connection to nonmunicipal sewer system

[ ] Connection to municipal water system
[ ] Develop or connection to nonmunicipal water system
[ ] School water supply
[ ] Surface mining (including rock quarry, material borrow site, sand and gravel, etc.)
[ ] Underground mining
[ ] Dredging
[ ] Oil and gas drilling and exploration
[ ] Geothermal drilling and exploration
[ ] Well injection
[ ] Well construction
[ ] Fireworks
[ ] Marine facility (access, dock, float, etc.)
[ ] Explosives
[ ] Disposal of surplus mineral resources

Food service facilities:
[ ] Restaurant
[ ] Temporary
[ ] Limited service restaurant
[ ] Commissary
[ ] Food vending machine
[ ] Vending machine
[ ] Mobile unit(s)
[ ] Shellfish distributors
[ ] Shucker packers
[ ] Harvesters

[ ] Swimming pool
[ ] Health facility (hospital, inpatient care, nursing home, etc.)
[ ] Home for aged
[ ] Group care home
[ ] Child care agency
[ ] Day care facility
[ ] Post secondary education facility at a new location
[ ] Junkyard
[ ] Alcohol or alcoholic beverages (industrial, manufacture, wholesale, retail)
[ ] Hydraulic structure
[ ] Irrigation, drainage
[ ] Hydro-electric facilities
[ ] Mobile home park
[ ] Airfield construct on or modification
[ ] Advertising signs
[ ] Cultural site development
[ ] Pneumatic conveyance facilities
[ ] Liquid petroleum gas
[ ] Flammable and/or combustible liquids
[ ] Shore-based handling devices
[ ] Excavation
[ ] Land leveling
[ ] Stream bed alteration, movement of material within banks
[ ] Flood control project (stream channelization)
[ ] Agriculture
[ ] Aquaculture
[ ] Bulkhead
[ ] Burning
[ ] Dam construction
[ ] Forest management
[ ] Tree cutting
[ ] Right of way clearing
[ ] Gravel operation
[ ] Road construction
[ ] Solid waste disposal
[ ] Utilities
[ ] Port Development
[ ] Propagation of fish or wildlife
[ ] Landfill
[ ] Tourist facilities (hotel, motel, recreational park, organization camp, picnic park, mass gathering)
[X] Other Preliminary geotechnical and survey.

No

B. [X] [ ] All or a portion of the activity will be located within 200 feet of the ordinary high water mark or within the floodplain of _____,XXXXXXXXX
(name of stream or body of water)

XX NENANA RIVER, EAST MIDDLE RIVER, WEST MIDDLE RIVER; a tributary(s)
(name of stream or body of water)
of the Tanana River.

C. Work will be conducted (include anticipated dates work will take place)

[X] [ ] Over Water JANUARY 1, 1981 --- FEBRUARY 15, 1981
(dates)

[X] [ ] In or under water JANUARY 1, 1981 --- FEBRUARY 15, 1981
(dates)

D. [ ] [X] The proposed work will be vented or will release materials into the air. (explain)

_____
_____
_____

E. [ ] [X] Will the construction or use of the final facility result in the discharge of a pollutant? Into:

[ ] Ground water
[ ] Surface water
[ ] Sewer system

Explain (pollutant): _____

F. [ ] [X] Will your proposal include facilities for the disposal of sewage?

[ ] Septic Tank and Drainfield Installation
[ ] Connection to Municipal sewer system
[ ] Develop a Nonmunicipal (individual) treatment facility

G. [ ] [X] Will construction or operations of the final facility involve the use of ground or surface water?

| SOURCE | USE |
|---|---|
| [ ] Ground water | [ ] Domestic Use |
| [ ] Surface water | [ ] Commercial/Industrial Use |
| | [ ] Other _____ |

Quantity of water use: _____ cfs, or _____ gpm.

If surface water, name of source: _____,
(stream or body of water)

a tributary of _____.
(name of stream or body of water)

| | Yes | No | |
|---|---|---|---|
| H. | [ ] | [X] | Will your proposal include facilities for public water supply? |

[ ] Connection to Municipal supply system
[ ] Develop a Nonmunicipal (individual) supply system

| | | | |
|---|---|---|---|
| I. | [ ] | [X] | Will your proposal require the construction or modification of a dam for the storage of water? |

Height of dam: _____ feet.
Quantity of water to be stored: _____ acre feet.

| | | | |
|---|---|---|---|
| J. | [ ] | [X] | Do you plan to dispose of material by burning? |

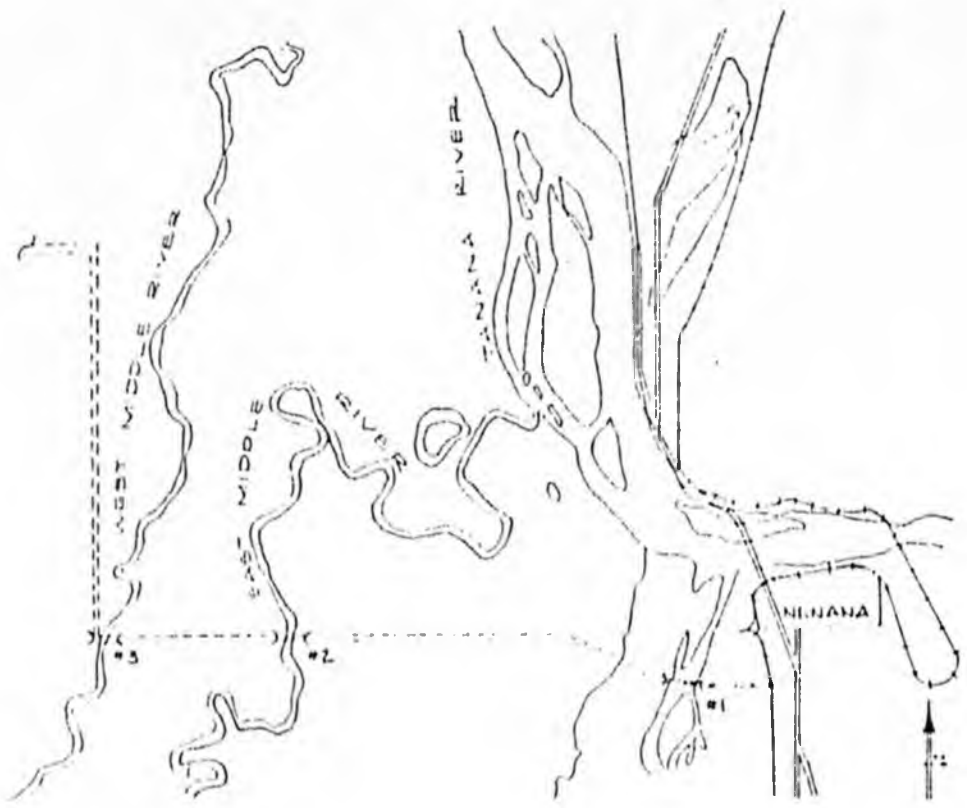
[ ] Natural material (organic)
[ ] Man-made material (processed)

| | | | |
|---|---|---|---|
| K. | [ ] | [X] | Do you plan to dump any mill waste or forest debris? |
| L. | [ ] | [X] | Do you plan to conduct a commercial operation with power driven machinery in dead or down timber? |
| M. | [ ] | [X] | Do you propose to remove more than 10,000 tons or disturb more than two acres of land in order to remove gravel, clay, coal, stone, sand, metallic ore, or any other similar solid material or substance to be excavated from natural deposits on or in the earth for commercial, industrial, or construction uses? |
| N. | [ ] | [X] | Do you plan to conduct any activity on or directly pertaining to forest land and related to growing, harvesting or processing timber including: road and travel construction; timber harvest; precommercial thinning; reforestation; fertilization; prevention and suppression of diseases and insects; salvage of trees; right-of-way clearing; or brush control? |
| O. | [ ] | [X] | Do you plan to recover stray logs, other than logs owned by you, from waters of the State? |
| P. | [ ] | [X] | Does your proposal involve work within, adjacent to, or near a state park? |
| Q. | [ ] | [X] | Do you have control of the land on which the project is located? Who does? |

[ ] I own/control the land.
[ ] I control the land through a license from a private individual/company.
[X] The State owns the land.
[ ] Federal land.
[ ] Locally owned land.

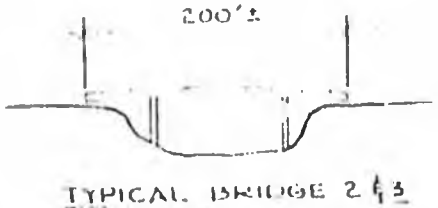
## V. PROJECT DIAGRAM

Show the general area involved by the project. Include the proposed project improvements, existing topography, streams or bodies of water, landmarks, property lines, north arrow, scale, etc. (include additional pages if necessary)

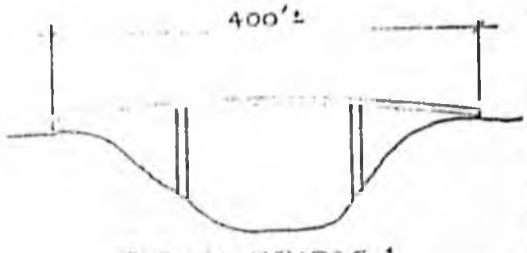



SCALE 1" = 1 MILE

LOCATION MAP




TYPICAL BRIDGE 2 & 3
N.T.S




TYPICAL BRIDGE 1
N.T.S

VI. ENVIRONMENTAL IMPACT

| | Yes | No | |
|---|---|---|---|
| A. | [ ] | [X] | Have you been asked to complete an "Assessment of Environmental Impact"? (If completed, please attach a copy.) |
| B. | [ ] | [X] | Has an "Environmental Impact Statement" been requested before you begin your project? (If completed, please attach a copy.) |

C. Comments: _____

_____

_____

---

The information given on this application is complete and accurate to the best of my knowledge and belief.

_____ P.E.
(Applicant's Signature)

11-15-8[illegible]
(date)

# APPENDIX III

## SECTION 46.35.030-46.35.210 ALASKA STATUTES

Sec. 46.35.030. Master application. (a) A person proposing a project which requires the issuance of one or more permits may submit a master application to the department requesting the issuance of all permits and documents necessary before the construction and operation of the project in the state. The master application shall be on a form established by the department and shall contain sufficient information as to the location and the nature of the project, including discharge of wastes and use of or interference with natural resources of the state.

(b) Upon receipt of a properly completed master application, the department shall immediately forward a copy of the application to all heads of executive departments of the state and the chief elected official of all municipalities in which a portion of the project is proposed to be constructed, together with the date by which the agency shall respond to the master application.

(c) Each agency notified shall respond in writing to the department by the specified date, not exceeding 15 days from receipt, as determined by the department, advising

(1) whether the agency has an interest in the master application;

(2) if the response to (1) of this subsection is affirmative, the permit program under the agency's jurisdiction to which the project described in the master application is pertinent; and

(3) whether, in relation to the master application, a public hearing as provided in §§ 50 and 60 of this chapter would be in the public interest.

(d) Each notified agency which (1) responds within the specified date that it does not have an interest in the master application; or (2) does not respond as required within the specified date, may not subsequently require a permit of the applicant for the project described in the master application unless the master application contained false, misleading, or deceptive information, or other information or lack of information which would reasonably lead an agency to misjudge its interest in the master application.

(e) The department shall submit application forms relating to permit programs identified in affirmative responses under (c) of this section to the applicant with a direction to complete and return them to the department within a reasonable time as specified by the department.

(f) When the applications, properly completed, have been returned to the department, each of the applications shall be transmitted to the appropriate state agency for the performance of its responsibilities of decision making in accordance with the procedures of this chapter. (§ 1 ch 60 SLA 1977)

Sec. 46.35.040. Withholding final permit. When it appears that the applicant does not own or control the land or water necessary for the siting of the project in the master application, the department shall continue the proceedings under this chapter but may withhold the final permit until the applicant has obtained ownership or control of the land or water necessary for the site of the project. If the applicant has applied

for land or water necessary for the siting of the project from the state or a municipality of the state, the state agency or municipality shall promptly adjudicate the application for the land or water filed by applicant. (§ 1 ch 60 SLA 1977)

**Sec. 46.35.050. Notice of proposed project.** (a) The department, within 30 days after transmittal under § 30(f) of this chapter, shall cause a notice to be published at the applicant's expense once each week for three consecutive weeks in a newspaper of general circulation within each municipality in which the project is proposed to be constructed or operated. The notice shall describe the nature of the master application, including, with reasonable specificity, the project proposed, its location, the various permits or documents applied for, and the state agency having jurisdiction over each permit or document. Except as provided in (c) of this section, the notice shall also state the time and place of the public hearing which shall be scheduled not less than 20 or more than 30 days after the date of last publication of the notice. It shall further state that a copy of the master application and a copy of all applications for the project are available for public inspection in the regional office of the department nearest to where the project is proposed to be constructed or operated, as well as at the department office in the capital and any other locations the department may designate in the notice.

(b) If no part of the project is to be constructed or operated in a municipality, or if there is no regularly published newspaper of frequency at least weekly, the public notice shall be published in a newspaper in the judicial district in which the project is proposed.

(c) If the responses received by the department from state agencies under § 30(f) of this chapter unanimously state the position that a public hearing concerning a master application is not necessary in the public interest, and the department, after a careful evaluation, taking into consideration all interests involved, including the opportunity for members of the public to present views, agrees, the provisions of (a) of this section pertaining to the time and place of a public hearing shall not be included in the notice. In that case the notice shall state that members of the public may present their views and supporting materials in writing to the department regarding any of the permits applied for within 30 days after the last date of publication of the notice in a newspaper. (§ 1 ch 60 SLA 1977)

Revisor's note (1977). — AS 46.35.050(a), as it appeared in § 1, ch. 60, SLA 1977 (HCS CSSB 227), contained reference to "(b) of this section." This citation originally appeared in SB 227; however, the subsection (b) referred to in that version became (c) of the final version of the bill as enacted. Consequently, the reference in (a) has been corrected to read "(c) of this section."

**Sec. 46.35.060. Public hearing.** (a) Except as provided in § 50(c) of this chapter, before a final decision is made on a permit application relating to a project subject to the procedures of this chapter, a public

hearing shall be held in or near the municipality in which all or a major part of the proposed project is to be constructed or operated, or, if the project is not to be constructed or operated in a municipality, the hearing shall be held at a location reasonably convenient to the site of the proposed project. The hearing shall be held in accordance with the notice given under § 50(a) of this chapter. At the hearing the applicant may submit any relevant information and material in support of his applications, and members of the public may present relevant views and supporting materials relating to any or all of the applications being considered.

(b) Each state agency having an application for a permit before it under § 50(a) of this chapter shall be represented at the public hearing by its commissioner or his designee. The commissioner of the department, his designee, or a hearing officer appointed by the governor, shall chair the hearing; however, the representative of any state agency other than the department within whose jurisdiction a specific application lies shall conduct the portion of the hearing pertaining to submission of information, views, and supporting materials which concern that application. The chairman may continue a hearing from time to time and place to place.

(c) No provisions of AS 44.62 apply to the hearing conducted under this section, and the hearing shall be conducted for the purpose of obtaining information for the assistance of state agencies and not as a trial or adversary proceeding.

(d) Federal and local government agencies may be represented at the hearings, at their option, by their chief executive officer or his designee.

(e) The hearing shall be electronically recorded, and copies of the recording shall be made available to state, federal and local agencies upon request. (§ 1 ch 60 SLA 1977)

Cross reference. — See revisor's note to AS 46.35.050

**Sec. 46.35.070. Final decision.** (a) Upon completion of the public hearing the chairman, after consultation with the state agency representatives, shall establish the date by which all state agencies shall forward their final decisions on applications before them to the department. The date established shall be within the following 90-day period after the public hearing.

(b) In a situation where a notice is provided under § 50(c) of this chapter, the department shall, 30 days after the last notice publication in the newspaper, submit a copy of all views and supporting material received by it to each agency as described in the notice as having an application before it. At the same time, the department shall notify each state agency, in writing, of the date by which final decisions on applications shall be forwarded to the department. That date shall be

no later than 90 days after the date of last publication of the notice, but may be extended by the department for reasonable cause.

(c) Each final decision shall state the basis for the conclusion together with a final order denying the application for a permit or granting it, subject to a condition of approval as the deciding agency may have the power to impose. An agency which denies an application shall, with its final decision denying the application, provide a written summary suggesting alternate means of completing the project, or, if no alternative is feasible, the agency shall provide a written summary of its reasons for that conclusion.

(d) As soon as all final decisions are received by the department under (b) and (c) of this section, the department shall incorporate them, without modification, into one document and transmit it to the applicant either personally or by registered mail.

(e) Each state agency having jurisdiction to approve or deny an application for a permit shall have the power vested in it before October 1, 1977 to make such determinations. Nothing in §§ 30 — 70 of this chapter lessens or reduces these powers, and §§ 30 — 70 of this chapter modify only the procedures to be followed in the carrying out of the powers.

(f) A state agency, in the performance of its responsibilities of decision making under this chapter, may request or receive additional information from an applicant and others before or after the public hearing. (§ 1 ch 60 SLA 1977)

Cross reference. — See revisor's note to AS 46.35.050.

**Sec. 46.35.080. Withdrawal of agency from participation.** (a) A state agency responding affirmatively under § 30(b) of this chapter may withdraw from participation in the processing provided in §§ 30 — 70 of this chapter at any time, by written notification to the department, if it subsequently appears to the state agency that it has no permit programs under its jurisdiction applicable to the project.

(b) A decision by a state agency to withdraw from the proceeding is irreversible, and the state agency may not subsequently require a permit of the applicant for the project described in the master application unless the master application contained false, misleading, or deceptive information, or other information or lack of information which would reasonably lead an agency to misjudge its interest in the master application. (§ 1 ch 60 SLA 1977)

**Sec. 46.35.090. Administrative and judicial review.** (a) A person aggrieved by a final decision issued under § 70(d) of this chapter may file a notice of appeal with the commissioner requesting an adjudicatory hearing within 30 days of transmittal of the final decision to the person. A failure to file a timely notice of appeal constitutes a waiver of the

person's right to review the final decision, unless the failure was due to circumstances beyond the applicant's control.

(b) The commissioner shall grant a request for an adjudicatory hearing within 20 days of filing of the notice of appeal if he determines that the notice raises a reasonable issue of fact or law material to the final decision.

(c) A hearing officer appointed under AS 44.62.350 shall preside at hearings under this section, rule on the admission and exclusion of evidence, advise the deciding officers on matters of law, and participate in posthearing deliberations.

(d) Appeals shall be heard jointly by the commissioner, or his designee, of each agency which rendered a final decision under § 70 of this chapter for which the person requesting the hearing is aggrieved. The commissioner, or his designee, of each agency shall decide only that portion of the appeal which involves his agency.

(e) The commissioner, after consultation with other state agencies and local governments, shall adopt regulations governing the conduct of adjudicatory hearings under this section. The commissioner may enter into cooperative agreements with local governments and federal agencies for the joint holding of adjudicatory hearings. To the extent feasible, regulations adopted under this section shall conform to adjudicatory hearing procedures for the review of permit decisions under AS 30.25 and AS 46.03. Notwithstanding AS 44.62.330(a)(4), adjudicatory hearing procedures to review permit decisions under this chapter, or under AS 30.25 or AS 46.03, need not conform to the Administrative Procedure Act (AS 44.62.330 et seq).

(f) A person aggrieved by a final decision of the commissioner under this section may appeal the decision to the superior court in the manner provided by AS 44.62.560 — 44.62.570. (§ 1 ch 60 SLA 1977)

**Sec. 46.35.100. Time.** It is the sense of the legislature that time is of the essence in the processing of applications under this chapter. Whenever a section in this chapter states a time within which an act or a review is to be completed, the legislature has determined that the time allotted is adequate for a responsive state agency or municipality to complete the act or review. If unusual conditions prevent this from happening, it is the sense of the legislature that minimum extensions of the period established in this chapter may be granted upon a determination that the delay occurred beyond the control of the reviewing agency or municipality. (§ 1 ch 60 SLA 1977)

**Sec. 46.35.110. Application.** Notwithstanding any other provisions of regulation or statute relating to the processing of applications for permits, the procedures set out in this chapter are exclusive for applications filed under § 30 of this chapter. The procedures of this chapter are in lieu of any procedures otherwise provided by law or

regulations, and are to be followed by a state agency in ruling upon those applications. (§ 1 ch 60 SLA 1977)

Sec. 46.35.126. Fee schedules. Fee schedules previously established or authorized by law for an application for a permit continue to apply. The department shall collect the fees and forward them to the appropriate state agency. (§ 1 ch 60 SLA 1977)

Sec. 46.35.130. Compliance with local zoning ordinances and plans. (a) No permit for a project filed under § 30 of this chapter may be issued unless the application has provided a certification from the appropriate local government that the project is in compliance with the zoning ordinances and associated comprehensive plans administered by the local government regarding the project. If the local government has no such ordinances or plans, the local government shall certify that fact. A local government may accept applications for certification under this section and shall rule upon them within 30 days. A local government may impose stipulations of performance in its approval, but, upon certification, the local government may not change the zoning ordinances as to the proposed project until the procedures of this chapter, including an appeal, are completed.

(b) Approval of an application for certification as provided in this section shall not eliminate any requirements of ordinances administered by a local government. A ruling by local government denying an application for certification is not appealable under this chapter, except that the denial of an application for certification under (a) of this section does not preclude the applicant from filing an application under a different statute or procedure. (§ 1 ch 60 SLA 1977)

Sec. 46.35.140. Applicability of other laws. Nothing in this chapter modifies in any manner the applicability of a land use law or regulation or local zoning ordinances to land of a state agency. (§ 1 ch 60 SLA 1977)

Sec. 46.35.150. Regulations and authorities. The department may adopt regulations to implement the provisions of this chapter. (§ 1 ch 60 SLA 1977)

Sec. 46.35.160. Permit requirement information centers. (a) The department shall establish permit requirement information centers at the commissioner's office and in all of its regional offices and may enter into an agreement with the governing body of any municipality having a population of more than 1,000 persons to establish and maintain local information centers to provide information to the public, in readily understandable form, regarding the requirements of federal, state, and local governments for permits which must be acquired before initiating projects in this state and to provide assistance in the completion of permit applications.

(b) Each regional office of the department and other offices as the department may establish shall provide a master application to any

person requesting it. The department shall provide information, forms, instructions, and assistance in the completion of a master application under this chapter to a person requesting assistance. (§ 1 ch 60 SLA 1977)

**Sec. 46.35.170. Conflicts and compliance with federal requirements.** (a) If any part of this chapter is found in conflict with federal requirements regarding the allocation of federal funds to the state, that part of this chapter is inoperative to the extent of the conflict regarding the agencies affected, and the determination shall not affect the operation of the remainder of this chapter.

(b) The department, to the extent necessary to comply with procedural requirements of federal law relating to permit systems operated by the state, may modify the notice, timing, hearing and related procedural matters provided in this chapter. (§ 1 ch 60 SLA 1977)

**Sec. 46.35.200. Definitions.** In this chapter

(1) "commissioner" means the commissioner of environmental conservation;

(2) "department" means the Department of Environmental Conservation;

(3) "local government" means a city or borough including a municipality unified under AS 29.68.240 — 29.68.110;

(4) "permit" means each of the following licenses, permits or authorizations required to be obtained from a state agency before constructing or operating a project in the state, or any other license, permit or authorization which may be designated by the commissioner:

(A) waste water disposal permit — AS 46.03.100, 18 AAC 72;

(B) solid waste disposal permit — AS 46.03.100, 18 AAC 60;

(C) air emissions permit — AS 46.03.150, 18 AAC 50.120;

(D) pesticides permit — AS 46.03.320, 18 AAC 90;

(E) surface oiling permit — AS 46.03.740, 18 AAC 75;

(F) open burning permit — AS 46.03.020, 18 AAC 50.120;

(G) anadromous fish protection permit — AS 16.05.870, 5 AAC 95.100;

(H) critical habitat area permit — AS 16.20.250 — 16.20.260;

(I) state game refuge land permit — AS 16.20.050 — 16.20.060;

(J) encroachment permit — AS 19.25.200;

(K) utility permit — AS 19.25.010;

(L) driveway permit — AS 19.05.020, 17 AAC 10.020;

(M) state park incompatible use permit — AS 41.20.020, 11 AAC 18.010;

(N) access roads permit — AS 41.20.020, 11 AAC 18.020;

(O) water well permit — AS 31.05.030, 11 AAC 22.140;

(P) brine or other salt water waste disposal permit — AS 31.05.070 [AS 31.05.030], 11 AAC 22.250;

(Q) coal development permit — AS 27.20.010, 11 AAC 46.010;

(R) right-of-way and easement permits — AS 38.05.330, 11 AAC 58.200;

(S) special land use permit — AS 38.05.035, 11 AAC 58.210;

(T) tidelands permit — AS 38.05.320, 11 AAC 62.710;

(U) tidelands right-of-way or easement permit — AS 38.05.320, 11 AAC 62.810;

(V) limited personal use permit — AS 38.05.320, 11 AAC 62.820;

(W) permit to appropriate water — AS 46.15.040, 11 AAC 72.050;

(X) dam construction permit — AS 46.15.040, 11 AAC 72.060;

(Y) preferred use permit — AS 46.15.040, 11 AAC 72.160;

(Z) permit for use of timber or materials — AS 38.05.110, 11 AAC 76.185;

(AA) authorization for tidelands transportation — AS 38.05.110, 11 AAC 76.205;

(BB) special material use permit — AS 38.05.115, 11 AAC 76.540;

(CC) mineral and geothermal prospecting permits — AS 38.05.[illegible];

(DD) tide and submerged lands prospecting permit — AS 38.05.250;

(EE) surface use permit — AS 38.05.255, 11 AAC 86.600;

(FF) burning permit during fire season — AS 41.15.050, 11 AAC 92.010;

(GG) miscellaneous state land use permit — AS 38.05.035, 11 AAC 96.010;

(HH) right-of-way permit — AS 38.05.330;

(5) "person" means an individual, municipal, public, or private corporation, or other entity, and includes a state agency and a local government;

(6) "processing" and "processing of applications" means the entire process followed in relation to the making of decisions on an application for a permit and review of it as provided in §§ 30 — 80 of this chapter;

(7) "project" means any new activity or expansion of or addition to an existing activity, fixed in location, for which permits are required before construction or operation;

(8) "state agency" means a state department, commission, board or other agency of the state; for the purposes of this chapter "state agency" also means a local or regional air pollution control authority established under AS 46.03.210. (§ 1 ch 60 SLA 1977)

Sec. 46.35.210. Short title. This Act may be cited as the Environmental Procedures Coordination Act. (§ 1 ch 60 SLA 1977)

## Chapter 40. The Alaska Coastal Management Program.

Article

1. Development of Alaska Coastal Management Program (§§ 46.40.010 — 46.40.100)
2. Coastal Management Programs in the Unorganized Borough (§§ 46.40.110 — 46.40.180)
3. General Provisions (§§ 46.40.190 — 46.40.210)

# APPENDIX IV

## DATA REQUIRED TO DETERMINE NAVIGABILITY OF A WATERWAY, CORRESPONDENCE RELATING TO U.S. COAST GUARD CLASSIFICATION OF EAST AND WEST MIDDLE RIVERS

# DATA REQUIRED TO DETERMINE NAVIGABILITY OF A WATERWAY

1. Name

2. Tributary to

3. Physical characteristics

   (a) Type of waterway (river, bay, slough, estuary)
   (b) Length
   (c) Width
   (d) Depth at Mean High Water
   (e) Drainage area
   (f) Discharge volumes (maximum, minimum, mean)
   (g) Cross-section or profile at proposed crossing
   (h) Fall per mile
   (i) Velocity of flow (maximum, minimum)
   (j) Elevation of water surface at:
       Design High Water (~~25 or 50~~ 100 year flood)
       Mean High Water (mean annual flood)
       Mean Low Water (average low observed during navigation season)
   (k) Extent of tidal influence

4. Past or present use of the waterway by boats, vessels, barges, rafts, canoes, etc.

5. Past or present use of the waterway for interstate commerce

   (a) General types, extent and period of time
   (b) Documentation, if necessary

6. Nature and location of significant obstruction to navigation

7. Length of time the waterway is open for navigation:

   (a) Time of spring break-up
   (b) Time of fall freeze-up

8. Description of any known proposed or completed projects to improve the condition of the waterway for navigation.

9. Pictures of the waterway in the vicinity of the proposed crossing at periods of high and low flow.

10. Pictures of any obstructions to navigation.

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

Address reply to:
COMMANDER (oan)
Seventeenth Coast Guard District
P.O. Box 3-5000
Juneau, Alaska 99802
(907) 586-7368

16590
26 NOV 1980

Alaska Transportation Consultants
Attn: Mr. Edward Peebles
212C Wedgewood Manor
Fairbanks, AK 99701

12/3/80
VS

Dear Mr. Peebles

Thank you for your letter of 18 November 1980, with information on the East Middle River and West Middle River.

A further review of the information available shows that both the East Middle River and West Middle River are distributaries of the Nenana River, rather than independent streams. As such, they are also in the category of "Advanced Approval", and no bridge permits are required for these two waterways.

Sincerely,

W. M. MONCRIEF Jr.
Commander, U.S. Coast Guard
Chief, Aids to Navigation Branch
By direction of the District Commander

SB

297

# Alaska State Legislature

## Senate Committee on State Affairs

Vic Fischer, Chairman • Pouch V • Juneau, Alaska 99811 • (907) 465-4954


Official Business

March 17, 1981

To: Fellow Senators

From: Senator Vic Fischer

RE: General Obligation Bond Defeasance legislation

Today, legislation is being introduced that would pay off the entire state debt, erase the millions we pay in debt service and clear the slate for all future generations of Alaskans by getting our financial house in order.

A number of ideas have emerged in this legislation session dealing with how to improve the state's financial image with the rest of the country. Ideas range from a cancer fund to bailing out Chrysler to a high powered advertising campaign. One thing they all have in common is that they appeal to the citizen, to the masses in an attempt to improve the state's fiscal profile.

An idea that is neither a scheme nor an attempt to sway public opinion, deals with defeasing of the state debt. Through a special defeasing [escrow] account, the state could create a monetary approach that would pay off the entire state debt. This account managed by a special bond counselor would invest in the taxable bond market (approx. 12% interest) while paying off the incurred debt in the tax-exempt bond market (approx. 8% interest). The potential is there at the moment to erase Alaska's debt ($720 million) and take care of all future interest payments with a cash account of $570 million.

One may ask why not make the investments directly out of the general fund and not set up a special account. It has become clear that we, the Alaska Legislature have the ability to spend all the money before us, no matter the amount. This special escrow account would set this money aside for a specific purpose: to pay off the state debt.

If we were to create this "defeasing escrow account," it would preclude us from going to the bond market for a period (minimum) of 18 months due to IRS regulations. That is why this concept goes hand in hand with substituting cash for all authorized but unissued general obligation bonds.

With continuing pressure from our Washington delegation assuring us that the mood in the "lower 48" is becoming increasingly jealous of our resource wealth, this would be one way of "putting our financial house in order." We would be showing our responsiveness to the nation's financial community by giving a clear signal that we were doing "first things first." We pay off our debts before we borrow money for other purposes.

The best way Alaska can prove that it deserves to manage it's new found oil wealth is to show the country's financial community the state can manage thru fiscal conservatism with an eye on the future. Then, the "outside" ideas of draining off part of the state's wealth will begin to diminish.

# Alaska State Legislature

## Senate Committee on State Affairs

Vic Fischer, Chairman • Pouch V • Juneau, Alaska 99811 • (907) 465-4954


Official Business

March 17, 1981

To: Fellow Senators

From: Senator Vic Fischer

RE: General Obligation Bond Defeasance legislation

Today, legislation is being introduced that would pay off the entire state debt, erase the millions we pay in debt service and clear the slate for all future generations of Alaskans by getting our financial house in order.

A number of ideas have emerged in this legislative session dealing with how to improve the state's financial image with the rest of the country. Ideas range from a cancer fund; to bailing out Chrysler; to a high powered advertising campaign. One thing they all have in common is that they appeal to the citizen, to the masses in an attempt to improve the state's fiscal profile.

An idea that is neither a scheme nor an attempt to sway public opinion, deals with defeasing of the state debt. Through a special defeasing (escrow) account, the state would create a monetary approach that would pay off the entire state debt. This account managed by a special bond counselor would invest in the taxable bond market (approx. 12% interest) while paying off the incurred debt in the tax-exempt bond market (approx. 8% interest). The potential is there at the moment to erase Alaska's debt ($720 million) and take care of all future interest payments with a cash account of $570 million. In addition to these earnings of $150 million, there is a $275 million savings through the relinquishing of the state's debt service.

One may ask why not make the investments directly out of the general fund and not set up a special account. It has become clear that we, the Alaska Legislature, have the ability to spend all the money before us, no matter the amount. This special escrow account would set this money aside for a specific purpose: to pay off the state debt.

FILE WITH BILL

# STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

**DEPARTMENT OF REVENUE**

OFFICE OF THE COMMISSIONER

POUCH S
JUNEAU, ALASKA 99811

April 2, 1981

The Honorable Vic Fischer
Chairman
Senate State Affairs Committee
Room 205 - Behrends Building
Juneau, Alaska

Dear Senator Fischer:

Re: Senate Bill No. 296 and Senate Bill No. 297

Senate Bill No. 296, an Act prohibiting the sale of certain general obligation bonds, was introduced in the Senate on March 17, 1981 and was referred to the Senate State Affairs; Senate Transportation and Finance Committees.

Senate Bill No. 297, an Act making special appropriations for capital projects for which general obligation bonds have been authorized but not issued and for defeasance of outstanding general obligation bonds, was introduced in the Senate on March 17, 1981 and was referred to the Senate Resources; Transportation and Finance Committees.

For the consideration of the Senate State Affairs Committee, I am enclosing a copy of a Fiscal Note prepared by Mr. Anselm Staack, Treasury Comtroller, Department of Revenue concerning both bills.

Sincerely,

R. D. Stevenson
Special Assistant

RDS/rdh

cc: The Honorable Bill Ray
Chairman
State Transportation Committee

The Honorable Don Bennett
The Honorable M. E. Dankworth
Co-Chairmen
Senate Finance Committee

The Honorable Bettye Fahrenkamp
Chairperson
Senate Resources Committee

Joseph K. Donohue
Deputy Commissioner
Department of Revenue

Anselm Staack
Tresaury Comptroller
Department of Revenue

04-02LH

Discussion Paper:

# General Obligation Bonding Policy and Debt Defeasance

Division of Policy Development
and Planning
Office of the Governor
February 23, 1981

Discussion Paper:

General Obligation Bonding Policy and Debt Defeasance

The State of Alaska is receiving (and over the next few years, expects to continue to receive) revenues in excess of current expenditures. It has been suggested that under these conditions it might be appropriate to pay for capital facilities with cash (general funding) rather than to borrow funds for these purposes through the general obligation bond method. Further, it has been suggested that the State consider the advance funding of the general obligation debt owed, thus, in essence, "paying off" and eliminating the State's bonded indebtedness. This process is known as "defeasance" in municipal bond parlance. The purpose of this memorandum is to outline the issues which need to be considered in weighing the pros and cons of these proposals.

The two proposals, paying cash in the future and defeasance of existing G. O. bonds are closely related, although the arguments surrounding each are somewhat different. The initial discussion here will focus on future G. O. bonding, since if it is decided that bonding should continue without interruption, this could constrain the State's ability to forward fund its existing indebtedness.

## BONDING VERSUS PAYING CASH FOR CAPITAL FACILITIES

### ISSUE I - FISCAL IMPACT:

A. Direct Impacts

1. The use of cash (general funds) instead of bonding would cost the State the opportunity to use the general funds for other purposes. The opportunity cost most easily measured is that of revenues which could have been earned by investing these funds. The State can borrow in the tax exempt market at a lower interest rate than that which it can earn on its investments. For every 1% spread on a 10 year $100 million bond issue, the present value of this opportunity loss would be in excess of $8 million. In nominal terms, a one percentage point spread would amount to more than $22 million for each $100 million of cash spent instead of borrowed.

2. There are other forms of legal arbitrage the loss of which would represent a cost to the State of paying cash. These include the allowable return on investment of borrowed funds during the lag between the time the funds are obtained and actually committed; and, the investment of 15% of the borrowed funds in certain reserve accounts.

3. On the other hand, use of cash would be administratively cheaper. The State Treasury Division estimates total bonding costs at approximately .35% of the value of bonds issued. These costs include such things as service fees, legal fees, preparation of prospecti, printing and advertising expenses.

B. Indirect Impacts

1. The major direct cost associated with paying cash (1 above) is relevant only if (a) the cash is invested at higher rates, or (b) is spent on projects which offer higher overall returns to the State (such returns being either economic or social in nature). However, if it is assumed that the funds will be spent on low valued activities, the State might be better off to spend the cash on the capital facilities and avoid creation of debt.

2. Another aspect of fiscal impact is concern over the total level of government spending. It has been contended by some, that bonded costs are not carefully considered as a part of overall State spending. A related concern is that there is tremendous pressure from special interest groups to spend all available cash and borrow in addition. Thus, to the extent that paying cash reduces the total fund availability (general funds plus borrowed funds), then overall spending will be reduced.

3. Even though bonding may not be considered by some as equivalent to other types of spending, debt service is a significant, non-discretionary element of the State's operating budget. The Governor's FY 1982 Budget Request contains $128 million for debt service. Since policy makers have no choice but to pay debt service, it reduces their flexibility in directing and controlling operating expenditures. This issue becomes more important if an expenditure limit, such as is being currently discussed, is established.

ISSUE II - IMPACT ON BOND RATING:

There are several elements which in combination are used to establish the State's credit rating. These include per capita debt levels, general economic health (both current and prospective), and expectations regarding the future tax climate. Thus, the reduction of G. O. bonding and the resultant decline (over time) of per capita debt might contribute positively to the State's credit rating as well as those of its political subdivisions. It is also possible

that there would result positive spillover effects on revenue bond ratings, since the ability of the State to meet any "moral obligation" would appear to be strengthened. However, if the State intends to forego bonding, then the direct benefit of an improved rating is lessened. The possible spillover effects are still relevant, although quantification of this impact would be difficult.

The State's credit rating has improved over the last 20 years from a Baa rating (medium grade with speculative characteristics) to Aa (high grade) in 1980. The State's financial reputation has been carefully established, and significantly decreasing market involvement could result in a loss of market familiarity with Alaskan conditions. If the State's good credit rating were to decline, it would fall to future generations to reconstruct this relationship, perhaps in more difficult times.

The exposure of our financing plans to credit rating agencies and bond buyers offers a slight incentive for fiscal planning and self-discipline. The removal of even this minimal exposure, may leave less reason for caution against the "over-building" and long-term operation and maintenance impacts of capital facilities.

ISSUE III - PUBLIC INPUT AND EXECUTIVE CONTROL:

Bonds have the positive aspect of requiring voter approval. It is unconstitutional for the State to incur general obligation indebtedness without a vote of the people. This requirement assures public participation in the bonding decision.

The spending of cash for capital facilities would require no such public vote. Governor Hammond has, however, introduced legislation which would require a public vote on capital expenditures above a limited level as part of his expenditure limitation proposal (SJR 4). If this, or similar legislation were to become law, the loss of this public input would be avoided.

From the viewpoint of executive control of expenditures, the use of cash has more appeal since appropriations of general funds are subject to line item veto by the Governor. Thus, specific projects which were felt to be unworthy could be selectively eliminated. Conversely, the projects to be included in a bond issue are established by statute which must be accepted by the Governor as passed or vetoed in whole.

ISSUE IV - THE DISTRIBUTION OF THE COST OF PUBLIC FACILITIES:

One of the standard rationales for bonding for long-lived public assets is that those who benefit from public facilities (the users) should pay for them. Bonding meets this objective

by spreading the payments for facilities out over the asset life. Thus, in a general sense, the people who receive the benefits are those who pay the cost. If the State pays cash for these facilities, future users (be they immigrants or future generations) will not be directly paying their share of the cost.

The user pay approach loses some of its validity however when the source of the cash payment is considered. In essence, neither present nor future users (other than oil companies) are directly paying for capital facilities. However, looked at somewhat differently, both future and present residents would pay indirectly for capital facilities through the cost of the opportunity to use the funds for alternative purposes. Since present residents are not directly responsible for the existence of "surplus" revenues, it might be argued that intergenerational equity would be served by spending these funds on projects which will offer future as well as current benefits.

ISSUE V - EXTERNAL PERCEPTIONS OF STATE WEALTH MANAGEMENT:

Some have voiced concern that large general fund balances ("surplus" revenues) represent a serious perceptual problem at the federal level and in the national press. Congressional actions to limit the State's taxing power or to reduce federal revenues to Alaska have been discussed. The existence of the risk of unfavorable Internal Revenue Service rulings on tax or bonding questions has also been suggested.

The question thus arises as to whether a State policy of paying cash for capital facilities would improve the external perceptions regarding Alaska's financial position. Paying cash would reduce the general fund balance, as it increased direct expenditure levels. If the general fund balance is the major indicator looked at by outsiders this might reduce the criticism regarding the State's "surplus" wealth. Or, if paying cash reduces the total level of expenditures by reducing overall fund availability (as discussed in Issue II.B.2 above), this might improve the external view. Likewise, it can be argued that it is fiscally responsible to pay cash and thus refrain from burdening future generations with debt to be repaid when the oil revenues are declining or gone.

On the other hand, since bond costs are often not included in expenditure reports, the use of general funds for previously bonded projects would result in inflated expenditure figures. Those from outside of Alaska who wish to "share" some portion of the State's wealth, could look at increasing expenditures per capita as evidence of profligate behavior. Further, it is possible that individuals with some financial sophistication could view the state's willingness to incur the loss of arbitrage revenues by paying cash, as further evidence that Alaska's current income is indeed "surplus."

On balance it is unclear whether continued bonding or cash expenditures would be viewed more positively at the federal level.

SUMMARY:

The major issues regarding the cash versus the bonding approach which have been discussed here are listed in summary form below. These issues are presented in terms of the pros and cons of the cash approach, since a decision to use that approach would represent a change from the status quo.

ARGUMENTS FOR USING CASH RATHER THAN BORROWED FUNDS (BONDING) FOR CAPITAL FACILITIES

- Reduces administrative costs (.35% of bonds issued).
- Reduces total funds available for spending, thus has the potential of reducing low valued expenditures.
- Reduces the non-discretionary impact of debt service on the State operating budget.
- May positively impact the State's credit rating, with spillover effects for the ratings of municipalities and State revenue bonding agencies.
- Increases gubernatorial control over specific capital projects through line item veto.
- Reduces the debt service burden (from debt which might otherwise have been incurred over the next few years) on future generations.
- Reduces the general fund balance and future debt service requirements, and thus might improve external perceptions (in the national press) regarding Alaska's wealth and its management.

ARGUMENTS AGAINST USING CASH RATHER THAN BORROWED FUNDS (BONDING) FOR CAPITAL FACILITIES

- Imposes the substantial cost of lost interest earnings and revenues from legal forms of arbitrage.
- Reduces public participation in the spending decision since voter approval would no longer be required.
- Bonding for long-lived assets implements the user pay principle over time. If cash is used, future residents will not directly pay for the facilities from which they will benefit.

- To eschew bonding would not necessarily be seen as fiscally responsible, since substantial revenue losses would result from such a policy, and per capita expenditures would appear higher.

- Market exposure of State capital financing and the benefits of the State's carefully achieved credit status, would be reduced by eliminating bonding.

## GENERAL OBLIGATION BOND DEFEASANCE

A second topic of this paper is the possibility of "paying off" the State's existing general obligation indebtedness. Defeasance of existing debt could be accomplished by making a current appropriation of the amount which will be required to retire the debt as it comes due. The Department of Revenue would use this appropriation to purchase a portfolio of securities which would generate sufficient cash flow to meet principal and interest payments on the portion of State G. O. debt which was to be advance funded. This portfolio would then be deposited with the State's principal paying agent according to an escrow and trust agreement.

There would be no financial disadvantage to the State in pursuing the defeasance of debt issued prior to May 2, 1978. However, Internal Revenue Service rulings in that year limited the yields on portfolios held for the purpose of defeasing debt issued after May 2, 1978. As a result, the State can purchase, or transfer, a high yielding portfolio to pay off the pre-May 2, 1978 debt owed, legally taking advantage of the interest differential between the State's investment earnings and the State's tax exempt borrowing costs. However, post-May 2, 1978 debt can be defeased only with securities earning little (if any) more than the bond rate. Thus, although the defeasance of debt incurred since the 1978 rulings could be handled similarly in a mechanical sense, any possible advantage from interest differentials would be insignificant.

Many of the general issues associated with the future of bonding apply also to the defeasance question. The major difference is that where paying cash in the future potentially represents a financial cost, defeasance of existing debt (at least that portion of the debt incurred prior to the May 2, 1978 effective date of the IRS regulations) does not represent a financial cost to the State.

A minor issue involves the windfall to investors from defeasance of State bonds. Defeasance would be accomplished by escrowing in trust United States Government Securities earning interest and maturing in amounts and time sufficient to retire the debt. The effect of this arrangement is to convert the State bonds defeased into debt with the same value as the United States Securities. When defeasance is accomplished, State bond holders will receive a windfall of increased price and a AAA rated bond. There is nothing counter to public policy in this result per se but it places a heavy burden on all "insiders" not to take advantage of special knowledge. It might be appropriate for those individuals who directly or indirectly might benefit from defeasance to disqualify themselves from participating in this decision.

Another consideration is that G. O. debt defeasance coupled with issuance of new debt, risks the Internal Revenue Service removal of the State's tax exempt bonding status. This would result if the Internal Revenue Service were to declare that new State general obligation bonds were arbitrage bonds and, hence, taxable. Therefore the State's bond counsels have cautioned the State that defeasance may require that the State refrain from issuing bonds, perhaps for one to three years.

In order to avoid undue repetition through restatement of the general arguments at length, the major pros and cons associated with defeasance are summarized below.

SHOULD THE STATE PURSUE DEFEASANCE (ADVANCE FUNDING) OF THE STATE'S GENERAL OBLIGATION DEBT?

Pro Defeasance

- The State could advance fund $718,193,000 of indebtedness owed as of June 1981 at a cost of approximately $562,527,000; or, if only pre-May 2, 1978 debt were advance funded, $507,193,000 of indebtedness, at a cost of approximately $351,527,000.

- The debt service period on outstanding bonds runs through the end of this century. Advance funding would relieve the debt service requirements which may become more burdensome as oil revenues decline over this period.

- Advance funding would remove a substantial amount of revenues from the general fund reducing the availability of funds to be spent, potentially on low valued projects.

- Defeasance would enhance the State's credit rating by reducing outstanding debt per capita. This could result in a lowering of borrowing costs by approximately twenty basis points (.2%). This improvement

might in turn heighten the probability of rating improvements for the State's political subdivisions and revenue bonding agencies.

- Defeasance would increase the State's debt capacity, perhaps for utilization in the future when borrowing may be increasingly important to fiscal health.

- Reduction of the general fund balance, and the removal of the debt service burden, might be viewed as conservative financial policies as compared with a large direct spending program, and thus could improve the external perceptions (at the federal level and in the national press) regarding Alaska's wealth and its management.

Con Defeasance

- The State could achieve the same interest differential by investing the funds necessary for defeasance through the Permanent Fund, some other account, or as general fund surplus. Or, there may be expenditures which offer a higher social rate of return (i.e., there may be higher valued alternative uses of the funds).

- Whether an actual credit rating change would result from advance funding of G. O. debt is uncertain. If there were a rating improvement, the maximum reduction in interest rates expected would be less than twenty basis points (.2%). The present value of this savings is relatively insignificant.

- Pre-funding of debt incurred after the 1978 IRS regulation would cost the State lost interest earnings, since under these rulings the interest on investments used for this purpose are limited to the tax exempt rate borne by the bonds in question.

- Defeasance may elicit a response from the Congress or the Internal Revenue Service declaring further State general obligation bonds, at least for a period of time, to be arbitrage bonds and, hence, taxable instead of tax-exempt bonds.

SB

342

# Alaska State Legislature

BETTYE FAHRENKAMP
ALASKA STATE SENATOR
4016 EVERGREEN
FAIRBANKS, ALASKA 99701
907-479-3550

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA 99811
OFFICE 907-465-3763
HOME 907-789-9182

## Senate

TO: Senator Bill Ray
Chairman
Transportation Committee

FROM: Bettye Fahrenkamp

DATE: April 6, 1981

RE: SB 342 and SB 343

I would ask that you waive referral of SB 342 from the Transportation Committee since, except for the second section, it is identical to SB 37 which passed from the Transportation Committee on March 12. I am also requesting of Senator Bennett, Chairman of the Finance Committee, that SB 37 be amended with the same language as section two of SB 342. The language in this section just calls for an immediate effective date.

SB 343 is a companion bill to SB 37 and specifies where the source of funds for the projects now being constructed at the Fairbanks International Airport be taken from. I would ask too that this bill, SB 343, be granted an early hearing by the Transportation Committee; or, if you feel that enough testimony has been received, you would waive referral of this bill to the Finance Committee.

Thank you.

BF/ab

SB

372

SB 372

# Paug-vik Inc. Ltd.

P.O.BOX 61
NAKNEK, ALASKA 99633

# 2,500,000

check w/DOT to see if feasibility study done.

RESOLUTION 80-3

WHEREAS The Beach Access Road is part of the Overall Economic Development Plan of the Borough and,

WHEREAS the State and Federal governments participated in an attempt to build a beach access road a couple of years ago and,

WHEREAS August 12, 1980 storm washed 15 to 20 feet of the River Bank and,

WHEREAS Economy of the area was jeopardized by the storm torn beach which meant fish could not readily be delivered to the buyers and,

WHEREAS vehicles used on the beach have a life span of two years because of the unkept beach road which is hard on the vehicles and,

WHEREAS the presently used beach by the vehicles is only accessable at low tides making it unusable much of the time for serving the fishing sites.

THEREFORE BE IT RESOLVED that the State Department of Transportation and Public Facilities seriously make every possible effort to construct this beach access road to alleviate the hardships caused by nonexistance of such a road by the next fishing season of 1981.

THEREFORE BE IT FURTHER RESOLVED that copies of this Resolution be sent to the Bristol Bay Borough Assembly, Representative Nels Anderson, Senator George Hohman, Senator Kertula, Congressman Don Young, Senator Ted Stevens and Senator Mike Gravel.

Clyde E. Clark - President

Dan O'Hara - Vice President

Dolly Herrmann - Secretary

John C. Knutsen - Treasurer

This Resolution 80-3 was duly passed by the Board of Directors of Paug-Vik, Inc., Ltd., on September 30, 1980 at a Regular Board of Directors Meeting.

- opens up Peterson Pt. Community (local IRA (Scenic))
  to Monson Creek.
- existing trail no right-of-way problem.

FISCAL NOTE: SENATE BILL NO. 372
Beach Access Road at Naknek

Construction cost estimates are based on the draft of the "Beach Road Location Study Bristol Bay Borough" prepared by consultants for the Alaska Department of Transportation and Public Facilities in 1980. The draft design is for a 32' wide paved road, with three alternate routes. The following estimates are adjusted for a 24' wide gravel surface and are for the shortest proposed route which is 4.37 miles long. This is the most direct route which extends from Naknek to Pederson Point. Adjustments of the unit costs of the roadway items are also made to reflect more realistic values. In this analysis it is assumed that there are no right of way costs associated with the project. Included in the construction cost is a mobilization fee of 20%, contingencies of 10%, and administrative costs of 12%. A consultant design is assumed and is estimated at 6% of the roadway construction costs. Road maintenance costs are based on the Fiscal year 1982 average cost per lane-mile of $4230 for 12' wide gravel surfaces with a 10% inflation factor applied to each successive year. The following is a summary of the fiscal requirements.

| | |
|---|---|
| Construction Costs (Includes Camp Facilities) | $5,148,000 |
| Construction Administration @12% | 618,000 |
| Consultant Design @6% | 309,000 |
| | $6,075,000 |
| Annual Maintenance: | $37,000 (FY 1982) |

The appropriation of $2,500,000 by SB372 will be insufficient to construct a Beach Access Road at Naknek.

FISCAL NOTE: SENATE BILL NO. 372
Beach Access Road at Naknek

Construction cost estimates are based on the draft of the "Beach Road Location Study Bristol Bay Borough" prepared by consultants for the Alaska Department of Transportation and Public Facilities in 1980. The draft design is for a 32' wide paved road, with three alternate routes. The following estimates are adjusted for a 24' wide gravel surface and are for the shortest proposed route which is 4.37 miles long. This is the most direct route which extends from Naknek to Pederson Point. Adjustments of the unit costs of the roadway items are also made to reflect more realistic values. In this analysis it is assumed that there are no right of way costs associated with the project. Included in the construction cost is a mobilization fee of 20%, contingencies of 10%, and administrative costs of 12%. A consultant design is assumed and is estimated at 6% of the roadway construction costs. Road maintenance costs are based on the Fiscal year 1982 average cost per lane-mile of $4230 for 12' wide gravel surfaces with a 10% inflation factor applied to each successive year. The following is a summary of the fiscal requirements.

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|---|---|
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SB

386

-FILE

# DRAFT

MASTER PLAN AND REPORT

FOR

PORT DEVELOPMENT

AT

BETHEL, ALASKA

GENERAL CARGO DOCK
PETROLEUM PRODUCTS DOCK
RIVERBANK STABILIZATION

Prepared For

THE CITY OF BETHEL







Prepared By

Harold H. Galliett, Jr.
Consulting Engineer
Anchorage, Alaska

George C. Silides
Consuting Engineer
Fairbanks, Alaska

April 1981

# MASTER PLAN AND REPORT

# FOR

# PORT DEVELOPMENT

# AT

# BETHEL, ALASKA

GENERAL CARGO DOCK
PETROLEUM PRODUCTS DOCK
RIVERBANK STABILIZATION

Prepared For

THE CITY OF BETHEL







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# PORT OF BETHEL IMPROVEMENTS

## I. CONCLUSIONS AND EXECUTIVE SUMMARY

1. The economic and cultural development of the City of Bethel and of the Bethel Service Area depends largely on the successful retention and development of the Bethel waterfront.

2. Without the immediate undertaking of a sustained program of riverbank stabilization, the Bethel waterfront, including the present location of the bulk fuel tank farm and the future location of the general cargo dock and industrial area, will be lost.

3. The evidence gathered from our studies since 1970, and from 1974 general cargo dock construction, show that port improvements and their protective appurtenances result in permanent, or very long-term riverbank stabilization.

4. Construction should commence in 1981 if possible, or in 1982 at the latest, to prevent the loss of the bulk fuel storage tank farm, and to relieve the expensive congestion at the general cargo handling facility.

5. Once begun, the entire program of port development/riverbank stabilization should be wholly completed with all reasonable dispatch to lessen the penalties of inflation, and to lessen the

chance of losing the partially completed improvements from any eccentricities of the Kuskokwim River.

6. The benefits to Southwest Alaska from Bethel port improvements and bank stabilization exceed the cost of facility construction.

7. Funding of the Bethel port development/riverbank stabilization program is in keeping with legislative fiscal policy of development.

8. That an adequate sum to fund at least the 1981-1982 construction phase should be appropriated from the general fund to the Department of Transportation and Public Facilities for use by the City of Bethel, as per the master plan for port development, upon submission by the City of Bethel of the necessary design and construction plans and specifications.

9. In all phases, time is of the essence.

## II. PORT OF BETHEL SERVICE AREA

The City of Bethel occupies a central location in Southwest Alaska. As the upper limit for oceangoing vessels, the Port of Bethel is the deep water entry port of Southwest Alaska.

The Port of Bethel presently serves a huge region of over 100,000 square miles. The City of Bethel has developed into the center of trade, transportation, distribution, communications, administration, education, health care and cultural activity for over sixty communities located on Kuskokwim Bay and the Kuskokwim River.

The region's complexity and isolation makes water transporation the most cost effective means of moving general cargo and bulk petroleum products in and out of Bethel. These are unloaded at the Port of Bethel and transshipped to other communities by tugs and barges better suited to ply river and shallow coastal waters.

When the Yukon River and the Kuskokwim River are joined together by the Yukon-Kuskokwim Crossing[1], now being investigated for the Senate Transportation Committee, the Port of Bethel will be the deep water

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1 Preliminary Engineering Report Yukon-Kuskokwim Crossing, Galliett & Silides, December 31, 1980.

terminus of a major river transportation system, on a par with those of the Mississippi and the Amazon systems in terms of length and relative importance to the area served. At that time it will become feasible to ship goods to and from the Yukon River system through Bethel, to the advantage of communities along both rivers.

In addition to general cargo and bulk fuel, it is anticipated that the Port of Bethel will then also handle diverse shipments such as timber harvested along the Yukon and Kuskokwim Rivers, the grain and red meat output of the Nenana Agricultural Project, and NGL's and refined crude oil products from the Fairbanks area. At that time, the Port of Bethel will increase its fuel service area toward Bristol Bay, the Alaska Peninsula, and to Norton Sound. Ties to the Asian Pacific Rim will be established for the shipment of grain, red meat and timber.

Without a plan of development, and a concerted effort to accomplish that plan, the Port of Bethel will never fulfill its future potential. Indeed, unless steps are taken to protect and expand the existing facilities, the port will fail to meet even its present obligations to its service area.

## III. THE PROBLEM

The problems facing the Port of Bethel can best be described as;

### A. INADEQUATE SIZE

1. The general cargo dock and staging area are too small.

The first, and last, permanent improvement to the Port of Bethel was made in 1974 to accommodate receipt and efficient handling of incoming cargo. Volume of general cargo had increased from 9000 tons in 1967 to 12,000 tons in 1972. About 25% of this cargo was transshipped.

An important additional consideration for port construction in 1974 was the abatement of riverbank loss.

General cargo volumes in 1980 were in the vicinity of 20,000 tons, plus approximately 40,000 tons of gravel. Bulk fuel handlings were 16.5 million gallons (1075 barrels/day), up from 6 million gallons in 1967 and 11 million gallons in 1977. Over half of the incoming bulk fuel is presently redistributed, resulting in the handling of approximately 24 million gallons annually through the Port.

General cargo is now off-loaded at several locations because of the inability of the dock staging area to receive all of this cargo. The extra cost of re-handling the cargo is presently about $20/ton. This extra handling penalty will increase as the dock becomes more congested.

Further, because of the size and frequency of incoming oceangoing barges, the transshipping barges must be anchored offshore when the ocean barges are unloading. This displacement effectively halts loading for transshipping. In 1980, thirty-six days of river navigation period were lost. It is necessary to provide separate mooring facilities for the transshipping vessels.

2. The construction of the present general cargo dock and staging area is composed of four circular sheet steel pile cells and wing walls, giving a working frontage of approximately 240 feet. By the end of the 1980's decade, the Port of Bethel will require a general cargo dock and staging area having a frontal working area of 1000 feet for oceangoing vessels, plus several hundred feet of mooring facility in Brown's Slough for the activities related to the tugs and barges engaged in transhipping.

3. It is proposed that, during the 1981 and 1982 construction seasons, the river frontage of the dock be extended westward by the addition of two circular cells. Working frontage would thus be increased from the present 240 feet to approximately 360 feet, and offer greater security to the dock from loss by erosion.

To enable the simultaneous mooring and working of the transshipping vessels and the oceangoing barges, it is proposed, during 1981 and 1982, to widen Brown's Slough and construct 400 feet of

wall type bulkhead. The proposed improvements in Brown's Slough will also provide adequate, safe moorage for the numerous small boats that are so important to the lives of the residents of Bethel, and of the visitors to Bethel from nearby villages.

It is proposed that the additional 675 feet of general cargo dock along the river front be constructed as rapidly as funding permits to, a) provide adequate space, b) to combat inflation, and c) to provide positive protection from erosion.

4. Essential Warehousing immediately adjacent to dock side is non-existent. When warehouse financing becomes available, the obviously best location would be at the general cargo dock, or in the immediately adjacent industrial area. No such warehousing and industrial area can be safely developed until the cargo handling facility is enlarged, and some further steps taken toward stabilizing the adjacent eroding riverbank.

5. Construction Cost Estimates for the expansion and more efficient utilization of the Port of Bethel General Cargo Handling Facility, expressed in 1982 dollars, are as follows;

| | |
|---|---|
| Extend Dock from 240' to 360' | $ 3,640,000 |
| Extend Dock from 240' to 1,000' | 13,720,000 |
| Construct Warehouse | 1,000,000 |

These figures do not include the total cost of land acquisition which is subsequently discussed.

B. RIVERBANK EROSION

1. Absent the necessary sustained expansion of the general cargo handling dock and staging area as proposed in the 1971 Bethel Port Study Report[2], a permanent petroleum dock, warehousing and industrial area, and appurtenant bank stabilization installation, the riverbank available for these improvements is suffering serious loss from erosion. That erosion has reached a crisis stage, threatening property improvements having a replacement value of between 35-50 million dollars. Relocation costs are estimated at about $25 million.

2. The area of immediate, crucial concern is the bulk fuel storage tank farm. A sudden, massive bank loss just upstream of the tank farm, plus lesser but substantial losses downstream makes it evident that if steps are not taken during 1981-82 to avoid a total $9 million loss, the tank farm must;

a) Relocate, temporarily, further from the riverbank (the plant has moved twice before), or

b) Relocate at some locale other than Bethel.

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2 Medium Draft Port Facility At Bethel, Alaska, Galliett & Silides, November 1971

The cost of a temporary relocation is estimated at $3 million, exclusive of land acquisition costs. The estimated 1981-1982 cost of the riverbank stabilization program designed to provide the Port of Bethel with a petroleum dock and to secure the safety of the bulk fuel storage facility, is estimated at $3,230,000. The 1981-1982 facilities are envisaged as a permanent circular cell type dock, wing walls, bulkhead, and articulated concrete mat.

To assist in maintenance, repair, and monetary contribution to following Phases of port development and bank stabilization, the City of Bethel is considering the imposition of a wharfage fee of between 1¢ to 3¢ per gallon handled over the petroleum dock. Such a fee, added to the cargo dock lease and wharfage fees, will spread the maintenance cost to all of the people in the Bethel service area, and provide a dedicated fund for matching funds to State participation in subsequent phases.

Relocation of the bulk fuel tank farm to a locality other than at Bethel will add approximately 25¢ per gallon lighterage fee to all fuel brought to Bethel and the upriver communities. At the 1980 volume

brought in and stored at Bethel, the added cost to the consumer would be $4 million each year.

3. Industrial Expansion of marine oriented industry is severly inhibited by continuous danger posed by the unstabilized riverbank. The prime example of this is the fishing and fish processing industry.

Currently the value of fish sold at Bethel has an average wholesale value of between $6-$10 million. The majority of the fish are exported either semidressed (gutted) or in the round. Most were exported by air. Although barge companies have indicated a willingness to stage freezer vans for backhaul in Bethel, there is no place on the waterfront for such staging.

The value of the locally caught fish product would be substantially increased if finished pack processing could occur at Bethel. However, fish processing facilities require direct access to the river system. Before such fish processing facilities can become a reality, riverbank stabilization and dock space must occur. Lacking such stabilization and space it is impossible to attract long-term capital investment to waterfront industry. Nevertheless, development of such industry is essential to Bethel and its service area.

4. Causes of Erosion. Basically, riverbank erosion is caused by permafrost degradation, rain, wind, water run-off, and wave action generated by wind and passing boats. The erosion is not caused

directly by breakup and attendant high water. What happens is that the permafrost melts, the thawed soil sluffs to the toe and is only then removed by the river which acts as a carrier during high water periods, or when the sluffed soil is carried into the river by wave action. When that soil is removed a new layer is exposed and the process repeats itself.

5. Remedial Measures. It appears that the best method of halting the erosion process is to interpose a covering structure between the soil and the action of the wind, sun, rain, and wave. The structure(s) should have as high a utilitarian value as practical. Once begun, the entire program of port development/riverbank stabilization should be wholly completed with all reasonable speed to lessen the chance of loosing the partially completed portion from eccentricities of the river.

Expansion of the general cargo dock and staging area, development of a warehousing and industrial area, and the construction of a petroleum dock and appurtenances are de facto permanent, or very long-term, methods of riverbank stabilization and utilitarian use of the waterfront.

Our experience to date has shown that the safest, longest life construction is that of circular cells, such as those which comprise the existing general cargo dock. This type of

construction is also the most expensive. It is most cost effective when used for dock purposes to accommodate large oceangoing cargo vessels and fuel barges, and to absorb the impact of mooring or of very heavy cargo handling equipment.

For the mooring of the smaller transshipping vessels, and for the stabilization of the warehousing/industrial area, it is proposed to design and install an adequate wall type bulkhead. Given the soil structure at Bethel, and the uncertainties of river bottom migration, wall type construction does not provide the assurance of cellular construction. However, the cost per linear frontage foot is only 40% of the cost of cellular construction. Expressed in 1982 dollars our extimate for a 1200 foot long wall type bulkhead, extending from Lot 11, Block 20 to the West side of Main Street, is $6,420,000.

Less certain, but, we believe, highly useful and of adequate life expectancy, is an articulated, concrete mat. We propose that such a protective concrete mat be installed between the bulk fuel storage tank farm and Main Street. In 1982 dollars, the estimated installed cost is $4,759,000. The cost per linear frontage foot of articulated mat construction is approximately one-tenth the cost of circular cells and one fourth that of wall type bulkhead. However, it has little utilitarian use beyond the abatement of riverbank loss and small riverboat tie-up.

6. Alternative To Riverbank Stabilization. Failure to undertake an adequate riverbank stabilization program such as outlined above will result in loss past First Street by the year 2000, including likely isolation of the cargo docking facility. Loss of the tank farm is an early certainty. By the year 2030 erosion will have reached Second Avenue in some places, and will include loss of the dock. Economic and cultural losses from non-development are not calculable.

## C. LAND OWNERSHIP, DESIGNATION, AND ACQUISITION

### 1. Ownership and Present Use

Present ownership and land use within the port development/bank stabilization area is a mixture of sometimes unrelated activity. The economic future of Bethel and the Bethel Service Area would benefit greatly from the logical resorting of these activities and land uses.

### 2. Needed Area Designation and Allocation

The port development/bank stabilization area described below, and shown on the plats accompanying this report, should be rezoned to port development use. It should be resubdivided, if necessary, and space for specific uses, i.e., docking, staging, warehousing, industrial, should be allocated. A dedicated street should be provided immediately adjacent to pierside for universal public access, and for dock/bulkhead/articulated mat construction, maintenance, and use. All

property within the designated area needed for construction, or which is not in conforming port development use, should be acquired by the City.

3. General Description of Port Development Area

The area that should be designated for port development/ bank stabilization purposes is described as follows;

a) Vacated Second Avenue East of Bridge Avenue, and

b) Between Brown's Slough and Main Street, all property south of Second Avenue and Bridge Avenue, and

c) West of Main Street, all of Tract E, Tract B lying south and east of Mission Lake Road except Lots 33 through 41 of Block 3, all property south of First Avenue to U. S. Survey No. 4000 (PHS property), and

d) All of U. S. Survey No. 4000 south of the State Highway, and

e) Tracts 42, 43, and 44 west of U. S. Survey No. 4000.

4. Land Acquisition

a) 1981-1982 Construction. For the 1981-1982 general cargo dock and staging area expansion, the City must acquire the following;

- Lots 3, 4, 5, 6, 7, and 8, Block 20
- Lots 1, 2, and 3, Block 19, and
- Vacation of Second Avenue east of Bridge Avenue.

For the petroleum port and construction to protect the bulk fuel storage tank farm an entry permit will be needed from the Public Health Service.

b) Future Construction and Development

It is proposed that the City purchase or otherwise acquire such property within the port development/riverbank stabilization area (project) that is necessary for construction and/or is not being used in conformity with this Master Plan.

The City should immediately seek the acquisition of all vacated Public Health Service property within the designated project area for use in connection with the petroleum products port and probable secondary general cargo port facilities. Such public lands should be transferred free of cost. The acquisition of any private property necessary to future construction and development can be aided through the use of part of the petroleum dock gallonage fee and general cargo wharfage fees.

5. Land Costs

The cost of land acquisition for proposed 1981-1982 general cargo dock expansion and Brown's Slough widening and moorage is included in the construction estimates shown herein. Total cost of land

acquisition for port development depends greatly on the cooperation pf all present inholders and potential beneficiaries. Therefore, this total land acquisition cost must await the 1982-1983 annual updating of the Port Development Master Plan and the City of Bethel Comprehensive Plan.

## IV. MAXIMUM TERM CONSTRUCTION SCHEDULE

The following schedule of improvements is the maximum reasonably allowable term of construction to first protect vital existing facilities, and then to develop the economic potential of the Port of Bethel. An accelerated construction program would lessen the chance of the entire problem becoming moot through loss of existing and partially completed improvements from eccentricities of the Kuskokwim River.

### A. 1981 - 1982

1. Petroleum Dock And Tank Farm Protection

    a) One 60 foot diameter circular cell

    b) 200 feet of wall type bulkhead

    c) Approximately 700 feet of concrete mat

2. Transshipping vessel moorage

    a) Widen Brown's Slough

    b) 400 feet of wall type bulkhead

    c) Dredging and backfill

3. Enlarge General Cargo Dock

    a) Two 60 foot diameter circular cells

    b) Acquire land

4. Industrial Area Protection

a) Acquire land

b) Construct warehouse

B. 1982 - 1983

1. Tank Farm Protection

a) 1000 feet of articulated concrete mat

2. Industrial Area Protection

a) 400 feet of wall type bulkhead commencing at Main Street and proceeding upstream toward general cargo dock.

C. 1983 - 1984

1. Industrial Area

a) 800 feet of wall type bulkhead, proceeding upstream to Lot 11, Block 20, to complete industrial area protection.

D. 1985 and 1986

1. General Area Bank Stabilization

a) Approximately 3,200 linear feet of articulated concrete mat, to complete bank stabilization other than industrial and cargo dock areas.

E. 1987 - 1990

1. Protection and Completion of General Cargo Dock and Staging Area

   a) Incrementally extend general cargo dock and staging area to the SW Corner of Lot 11, Block 20 through the construction of eight additional 60 foot diameter circular cells.

F. 1981 - 1990

1. Designate Port of Bethel development area limits, to include all of the lands described in Section III C 3, General Description of Port Development Area.

2. Acquire all vacated Public Health Land for use and lease in connection with the petroleum products docking and storage facility and secondary general cargo dock.

3. Acquire all other available vacated Federal lands within the Port of Bethel development area.

4. Resubdivide and allocate lands within port development area for specific uses.

5. Acquire such property that is presently in non-conforming, port development, use.

# V. CONSTRUCTION COST ESTIMATES

## A. NOTES

1. Inflation. The following construction cost estimates for alternatives A - D include a 15% annual increase attributable to inflation in material and labor costs.

2. Design. Estimates are based on existing state-of-the-art. Technical advances and innovative design may reduce the costs shown. For example, in 1972 we were told that, "nothing can be done at Bethel." The existing medium draft cargo handling facility refuted that contention.

3. Effect of Accelerated Schedule. Accelerated construction schedules can reduce costs by taking advantage of economies of scale, and by offsetting the penalty of annual inflation. Moreover, quick completion reduces potential loss of existing and partially completed facilities, from riverbank erosion, prior to completion of the total port facility/bank stabilization program described herein.

B. ESTIMATES (In Thousands)

| 1. Alternative A | | $ 1982 | $ Future |
|---|---|---|---|
| 1981-1982 | General Cargo Dock | 3,640 | 3,640 |
| | Petroleum Dock and Protection | 3,230 | 3,230 |
| | Warehouse | 1,000 | 1,000 |
| | 1981-1982 Project | 7,870 | 7,870 |
| 1982-1983 | 1000 linear feet mat protection | 1,286 | 1,479 |
| | 400 linear feet wall bulkhead | 2,140 | 2,460 |
| | 1982-1983 Project | 3,426 | 3,939 |
| 1983-1984 | 800 linear feet wall bulkhead | 4,280 | 5,564 |
| 1985 | 1600 linear feet mat protection | 2,058 | 2,984 |
| 1986 | 1600 linear feet mat protection | 2,058 | 3,293 |
| 1987 | 2 circular cells | 2,520 | 4,410 |
| 1988 | 2 circular cells | 2,520 | 4,788 |
| 1989 | 2 circular cells | 2,520 | 5,166 |
| 1990 | 2 circular cells | 2,520 | 5,544 |
| TOTAL PROGRAM | | $29,772 | $43,558 |
| 1981-1990 | | | |

## Recapitulation of Alternative A, By Allocation

| (In Thousands) | $ 1982 | $ Future |
|---|---|---|
| 1. General Cargo Dock | $13,720 | $23,548 |
| 2. Petroleum Dock & Tank Farm Protection | $ 3,873 | $ 3,969 |
| 3. Waterfront Industrial Area Protection | $ 6,420 | $ 8,024 |
| 4. General Area Riverbank Protection | $ 4,759 | $ 7,017 |
| 5. Warehouse 1982 | $ 1,000 | $ 1,000 |
| | $29,772 | $43,558 |

Alternative A gives maximum benefit per dollar invested. It allows cargo handling facilities and industrial area to reach fullest potential while simultaneously providing for bank stabilization.

Construction cost savings can be realized by shortening completion period. Accelerated construction will take advantage of economies of scale and offset inflation.

2. Alternative B

| | |
|---|---|
| 1981-1982 Cargo Dock | $ 3,640 |
| 1981-1982 Petroleum Dock & Protection | 3,230 |
| 1982-1983 1200 feet bulkhead | 7,382 |
| 1983-1984 8000 feet mat protection | 13,376 |
| | $27,628 |

Alternative B continues to provide the needed industrial area and bank protection. It does not allow the general cargo handling facilities to reach their needed size and, therefore, will add to cargo handling costs.

3. Alternative C

| | |
|---|---|
| 1981-1982 Cargo Dock | $ 3,640 |
| 1981-1982 Petroleum Dock & Protection | 3,230 |
| 1982-1983 9000 feet mat protection | 13,311 |
| | $20,181 |

Alternative C provides the minimum reasonable alternative. Though it provides bank stabilization for an indeterminate period, possibly 25 years, it provides only temporary relief to the increasing problem of efficient cargo handling. Under this alternative, expansion of the general cargo dock will require removal of earlier construction.

4. Alternative D

1982-1983 10,000 linear feet of mat protection $13,825

Alternative D is an emergency measure to safeguard existing facilities only. It provides the minimum acceptable alternative.

SB

415

# Alaska State Legislature

Senator Vic Fischer • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

MEMORANDUM

DATE: April 14, 1982

TO: Senator Bill Ray, Chairman Senate Transportation Committee

FROM: Senator Vic Fischer

RE: Fiscal Note for CSSB 415

The Senate State Affairs Committee, at a recent meeting, took issue with the fiscal note prepared for CSSB 415 by the Department of Administration.

The Department of Administration fiscal note is a manipulation of numbers to support their stated bias against giving any preference to Alaska bidders. As they point out, their national association opposes all forms of state preference. In contrast, it was our point of view that any encouragement we give to creating healthy private businesses in Alaska benefits the whole state.

The fiscal note is based on a 10 percent cost increase. However, CSSB 415 provides that the Alaska bidders preference will only be raised by 5 percent and the minority bidders preference will be raised by a formula which will only result in a 5 percent preference. The fiscal note should, at a minimum, be reduced from $6 million to $3 million to reflect a 5% increase in bidders preference. We maintain that the 10% preference used in the fiscal note is incorrect!

Minority preferences would only be granted if target levels for minority participation are not met, and large contracts would always be excluded from preference. The fiscal note ignores these cost saving provisions.

CSSB 415 would increase economic participation for all Alaska businesses. There may be some cost to state purchasing, but these costs can at least in part be more than offset by development of our domestic economy and increased overall efficiency. Purchasing efficiency is only one factor in overall market efficiency; and what's best for purchasing may not be best for the development of domestic business.

The Senate State Affairs Committee also took issue with the concluding editorial comment in the fiscal note that, "The preference is little more than a token gesture of appeasement to an interest group."

Committee members responses were: "I do not vote for token gestures to appease special interest groups...", This accusation is a slander against senators who favor preferences for Alaskans and minorities...",

"The bill provides a system to insure that public contracting procedures will favor Alaskans. I think I can speak for my fellow legislators when I say that Alaskans are not an interest group; they are the interest of all legislators and they are our only reason for existence. One might expect the federal government to refer to Alaskans as a special interest group. I am shocked and dismayed when our own government makes this inference...".

# Alaska State Legislature

Senator Vic Fischer • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

MEMORANDUM

DATE: April 13, 1982

TO: Senator Bill Ray, Chairman, Senate Transportation Committee

FROM: Senator Vic Fischer

RE: CSSB 415, Summary

CSSB 415 provides a system to insure that public contracting procedures will favor Alaskan bidders. Existing statutes are full of loopholes which result in state subsidization of out-of-state interests. The major features of CSSB 415 are:

1. The proposed legislation closes loopholes which currently allow various state funded contracts to be issued without regard for formal state bidding requirements.

2. The 'Alaska bidders preference' is raised to 10%, from the existing 5%.

3. CSSB 415 closes loopholes which currently result in state subsidization of out-of-state bidders posing as Alaska bidders. This is accomplished by providing the following qualifications for an Alaska bidders preference: a business must have 50% of its employees residing in Alaska or employ at least 10 resident employees. These requirements do not prevent non-residents from bidding.

4. If during the prior fiscal year a proportionally smaller dollar amount of contracts are awarded to minority bidders compared to target levels, then businesses owned by economic minorities, including women, Alaska Indians, Eskimos, Aleuts, Blacks, and Viet Nam veterans, receive a 10% bidders preference on contracts less than $1,000,000 for the next fiscal year.

5. The Department of Administration is required to prepare an annual count of contracts awarded in accordance with bidders preference lists by all state agencies, municipalities, and other entities for contracts using State monies. The results shall be submitted to the House and Senate State Affairs Committees.

CSSB 415 is very similar to FCCSSB 114 which passed the Senate and the House in 1980 and was vetoed by the Governor. The objections mentioned in his veto message have been corrected by this committee substitute. The primary objection was that the original bill raised the Alaska bidders preference to 15 percent and it was felt that this was too high. This bill raises the preference to only 10 percent.

# STATE OF ALASKA
# THE LEGISLATURE

POUCH Y · STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

## LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M

March 23, 1982

SUBJECT: Public contracts -- CSSB 415
(Work Order No. 12-2755)

TO: Senator Vic Fischer
Chairman, Senate State
Affairs Committee

FROM: Tamara Brandt Cook
Legislative Counsel TBC

Here is the section-by-section analysis you requested of the draft of CSSB 415 (State Affairs).

Sec. 1. The Department of Transportation and Public Facilities is required to award a highway construction contract in accordance with bidding requirements if the contract is $50,000 or more. Existing law requires the department to award a contract in accordance with bid requirements only if it exceeds $100,000. The reference to AS 44.33.300 is deleted, since that section allows a waiver only if the contract is less than $50,000 and by its terms it would not apply to contracts awarded for $50,000 or more.

Sec. 2. The Department of Transportation and Public Facilities is required to award a contract for maintenance of a highway in accordance with bidding requirements if the contract is $25,000 or more. It is discretionary with the department whether to award smaller contracts in accordance with bidding requirements. The department may not award contracts in smaller increments to avoid the bidding requirements. These are new provisions.

Sec. 3. The Department of Transportation and Public Facilities is required to comply with the bidding requirements and preferences of AS 37.05.230(1) in awarding a contract that is subject to bid requirements. Existing law only requires the department to award a contract to the lowest responsible bidder.

Sec. 4. A local government is required to comply with the bidding requirements and preferences of AS 37.05.230(1) in awarding contracts for a local service road or trail that the local government has assumed from the Department of Transportation and Public Facilities if the amount of state money to be used on the project is $50,000 or more. Existing law only requires that contracts be awarded on the basis of the lowest responsible bid.

Sec. 5. A contract for maintenance of local service roads and trails that is for $25,000 or more entered into by the state and a contract for maintenance of local service roads and trails that is for $25,000 or more for which state money is to be used entered into by a local government is required to be awarded in accordance with the bidding requirements and preferences of AS 37.05.230(1).

Sec. 6. The Department of Transportation and Public Facilities is required to award a public works construction contract in accordance with bidding requirements if the contract is $50,000 or more. Existing law requires the department to award a contract in accordance with bid requirements only if it exceeds $100,000. The reference to AS 44.33.300 is deleted, since that section allows a waiver only if the contract is less than $50,000 and by its terms it would not apply to contracts awarded for $50,000 or more.

Sec. 7. The Department of Transportation and Public Facilities is required to award a contract for maintenance of a public works project in accordance with bidding requirements if the contract is $25,000 or more. It is discretionary with the department whether to award smaller contracts in accordance with bidding requirements. The department may not award contracts in smaller increments to avoid the bidding requirements. These are new provisions.

Sec. 8. The Department of Transportation and Public Facilities is required to comply with the bidding requirements and preferences of AS 37.05.230(1) in awarding a contract for a public works project that is subject to bid requirements. Existing law only requires the department to award a contract to the lowest responsible bidder.

Sec. 9. A municipality or regional educational attendance area is required to comply with the bidding requirements and

preferences of AS 37.05.230(1) in awarding a contract for a public works project assumed from the Department of Transportation and Public Facilities if the amount of state money to be used on the project is $50,000 or more.

Sec. 10. Subject to certain bidding preferences added by this bill, a bid shall be awarded by the Department of Administration to an Alaska bidder if his bid is not more than 10 percent higher than the bid of the lowest nonresident and he is on the certified Alaska bidders list. Existing law requires a bid to be awarded to an Alaska bidder if his bid is not more than five percent higher and makes no provision for a bidders list.

Sec. 11. Existing law provides that competitive bids are not required for sales involving fair trade items or when materials for use in laboratory and experimental studies may be purchased otherwise to the best advantage of the state. These two exceptions to the bid requirements have been deleted.

Sec. 12. A contract shall be awarded to a bidder on the certified minority bidders list under certain conditions, including a requirement that during the prior fiscal year a proportionally smaller dollar amount of contracts were awarded to minority bidders compared to the population of minority people in the state, that the bid not be more than 15 percent higher than the lowest bid, that the minority bidder agrees to lower his bid by five percent or match the lowest bid. This preference applies only to contracts of $1,000,000 or less. A contract shall be awarded to a bidder on the certified women bidders list under similar conditions as those applied to the minority bidders preference, except that during the prior fiscal year women bidders must have received less than 10 percent of the value of contracts of $1,000,000 or less awarded for the preference to apply. A contract shall be awarded to a bidder on the certified Viet Nam veterans bidders list under similar conditions as those applied to minority bidders preference, except that during the prior fiscal year Viet Nam veterans must have received less than five percent of the value of contracts of $1,000,000 or less awarded for the preference to apply. If two or more bidders qualify for a minority bidders, women bidders, or Viet Nam veterans bidders preference a contract shall be awarded to the lowest of the bidders. These are new provisions.

Sec. 13. The Department of Administration is required to solicit bids by sending notices to all bidders on the certified Alaska bidders list and the department may limit solicitation of bids. Under existing law the department is required to send notices to known active prospective bidders and the department is not authorized to limit solicitation of bids.

Sec. 14. A contract for $50,000 or more for the operation of a transportation system for students is subject to competitive bid requirements. Under existing law this type of contract is exempt from the bid requirements.

Sec. 15. Besides the requirements of existing law, to qualify as an Alaska bidder a person may not be delinquent in the payment of state taxes and must maintain inventories or facilities in support of business activities in the state.

Sec. 16. The bidding preferences do not apply to contracts that are less than $50,000 of the Department of Transportation and Public Facilities. Under existing law the Alaska bidders preference does not apply to contracts that exceed $5,000.

Sec. 17. A contract for $50,000 or more for products or services of a sheltered workshop operating in the state is subject to competitive bid requirements. Under existing law this type of contract is exempt from the bid requirements.

Sec. 18. The Department of Administration is required to compile and update a certified Alaska bidders list, a certified minority bidders list, a certified women bidders list, and a certified Viet Nam veterans bidders list. To qualify for a certified list, other than the Alaska bidders list, a person must be on the certified Alaska bidders list and have a business with at least 85 percent of its interest beneficially owned or 85 percent of its voting interest owned by the type of person for which the preference is granted. In addition, the daily operations of the business must be controlled by the type of person for which the preference is granted. The bidders preferences do not apply to contracts involving federal money if the application of a bidding preference would violate federal law or program guidelines. These are new provisions.

Sec. 19. Execpt for the bidding preferences of AS 37.05.-230, a contract for which competitive bids are required shall be awarded by the Department of Administration to the lowest responsible bidder. Under existing law there is a preference for Alaska bidders only.

Sec. 20. A prime contractor must name the principal subcontractors he intends to use when submitting a bid. After a bid is awarded the subscontractors may be changed only for cause. "Principal subcontractor" is defined. This is a new provision.

Sec. 21. At least 20 percent of the money under a contract awarded through the competitve bid process shall be paid to subcontractors on the certified minority bidders list, certified women bidders list, or certified Viet Nam veterans bidders list unless no subcontractor on those lists is available. A prime contractor must identify subcontractors on the lists that he intends to use when submitting his bid. These are new provisions.

Sec. 22. If a bid is awarded under the competitive bid requirements, a proposed substitution for a subcontractor named in the bid shall be submitted to the Department of Administration for approval. This is a new provision.

Sec. 23. The Department of Administration is required to prepare a report on contracts awarded in accordance with a bidders preference for minority bidders, women bidders, or Viet Nam veterans bidders by state agencies, the University of Alaska, municipalities, and other entities. The report shall be submitted to the Senate State Affairs Committee and the House State Affairs Committee. This is a new provision.

Sec. 24. If the amount of state money used to finance a contract of the University of Alaska is $50,000 or more the competitive bidding and preference provisions of AS 37.05.-230(1) apply. This is new.

Sec. 25. If the amount of state money used to finance a contract of a non-profit corporation is $50,000 or more, the bidding and preference provisions of AS 37.05.230(1) apply. This is new.

Sec. 26. To qualify for receipt of a grant, a municipality must comply with the bidding and preference provisions of AS 37.05.230(1) in the award of a contract if $50,000 or more of the contract is financed with the grant or other state money. This is a new requirement.

Sec. 27. To qualify for receipt of a grant, a named recipient must comply with the bidding and preference provisions of AS 37.05.230(1) in the award of a contract if $50,000 or more of the contract is financed with the grant or other state money. This is a new requirement.

Sec. 28. In the awarding of a contract to an entity in an unincorporated community the Department of Community and Regional Affairs must determine if there is an incorporated entity that will agree, along with other things required by existing law, to award any contract of $50,000 or more financed by the grant in accordance with the bidding and preference provisions of AS 37.05.230(1).

Sec. 29. Technical amendments are made to the section providing for a waiver of provisions regarding public contracts in an area impacted by an economic disaster so that citations are to sections dealing with contracts of under $50,000.

Sec. 30. The bill is effective July 1, 1982.

TBC:ljb

FISCAL NOTE ANALYSIS OF SB 415

As stated, in the narrative of our fiscal note, on SB 415, the fiscal impact of this bill is difficult to analyze.

We have suggested that the cost of goods and services might increase by as much as 10% or $6,000,000 in FY 83 (10% of $60.0 million = $6.0 million).

This is based on a couple of assumptions, first the National Association of State Purchasing Officials has indicated that preferences raise costs proportionate with the preference. This is difficult to substantiate based upon this assumption alone, there is currently a 5% preference at this time and increasing the preference to 10% is only a 5% increase, (i.e. 5% of $6.0 million = $3.0 million).

However, the second assumption is based upon the theory that out-of-state and in some cases in-state business may be reluctant to go through the bidding process if they are competing against a preference from 10 to 15 percent.

It is difficult to prove that people have stopped submitting bids for this reason, but some vendors have expressed this as a reason.

Possibly the best way to depict how these particular preferences might effect competition and prices is with some hypothetical examples.

EXAMPLE #1

| | Bid Price | |
|---|---|---|
| Out-of-State Bidder | $10,000.00 | |
| Certified Alaska Bidder | $11,000.00 | |
| Certified Alaska Minority Bidder | $11,500.00 | *Winner: If bidder is willing to drop price by 5% or to $11,000.00. |

*This represents a 10% increase.

---

EXAMPLE #2

| | Bid Price | |
|---|---|---|
| Out-of-State Bidder | No Bid | |
| Certified Alaska Bidder | $11,000.00 | |
| Certified Alaska Minority Bidder | $12,650.00 | *Winner: If bidder is willing to drop price by 5% or to $12,100.00. |

*This represents a 10% increase over the low bidder, but, a 21% increase over the original out-of-state bidder.

---

GE/bab
GSS2A/E1

EXAMPLE #3

| | Bid Price |
|---|---|
| Out-of-State Bidder | No Bid |
| Certified Alaska Bidder | No Bid |
| Certified Minority Bidder | $12,650.00 or higher * |

*This represents a 26.5% increase over the original out-of-state bid. At this point the bidder will realize that there is no competition. The bidder may play it safe and only bid 15% higher than the suspected competition, but again the bidder may just as likely increase the price still further.

---

These examples indicate that a 10% increase may be conservative. It is not the Alaska or minority preferences which seem to be the cause for the dramatic increase but the lack of competition caused by the preference. The preferred bidders feel more secure and have less incentive to submit their best price when a free competitive market is absent.

I hope this explains in some detail how we arrived at the present figures for the fiscal note on SB 415. The figures could be higher or lower depending on which set of assumptions people choose to use. However, I still believe our fiscal note may be conservative, in that it only includes goods and services procured by the State and does not take in account the fiscal impact that this bill may present to construction contracts or municipal grants.

The increased costs which we have identified will have to be absorbed by each individual agency. The fiscal note is not a request for an additional appropriation to the Department of Administration or any other department, but reflects what we estimate the costs that this bill could be to all State agencies. This will be reflected in their reduced purchasing capabilities. Agencies will either find additional funding within their existing budgets or procure less goods and service or in some case not procure those services at this time and submit larger budget requests in future years.

As a further clarification of our fiscal estimate of this bill we will submit two fiscal notes. The first will indicate the potential fiscal impact this bill will have on the Division of General Services and Supply. The other fiscal note will be our estimate of the fiscal impact to all State agencies, as reflected in their reduced purchasing capabilities.

GE/bab
GSS2A/E2

*** (The National Association of State Purchasing Officials, who oppose any local preference statutes, estimate that a bidder's preference raises the cost of doing business proportionate with the preference.)

From a purely professional purchasing standpoint vendor preferences are not condusive to good purchasing practice nor in the purchaser's best interest. We are sympathetic to the idea of stimulating various sectors of business, however we do not believe this is the correct vehicle. A vendor preference is a weak and easy approach to the problem which will not solve it. The preference is little more than a token gesture of appeasement to an interest group. Open competition is the backbone of our free market system. To reduce or eliminate it adversely affects everyone.

## PURCHASING PREFERENCES

### PRO's

- New jobs are created.
- Businesses are encouraged to locate within the State.

### CON's

- Arguably unconstitutional as a barrier to interstate commerce.
- In direct conflict with the principles of competition and precludes the purchaser from obtaining the best competitive price.
- Many bidders who otherwise would be interested are discouraged from competing and potential sources of supply are reduced.
- Preferred bidders feel more secure and have less incentive to submit their best prices when a free competitive market is absent.
- Results in higher costs to taxpayers, prices usually are increased by the amount of the preference.

SB

416

# STATE OF ALASKA
# THE LEGISLATURE

POUCH V, STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

## LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M April 9, 1981

SUBJECT: Special appropriation for Boysen Investment Corporation (Work Order No. 12-1432)

TO: Senator Vic Fischer

FROM: Donna Spragg Pegues
Co-Revisor of Statutes

At your request I have drafted the attached bill appropriating $65,140 for unanticipated expenses incurred by the Boysen Investment Corporation in completing a Seward Highway pavement project. This bill raises a question in my mind.

Article IX, section 6 of the Constitution of the State of Alaska prohibits the use of state money except for a "public purpose". Courts have analyzed similar provisions to prohibit gifts of public money to private persons. (See 81A C.J.S. sec. 207.) It seems to me that this appropriation could be considered a gift of public property. The contractor and the state entered into a contract under bidding procedures calling for award to the lowest responsible bidder (see AS 19.10.210 and AS 37.05.230 - 37.05.240). To simply override that contract (bypassing the usual state claim procedures) with an appropriation seems questionable to me. However, brief research has not revealed a case involving an appropriation closely comparable to the one in the attached bill and I do not know how an Alaskan court would rule on the question. However, I wanted you to be aware of my concern.

DSP:ljb

Enclosure

SB

430

SB430

# CITY OF PORT HEIDEN
## PORT HEIDEN, ALASKA 99549

November 6, 1980

Senator George Hohman
P.O. Box 289
Bethel, Alaska 99559

Dear Senator Hohman,

This is to acquaint you with a serious situation which has been developing here in Port Heiden.

As you may already know, we are experiencing a severe beach front erosion problem. Large tides and storms claim anywhere from 10 to 20 feet of beach each year. This has forced some residents into moving their entire houses away from the beach. In just one storm this year, we lost 15 feet of beach, a house was destroyed, and several other homes are in danger of being damaged.

For the past two years we have been working with the Department of Community and Regional Affairs putting together a realistic program for relocating our city. Unfortunately, due to escalating prices and the high cost of transporting materials, the money we have received wasn't enough.

In order for any site to be suitable grounds for a home electricity must be available. With the money we have received to date we have done that. We have extended our utility service 3 1/2 miles along the main road. Several homes have been relocated along this road. However, due to lack of funds we cannot complete this project.

Working with the Department of Community and Regional Affairs we tried to get funding from the legislature. This was denied. But, with or without funds the danger to homes and to the people here still exist.

# CITY OF PORT HEIDEN
## PORT HEIDEN, ALASKA 99549

We have learned recently that you may be able to help us secure the necessary funds from the Governor's Contingency Fund. We need $80,000.00 to complete this most necessary project. We feel the $80,000.00 necessary to complete this project is a small price to pay to insure the continued existence of this community. The loss of one home this year, and the danger to others, is directly related to the lack of funds available to finish this project.

Time is of the essence. With winter approaching we must get the funds at the earliest possible date as the frozen ground also makes house moving easier. This being a fishing community the only time available to us for such a project is winter.

We will be sincerely grateful for any help you can give us in alleviating this dangerous and unnecessary situation.

Sincerely,
City Council of Port Heiden

Virginia Graham
Connie Christenson
Carol Carlson
Bert Carlson
Roxanne Christenson
Willie E. Ford (Mayor)

CC:
Dave Gray
R&S - Anch. 11/17

DKW/cw

SB

440




# Nunakauiak Yupik Corporation

Nelson Island
Toksook Bay, Alaska 99637
Phone: Area Code 907 ~~526-3001~~ 427-7929

Serving the community since 1975


SB 440

Honorable Rep. Tony Vaska
Pouch V
Juneau, Alaska 99811

2-18-81

Dear Rep. Vaska,

I am writing on behalf of this community and as a concerned citizen. Since I feel the subject that I am going to bring to your attention is the most important issue to this community.

During the United Villages meeting, which was held in Toksook Bay on February 5,6,&7, 1981 the resident of Toksook Bay proposed that the airport be moved to a better and safer site for the reasons listed below;

1. The present airport being close to the village is getting to be hazardous to this community. Especially to the B.I.A school and the High School. One of these days the plane might have a mechanical trouble and go down to residental area. Like one incident a few years back, a plane almost went down to this community but fortunately the plane got high enough to go over the village and went down to the other side. About 300-800 yards from the nearest house.
Who's fault would it be if one of the planes go down to one of the houses?-- and who is to blame?

2. Bureau of Land Management will soon convey land to our corporation. Our corporation in turn would reconvey land to all those who are eligible under 14(c). Under 14(c)(4) our corporation will convey to federal, state or municipal gov't. the title to the surface estate for airport site. I would like to see the airport be moved to the new site before our corporation starts conveying lands to those who are eligible under 14(c).

I know there are funds available to work on our airport because there was an article in the Tundra Drums last summer, June 5, 1980, Volume VII, number 10. The article was in front page entitled "Multi-Millions for Area-Approved by Governor". Nearly 70 million dollars was approved for this area by Gov. Hammond in the passage of HB 60, the bill which set operating and

capital expenses of the state. Some of this package was to be used to improve airport runways in rural villages.
About $6,137,600 was approved for 22 villages to improve airport runways, runway lightings, airport terminal storage buildings. etc. $4,719,000 for 33 villages for airport lighting projects, $2,775,000 Navigation aids was funded for 37 villages, $88,000 for air-to-ground radios for 22 villages to purchase two public frequency unicom radios, addtional $110,000 for 55 villages to get one public frequency unicom radios, $1,950,000 for 26 villages and these villages would get $75,000 each to build airport terminal storage buildings of approximately 900 sq. ft. These buildings were to be big enough to accomodate the installation of communication & weather reporting equipments, waiting rooms for passengers and storage & equipment bays, $300,000 for 59 villages for airport weather reporting equipments-- each villages would get $5,000 to get their equipments and last of all $30,000 to get Emergency Medical Supplies for 25 villages. Each villages would get $1,200.
These figures were taken from the newspaper and the reason why I am bringing these to your attention is because I have never seen any airport weather reporting equipments, air-to-ground radios, navigation aids, medical emergency supplies, runway lightings, runway improvements and airport terminal storage buildings put out here in Nelson Island area.
I am sure that the State still have enough money to provide this community to built a better and safer airport in another site, at least we would be very happy if some of this HB 60 is spent in this area.

Thank you for your time and we wish you best of luck in everything that you do.

Sincerely,

P.R. Julius

letter listing proposed projects ...

SB

445

City of Goodnews Bay
Goodnews Bay, Alaska

Dec

SB445
23

Honorable Governor Jay S. Hammond;

I would like to make a request to the State to put into the 1981 buget. The following items which we need for this village' is:

appro. $425.0K

I Water and Sewer system: Our water&sewer system is old and most of the pipes are broken. And we had a bad storm on Nov. 11, 1979 which broke some pipes. We really need to change our system.

2. Airfield: We need a bigger airfield than the one we have now so the fish buyers wouldn't have no problem taking off from here with our catch fish. We need to extend our airfield and airport lights. $ 1,250,000

appro. $ 250.0K

3. Dumpsite and road: We have a dumpsite which is located east side of the village and we have a proposed dumpsite which was started but stopped because it was to close to the village and it was located on the side of the mountain just north of the village. The people didn't want the proposed dumpsite too close to the village so We need to relocate the dumpsite to outside the city limits.

SB-170

4. Television: We need a television system here in Goodnews so our Children would learn more and they wouldnt stay out to late at night. Seems to me that the surrounding villages have a television system in their village and we don't.

Its the bush villages that get the short end of the stick. Because the people we ELECT in the State Office ain't doing their job Soon as we elect them into the office, that's the last we heard from them. Soon the promises they made are soon forgotten.

Sincerely,
Joseph L Martin
Joseph L Martin, Mayor

cc: Senator Ted Stevens
Senator George Hohman
Bristol Bay Area Health Corp.

SB

465

# Alaska State Legislature

## Senate

## Committee on Transportation

Senator Bill Ray
Chairman

Official Business
Pouch V
State Capitol
Juneau, Alaska 99811

February 9, 1982

Senator Don Bennett
Senator Ed Dankworth
Co-Chairman, Finance Committee
Pouch V
Juneau, Alaska 99811

Dear Senators Bennett and Dankworth:

The Transportation Committee has heard Senate Bill No. 465, "An Act making a special appropriation to the City of Aniak for construction of a dike extension; and providing for an effective date." The bill was passed out and has a further referral to the Finance Committee.

The fiscal note on this bill doesn't appear to be realistic and as such I would ask that you make a determination as to what the proper amount should be.

Sincerely,

Bill Ray

Senator Bill Ray, Chairman
Transportation Committee

SB

466

# Alaska State Legislature

## Senate

### Committee on Transportation

Senator Bill Ray
Chairman

Official Business
Pouch V
State Capitol
Juneau, Alaska 99811

February 9, 1982

Senator Don Bennett
Senator Ed Dankworth
Co-Chairman, Finance Committee
Pouch V
Juneau, Alaska 99811

Dear Senators Bennett and Dankworth:

The Transportation Committee has heard Senate Bill No. 466, "An Act making a special appropriation to the City of Aniak for construction of a slough bridge; and providing for an effective date." The bill was passed out and has a further referral to the Finance Committee.

The fiscal note on this bill doesn't appear to be realistic and as such I would ask that you make a determination as to what the proper amount should be.

Sincerely,

Bill Ray

Senator Bill Ray, Chairman
Transportation Committee

SB

4483

# Alaska State Legislature

## Senate

### Committee on Transportation

Senator Bill Ray
Chairman

Official Business
Pouch V
State Capitol
Juneau, Alaska 99811

February 9, 1982

Senator Don Bennett
Senator Ed Dankworth
Co-Chairman, Finance Committee
Pouch V
Juneau, Alaska 99811

Dear Senators Bennett and Dankworth:

The Transportation Committee has heard Senate Bill No. 483, "An Act making a special appropriation to the City of Aniak for improvements to Morgan's Road; and providing for an effective date." The bill was passed out and has a further referral to the Finance Committee.

The fiscal note on this bill doesn't appear to be realistic and as such I would ask that you make a determination as to what the proper amount should be.

Sincerely,

Bill Ray

Senator Bill Ray, Chairman
Transportation Committee

SB

495

UTILITY CONTRACTORS OF ALASKA, INC.
*Alaska Chapter of the National Utility Contractors Association*
SRA Box 112 • Anchorage, Alaska 99502 • (907) 344-1564

MEMO TO: All Concerned Parties

FROM: UCA Governmental Affairs Committee

DATE: March 10, 1981

RE: Proposed Legislation: Construction Contract Retainage - Payment of Interest Thereon

THE PROBLEM

In construction contracting it is standard practice for the owner agencies to make partial payments to the contractor during the construction period on a regular basis - typically every thirty days. These "progress payments" or "pay estimates" as they are often called are made to pay the contractor for portions of the work completed to date so that the contractor can, in turn, pay his suppliers, subcontractors, and workmen.

However, it is also the standard practice for the owner agencies to "retain" a portion of the money owed to a contractor under any particular pay estimate as "retainage." Theoretically this retainage represents the contractor's profit on the job and as such is held back by the owner until the job is complete. (It should be noted that the retainage is often more than the profit.) The retainage is seen as protection for the owner against the possibility that the contractor may not complete the job or may not pay all his bills. In other words, the retainage is held as a kind of cash bond to guarantee the contractor's performance under the contract.

Even after the contract is complete, it is customary for the owner to hold a portion of the retainage for a period of time as additional insurance against a possible lien or the third party claim.

For example, suppose XYZ contractor has a contract with the Municipality of Anchorage in the amount of $1,000,000 to install a new water transmission main. Lets also assume that XYZ receives notice to proceed and begins work on May 1. On May 31, XYZ is 20% complete; on June 30, 40% complete; on July 31, 60% complete; on August 31, 100% complete. Now under this scenario, on June 1, XYZ would submit to the engineer a "pay request" for payment of work completed to date; i.e., 20% or $200,000. Assuming the engineer approves the pay request as being accurate, the Municipality would then pay XYZ $200,000 less 10% retainage or $180,000. On July 1 XYZ again submits a pay request this time for 40% or $400,000 and the Municipality then pays XYZ $400,000 less $180,000 already paid, less 10% or $40,000 retainage, or another $180,000. This process continues until the project is complete with the Municipality

always holding as retainage a portion of the amount due the contractor at any given time. Thus, when the project is complete, XYZ is still owed a considerable chunk of cash which the Municipality has held back as retainage. This retainage is not actually paid until some specified time after the project is complete (in the case of the Municipality of Anchorage, the percentage of retainage is reduced to 2% when the project is complete and the final 2% retainage is paid 90 days after project completion).

The actual percentage of retainage held and the length of time that retainage is held varies with contracting agencies and sometimes with contract size, but the basic principle of withholding a portion of the money earned by the contractor is the same with almost all construction contracts. To summarize, retainage is money earned by the contractor but not paid to the contractor for some period of time after it is earned.

The problem is that the practice of holding retainage adversely affects the contractor's cash flow. In these days of high interest rates, working capital is a precious commodity to any contractor. While the owner's right to hold retainage is not disputed, it should be recognized that the practice adversely affects the contractor's cost of doing business by forcing him to borrow working capital or, at the very least, forego interest which could be earned with cash on hand. Therefore, the contractor must bid higher prices for his services.

The contractor's problems with retainage are sometimes further compounded by owner agencies which, for one reason or another, fail to pay the contractor retainage due on time. When this happens (and it happens not infrequently) the contractor has no recourse except the courts. Typically, of course, the high cost of litigation makes recourse to the courts an unacceptable solution to the contractor's problem.

PROPOSED SOLUTION

Legislation should be passed making it public policy in the State of Alaska that when retainage is held by the owner, the contractor shall have the right to direct that the retained money be invested in a savings institution of his choice and that the interest earned thereon shall accrue to the contractor. As an alternative, interest on retainage should be paid to the contractor directly by the owner.

Sincerely,

UTILITY CONTRACTORS OF ALASKA, INC.

Don May,
President

SB

500

# Municipality of Anchorage

## MEMORANDUM

DATE: May 21, 1981

TO: Senate Transportation Committee

FROM: Mayor, Municipality of Anchorage

SUBJECT: Testimony, SB 500 International Airports

We support Senate Bill 500. It will increase local participation in the management and operation of our international airports. Transferring policy and financial control of the airports to a policy advisory board with a majority of the members from the Anchorage and Fairbanks local communities is a major step in the right direction.

As we understand the bill would establish a technical committee for AIA and FIA. Each of the committees would consist of 5 members:

1 - Chamber of Commerce Appointment
2 - Mayor Appointment
1 - Airport Manager
1 - Airport Operators Council

The role of the technical committee is to make recommendation to the policy board on the following:

(1) Operating hours of the airports;
(2) Operating procedures of the airports;
(3) Fees and charges at the airports;
(4) Operating budget items; and
(5) Capital improvements.

A policy board of three members will be established to set airport operational and fiscal policy. The board will be composed of the following:

(1) Chairman of AIA technical committee
(2) Chairman of FIA technical committee
(3) DOTPF commissioner or designee

The policy board would have the same broad powers as are currently exercised by DOTPF, i.e.,:

A. Fiscal Policy

1) Budgets
2) Fee structure
3) Cash pool investments
4) Appointment of airport managers

B. Operating Policy

C. Planning

Both the technical committees and the policy board are to be staffed by state employees.

The bill also requires an annual audit of the international airport revenue fund by an independent certified public accountant.

Comments on SB 500

- The fact that policy and technical committee members are not paid may diminish their effectiveness by limiting the amount of time available for airport business.

- We agree with Senator Fahrenkamp's deletion of Section 6(b) dealing with airport leases. This section states that lease rates will be set at market value. There are justifiable economic reasons for leasing property at less than fair market value.

- One key to the success of the policy/technical committee approach is how committee staffing is handled. If the committees are given the authority to hire a professional staff, the concept will be more effective than if the State provides staff support from existing international airport staff.

- Under the current state organization, the airports are fiscally tied together with the state administration deciding the direction of each airport. Both communities have concerns with regard to state policy. More local involvement will improve policy decisions; however, as long as the two airport facilities are tied together the economics of each community will not play a major role in the decision-making process.

- Should the airport managers of each facility be elected chairman of the technical committee, the policy board will be composed of the DOTPF commissioner and the two airport managers. We would recommend that the airport managers be restricted from holding the chairman position on the technical committee.

- The mayors should not be restricted from appointing the best available technical representatives to their respective committees. The restriction of appointed officials is unnecessary. It will be most important that the technical committee understand the governmental process of both the state and local government. This understanding is best developed through years of government employment. Furthermore, airport policy and local government policy should be coordinated in some fashion. For example, the ports and airports have a direct relationship.

Conclusion:

Though SB 500 does not transfer control of the international airports to local government it does go a long way toward giving the local community greater participation in the management and operation decisions. The bill is a step in the right direction.

# STATE OF ALASKA
# THE LEGISLATURE
## LEGISLATIVE AFFAIRS AGENCY

POUCH Y · STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

MEMORANDUM

TO: Senator Bill Ray
Chairman, Senate Transportation Committee

FROM: Bettye Fahrenkamp
Alaska State Senator

DATE: May 13, 1981

RE: Amendments to SB 500 "An Act relating to international airports."

Through this memorandum I would ask that you amend SB 500 in the following manner.

1. Section 1; Sec. 02.17.070. Add a new subsection (5): The chairman of the technical committee shall be elected from the members, except that an airport manager shall not serve as chairman of a technical committee.

2. Section 6; Sec. 37.15.500(B). Delete all of (B).

I feel these amendments will strengthen the bill. I would appreciate it if you will schedule the bill before the committee for further hearing. I anticipate testimony from some folks in Anchorage and Fairbanks and would like several days advance notice, if possible.

SECTIONAL ANALYSIS

SB 500 "An Act relating to international airports."

Sec. 1. Establishes International Airport Policy Board. Membership consists of chairman of Technical Committee of Anchorage and Fairbanks airports and commissioner of Transportation.

Powers include (a) some planning and policy duties of DOT under Alaska Aeronautics Acts of 1937 and 1949;

(b) preparation of the operating budget and long-range capital improvement program for each airport;

(c) responsibility for investment and use of International Airport Revenue Fund and International Airport Construction Fund.

(d) shall appoint the airport manager.

Staff will be provided by DOT/PF. The airport manager will be selected based on an established list of qualifications.

Creates a technical committee for each international airport consisting of the airport manager, a member of the Airport Operator's Council, a member of the Chamber of Commerce and two members of the public. The technical committee members serve four years with no salary. It shall meet at least four times a year. It's duties include assisting the board and making recommendations regarding the operating hours and procedures of the airports, fees, budget and capital improvements.

Sec. 2. Requires Legislative Audit to appoint an independent CPA to perform annual audit of the International Airport Revenue Fund.

Sec. 3. Amends the State Bonding Act (AS 37.15), section on International Airport Construction Fund to state that International Airport Policy Board is responsible for investment and use of money in construction fund.

Sec. 4. Amends State Bonding Act, section on International Airport Revenue Fund to state that International Airport Policy Board is responsible for investment and use of money in revenue fund.

Sec. 5. Amends State Bonding Act to require an independent audit of the International Airport Revenue Fund and specifies information in the audit.

Sec. 6. Amends State Bonding Act so that International Airport Policy Board, instead of the Commissioner of the Department of Transportation, is responsible for fixing and collecting fees, charges or rentals. Adds a new section which requires all leases to be at market value. Adds a new section which states that replacement, expansion and improvement of facilities be considered when fees are fixed.

Sec. 7. Amends Sec. 37.15.510, state improvements to airports so that International Airport Policy Board, instead of the Commissioner of the Department of Transportation may authorize acquisition, construction, improvements, etc., at the airports.

Sec. 8. Amends State Bond Act (AS 37.15) by adding a new section that allows for construction of facilities and purchase of equipment to be made by appropriation as well as financed through revenue bonds.

Sec. 9. Exempts current airport managers from employment provisions of this act.

Sec. 10. Specifies terms of initial technical committee members.

Sec. 11. Repeals: AS 37.15.420(6) authorization for bond committee to provide for investment of money into the construction fund and statement that interest earned becomes a part of the construction fund; and AS 37.15.430(6) authorization for bond committee to provide for investment of money into the revenue fund and statement that interest earned becomes a part of the revenue fund.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

APR 2 8 1981

SB 500

# FISCAL NOTE

I. REQUEST
Bill/Resolution No. SENATE BILL NO. 500
Title Relating to International Airports
Requested by Senate Transportation Committee Date 4/22/81

II. FISCAL DETAIL
Agency Affected DOTPF / Dept. of Revenue
Program Category Affected Transportation/ International Airports
BRU, Program, or Subprogram(s) Affected
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | | | | | | |
| 200 TRAVEL | | | | | | |
| 300 CONTRACTUAL | | | | | | |
| 400 COMMODITIES | | | | | | |
| 500 EQUIPMENT | | | | | | |
| 600 LAND & STRUCTURES | | | | | | |
| 700 GRANTS, CLAIMS, ETC. | | | | | | |
| TOTAL | | | | | | |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

This bill establishes the International Airports Policy Board. The board is supported by the additional creation of a Technical Committee appointed for each airport. The Board powers and duties related to the international airports include budget preparation, capital improvements planning and selection, investment and use of money in the Construction and Revenue Funds; appoints each airport's manager. Also operating hours, operating procedures, fees and charges. DOTPF to provide all staff and assistance necessary for the use of the Policy Board and the Technical Committee's.

Because the Board and Technical Committee's effectively take over operating the airports, and DOTPF has to provide them with all necessary staff. DOTPF will provide a seperate fiscal note as to costs involved related to operations. Board policy related to investments will determine if additional costs, and impacts of their decisions will effect earnings; fiscal impact is real but indeterminite.

IV. DATE April 27, 1981 PREPARED BY Anselm C. Staack, Treasury Comptroller
AGENCY Dept. of Revenue/Treasury Division
PHONE 465-2351

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

Anselm C. Staack

33-001 (Rev. 12/80)

BETTYE FAHRENKAMP
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Co-Chairman

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# ISSUE PAPERS

## RELATING TO

## LOCAL CONTROL OF THE ANCHORAGE AND FAIRBANKS INTERNATIONAL AIRPORTS

PREPARED BY:

ROBIN HALVORSEN
ADMINISTRATIVE ASSISTANT
SPECIAL COMMITTEE ON
INTERNATIONAL AIRPORTS

# INTRODUCTION

The potential of gaining local control of the Anchorage and Fairbanks International Airports is not a new idea. Dealing with an absentee landlord (State of Alaska) has posed many problems, foremost of which is that decisions are made directly affecting the community with little or no interface with that community.

Development of the economic potential of both Anchorage and Fairbanks depends on aggressive management of the facilities, the scheduling and the general operations at both airports. However, state policy regarding management of the two airports is based primarily on their status as part of the state-wide transportation network.

The communities perceive that the airports, as service entities, should provide that service in a manner conducive to attracting visitors to the area, as well as providing the conveniences necessary for the business traveler. Both Anchorage and Fairbanks feel the state is not listening to this concern.

The Eleventh Alaska State Legislature passed "An Act making a special appropriation to the Legislative Council for a study of options for local acquisition and ownership or management of the Fairbanks International Airport and the Anchorage International Airport" as an outgrowth of the above-stated current situation: lack of state responsiveness to local concerns and the perceived need for a more aggressive management system for both international airports.

The following issue papers have been prepared to illustrate the different points which have arisen during the discussions of the airport.

1) Current Operation

2) Finance

3) Competition

4) Tourism

5) Air Cargo

6) Local Responsiveness

7) Labor

8) Bush

## CURRENT OPERATION

The actual physical operation of the airport is good, at least in the opinion of the airport carriers. The real test for operations is winter cleanup and the state does an excellent job in these areas.

The air carriers at Anchorage do have some concerns. One is the fact that in a power outage, no emergency electrical generator exists for the use of the carriers. According to the Anchorage Airport manager, this means that the jetways and certain other carrier facilities are unuseable during a power outage. Although it is not a safety problem, the frequency of outages is expected to increase over the next several years until such time as additional power is brought into the Anchorage area. Passenger comfort is important to the carriers, and is at the heart of this issue.

International carriers are concerned, too. While the international pilots association has given both airports high ratings in surprise inspection tours, they remain concerned that the airport be closed immediately at the time of a crash. While this is normal procedure, no specific policy or regulation is written which will assure the closure. The ALPA rating is critical for Anchorage and Fairbanks.

Both airports suffer in the equipment category. Much of the equipment being used is dated, and some is next to impossible to repair. The equipment request (emergency, maintenance, etc.) is subject to the same budgetary process as any state agency. The equipment is sometimes purchased from older "surplus" equipment inventories released from other DOT operations. With the safety of so many individuals relying on the no-fail operation of this equipment, substandard pieces are not acceptable.

One further operational problem is perceived by the local business communities. It is not specifically operational, but is the responsibility of the present management. The airport is often the first impression a visitor has of Alaska. Both airports need some help "sprucing up."

The appearance--what people see at the airport--is the problem. 1) Cleanliness. The airports are not very clean, and with the preponderance of casual travelers so prevalent in Alaska, the airport can appear very shoddy. 2) Seating. Considering the number of delayed or temporarily weather-bound flights in Alaska and the need to change planes between bush and city destinations--the general waiting that occurs so often in Alaskan airports, it is amazing that there are so few comfortable seating (napping) areas available. 3) Aesthetics. While Alaska abounds with beauty and artists,

there is little or no art work at the airports. While grants from the Alaska Council of the Arts are being used for artistic endeavors at both Anchorage and Fairbanks airports, there is much more that should be done to enable the traveling public to enjoy a look at our culture. Under current operations structure there is no particular emphasis on aesthetics.

There are also no incentives in the current structure for development that could lower operating costs for all users.

## FINANCE

The discussions of local ownership of the airports probably began at the time Anchorage International Airport began to make a profit each year. This was about 1970. Since that time, that airport has grown both physically and financially and is currently making a paper profit of $8 million, FY 80. Those funds are returned to the International Airport Revenue Fund (IARF) and are used to pay off the bonded indebtedness and the normal maintenance and operation costs of both the Anchorage and Fairbanks airports. In the meantime, the Port of Anchorage is being well managed, and thanks to operating agreements with its users, is also looking forward to a profitable financial future.

Fairbanks International Airport has also grown and appears to be operating in the black this year for the first time. If current economic trends continue, Fairbanks will become a profitable airport. New cargo air carriers and expansion of the North Pole Refinery are two reasons for this new success.

The physical assets of the airports are high. Anchorage has a physical worth of $108,673,000, while Fairbanks has a worth of $36,994,900. The municipalities of Anchorage and Fairbanks both enjoy large budgets: Anchorage (FY 81) $310,009,630 and Fairbanks/North Star Borough combined, $74,310,594.

Three primary concerns have been expressed relating to the financial side of the change in ownership question. One is how to retain the integrity of the airport monies. No one wants to see the profit (loss) of the airports used to offset the cost or profit of other municipal functions. Under no circumstance can the monies be allowed to comingle with other parts of the municipality's finances. This may be accomplished through an Enterprise Fund, or may best be handled by an authority separate from municipal government.

The second concern is that of insurance liability. What would happen if a disaster occurred and one of the 747's or DC-10's crashed at one of the airports? Even without deaths or injuries, the operator of the airport is responsible for the damage. In the case of a crash over the city or into a housing cluster, the liability rises dramatically. Anchorage currently has total assets of $776,092,494 and Fairbanks, $292,958,240. Anchorage carries liability insurance in the amount of $50 million for Merrill Field; Fairbanks carries $25 million on the city. The state currently carries $100 million aviation premises insurance

which covers all state owned airports. Since the crash of the Japan Air Lines jet two years ago (which hasn't been settled yet), insurance rates have remained the same. The state, with its seemingly unlimited resources, does not believe the city is capable of handling the responsibility, should a disaster occur. It would also be probable that it would take about six months to transfer the insurance to a new carrier. That transfer would likely have to take place in London.

It may be possible for the state to retain interest in contingent liability for the airports, and to help the airports in case of a disaster. However, this remains to be seen.

The third concern is that of capital improvement needs. The state has either directly financed or sold bonds for construction at the airports. Certainly there are capital improvement requirements at both airports now which need to be funded. They are outlined in CIP's and master plans.

One way the final concern may be met is through operator/user agreements. Depending on the terms and conditions of the operator/user agreements with air carriers using the premises, those agreements can be used as assurance for revenue bond sales. Certainly those agreements allow each party to plan based on the mutual commitments. In the case of major expansion, air carrier revenues can be committed to be responsible for the improvements they seek for the period of time it will take to retire the bonds purchased for the improvements.

The budgetary process of the state should also be mentioned here. Priorities are assigned to projects at the airports with little or no input from the local community. While some of the budget matters of the airport do not truly concern the community, other matters which are important to the community and to the users should be considered. The Port of Seattle, often pointed to as an excellent example of a successful and profitable operation, holds public hearings on its budget before the budget is submitted for final approval.

There are other considerations which are not specifically financial, but seem to fit here. In promoting the airports, and seeking to improve the facilities with a mind towards the traveling public, there is no limit to the amount of service an entity can provide. But spending large amounts on facilities may not necessarily bring more people. The cost of improvements must be weighed against the needs of 200,000 people. On the other hand, how much money can the state put into the airport when there are so many other needs? Needs must be weighed against job creation and return to the state as a whole--i.e. services, tourism, etc.

Financial consideration of the importance of tourism in Alaska must be made. The three anchor theory for Alaska states the need for a strong economic base in Alaska with support from the lower 48, the Orient and Europe. Alaska must have strong economic ties with each of these areas in order to retain a semblence of economic independence. The theory states the primary exports which Alaska must depend on are petroleum, tourism, minerals, fish and wood products. We must expand each of these exports with each of the legs in order to prosper. The need for this strong base is evidenced from our past. At one time, there was no money in the state and we were owned by Seattle banks. Even now, our fishing industry is primarily owned by the Japanese and they control the price of our product, not us. The financial implications of this economic principle need to be considered.

The other financial arena which has not been considered is that of the air carriers. During some of the interviews, they stated that their finances are controlled by one factor, and that is staff. When other costs grow, staff numbers are the first to be reduced. Of course, staff is not the same as service-related employees. As long as there is growth, that should not be a problem. The airport and its associated industries is probably the second largest employer in Anchorage. With employment an important factor in considerations of state economy, this point must be kept in mind.

## COMPETITION

Competition between the two airports has been a fear expressed by many in any discussion of the ownership of the airports. The fear is that either one or both of the airports will engage in shady actions designed to siphon business from the other airport and leave it in a poor financial condition.

The two airports have been tied together physically (through need for alternate landing fields) since the early 1950's when each was being developed, and fiscally since 1972 when they were united through the International Airport Revenue Fund (IARF). Because both airports are managed by the state, there has been little direct competition between them to date. That does not mean there is no jealousy between them. Fairbanks looks longingly at the large terminal and the international carriers at Anchorage and feels it may have been shortchanged somehow. Anchorage looks at the increasing number of cargo flights refueling at Fairbanks and wonders why not Anchorage. The financial bonds between the two are also the cause of ill feelings. Anchorage's revenue picture has been in the black for several years; Fairbanks' has been in the red until recently with the Fairbanks community firmly believing that the figures are wrong. Anchorage wants to stop supporting Fairbanks financially; Fairbanks thinks the current set-up is only fair. So the story continues.

But these points are only incidental. The real question is what could happen if competition between the two were open and unregulated. One school supports the idea that Fairbanks is Anchorage's country cousin, and, as such, would be unable to compete on equal grounds. Fairbanks locals disagree. They cite the mileage advantage on most transpolar flights and the supplies of jet A-1 and B fuel. Fuel supplies must be assured in order to keep this advantage. Anchorage has a more finely developed infrastructure and also available supplies of fuel. Anchorage also has the advantage of established passenger and international routes.

Another fear is that Anchorage, if it receives ownership of the airport, would slash landing and other fees and try to induce the carriers now re-fueling at Fairbanks to come to Anchorage. Rumors also have it that the airlines now stopping in Fairbanks only do so because of the fuel availability and will return to Anchorage if given the opportunity. Neither of these claims have much credence. Anchorage would have no reason to cut landing prices and reduce their profit. Additionally, if the Cannon bill (ADAP program) passes without amendments, Anchorage may stand to

lose some of its federal matching funds for the airport and would require all the current revenue for funding capital improvements and maintenance of existing facilities. The landing fees in both Anchorage and Fairbanks are lower than most, if not all, airports internationally, and are not based on any logical structure. This fear is groundless at this time.

Anchorage and Fairbanks are tied together in one more important way. In order for an international flight to attempt a landing at a particular field, there must be an alternate landing site available. The two airports serve as each other's alternate. Stringent requirements exist for these alternate landings, and while some Alaskan military installations fulfill the requirements, the red-tape monster they also require negates their status as acceptable landing fields. A recent exception is Eielson Air Force Base. All air carriers operating in or out of Fairbanks have official permission to use Eielson as a secondary landing field.

There are a few items which will reduce the fears of competition that must be included in any decision. First, the airports need to be equalized in their capital improvement needs prior to transfering ownership. Without this accomplished, it would be possible for the Anchorage legislative delegation to block any future capital improvements at Fairbanks, and could keep Fairbanks in the noncompetitive mode it feels it is currently. Second, operation/use agreements should be signed between any new management team and the airport users prior to transfer. This could work one of two ways. The operation agreements could be made so that an airline is responsible for particular costs even if it no longer uses the airport. The Port of Seattle's contractual agreements with the airlines provides that they will pay annual charges which are based on the net cost of operating the airport plus the required debt service on the revenue bonds. That airport works on a not-for-profit system with an annual review and necessary adjustments made yearly. Operating agreements could remove some of the threat of stealing a competitor's business. Airlines considering a move to a different home base could do this before the agreements are signed. These agreements would also absolve the fears of some of the domestic airlines that their space fees would be raised beyond reason.

It must be kept in mind that competition is an essential part of the American economy. It appears the citizens who are worried should be concerned about getting a larger pie instead of just changing the size of the slices of the one we have. A good marketing program, used aggressively for both areas, could help here. Competition can improve management efficiency and can promote economic expansion. Whether or not it does will depend on the approach which is taken in any proposed transfer.

# TOURISM

A change in goals of the airport could result in an increase of tourist dollars into the economy. At this time, tourism is estimated to place $ 80 million directly into the Anchorage community. This dollar amount represents all overnight visitors in Anchorage. There are no estimates for Fairbanks at this time.

The bottom line for the economics discussion is not how much profit can be brought into the actual airport facility, but rather how dollars from tourism and related industries can be brought into the community, as well as justify airport operational cost increases.

Tourism is one of the cornerstones of the state's economy. Along with petroleum, fish, minerals, wood products and agricultural products, tourism can be considered one of Alaska's commodities for export. It is an export since it brings needed dollars from outside into the economy, and accomplishes this without any loss in raw materials. Currently, tourism brings about $500 million into the state's economy, including state and local taxes, employees and sales.

Tourists don't just "drop in" to visit Alaska. Most, if not all of them, have probably spent many hours in the planning stages for their trip and have probably gone to great expense to get here. Tourism depends not only on the one-time visitor, but also the repeat visitors and the word-of-mouth reputation an area can receive. An airport can be a good visitor satisfaction tool. In order to assure return in addition to achieving good public relations, attention must be paid to details at the airport, such as cleanliness, parking and convenience facilities, and attractive grounds or entries.

The visitors which are currently very appealing to those looking to expand the tourism industry are the nearly one million international passengers in transit to the Far East or Europe. Probably 1 or 2% of these passengers, 30,000 at the most, deplane in Anchorage (none in Fairbanks) and they don't come to visit Alaska. Logistically, enticing these people to visit Alaska has been a problem due to airline staff requirements, reciprocal landing agreements and seat availability on airplanes. Until now, large blocks of seats have been unavailable for use by foreign tour groups wishing to stop here. The difficulty faced by the air carriers is that with expenses running several thousand dollars per hour, it is important for them to be assured that all seats (therefore, each possible paying passenger is on board) are occupied each trip. Deplaning in Alaska could cause some financial uncertainty for some of the airlines operating

here. Although the numbers are unknown, some additional staff would be required by each airline if passengers regularly deplaned. Of course, if the numbers of travelers grew to magnitudes warranting the greater use of nonfinal destination flights or warranting Alaska itself as a destination, these difficulties might be alleviated.

Local communities would like to attract some of these international passengers. Internationals generally do spend more per person than domestic visitors and are more souvenir and gift oriented.

An in-house study is being made of the potential for the stopover traffic by international passengers in Anchorage by the Anchorage Convention and Visitors Bureau. It is due for completion prior to the end of the year. At this time the study results indicate approximately 10% of the international travelers would be inclined to stopover in Alaska. This market will take about 5 to 10 years to develop.

The primary way to attract travelers to visit Alaska is to attract them before they leave their homes. Programs aimed at this market are being conducted by the Anchorage and Fairbanks Visitors and Convention Bureaus (AVCB, FVCB), the State of Alaska Division of Tourism, and the Alaska Visitors Association Marketing Council. The annual budget of the Marketing Council alone is 2.6 million for FY 81.

This visitor market is one that generates a great deal of interest. Expansion is evident through such programs as "triangle" fares, with Alaska being one leg of the Seattle-Alaska-London or Seattle-Alaska-Hawaii routes. In addition, tourists are becoming more discretionary in their spending patterns. They spend as much as before, but are after the most benefits for their money.

The State, Marketing Council, AVCB and FVCB are aggressively marketing their respective areas, but no one is marketing either of the airports for itself. Most major airports are marketed. Airport marketing has previously taken place in CAB rate and route hearings (no longer applicable) and in foreign markets. Fuel availability, route distances and airport amenities such as warehousing or federal Foreign Trade Zone designation are also used to market airports. The question has arisen as to where and how the current tourism marketing programs could be expanded to include the airports. It must be made clear, however, that airports don't market tourism; airports market themselves. Whichever programs are put together, it is essential that each group's marketing aims, goals and successes be interfaced with each other and local community projects.

This is one place where the differences between the policies

of the state and the concerns of the local community become apparent. The state has directed operations of the airports as service facilities. The local communities would like to see the airports marketed for the tourist potential and added local service jobs. Certainly, attention to some of the details felt to be important by the local communities could be accomplished through more local input into the decision making process. The local community has not been invited to participate in the decisions which they feel are important to their local tourism industry.

Marketing has become a "buzz word" that means different things to different people. Right now, marketing is thought to be the key to developing tourism in the state and Anchorage holds the key. Because there is so much potential in Alaska, a political commitment must be made. First, the administration, perhaps directed by the Legislature, but certainly led by the Governor, must give more than lip service to the concept that tourism is an important facet in Alaska's developing economy. Second, tourism must be developed as a priority in agency policy development. Third, the role of the State and of the communities must be determined.

It must also be accepted that the airports are an important part of the entire tourism package. Tourism is a desirable form of commerce and as the second largest industry in the state, deserves appropriate attention.

## AIR CARGO

There are three types of air cargo flights flying in and out of the Anchorage and Fairbanks International Airports: intrastate cargo distribution flights, international air cargo refueling flights, and flights carrying Alaskan trade.

Traditionally, Alaska has imported most of its essentials and air cargo has been the lifeline to many bush communities. Intrastate air travel has been visualized in a complete service manner by the state. The state has realized the bush community need for the Anchorage and Fairbanks International Airports, so landing fees and expenses have been maintained as much as possible. This state of equilibrium might not be as well maintained if the Anchorage and Fairbanks communities managed their own airports without the broad scope of the whole intrastate transportational network.

The refueling of the international cargo flights has been a changing market in the last two years, with the availability of fuel and the CAB deregulation. Anchorage has been catering to and has developed an infrastructure for this market for quite some time, because of the relationship to the transpolar flight plan and the two refineries in the Kenai. Fairbanks, up until two years ago, was used as the alternate landing field for the flights. This situation changed with the addition of the North Pole Refinery and the availability of competitively-priced fuel in Fairbanks. As of FY '80 there were 2463 international air cargo flights into Fairbanks and only 38 of those flights were diverted flights scheduled for Anchorage. This is compared to two years ago when there were no scheduled international air cargo flights into Fairbanks. This could become a competitive market between the two airports, since each flight qualifies as a revenue landing and provides a source of commerce within the respective communities. The competition between the communities might result in lowering of landing fees in Anchorage before Fairbanks is able to develop the needed infrastructure to support the additional traffic being developed between the orient and the european markets.

Until 1978 the amount of Alaskan trade transported by the international flights was negligible. Since then the air cargo industry has been deregulated and the poundage has increased five hundred percent. Most of the present cargo being exported is fresh fish to the orient from Anchorage, but as Alaska's renewable and nonrenewable resources develop there will be an increase in traffic between Alaska and the lower 48, oriental, and european markets. This will require the management of both airports to develop the proper warehousing and ramp space to meet the increased needs.

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The 1980 Alaska State Legislature passed HB 917 which established requirements for foreign trade zones in Alaska. Foreign trade zones are custom-free facilities providing sites at domestic ports of entry where operations involving foreign goods can take place which would otherwise have severe customs restrictions. Both Anchorage and Fairbanks are suitable for a foreign trade zone, since both have international traffic using their facilities, both are part of a transportation network (Anchorage has the additional advantage of the Port of Anchorage), both have available work forces who, because of inflation in the lower 48 are becoming more competitively priced, and both have access to Alaskan resources which, when combined with foreign goods, could become more marketable.

The idea of foreign trade zones, combined with the exporting of Alaska goods via air cargo, warrants an aggressive marketing process which should be undertaken by the communities with the assistance of the state. Infrastructure required at the airports should be determined on the basis of need, rather than by a territorial mandate. This concept must be considered during the airport ownership discussion.

## LOCAL RESPONSIVENESS

Any governing body which isolates itself from participation by that public affected by its decisions (rules or policies) can cause dissension among those governed. It is the perception of the citizens in Anchorage and Fairbanks, who are concerned about improving airport operations and conditions, that the DOT/PF has almost continuously ignored any option for public input and has distinct problems with communication lines. A public advisory committee was appointed by the state to work on the airport master plan development at Anchorage, but one was not appointed in Fairbanks. The Anchorage advisory committee reported difficulty in getting DOT/PF staff to listen to their concerns.

DOT believes that it is being condemned for no reason. Airport managers meet regularly with those in the aviation industry, but the anger some general citizens feel when they are able to spot an area in the airport terminal complex which has not been cleaned or painted for several years is readily understandable when they can't get anyone to listen to their complaint. The entire DOT/PF organization at present causes confusion. There is no "head" to the monster--organization regarding delegation of authority and responsibility is not clear to the public.

Public needs are important. When the needs concern an area which exists to serve the public, they become even more important. Many people understand the role which is played by the airports in the tourist industry. Local elected representatives, businessmen and those whose livelihoods depend on the tourism dollar are concerned about the seeming inability of the local informed community to impact decisions which regard the airport. The legislative and budgetary processes are a part of this problem. Planning operations and marketing decisions are made by the state without input from the local community. In areas which are operational in nature, such as air traffic coordination and other operating functions, it is not necessary for the community to participate. The state must have discretion, but accountability along with the responsibility. These decisions are and should be the realm of the professional airport managers. On the other hand, because tourism is an essential Alaskan industry, some consideration for the public point of view should be included in the decision-making process, perhaps through advisory boards or quarterly public meetings.

The current chain of command at the airports requires some decisions to be made in Juneau. The process can take several months for action on a single issue. The DOT/PF has

split responsibilities for airports, marine transportation and highways. There have been times when problems couldn't be addressed because those people making decisions about the airports were busy making decisions about highways, or railroads, or were not readily identifiable. DOT/PF organization charts need to be clarified.

At the beginning of 1980, it became apparent that one bill in the U.S. Congress could drastically affect the funding sources for the international airports nationally, and for Anchorage specifically. This was the ADAP program through the Cannon bill. Not only did the DOT ignore the situation, but the Alaska Congressional delegation also thought the situation of little note. The Municipality of Anchorage lobbied Congress through the U.S. Conference of Mayors before any favorable action to Alaska was taken. This kind of inattention and non-responsiveness causes suspicion and distrust among citizens.

From the standpoint of the local communities, it appears that some of the decisions which should be made locally are made in other areas. Local district maintenance and operation people are directed not to provide feedback. DOT/PF has a large staff in Anchorage and in Juneau. To the people in Fairbanks, it appears that all the important decisions have to be made in Anchorage, and the long existing rivalry makes this relationship awkward at times and frustrating most of the time. Anchorage has a similar relationship with Juneau. This certainly appears to the public as a direct conflict of interest; and, it may be. DOT/PF is also known as an agency that sometimes makes its decisions based on political exigencies instead of facts. In fact, some staff members place primary consideration on political aspects of decisions before the public has even participated in the discussion of a certain project.

Another case in point has been the constant struggle between members of the community and DOT/PF in the planning efforts surrounding Airport Master Plan development. Anchorage and Fairbanks citizens have tried to convince state DOT/PF planners of particular needs in the airports and the communities associated with the airports. Those working on the Fairbanks Master Plan have agreed to work with the community future-thinkers, but only after considerable effort on the part of those who wanted some positive input into the plan. The consultant in charge of the planning stated that although he had requested meeting with some of the elected officials in Fairbanks early in the planning stages, DOT/PF super-visory personnel told him that would not be acceptable.

The Anchorage Master Plan, after four years on the shelf, is finally scheduled for completion in December, 1980. However, the Anchorage Airport Master Plan has already been used by DOT/PF as a support document for airport capital

projects. This kind of tactic wears thin when lack of a current master plan was the reason quoted for vetoing a bill which authorized revenue bond sales for the Fairbanks airport. Non-progressive thinking on the part of the state, with little or no acceptance of the thought of the business community, and with no visible, established policies by which to guide decisions, creates an untenable situation for any citizen wishing some meaningful response from the state.

## LABOR

Presently there are two collective bargaining units representing the workers at the Anchorage and Fairbanks International Airports: Public Employees Local No. 71, AFL-CIO, and Alaska Public Employees Association. Local 71 represents 150 employees in Anchorage and 30 employees in Fairbanks. APEA represents 46 employees in Anchorage and 42 employees in Fairbanks.

These collective bargaining units wish to continue representing their members at the Anchorage and Fairbanks Airports in order to ensure retaining retirement and health benefits, along with established seniority benefits. A change in the management of the airports would not necessarily mean a loss of the current union structure, but a change in ownership most certainly would.

Should a change in management or ownership take place, written agreements must be negotiated protecting the employees, insofar as possible. At the very least, a method might be devised where the current employees would be given first option on any new, or changed employment opportunity. As one person stated during the committee hearings on the issue, "It is the people who make the airport work."

## BUSH

Anchorage and Fairbanks airports are both transportation hubs of the state. It is necessary for almost all goods and materials entering the state to pass through one or the other of the cities. The bush relies entirely on goods which pass through the towns. The costs of living in Alaska which are high in the municipalities and urbanized areas are much higher in the bush. If the airports change hands and any fees are raised to those airlines which service the bush, the price increases will be passed directly to the bush. A study done several years ago showed that a 1% increase in price in the cities created an 8% increase in price in the bush. Fees should probably be allocated to the users which would cover the increase in costs.

Currently, the state operates the airports as service facilities, one price piece of a larger picture of in-state air transportation. The state, due to international carriers, is able to keep the landing, fuel flowage fees, and other rates at a level low enough to allow the bush airlines to continue serving bush communities. A change in price structure could cause some of the domestic carriers to move from Anchorage or may even cause the demise of some.

The larger communities in the remainder of the state also depend on use of the airport facilities in Anchorage and Fairbanks. Change in the price of landing fees could raise ticket prices, but the price of fuel appears to be a more important consideration.

Airport Study Committee staff will continue to work on the following points, regardless of the outcome of the current study efforts:

1. Organization charts -- more and generally responsive to local and air carrier needs.

2. Marketing

3. Response to local concerns: Policy advisory committee, not volunteer; legislator should be involved.

4. Continued oil supplies -- reasons for completion of Fairbanks processint plant

5. Operational agreements -- what options can be included.

6. Capital development

7. Financial system

8. Policies in written form

9. Equipment

If there is a change in ownership, the following issues must be addressed as well:

1. Financial responsibility, including contingent insurance.

2. Bonding

3. Bush

4. Labor

5. Continued subsidy

6. Separation from politics

7. Lease holders

8. Capital improvements in Anchorage and Fairbanks

PLEASE NOTE: THE PRECEDING PAGES HERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

SB

510



# NANA REGIONAL CORPORATION, INC.

BOX 49, KOTZEBUE, ALASKA 99752
TELEPHONE (907) 442-3301

May 15, 1981

Honorable Bill Ray
Chairman
Senate Transportation Committee
Pouch V
Juneau, AK 99811

Re: Senate Bill 510

Dear Mr. Chairman:

This is in regard to Senate Bill 510, which would appropriate $1 million to the Department of Transportation for a route survey for a highway from Prospect Creek to the Ambler Mining District. This letter supplements the testimony Don Argetsinger delivered to the Committee on May 7.

NANA strongly opposes the adoption of any legislation which will assist in the development of overland transportation routes from the east to the Ambler District. We are very concerned with the consequences allowing uncontrolled overland access would have on the Arctic environment and the lifestyle of the residents of this region. Three of the 11 communities in this region are located in the Ambler Mining District/Kobuk River Valley and four others are either in the Kobuk Valley or immediately adjacent to it. Residents of these villages enjoy and work hard to maintain a lifestyle traditional to the Natives of this region. While development of mining claims in the Ambler District might some day prove to be economically feasible, it is extremely important that when and if it takes place, it is done in a manner consistent with the aspirations of the people of this area. This is the essence of NANA's concern with this legislation. In addition, there are a number of other specific reasons why Senate Bill 510 is unacceptable. Several of these are listed below:

1. The results of the State Department of Transportation's "Western Arctic Transportation System " study (WATS) are unknown. This study is supposed to have examined a number of alternatives for transportation to, from, and within

the Western Arctic regions of the State. A great deal of time and money was devoted to this effort. It is important for everyone to have an amble opportunity to review the analysis and recommendations made by those contributing to this work. This should be done before any decisions are made by either the Administration or the Legislature to fund work in connection with designated transportation routes to or from the Arctic. For example, alternative modes of transportation (water and railroad) going to the west from the Ambler District to tidewater have been examined in the WATS study, demonstrating that it is premature to take action on a measure such as Senate Bill 510 until everyone has had a chance to look at these options and a full and complete public airing of all alternatives has been provided.

2. There are no major mining concerns with claims in the Ambler District who are anywhere near a decision to develop their property. From all we have been able to learn, development decisions are easily 10 and very likely 15 years away. In certain cases NANA lands contain or will be situated adjacent to the claims of the companies holding large claim blocks at Ambler. We expect to work closely with those having interests in the area and may even participate in some way in this development ourselves, either on our own lands in the District or through use of NANA lands adjoining these claims. All this is to illustrate that we are not opposed to mining within the region, in fact our shareholders now support the the idea of a carefully planned and executed mining development for the simple reason they need the employment it would bring. However, mining will not help our people unless it is carefully planned and development is phased over a long period of time. For this reason we have begun discussing with a number of companies (including the major concerns holding claims in the Ambler District) the potential for development of a lead/zinc property in the Northwest part of the region in the vicinity of Kivalina. This property is located close enough to tidewater that we believe the problem of transportation can be successfully addressed with a minimum of disturbance to the environment and the lifestyle of our people.

In summary, NANA requests that no action be taken on Senate Bill 510 and that the issue of developing any additional transportation for this region be approached in a manner which allows for proper planning, consideration of *all* modes and routes, and the full participation of the residents of this area.

Sincerely,

NANA REGIONAL CORPORATION, INC.

John W. Schaeffer
President

dcs

cc: Governor Jay Hammond
Lt. Governor Terry Miller
Commissioner Bob Ward
Senator Frank Ferguson
Senator John Sackett
Representative Al Adams
Representative Jack Fuller
Tim Wallis, Doyon
Charles Johnson, Bering Straits
Marie Schwind, Mauneluk Association
Senator Charles Parr
Senator Don Gilman
Senator Ed Dankworth
Senator Tim Kelly
Senator Bettye Fahrenkamp
Senator Brad Bradley
Senator Mike Colletta
Senator Arlis Sturgelewski

NANA REGIONAL CORPORATION, INC.
BOX 49, KOTZEBUE, ALASKA 99752
TELEPHONE (907) 442-3301

May 20, 1981

Honorable Bill Ray
Chairman
Senate Transportation Committee
Pouch V
Juneau, AK 99811

Re: Senate Bill 510

Dear Mr. Chairman:

This refers to my letter of May 15, 1981, expressing NANA's views regarding the above referenced legislation.

There are two errors in this letter which I want to call to your attention. In the seventh line of item number two on page two, the third word should be "ourselves." In the third line of the last paragraph on page two, the third word from the end of the line should be "all."

Thank you for making these corrections on your copy.

Sincerely,

NANA REGIONAL CORPORATION, INC.

John W. Schaeffer
President

dcs

cc: Governor Jay Hammond
Lt. Governor Terry Miller
Commissioner Bob Ward
Senator Frank Ferguson
Senator John Sackett
Representative Al Adams
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Senator Charles Parr
Senator Don Gilman
Senator Ed Dankworth
Senator Tim Kelly
Senator Bettye Fahrenkamp
Senator Brad Bradley
Senator Mike Colletta
Senator Arlis Sturgelewski

May 22, 1981

John W. Schaeffer, President
NANA Regional Corporation, Inc.
Box 49
Kotzebue, Alaska 99752

Dear Mr. Schaeffer:

This is to acknowledge receipt of your correspondence of May 15 opposing Senate Bill 510 which appropriates $1 million for a route survey for a highway from Prospect Creek to the Ambler Mining District.

Thank you for sending me NANA's position on this legislation. You can be assured that the Transportation Committee will take these points into consideration.

Sincerely,

Bill Ray

Bill Ray
Senator
District C

ANS - FILE WITH BILL



# NANA REGIONAL CORPORATION, INC.

BOX 49, KOTZEBUE, ALASKA 99752
TELEPHONE (907) 442-3301

May 15, 1981

Honorable Bill Ray
Chairman
Senate Transportation Committee
Pouch V
Juneau, AK 99811

Re: Senate Bill 510

Dear Mr. Chairman:

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1. The results of the State Department of Transportation's "Western Arctic Transportation System " study (WATS) are unknown. This study is supposed to have examined a number of alternatives for transportation to, from, and within



the Western Arctic regions of the State. A great deal of time and money was devoted to this effort. It is important for everyone to have an amble opportunity to review the analysis and recommendations made by those contributing to this work. This should be done before any decisions are made by either the Administration or the Legislature to fund work in connection with designated transportation routes to or from the Arctic. For example, alternative modes of transportation (water and railroad) going to the west from the Ambler District to tidewater have been examined in the WATS study, demonstrating that it is premature to take action on a measure such as Senate Bill 510 until everyone has had a chance to look at these options and a full and complete public airing of all alternatives has been provided.

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Sincerely,

NANA REGIONAL CORPORATION, INC.

John W. Schaeffer
President

dcs

cc: Governor Jay Hammond
Lt. Governor Terry Miller
Commissioner Bob Ward
Senator Frank Ferguson
Senator John Sackett
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Tim Wallis, Doyon
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Senator Charles Parr
Senator Don Gilman
Senator Ed Dankworth
Senator Tim Kelly
Senator Bettye Fahrenkamp
Senator Brad Bradley
Senator Mike Colletta
Senator Arlis Sturgelewski

CITY of AMBLER

99786

May 6, 1981

Senator Frank Ferguson
Representative Al Adams
Pouch V
Juneau, Alaska 99801

Dear Frank & Al,

We have just learned about S B 510 which would begin work on a road from the Pipeline to Ambler and we are strongly against this bill.

We think a road into the Upper Kobuk would not be good for the people who live here as it would bring in too many people to keep on living on subsistance lifestyle.

The City Council of Ambler will discuss this bill at our next meeting and we will ask those who don't want the road build will sign the letter.

We have to ask you to help us to stop them from ruining our land and the way we live.

Sincerely,

City Council of Ambler

and concerned people of Ambler.

Peter MacManus

Thelma J Cleveland

Thelma B Johnson

~~Thelma A Johnson~~

John Blower

Molly Pearson

Stanley Johnson

Truman Cleveland SR.

Sidney Cleveland

Arthur L Douglas Sr.

Tommy Lee

Louie Commack Jr.

Frank Downey

Scott Jones

Nicholas A. Jones

Helena R Jones

Nancy Johnson

Lillian E Johnson

Katherine Cleveland

Wallace M. Cleveland

Regina Randall

Rodney Dickett

TELEGRAM TRANS - FILE

[illegible]
[illegible], AK 99[illegible]

#

02075 TDA NOORVIK AK 136 05-12 1247P ADT

PMS SENATOR BILL RAY, CHAIRMAN 9884

SENATE TRANSPORTATION COMMITTEE

JUNEAU

WE OPPOSE THE PASSAGE OF THE SENATE BILL NBR 513 QUOTE AN ACT MAKING A SPECIAL APPROPRIATION TO THE DEPARTMENT OF THE TRANSPORTATION-PF FOR A HIGHWAY ROAD SURVEY FROM PROSPECT CREEK TO THE AMBER MINING DISTRICT; AND PROVIDING FOR AN EFFECTIVE DATE. WE FEEL THAT STREET AND ROAD DEVELOPMENT SHOULD BE A PRIORITY WITHIN RURAL TOWNSITE BOUNDARIES RATHER THAN EXPANDING STATE FUNDS FOR A SURVEY ATTEMPTING TO LINK URBAN AREAS WITHIN RURAL COMMUNITIES. RURAL COMMUNITIES SUFFER FROM INADEQUATE STREET ROADS AND WILL CONTINUE TO, UNLESS LEGISLATORS AND ADMINISTRATIVE OFFICIALS DEVELOP POLICIES TARGETING FUNDS TOWARD RURAL COMMUNITY STREETS AND ROAD DEVELOPMENT, RATHER THAN EXPANDING FUNDS DETRIMENTAL TO THE LIVLIHOOD AND CULTURAL LIFESTYLE OF RURAL RESIDENTS. WE URGE NON PASSAGE OF THE ABOVE BILL IN THE SENATE TRANSPORTATION COMMITTEE.

JAKE WELLS

CITY ADMINISTRATOR OF NOORVIK

BOX 146

NOORVIK AK 99763

#

02061 TDA AMBLER ALASKA 60 05-11 136P ADT

PMS SENATOR BILL RAY CHAIRMAN TRANSPORTATION COMMITTEE

0833

JUNEAU AK

'81 MAY 11 PM 4

THE CITY COUNCIL AND CITIZENS OF AMBLER UNANIMOUSLY, STRENUOUSLY OPPOSE THE PROPOSED HIGHWAY TO OUR REGION. SUCH A ROAD WOULD SURELY LEAD TO THE ULTIMATE DISSPOILMENT OF THE LOCAL ECOSYSTEM AND TO THE DESTRUCTION OF OUR SIBSISTENCE LIFE STYLE. WE VOW TO UNITE WITH ALL WHO OPPOSE THIS THREAT, AND WILL USE EVERY POWER WITHIN OUR MEANS TO DEFEAT IT.

CITY OF AMBLER

TELEGRAM

ALASCOM, INC.
PHONE: 586-6442
JUNEAU, AK 99802

#

'82 MAY 11 PM 3 10

02049 TDA KOTZEBUE ALASKA 82 05-11 1135A ADT

PMS SEN BILL RAY

[redacted] 0822

JUNEAU

SENATE BILL 510 WOULD BE A DISASTER FOR THE RESIDENTS OF THE UPPER KOBUK RIVER. RESIDENTS OF AMBLER, KOBUK AND SHUNGNAK HAVE OFTEN EXPRESSED THEIR OPPOSITION TO ANY ROADS IN THE AREA. THE ROAD WOULD BEING UNWANTED DEVELOPMENT AND INFLUX OF PEOPLE WHO WOULD COMPETE WITH LOCAL RESIDENTS FOR JOB AND SUBSISTENCE RESOURCES. AT A TIME WHEN THE SUBSISTENCE PRIORITY OF RURAL ALASKAN RESIDENTS IS BEING CHALLENGED SB510 IS PARTICULARLY ILL ADVISED. I URGE THE SENATE TRANSPORTATION COMMITTEE DEFEAT SB510.

GREG MOORE SUBSISTENCE COORDINATOR, MAUNELUK ASSOCIATION

'81 MAY 11 AM 5 31

#

02081 NL TDA KOTZEBUE ALASKA 100 05-11 230P ADT

PMS SENATOR BILL RAY

0836

JUNEAU AK

I WORK FOR THE MAUNELUK HEALTH CORPORATION IN KOTZEBUE AND HAVE TRAVELED TO THE VILLAGE OF SHUNGNAK AND AMBLER ON HEALTH RELATED BUSINESS. I HAVE SPENT TIME TALKING TO THE RESIDENTS OF THESE VILLAGES ON THE MATTER OF SB510 AND THEY FEEL STRONGLY AGAINST THE ROAD INTO THIS AREA. THIS ROAD WOULD GREATLY AFFECT THEIR LIVELIHOOD IN BOTH CULTURE AND SUBSISTENCE LIFESTYLE OUR MAUNELUK CORPORATION DEALS IN HEALTH PROBLEMS IN THE REGION AND SUCH A ROAD WOULD ADD TO THE EXISTING PROBLEMS OF OUR AREA. WE HOPE YOU WILL HELP OTHERS CONSIDER MORE THOUGHTS BEFORE SUCH A MOVE IS MADE.

TOM FIELDS, WELLNESS COORDINATOR

02133 TDA KIANA ALASKA 32 05-11 0418P ADT

PMS SEN BILL RAY

JUNEAU 0852

THE CITY OF KIANA OPPOSES THE PROPOSED ROAD FROM PROSPECT CREEK TO AMBLER UNTIL THERE ARE HEARINGS IN EACH VILLAGE THAT MAY BE EFFECTED BY THE ROAD IN OUR NANA REGION.

EUGENE GESSE, MAYOR

KIANA ALASKA

'81 MAY 11 PM 6 52

# MAUNELUK ASSOCIATION

P. O. Box 256
Kotzebue, Alaska 99752

Phone
(907) 442-3311
or
(907) 442-3313

May 6, 1981

Senator Bill Ray
Senate Transportation Committee
State Legislature
Pouch V
Juneau, Alaska 99811

Dear Senator and Committee:

It is the position of the people of Northwest Alaska that a road through the Kobuk Valley to the western coast would be undesirable.

The social, environmental, cultural and political impacts on the people of the region would far outweigh the positive aspects. This could be especially destructive if done in conjunction with secretary Watt's accelerated exploration for oil.

NANA Corporation has proposed an alternative route, from Ambler to Golovin Bay, to allow the mining corporations to get the minerals out, and jobs to be created, yet allow the people to remain in the present subsistence and local control situation.

Before you open up roads, please investigate other alternatives such as railroads and lighter -than-air vehicles. This is a strong position held by the people of the region, and we suspect, many people outside the region who have not yet spoken up.

The bill introduced by Parr et. al. for a $1 million route survey should not be passed. The Western Arctic Transportation Study has not even been distributed for public review yet, and already proposals are being made for opening up this country.

It is in the State's interest to leave the minerals in the ground as long as possible to get a higher price later when the market demand is higher. The remaining time can be used by the State, our corporations, and our people to get the training and develop the management capability to handle the changes.



Please read thoroughly the enclosed resolution and the points it makes in developing the reasons for our position. This resolution was adopted by ALL the communities of the NANA region.

Sincerely,

MAUNELUK ASSOCIATION

Dennis J. Tiepelman, President

Marie N. Schwind
Executive Vice-President

MNS/ijc

cc: Senator Frank Ferguson
Rep. Al Adams
Rep. Jack Fuller
House Transportation Committee
Commissioner of Community & Regional Affairs
Commissioner of DOT/PF
Commissioner of Dept. of Natural Resources
AFN Members
Mauneluk Board of Directors
John Schaeffer, President of NANA

ENCLOSURE

# MAUNELUK ASSOCIATION

P. O. Box 256
Kotzebue, Alaska 99752

Phone
(907) 442-3311
or
(907) 442-3313

RESOLUTION #81-08

KOBUK VALLEY ROAD

WHEREAS: Mauneluk Association represents the eleven (11) villages in the NANA Region; and

WHEREAS: The Mauneluk Association Board of Directors is the policy making body for the Mauneluk Association; and

WHEREAS: The people of Northwest Alaska wish to retain their current lifestyle and economy; and

WHEREAS: Development needs to be carefully phased to allow for local training and growth management institutions; and

WHEREAS: A highway would accelerate sociocultural caribou and fishery impacts through immigration of outside employment and population; and

WHEREAS: A highway would be a subsidy to a multi-national corporation capable of funding it's own support system; and

WHEREAS: The benefits would not outweigh the social and economic costs; and

WHEREAS: The State's hard-rock mineral severance taxes are so low that there would not be substantial State benefits; and

WHEREAS: State's severance taxes are not likely after reapportionment to be redistributed to rural aras to offset the impacts; and

WHEREAS: Other technological and routing alternatives exist for getting the minerals to market; and



AND WHEREAS: The precedent is already set around Nome for a road system not connected to the main network.

NOW THEREFORE BE IT RESOLVED THAT: No road be built nor route surveyed from the existing network through the Kobuk Valley to Ambler.

ATTEST: Lila M Moto
LILA M. MOTO
CORPORATE SECRETARY

Dennis J. Tiepelman
DENNIS J. TIEPELMAN, PRESIDENT
MAUNELUK ASSOCIATION

DATE: May 6, 1981

Viola C Morton
Vice- CHAIRPERSON
MAUNELUK BOARD OF DIRECTORS

# MAUNELUK ASSOCIATION

P. O. Box 256
Kotzebue, Alaska 99752

Phone
(907) 442-3311
or
(907) 442-3313

May 6, 1981

Senator Bill Ray
Senate Transportation Committee
State Legislature
Pouch V
Juneau, Alaska 99811

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Dennis J. Tiepelman, President

Marie N. Schwind
Executive Vice-President

MNS/ijc

cc: Senator Frank Ferguson
Rep. Al Adams
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House Transportation Committee
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Commissioner of DOT/PF
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AFN Members
Mauneluk Board of Directors
John Schaeffer, President of NANA

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LILA M. MOTO
CORPORATE SECRETARY

DENNIS J. TIEPELMAN, PRESIDENT
MAUNELUK ASSOCIATION

DATE: May 6, 1981

Viola C. Morton
Vice-CHAIRPERSON
MAUNELUK BOARD OF DIRECTORS

SEAL

To: Senate Transportation Committee May 7, 1981

From: E. O. Bracken, Development Specialist
Office of Minerals Development

Statement in favor of Senate Bill No. 510

TRUNKLINE SURFACE TRANSPORTATION SYSTEM

The transportation system component proposed by Senate Bill No. 510 is representative of the type of infrastructure improvement needed to encourage development of Alaskan resources.

Access for transportation of product to market and for supplies and labor for the production process is an essential first step toward making resource potential commercially valuable.

This Division would encourage the establishment of a bulk transportation system for the state. Whereas, S.B. No. 510 proposes highway access, the optimum system might be railroad extension.

The appropriation should include consideration of feasibility for any combination of bulk surface transportation facilities for servicing the potentially productive area in and adjacent to the Ambler mining district.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

NOTES from phone conversation with Dave Smith, DNR, Division of Minerals & Energy, Anchorage, Noon, May 6, 1981:

Ambler Mining District:

Includes the Arctic deposit: minerals include copper, lead, zinc, silver and gold; area "drilled out" by Kennecott Copper -- they are certain of the scope of the deposit -- they anticipate 9,000 tons per day produced at the mine, and about 600,000 tons per year.

Also includes the Sun deposit and the Smucker deposit, with the same ore minerals: Anaconda has interest in these deposits; Anaconda is not altogether sure of the scope of these deposits, but figures that together they may add up to another 600,000 tons per year. There may be other deposits.

Total mineral materials available for export from area probably about 1.2 million tons per year.

An area 6 miles wide, located about 20 miles north of Kobuk, extending about 25 miles to the west and about 35 miles to the east.

Should also be considerable "in haul" -- perhaps 20% to 25% of amount of mineral out haul -- food, supplies, etc.

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF COMMERCE & ECONOMIC DEVELOPMENT

OFFICE OF THE COMMISSIONER

POUCH D
JUNEAU, ALASKA 99811
Phone: 465-2500

May 6, 1981

Honorable Charles Parr
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Parr:

Thank you for your letter of April 24 with reference to legislation (SB 510) which you are introducing to provide a route survey from Prospect Creek to the Ambler Mining District. My department is supportive of meaningful initiatives to plan for and develop the transportation and power infrastructures necessary to realize the potential of the Ambler District.

John Sims, Director of the Office of Minerals Development, is currently in the process of contacting mining companies active in exploration of the Southern Brooks Range Mineral Belt with a view to establishing collective infrastructure needs. At least two major companies, Anaconda and Bear Creek have very substantial proven reserves while several other companies are pursuing active exploration programs. Remote mineral districts such as the Kobuk or Ambler Belt will require the collective efforts of and cooperation between the private sector state and federal agencies to provide for overland access and other components of infrastructure. This should be addressed not as a site-specific need but to further the development of more than one mining property.

Even in these days of depressed base metal prices, the major mining companies would, in all probability, be developing mines in the Ambler District given the existence of a realistic mineral development climate and a resolution of infrastructure requirements.

Initiatives of the Office of Minerals Development in conjunction with the holders of in-ground resources should clearly indicate an appropriate integrated development scenario. This contact could then be broadened into a task force approach involving the private sector, agencies and affected communities with the objective of working towards the establishment of a viable, healthy and efficient mining industry in the Interior.

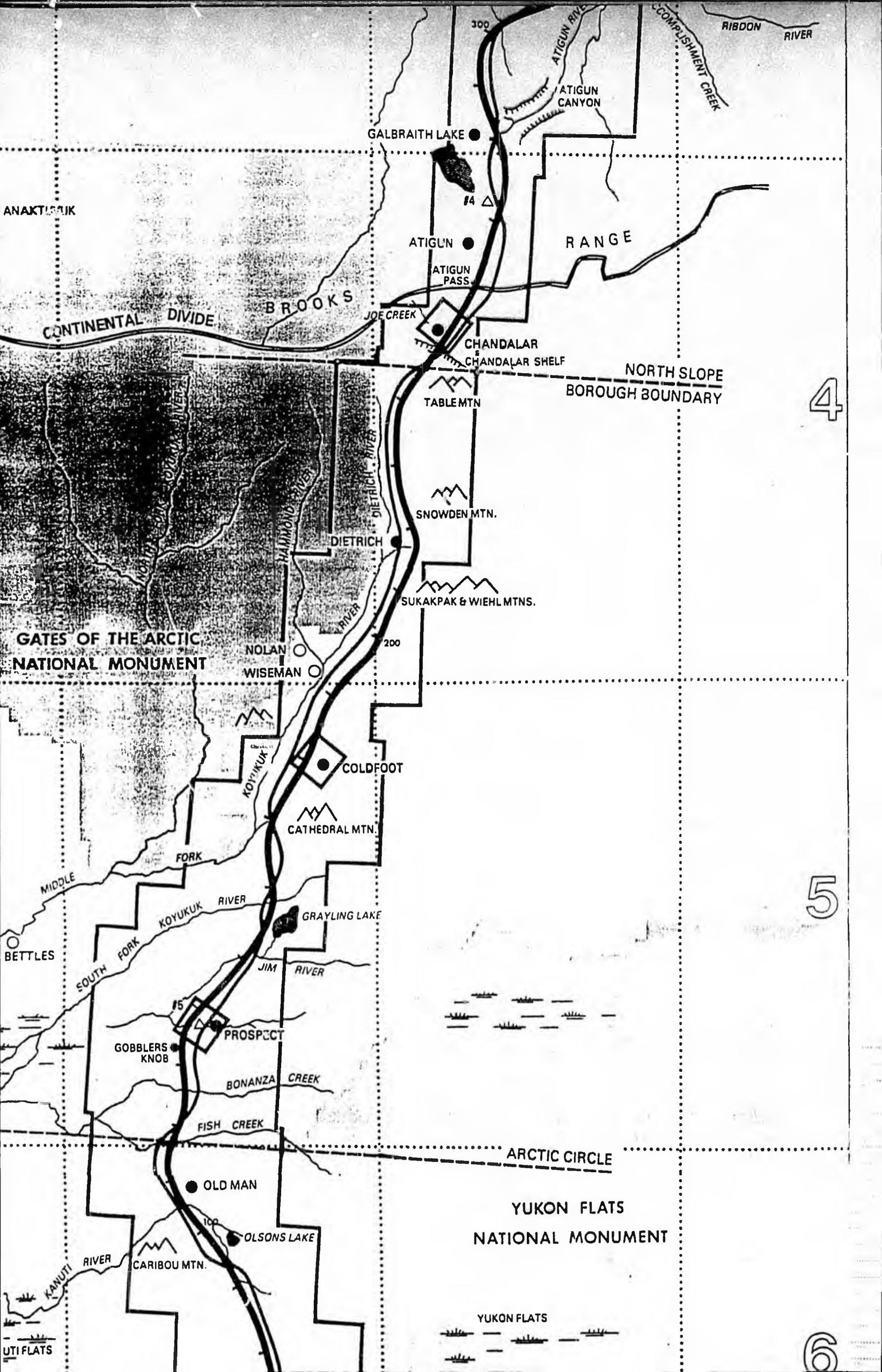
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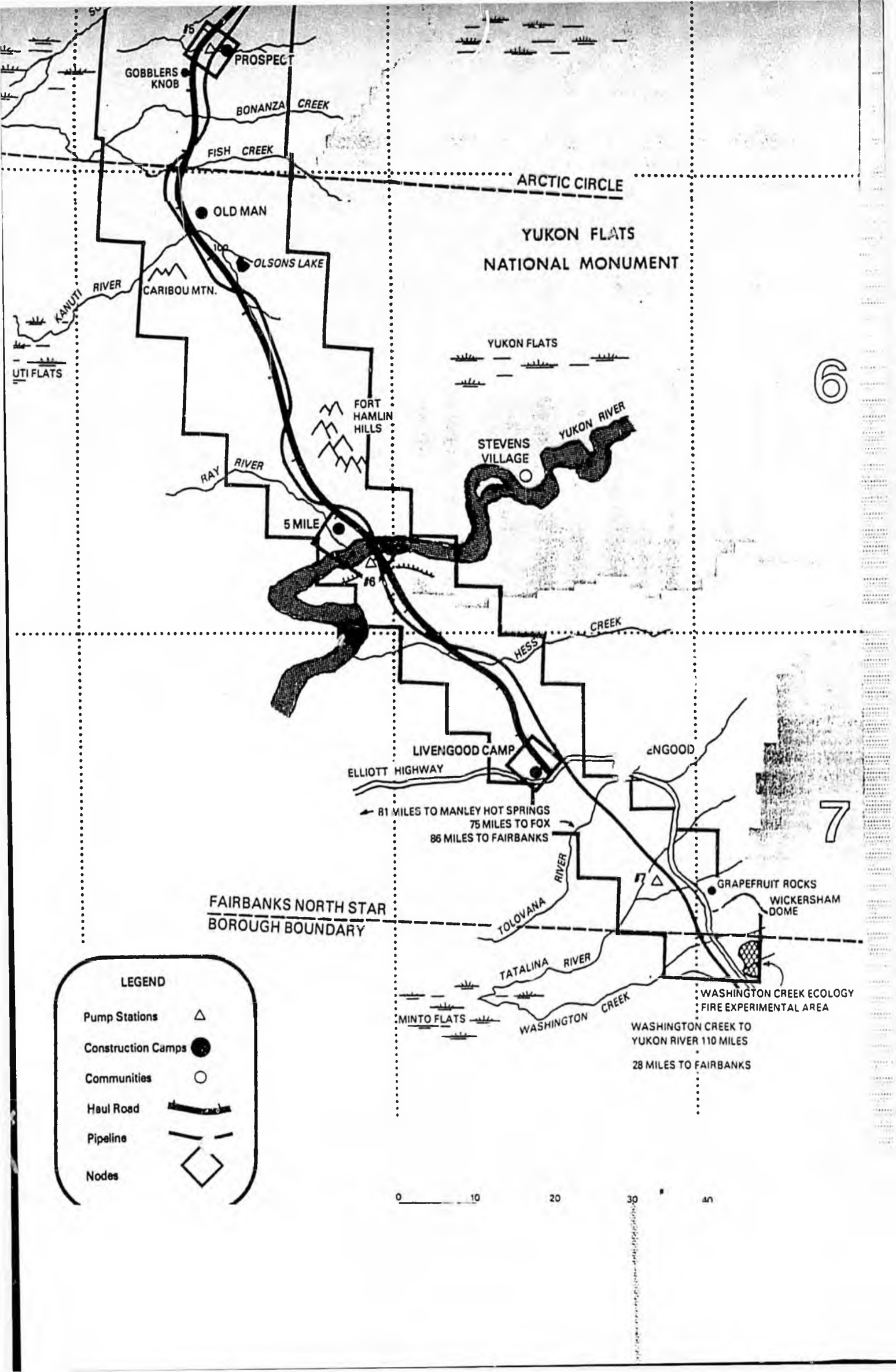
While we are probably, in realistic terms, a decade or more away from major mineral production in the Ambler District, given the lead and lag times inherent in the start-up of new mining operations, it is timely to seize the initiative now and develop momentum in this vital aspect of our future economy.

Sincerely,

Charles R. Webber
Commissioner

CRW/val11


300
ATIGUN RIVER
ATIGUN CANYON
ACCOMPLISHMENT CREEK
RIBDON RIVER
GALBRAITH LAKE
14
ANAKTUVUK
ATIGUN
RANGE
ATIGUN PASS
BROOKS
CONTINENTAL DIVIDE
JOE CREEK
CHANDALAR
CHANDALAR SHELF
NORTH SLOPE
BOROUGH BOUNDARY
TABLE MTN
4
NORTH FORK KOYUKUK RIVER
HAMMOND RIVER
DIETRICH RIVER
SNOWDEN MTN.
DIETRICH
SUKAKPAK & WIEHL MTNS.
GATES OF THE ARCTIC
NATIONAL MONUMENT
NOLAN
WISEMAN
200
RIVER
KOYUKUK
COLDFOOT
CATHEDRAL MTN.
FORK
MIDDLE
KOYUKUK RIVER
GRAYLING LAKE
5
BETTLES
SOUTH FORK
JIM RIVER
15
PROSPECT
GOBBLERS KNOB
BONANZA CREEK
FISH CREEK
ARCTIC CIRCLE
OLD MAN
YUKON FLATS
NATIONAL MONUMENT
100
OLSONS LAKE
KANUTI RIVER
CARIBOU MTN.
YUKON FLATS
UTI FLATS
6


#5
PROSPECT
GOBBLERS KNOB
BONANZA CREEK
FISH CREEK
ARCTIC CIRCLE
OLD MAN
YUKON FLATS
NATIONAL MONUMENT
OLSONS LAKE
CARIBOU MTN.
KANUTI RIVER
UTI FLATS
YUKON FLATS
6
FORT HAMLIN HILLS
STEVENS VILLAGE
YUKON RIVER
RAY RIVER
5 MILE
#6
HESS CREEK
LIVENGOOD CAMP
ELLIOTT HIGHWAY
81 MILES TO MANLEY HOT SPRINGS
75 MILES TO FOX
86 MILES TO FAIRBANKS
7
GRAPEFRUIT ROCKS
WICKERSHAM DOME
TOLOVANA RIVER
FAIRBANKS NORTH STAR BOROUGH BOUNDARY
TATALINA RIVER
MINTO FLATS
WASHINGTON CREEK
WASHINGTON CREEK ECOLOGY FIRE EXPERIMENTAL AREA
WASHINGTON CREEK TO YUKON RIVER 110 MILES
28 MILES TO FAIRBANKS
LEGEND
Pump Stations
Construction Camps
Communities
Haul Road
Pipeline
Nodes
0
10
20
30
40

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

FILE WITH BILL


# CHARLIE PARR

*ALASKA LEGISLATURE*

S.R. Box 50599
Fairbanks, Alaska 99701
(907) 456-5029

Pouch V
Juneau, Alaska 99811
(907) 465-4907


June 5, 1981

M E M O R A N D U M

TO: Senator Bill Ray and
Members of the Transportation Committee

FROM: Senator Charles H. Parr CP

SUBJECT: SB 510

At the time I testified before your committee on SB 510, the enclosed material had been requested but not yet received from DNR.

Although I understand the concerns of the Senator from Kotzebue, I should point out to the committee that some of the largest mineral deposits along the route of the proposed road are fairly far east of the Ambler area. It seems that some steps will need to be taken in the near future to exploit the at least $10 billion of known metal deposits.

CHP:pbd
Enclosure

## South Flank Brooks Range Mineral Belt

It is generally estimated the mineral belt along the south flank of the Brooks Range, from the pipeline haul road west to the Ambler district, contains a minimum of $10 billion dollars worth of metals already discovered. The metals include important amounts of copper, lead, zinc, silver, and gold. Less well known deposits of chromium and nickel exist farther to the west. Nonmetallics present include barite, asbestos, talc, and jade. Minor amounts of coal are known.

Some of the deposits have been extensively explored by drilling (Arctic Camp and Bornite). Others are partly tested, and the entire extent and reserves are still not completely determined. Industry has released grade and/or tonnage figures on some deposits, but information is generally confidential or incomplete. Additional exploration will increase the proven reserves.

A statistical analysis of the resource potential of some of the region by the U.S. Geological Survey (Grybeck and Young, 1978) suggests that there could be several times as much ore still undiscovered as has been found to date.

The attachments include two maps and one table. Map A is to be used with the table which provides information on the types of metals present and available data on grades and tonnages by deposit.

Map B is included because it gives the locations of the known prospects and principal metals at a glance.

## Explanation of Map "A"

The map is a copy of a portion of the Mineral Terranes of Alaska map series published in 1979 by the University of Alaska Arctic Environmental Data Center. There is a township base; 1" = 16 miles.

Shaded areas represent various rock units found to be favorable for one or more types of minerals in some areas.

Triangles and hexagonal symbols indicate the better-known ore deposits; size of symbol is a general indication of the size of the ore deposit; numerous minor deposits are not shown.

Numbers above the symbols correspond to numbers in the table containing names of the deposits, types of metals present, and comments.

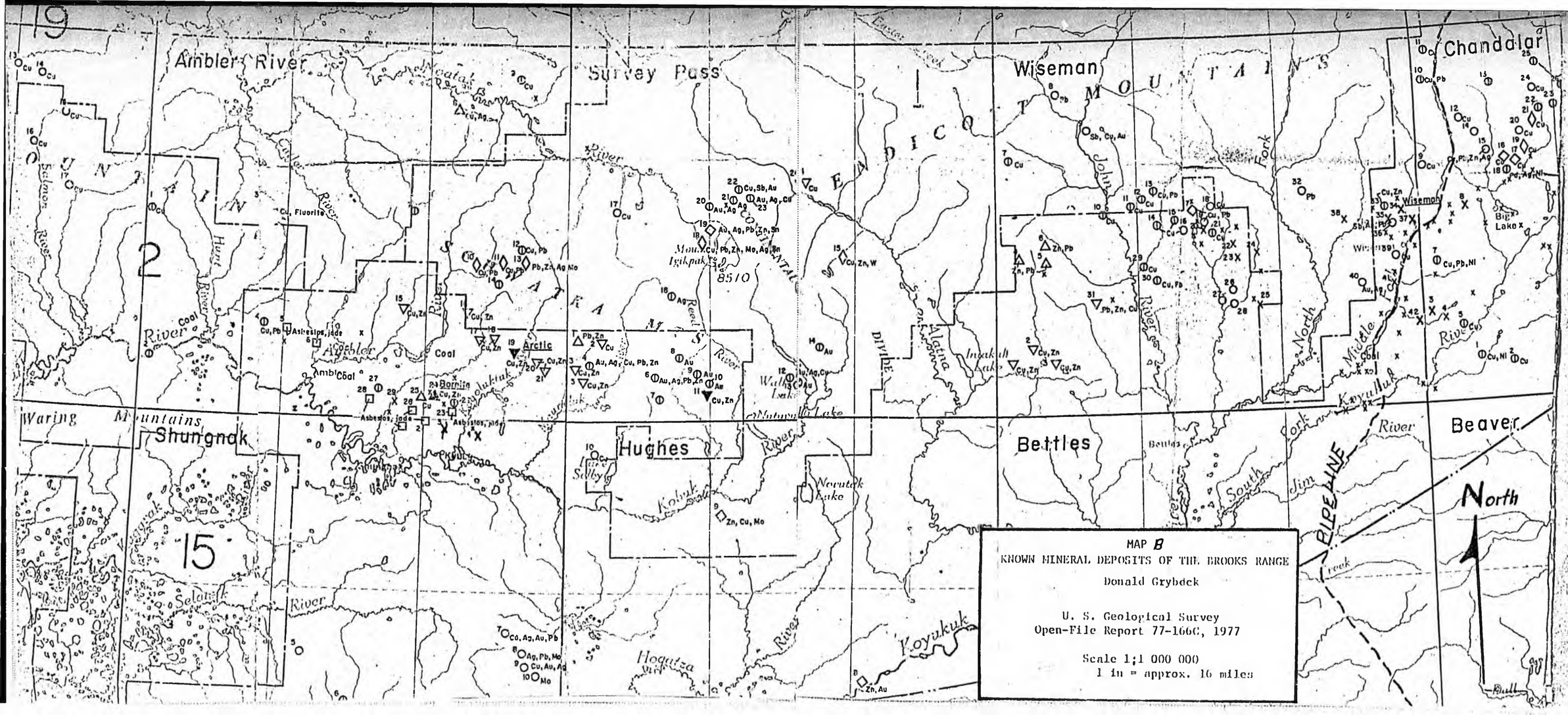
Dotted outlines are areas having anomalous metals in stream sediments, detected by geochemical prospecting. Symbols for anomalous metals shown.

A section of the Haul Road has been inked in for reference.

## Mineral Deposits, South Flank of Brooks Range

| Map Number (Map A) | Name of Prospect | Comments (as of March 1978) |
|---|---|---|
| 1 | Picnic Creek | This is a major copper, lead, zinc silver occurrence, where 17 drill holes have defined over 1 billion dollars worth of metal. The deposit is almost surrounded by the proposed park, and is less than 6 miles from the Park Boundary. |
| 2 | Red (Walker Lake) | Copper, zinc, gold, silver present but not drilled. |
| 3 | Unnamed | Assays of 1% tungsten and tin. |
| 4 | R-O | Copper and zinc prospect: geology similar to that in Ambler district. |
| 5 | Arrigetch Peaks North | Copper, zinc, tungsten, tin. |
| 6 | Ann (and others in vicinity) | Are copper, lead, zinc and silver occurrences containing up to 20% lead-zinc and 3% copper. |
| 7,8,9 | Abo and others | Similar to Ann deposit. |
| 10 | KAV | Copper; silver. |
| 11,12 | Unnamed | A cluster of occurrences containing copper, lead, zinc, silver and molybdenum in this area. |
| 13 | Horse Creek | A significant deposit containing copper, zinc. lead, silver, and gold. Similar to Arctic Camp Deposit (No. 18). |
| 14 | Cliff | Near Horse Creek deposit; zinc, lead, copper. |
| 15 | Smucker | A high grade copper, lead, zinc, silver deposit. 5 drill holes have defined several millions tons of mineral resource with values up to $110/ton. The geology suggests significant additional reserves will be found. |

| Map Number (Map A) | Name of Prospect | Comments (as of March 1978) |
|---|---|---|
| 16 | Sunshine Creek | Copper, zinc, lead, silver and gold. Details not published, but deposit similar to Arctic Camp. |
| 17 | Dead Creek | Copper, zinc, lead, silver and gold. Details not published, but similar to Arctic Camp. |
| 18 | Arctic Camp | This is one of the world's largest copper, lead, zinc, silver ore bodies. Numerous diamond drill holes have defined 40 million tons which average 4% copper, 1.0% lead, 5.5% zinc, 1.5 ounces/ton silver. |
| 19 | Bornite | This is a very high grade copper deposit, numerous drill holes have been defined several 100 thousand tons of high grade reserve worth approximately $120/ton and millions of tons of lower grade copper. Also contains zinc, lead, silver, and gold. Extensively explored by drilling and a 1100-foot vertical shaft. |
| 20 | Pardner Hill | May be similar to Bornite. Copper, lead, gold, and silver. Near Bornite deposit. |
| 21 | Kobuk Placer District | Placer gold has been mined. |
| 22 | Unnamed | Northwest of Ambler district. Primarily vein copper deposit. |
| 23 | Omar | Northwest of Ambler district. Drilling indicates a significant copper deposit. |
| 24 | Frost | Northwest of Ambler district. Copper, zinc and barite. Possibly as much as 10 million tons of barite indicated. |
| 25 | Clery Creek | Placer gold district north of Kiana. |



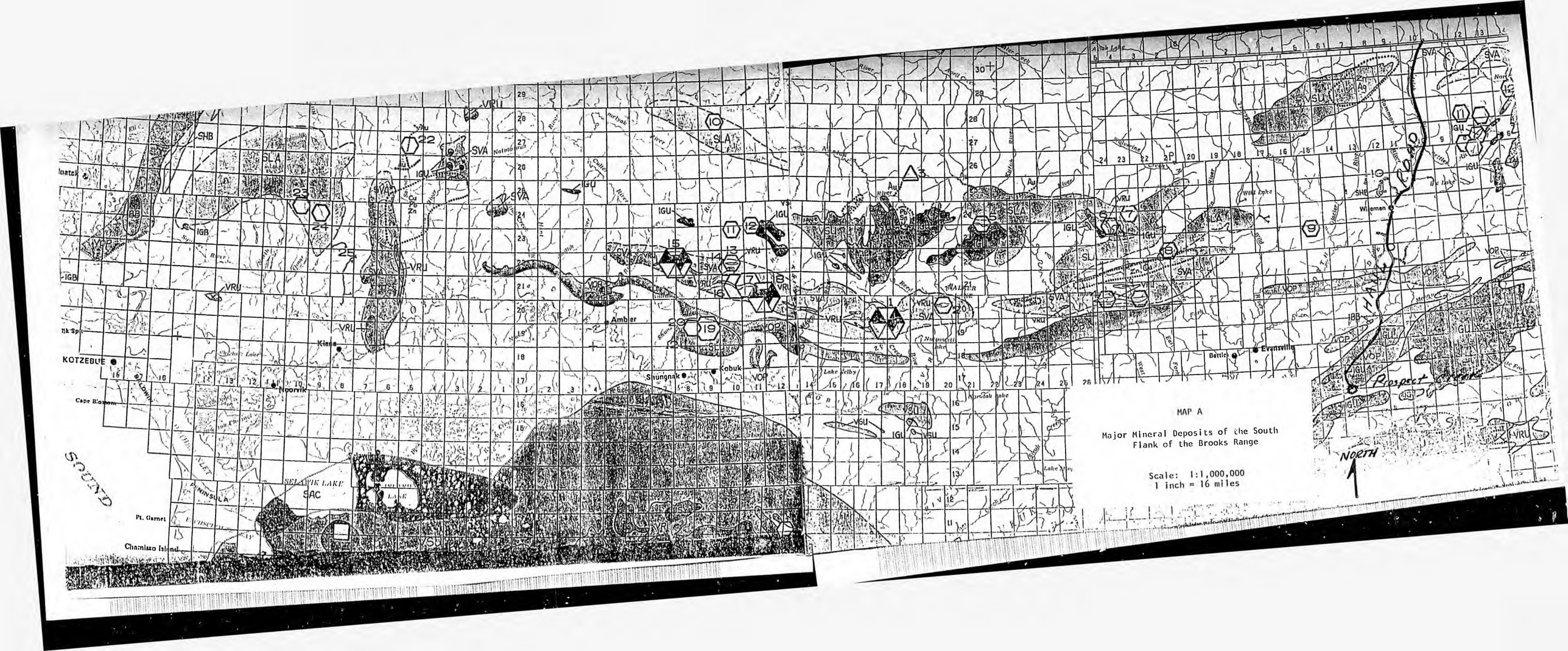

MAP B

KNOWN MINERAL DEPOSITS OF THE BROOKS RANGE

Donald Grybeck

U. S. Geological Survey
Open-File Report 77-166C, 1977

Scale 1:1 000 000
1 in = approx. 16 miles




MAP A

Major Mineral Deposits of the South Flank of the Brooks Range

Scale: 1:1,000,000
1 inch = 16 miles

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

SB

636

GREATER KETCHIKAN CHAMBER OF COMMERCE

# RESOLUTION

## REVILLA - GRAVINA HARD LINK ACCESS

WHEREAS: Ketchikan currently is feeling the impact of a growing community accelerated by the influx of increasing industry by U. S. Borax, the ferry maintenance facility, the Swan Lake Hydro Project and an increasing tourism trade, and;

WHEREAS: Ketchikan's existing and proposed road system is obsolete for the size of the community and is considerably behind highway development and expansion in the rest of the State, and;

WHEREAS: The Department of Transportation has indicated its intent to re-draft a long range transportation study for Southeastern, incorporating an expanded road system for future linkage between major communities and relegating ferry use for shuttle service between areas of lesser trade, and;

WHEREAS: The ferry transportation in operation to the airport is barely sufficient to meet current passenger, vehicle and freight demands and will be overburdened in the near future, making water access to a major commercial and industrial development outmoded, and;

WHEREAS: The air freight business at Ketchikan International Airport has increased beyond projection in the past two years and will continue on the incline even more rapidly with the type of new industries being introduced into the community, and;

WHEREAS: Local land investors and developers have been thwarted from providing Ketchikan with future housing projects and residential areas because land has not been available for release and no direction has been given to possible and alternative usages, and;

WHEREAS: Ketchikan has an increasingly urgent need for available land for both residential and industrial development as could be provided for with the opening of Pennock and Gravina Islands, and;

WHEREAS: The State has revenues available for long term capital improvement projects and the Federal Government will share in a major portion of the financing with the State of Alaska for one hard access to the Ketchikan International Airport, and;

WHEREAS: Ketchikan has strong and experienced legislative representation in Juneau of which we can only be assured throughout the 1982 session;

BE IT THEREFORE RESOLVED: The Greater Ketchikan Chamber of Commerce does re-endorse its prior position letter of July 22, 1980 and urges action by our local officials in Juneau to procure the funding in the 12th Legislature for the engineering studies and the State's share of the project construction costs for the most feasible Revilla-Gravina Hard Link section of the Ketchikan Transportation Corridor.

SIGNED AND SEALED this 23rd day of June, 1981 by;

Les Hook
President
Greater Ketchikan Chamber of Commerce

including feasibility of a tunnel



# STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DEPUTY COMMISSIONER – PLANNING AND RESEARCH

POUCH Z
JUNEAU, ALASKA 99811
(907) 465-3900


July 16, 1981

The Honorable Robert H. Ziegler, Sr.
Alaska State Senator
307 Bawden
Ketchikan, Alaska 99901

Dear Senator Ziegler:

At your request we have reviewed the Gravina Island Crossing Study prepared by this department in 1974.

We estimate that the cost of updating the study and conducting field engineering to evaluate either bridge or tunnel construction, including geological testing, would cost approximately $1.0 million dollars. The previous study of the crossing did not involve any significant testing of the geologic structure and therefore would not provide a basis for estimating the actual total construction costs. Completion of the necessary field investigations will allow the development of a realistic total cost of the structure.

If you have any additional questions please contact me or Warren Sparks, Director, Southeast Region Planning and Programming at 465-2470.

Sincerely,

John Bates

John Bates
Deputy Commissioner



*KETCHIKAN GATEWAY BOROUGH*
344 FRONT STREET
KETCHIKAN, ALASKA 99901

JANUARY 18, 1982

SENATE TRANSPORTATION COMMITTEE
STATE OF ALASKA
JUNEAU, ALASKA

SENATORS:

FOR SOME TIME KETCHIKAN HAS BEEN CONCERNED WITH THE DEVELOPMENT AND GROWTH OPTIONS INSIDE OUR BOROUGH. WE ARE ANTICIPATING SIGNIFICANT AMOUNTS OF GROWTH AND DEVELOPMENT OVER THE NEXT TEN YEARS AND THE DEVELOPMENT OPTIONS ARE LIMITED.

THE PLANNING COMMISSION IS CONSIDERING OPTIONS FOR EXPANSION INCLUDING SEVERAL DIFFERENT AREAS ON REVILLA ISLAND AND ON GRAVINA ISLAND. A WATERFRONT DEVELOPMENT STUDY COMPLETED WITH COASTAL MANAGEMENT FUNDS LAST YEAR CONCLUDED THAT THE MOST DESIRABLE INDUSTRIAL AND COMMERCIAL LAND IS AVAILABLE ON GRAVINA ISLAND. WE FEEL THAT SOME RESIDENTIAL AREAS WILL BE DEVELOPED THERE AS WELL.

ONE OF THE MAJOR CONSTRAINTS IN DEVELOPING THIS OPTION IS ACCESS. AT THE PRESENT TIME, I AM SURE MANY OF YOU ARE AWARE, WE ACCESS THE ISLAND BY FERRY. THIS IS ONE OF THE FEW PLACES WITHIN THE STATE WHERE THE FERRIES ARE OPERATED BY THE LOCAL MUNICIPALITY AND NOT BY THE STATE. IT SHOULD BE

POINTED OUT THAT KETCHIKAN SERVES THE ENTIRE SOUTHEAST REGION, THEREFORE, THIS FERRY IS USED BY PEOPLE OUTSIDE THE MUNICIPAL BOUNDARIES, YET IS COMPLETELY FINANCED BY THE LOCAL COMMUNITY. IN 1980 WE CARRIED 290,000 AND IN 1981 WE CARRIED 297,000 PASSENGERS.

AT THE PRESENT TIME WE ARE OPERATING A SMALL FERRY THAT HAS LIMITED CAPABILITIES. WE ONLY OPERATE ABOUT 16 HOURS A DAY. WHEN THERE IS EXPANSION TO GRAVINA, IT WILL BE NECESSARY TO START A 24-HOUR OPERATION. ALSO, WE HAVE REQUESTS FROM OPERATORS AT THE AIRPORT TO HAVE THE ABILITY TO KEEP CREWS IN THEIR WORK AREAS OVERNIGHT. WHEN ALASKA AIRLINES HAS A SCHEDULING PROBLEM, THE FERRY CREWS HAVE TO WORK OVERTIME AS THEY WAIT TO MEET THE LAST FLIGHT BEFORE CLOSING DOWN THE AIRPORT. KETCHIKAN INTERNATIONAL AIRPORT SERVES AS A BACKUP POINT FOR OTHER AIRPORTS. OUR FERRY CREW STAYS ON DUTY UNTIL AFTER A PLANE TOUCHES DOWN IN JUNEAU WHEN JUNEAU'S WEATHER IS MARGINAL.

WHEN THE PROPOSED MOLYBDENUM MINE IS OPERATIONAL, THERE ARE INDICATIONS THAT THE POPULATION OF THE KETCHIKAN BOROUGH WILL DOUBLE. WE FEEL THAT WITH THIS IN MIND, DEVELOPMENT AND EXPANSION TO GRAVINA ISLAND IS NECESSARY FOR THE COMMUNITY. SOME TYPE OF HARD ACCESS IS NECESSARY TO FACILITATE THIS GROWTH AND TO ALLOW THE COMMUNITY TO MARKET THE PRESENT POTENTIAL OF THE AIRPORT.

THANK YOU.

1-14-82

# OPINION

## Save money for the boro

When the issue of a tunnel or a bridge to the airport is raised, some opponents to either plan point to the cost as a reason to stick with the ferries.

Cost is a factor but not in the way the opponents realize. The bridge or tunnel will be cheaper for Ketchikan Gateway Borough residents and here is why:

— The state will build the tunnel or bridge as part of the state highway program.

— The state receives most of its highway construction funds from fuel taxes and highway user fees imposed by the federal and state government. Ketchikan residents, like other motorists, are paying those fees now. Plus, we are paying for the ferries to the airport.

The fees and taxes paid to the federal government go into the highway trust fund. The accumulated monies are allocated to states each year on a formula based on the size of the state, the amount of federal land in the state, and the number of miles of road. Currently, Alaska receives about $106 million a year from that trust fund. The trust fund is unaffected by Reagan budget cuts.

The state matches those funds. In the past, that match has been as small as five percent. But it grows larger as federal land is conveyed to the state and Native corporations.

The state raises its funds from motor fuel taxes, bond issues or from the general fund, whatever the governor and the legislature agree upon.

When the bridge or tunnel is constructed it will be maintained by the state as a part of the state highway system, not by the borough. Sen. Frank Murkowski (R-Alaska) was successful recently in getting a bill through the Senate that puts Alaska in a second federal highway program, the interstate plan. That program was set up before Alaska became a state. The territory was denied participation. If the legislation now clears the House to include Alaska, it will mean $80 million additional in highway maintenance funds for the state over the next few years.

In the meantime, borough residents are paying the federal and state highway taxes, and helping retire bond issues that support highway projects without Ketchikan getting one of its own desired highway projects.

In the meantime, borough residents are paying for a ferry system whose repair bill this year may approach $1 million. One of the two ferries has been overhauled at a cost so far of $284,000, although the final price tag isn't known. The second ferry will also undergo extensive repairs as soon as the first one is back in the water.

We admit that such high ferry maintenance expense may come every 10 years. But the life of a ferry is about 25 years, after which we start buying new ships.

Traffic to Gravina Island is growing. Last summer, for the first time, two ferries ran during peak times to handle the passenger load, which now exceeds 280,000 people a year.

As business grows at the airport, as land develops on Gravina Island, there will be demand for more service, which means a third and fourth ferry and more ferry landings. Those ferries and their maintenance are paid by borough taxpayers.

We see a bridge or tunnel — and we prefer the tunnel — as a saving for borough residents.

We encourage the borough assembly to get on with the planning to determine whether a bridge or tunnel is the most feasible. We encourage our state legislators to get the project on the state highway program before borough residents have to buy more ferries.

## Politica

## Being saf

By DAVID BRODER
Washington Post Writers Group

WASHINGTON — The folks at the Republican Senatorial Campaign Committee are frustrated. Their polls show Sen. Lloyd Bentsen (D-Texas) would be vulnerable to a strong Republican challenger this year. But they can't convince the Texas business and money establishment that Bentsen has done anything that deserves defeat.

They went so far as to spread the word in Dallas financial circles that Bentsen had voted for food stamps, CETA public-service jobs, legal and abortion services for the poor and other bleeding-heart liberal stuff like that. They produced a flurry of inquiring phone calls that annoyed Bentsen's staff to the point that a Bentsen aide called the Republicans to point out that the GOP Senate campaign committee chairman, Bob Packwood of Oregon, had voted for most of the same things. But the GOP failed in its mission of stirring the Texas establishment into a holy crusade to beat Bentsen.

It's no wonder the Republicans have a problem. When Congressional Quarterly published its "presidential support" scorecard last week, showing how often each member of Congress had backed Ronald Reagan's position on the 1981 roll-calls, it was hard to tell who was the champion Reaganite in Texas.

Sen. John G. Tower, the staunch GOP conservative, backed Reagan on 78 percent of the roll-calls. And Lloyd Bentsen, the man the Republican would love to beat, backed Reagan 70 percent of the time.

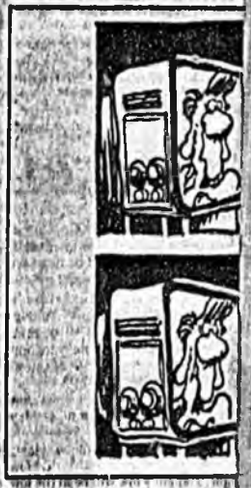
True, those percentages can be misleading, because all votes — vital or routine — count equally. But on the 11 roll-calls CQ rated as "key" tests of Reagan's program, Bentsen voted seven times with Reagan and his colleague Tower.

Bentsen may be a particularly dramatic case of political adaptation. He supported Reagan's positions in 1981 almost exactly as consistently as he had supported Jimmy Carter's positions in 1980. But he is certainly not unique. Of the 20 Democratic senato up for re-election this year, 13 vot with Reagan on half or more of the roll-calls.

Three of the 13 — John Stennis Mississippi, Edward Zorinsky Nebraska and John Melcher of Mo tana — gave Reagan a higher ratio support than they had given Carter 1980.

The only Democratic senators ru ning this year who opposed Reag more often than they backed him on t CQ scorecard are the heart of t liberal lineup: Kennedy Massachusetts, Riegle of Michiga Metzenbaum of Ohio and Sarbanes Maryland, most conspicuously; and, lesser ratios, Williams of New Jers Moynihan of New York and Mitchell Maine.

What this suggests to me is that ma of the Democratic senators up this ye have put themselves in a position whe they can run a "Chuck Robb ca



## Le

## 'We did

EDITOR, Daily News:

We citizens of this great land have been pushed around long enough. We have a chance to have a very helpful and very profitable business in our vicinity. We need the Borax mine.

To me the Borax mine means I will have steady work until retirement, my sons can work until retirement, and very possibly my grandchildren can work until retirement.

My contact with Alaskans has shown me that very few here are against the Borax mine. It seems the only opposition comes from a group of kahoots with Sierra Club.

SEACC. SEACC has less than about 100 member, what I hear. T I feel does not represent the people Alaska, or our nation's interests.

Most people will agree we need control and balance with nature, can't go around ruining our forests rivers.

But then also we need to work live. Remember we're in hard tim People he's pretty skimpy Christ around these parts. We need economic expansion the mine bring. Especially in the face of

Letter

FILE WITH BILL

Board Members
Pat Breese
Paul Crowl
Mike Cruise
Ken Duckett
Sue Hashagen
Rose Isaac
Ron Parsley



Mike Cruise, Chairman
P.O. Box 3081
Ketchikan, Alaska 99901

MAR 5 1982

# Pennock — Gravina Island Association

February 26, 1982

Honorable Jalmar M. Kerttula
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Kerttula,

The Pennock-Gravina Association represents 51 voters registered in the Pennock-Gravina Precinct, Ketchikan Gateway Borough, Alaska. Our association is opposed to Senate Bill No. 636, introduced in the Senate by Senator Ziegler. This bill is for a special appropriation of $1,000,000 for design of a bridge from Revilla Island to Gravina Island. Our association is opposed to this expenditure for the following reasons:

1) The only time the project was subject to a vote of the people of the Ketchikan Gateway Borough it came out last on a list of five projects. None of the four projects considered to be a higher priority than the bridge by the voters have been constructed.

2) The development direction dictated by a bridge to Gravina Island is in direct conflict with the current Ketchikan Comprehensive Plan. Public testimony given on January 19, 1982 before the Ketchikan Planning and Zoning Commission on development options for the Ketchikan area was in overwhelming opposition to changing current development direction. The Planning and Zoning Commission adopted the "Revilla Cluster" alternative at the conclusion of that hearing.

3) Recent Borough Planning Department estimates indicate there are between 6 and 7 thousand acres of private and borough selected land on Revilla Island. The Planning Department's high estimate of the amount of land needed for development from now until 1990, if U.S. Borax locates in Ketchikan, is 1,033 acres. This implies we have 40 to 60 years worth of land available for development on Revilla Island even if growth continues at its current rapid rate. This makes no allowance for Cape Fox land which the Corporation may choose to develop in the future.

4) Most communities are directing their residential development away from their airport due to the noise problems from modern jet airplanes. This bridge would focus this type of development in the immediate area of the airport on Gravina Island. We believe this is a very poor direction for our future development to take.

5) There are many badly needed projects on the Revilla Island (Ketchikan) side of Tongass Narrows that need funding and to fund the bridge project would detract from these projects. Some of these projects are: a downtown Ketchikan parking facility; traffic relief on Tongass Avenue; improvement of many existing rural roads such as in the Forest Park and Point Higgins areas, among others; construction of outlying area sewerage systems; accessing of developable land with the bypass road; Ketchikan Community Center and many others.

The opposition of our Association to this bridge is well known in Ketchikan. In our discussions with fellow residents, we hear evidence that opposition to the bridge is strong and widespread throughout the community. We have repeatedly asked in oral testimony before the Borough Assembly for the issue to be brought to the people for ballot determination. This has not been done. If popular vote shows the people of Ketchikan to be in favor of this project as a high priority, we will withdraw our opposition. Until then, we respectfully request that you vote against this appropriation.

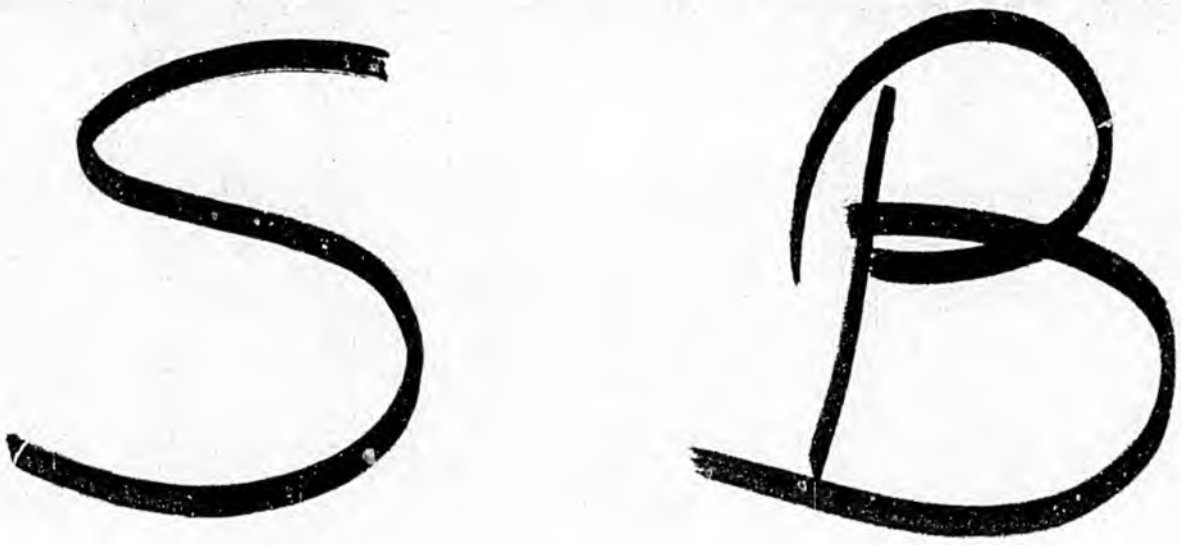
Sincerely,

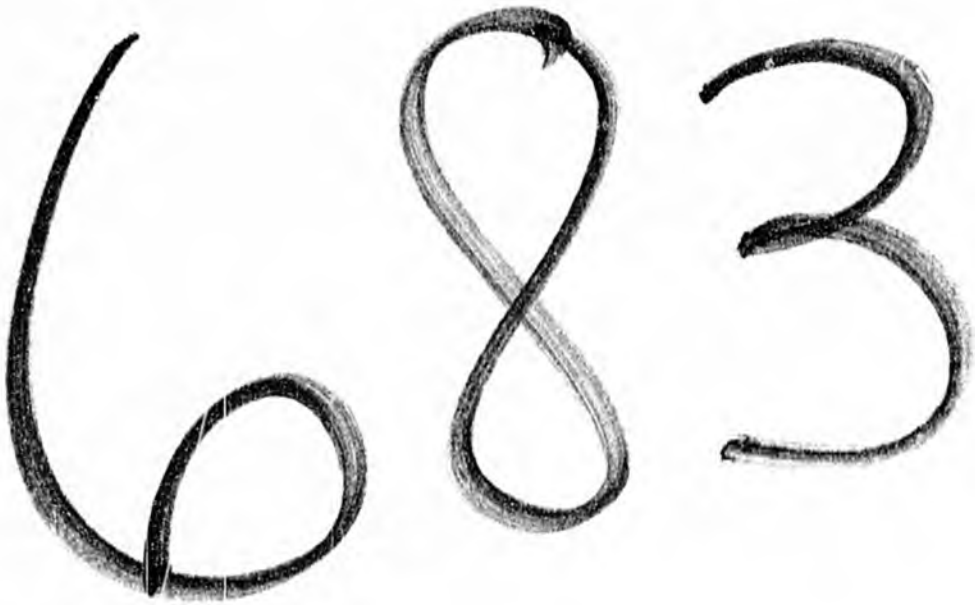
Kenneth Duckett

Kenneth Duckett
Board Member
Pennock-Gravina Island Association

KD:ad

cc: Alaska State Legislators
Alaska State Senators
Ketchikan Daily News
Anchorage Daily Times
Anchorage Daily News


SB


683

February 9, 1982

Mr. and Mrs. Del L. Ingrim
3715 W. Northern Lights Blvd.
Anchorage, Alaska 99503

Dear Mr. and Mrs. Ingrim:

This is to acknowledge receipt a copy of your correspondence of February 5 to Senator Rodey opposing Senate Bill 683 which requests funds to widen West Northern Lights Blvd.

I appreciate your taking the time to send me your thoughts on this subject. You may be assured that I will take your views into consideration on this piece of legislation.

Sincerely,

Bill Ray
Senator
District C

— AOK —

Mr, and Mrs. Del L, Ingrim
3715 W. No. Lights Blvd,
Anchorage, Alaska 99503

February 5, 1982

The Honorable Patrick Rodey
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Re: Senate Bill No. 683
West Northern Lights Blvd.

Dear Senator Rodey:

According to the Anchorage Times of January 28, 1982, Senate Bill #683 proposes $18.8 million to widen West Northern Lights Blvd. to five lanes from Lois Drive to the Lake Hood Airport entrance. I hope you will consider the following facts before making a final decision. Northern Lights needs to be made safer and upgraded and widening this road four or five lanes will not do this.

Northern Lights Blvd. from McKenzie Drive to the old military reservation (now International Airport) travels through what was once my grandfathers homestead which was patented when Alaska was still a Territory in the early 1900's. After World War II, W. Northern Lights, formerly KFQD Road, came into existence. It was cut through from McKenzie Drive (formerly Simonson Blvd.) to the military reserve. At one time, Northern Lights turned North at Simonson Blvd. for two blocks then west to Point Woronzof where the military had gun emplacements during the war.

When the property was subdivided by my relatives, the present W. Northern Lights Blvd. was opened up with a 60' right-a-way, not a 80' which apparently exists from the railroad tracks to McKenzie Drive - this section of Northern Lights was developed into a residential area and was not intended for a five lane arterial as the state, or city, presently plan.

When the International Airport was being constructed, a road was open from Northern Lights around Lake Hood. The residents were assured it was merely a temporary road. A gate was locked every night to prevent access. Now the state opened another road from Northern Lights to the new post office. It appears the state itself wants another high speed access road to service the airport to further its development, but if you will check a few of the sub-division plot plans, you will see the intentions were for West Northern Lights to be a residential street at the lower end and not a commercial highway.

Minnesota and International Airport Road was improved this past year at great expense for the purpose of servicing the airport - trees imported from the South "48" for beautification for the tourists. I hope a recount of traffic on W. No. Lights will be initiated because after the busy hours 8 am and 5:51 pm there is not sufficient traffic to substantiate a 4 or 5 lane road. We don't want a truck route through this residential area.

A four or five lane highway in this area would require considerable condemnation of private property and homes. Many homes face Northern Lights and since direct access to a main arterial is discouraged from a residential lot by City Code, our property values will drop because of no access. Wally Hickel had the right idea when he suggested placing the airport access below the bluff along the railroad track from the railroad yards, across Chester Creek and through earthquake park to the airport. The state owns the tide lands. Negotiating with the Alaska Railroad makes more sense than removing valuable homes. Your 18.8 million dollars could be spent on that route. Northern Lights needs upgrading with better lighting, repaving, and street signs, not widening, to make it safer. If they continue to correct problems that exist now in this manner, we will have another Tudor Road nightmare.

We attended the meeting on February 4, 1982, of the Turnagain Council and the general consensus from those present was they did not want this section of W. Northern Lights Blvd. widened to 4 or five lanes because they felt this would not solve the problem, but only create more. We will be attending those meetings for our input and looking at ways to correct W. No. Lights problems to present to the Municipality and the State of Alaska.

Please refer to Robert and Virginia Flint's letter to you dated 2-4-82. We agree with their recommendations for solving the traffic flow.

As a 55 yr. state resident and 30 years in this area, I urge you to reconsider your position on S.B. 683.

Very truly yours,

Delmar L. Ingrim

Delmar L. Ingrim

Thelma B. Ingrim

cc: Senate Transportation Committee
The Honorable Bill Ray
The Honorable Donald E. Gilman
The Honorable Jalmar Kerttula
The Honorable John C. Sackett
The Honorable Joe Montgomery
The Honorable Joe Hayes
The Honorable Tony Knowles, Mayor of Anchorage
Assemblyman David Walsh
Assemblyman Rick Mystrom
Lee Browning, Planning

February 9, 1982

Robert and Virginia Flint
2515 Telequana Drive
Anchorage, Alaska 99503

Dear Mr. and Mrs. Flint:

This is to acknowledge receipt a copy of your correspondence of February 4 to Senator Rodey opposing Senate Bill 683 relating to West Northern Lights Blvd.

Thank you for taking the time to send me this information. You may be assured that I will take your views into consideration.

Sincerely,

Bill Ray
Senator
District C

-ACK-

2515 Telequana Drive
Anchorage, Alaska 99503
February 4, 1982

The Honorable Patrick Rodey
Alaska State Senate
Pouch V
Juneau, Alaska 99811

RE: Senate Bill No. 683
West Northern Lights Blvd.

Dear Senator Rodey:

According to the Anchorage Times of January 28, 1982, Senate Bill No. 683 proposes to appropriate $18.8 million to widen West Northern Lights Boulevard to five lanes from Lois Drive to the Lake Hood airport entrance. We have lived in Turnagain since 1964, currently one and one-half blocks from West Northern Lights. We are strongly opposed to this proposal and urge that you withdraw the bill. The project as described would be a clone of Tudor Road designed to serve as a major access to the airport and not as a traffic aid to residents of the area.

## Access to the Airport

When International Airport Road was first constructed over ten years ago a road was built from Northern Lights around Lake Hood to the terminal. At that time, residents were assured that the road was temporary for the construction period only, since International Airport Road was to be the access to the airport. The "temporary" road was never closed and in fact another road has recently been built from Northern Lights to the Post Office. The State now plans major air cargo development at the North end of the new North-South runway. That plan contemplates West Northern Lights as the major truck access. The State DOT concedes that if West Northern Lights becomes four lanes, traffic will be drawn to the airport and upgrading of the airport access roads will follow. (source: Kay Schmidt ADOT Planning, Anchorage). Obviously the West Northern Lights/Turnagain area, which is residential not commercial, does not want a major high speed truck route through the community. Instead of enhancing safety for joggers, bicyclists and children, such users could go near the road only at the peril of their lives. Moreover it would completely bisect this community in violation of the guidelines set out in the Anchorage Municipal Code (Section

24.10.030B). There is absolutely no need for such an access since International Airport Road and Minnesota Drive are divided highways developed for the purpose of easy access to the airport. We are opposed to any development of West Northern Lights that would encourage airport traffic. If residential traffic is to be considered another approach must be taken.

## Residential Needs

Besides swamping the area with high speed truck traffic to the airport, the SB 683 proposal will solve none of the residential problems and will in fact worsen them. A major complaint is the difficulty of access to Northern Lights from residential streets such as Lord Baranof. Anyone who has tried to turn left onto Tudor Road knows that such a project makes the task more difficult not less. Extra traffic and speed would make such a left turn entrance nearly impossible.

Cross traffic, especially by children, is important in this area. Local churches and Turnagain Elementary School lie south of the road and are used by Turnagain residents as is the Lake Spenard beach. Lynary Park north of the road is heavily used by those on the south side. How are children with bikes going to cross five lanes and successfully dodge the trucks? Safety will take a giant step backwards if this project is ever constructed.

A multilane highway in this area would require considerable condemnation of private homes. Many homes face Northern Lights and some are fairly close to the existing right-of-way. Since direct access to an arterial from residential lots is to be discouraged according to the Municipal Code it is evident that many residences will be damaged or eliminated. Turnagain Elementary School is on Northern Lights also. A substantial portion of its frontage would be required and its access disturbed.

At the current time there is absolutely no need for a four or five lane road in this area. The traffic count on which DOT intends to recommend a multilane highway was taken in the wrong place. The 1980 traffic count on Northern Lights of 18,189 was taken, we are informed, west of the division of Benson and Northern Lights and east of the railroad tracks. This section is already four lanes. Traffic begins to drop off immediately after this section especially due to left turn traffic on to Turnagain Boulevard. The traffic count on Northern Lights at the airport access road was 7,890 or less than that required for a minor arterial. The access road itself had 3,660 cars per day while the treatment plant/detox road had only 2,000. Driving experi-

ence at peak hours (8AM and 5:15PM) show only occassional congestion or delays at specific points. These problems can be eased or corrected without changing the character of the area.

## Needed Improvements

The traffic problem on West Northern Lights occurs on a small stretch between the railroad tracks and Turnagain Boulevard. This occurrs because the various highway bureaucracies failed to cooperate with each other before unification. The result is that eastbound there is only one lane between Turnagain Boulevard and the tracks. When traffic backs up in the morning rush hour it is this segment that is the culprit. Westbound the two lanes turn into about one and a half lanes at Turnagain Boulevard which is a heavy left turn corner. Cars are either backed up or drive around on the bike path. The access at Wisconsin and Turnagain Parkway is a lesser problem since traffic is lighter there. Otherwise traffic flows smoothly except that there can be short waits on the side streets when entering Northern Lights. In addition the bike path is too close to the road in many places. In fact the entire road needs sharper definitions since it is difficult to distinguish the bike path from the road especially in winter.

These problems can be solved as follows:

1. Northern Lights should be four lanes from the tracks to Turnagain Boulevard.

2. Northern Lights at Wisconsin and Turnagain Parkway should have permanent and visible left turn lanes in both directions. Lines were painted on the street last fall, but this obvioulsy doesn't help in the winter. A traffic light could be installed at this intersection. Four lanes are <u>not</u> needed between Turnagain Boulevard and Wisconsin.

3. The bike path can be improved by separating it from the road at the worst points.

4. Improved street lighting will greatly improve winter safety. The road is now very dark.

None of these improvements will cost the amount required by SB 683 and certainly not $10 million per mile. None will require the taking of as significant amount of private property. None would divide the community or endanger residents by inviting high speed airport and truck traffic. Such improvements can be accom-

plished quickly with a minimum of disruption unlike the major reconstruction proposed.

We urge you to reconsider your position on SB 683. Please do not push a high speed road through this residential area.

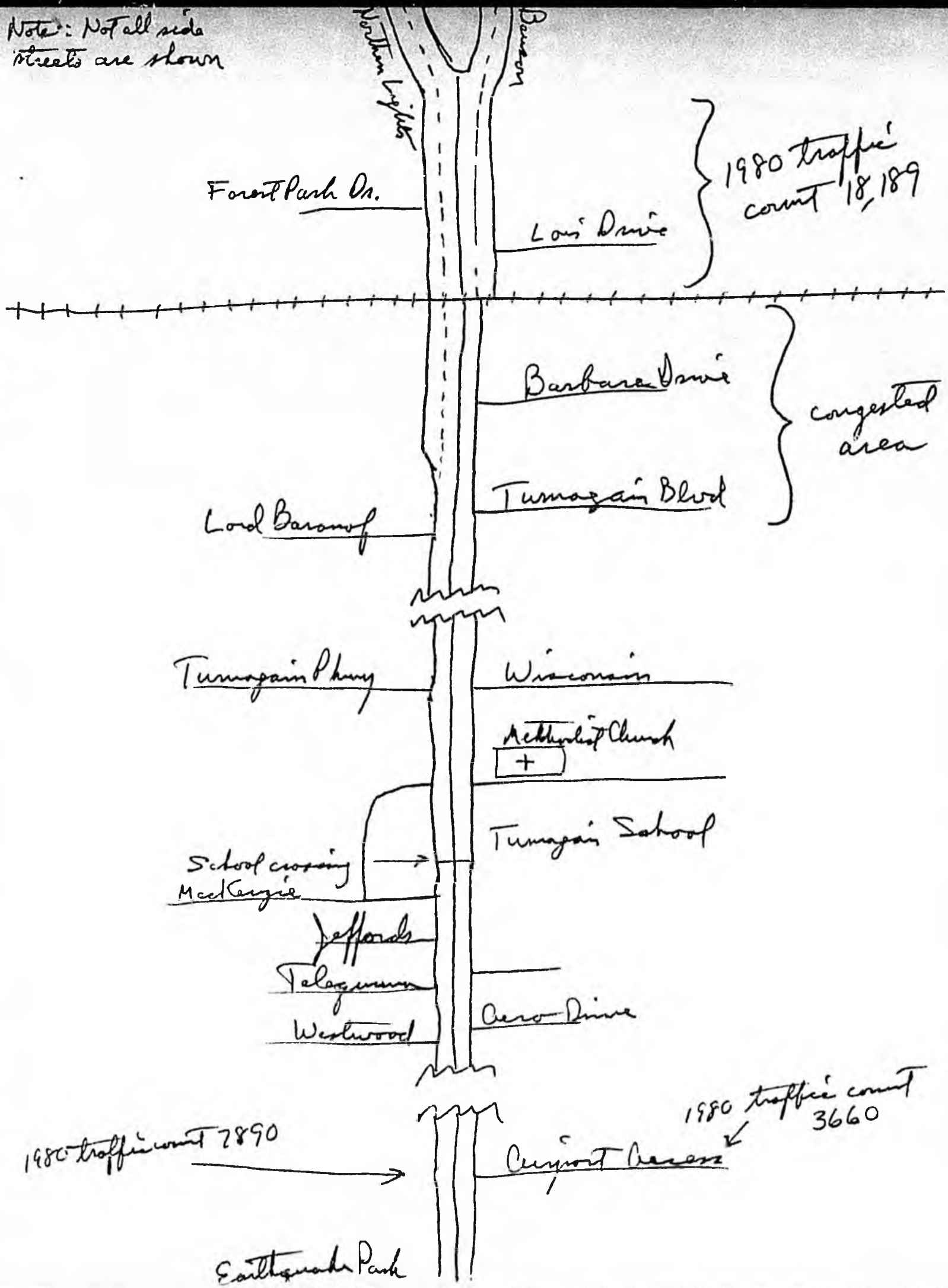
Very truly yours,

Robert B. Flint

Virginia B. Flint

cc: Senate Transportation Committee
The Honorable Bill Ray
The Honorable Donald E. Gilman
The Honorable Jalmar Kerttula
The Honorable John C. Sackett
The Honorable Joe Montgomery
The Honorable Joe Hayes
The Honorable Tony Knowles, Mayor of Anchorage
Assemblyman David Walsh
Assemblyman Rick Mystrom
Mike Meehan, Planning
Ken Markve, AMATS

Same Letter being sent to Senators Sturgulewski and Dankworth


Note: Not all side streets are shown
Northern Lights
Bowen
Forest Park Dr.
Lois Drive
1980 traffic count 18,189
Barbara Drive
Tumagain Blvd
congested area
Lord Baranof
Tumagain Pkwy
Wisconsin
Methodist Church
Tumagain School
School crossing
MacKenzie
Jeffords
Talagamma
Westwood
Aero Drive
1980 traffic count 7890
1980 traffic count 3660
Cuspert Beacon
Earthquake Park

FILE WITH BILL

BISS AND HOLMES
ATTORNEYS AT LAW
AN ASSOCIATION OF PROFESSIONAL CORPORATIONS

BURTON C. BISS
ROGER F. HOLMES

618 CHRISTENSEN DRIVE
ANCHORAGE, ALASKA 99501
TELEPHONE (907) 277-8564

WASILLA OFFICE
SR BOX 611
WASILLA ALASKA 99687
TELEPHONE (907) 376-5318

February 10, 1982

Senator Ed Dankworth
Pouch "V"
Juneau, Alaska 99811

RE: Senate Bill 683, West Northern Lights Boulevard

Dear Senator Dankworth:

According to an article in the Anchorage Times you have introduced legislation to appropriate $18.8 million to widen West Northern Lights Boulevard to five lanes from Lois Drive to the Lake Hood Airport entrance. My wife and I have lived on Westwood Drive in West Turnagain for over 12 years. We strongly oppose this proposal and urge that you withdraw the bill, or amend it to the level suggested below.

A neighbor of ours, Bob Flint, has sent you some extensive comments concerning his opposition to this road. My wife and I fully agree with these comments. Millions of dollars have been spent upgrading Minnesota Bypass and International Airport Road to provide a high speed route between downtown and the airport. S.B. 683 would not solve the existing traffic problems on West Northern Lights, most of which are minimal, rather, we believe that bill would compound the problem tenfold.

Most highway surveys which have been done indicate that major upgrading of a traffic route increases traffic dramatically. As an example, if 8,000 cars a day now use West Northern Lights, you might expect 12,000 or 13,000 to use it the moment the five lane road is opened.

The major complaints of the Turnagain residents appear to be the inability to get from the Turnagain area onto Northern Lights and off of it during the 8:00 a.m. and 5:00 p.m. rush hours. Adding several thousand high speed vehicles a day to that road seems counter-productive. Sooner or later there will probably have to be traffic lights in place at the Forest Park Drive, Turnagain Parkway/Wisconsin intersection and

perhaps at Lord Baranof or Turnagain Boulevard. Once West Northern Lights becomes a high speed access to the airport, there will be tremendous conflict between the neighborhood residents needing traffic light access to the road and high speed commuters opposing them. More than 50 residential units between Lord Baranof and Telequana have their driveway access directly onto Northern Lights Boulevard. For these homes an increased right of way or lane development will either result in their property being taken or an almost insurmountable access problem.

West Northern Lights now from the school to Lake Hood often has little or no police enforcement of the speed limit. Many of the airport service vehicles (trucks, taxis, crew buses, etc.) can be seen daily traveling in excess of 50 miles per hour on this back road within 2 or 3 feet of people attempting to use the bicycle paths for walking, cycling, etc.

If this road is constructed to 4 or 5 lanes, Turnagain Elementary School will become a hazardous busing route or an elevated crosswalk will have to be installed. A high percentage of the school children now attending Turnagain Elementary School cross Northern Lights Boulevard every morning and afternoon. In the fall and spring the vast majority of these students come to school on their bicycles. History suggests that these children are not going to take their bicycles up and over the road. History also suggests that commercial traffic on a five lane, high speed road routinely ignores the 20 mile per hour school zone speed limit.

We are prepared to acknowledge that the traffic problem on West Northern Lights needs investigation. Most probably there will have to be one or two stop lights installed along West Northern Lights Boulevard to allow an opportunity for traffic to enter and exit from Northern Lights. Perhaps an additional third turning lane will have to be added in some places and the existing road should be built to high standards with curbs and gutters defining the lanes. Also, the major bottleneck in traffic between the railroad tracks and Lord Baranof should be eliminated by installing four lanes in this section.

Effort should be made to discourage commercial use of West Northern Lights Boulevard. Since we have a first class access to the airport it should no longer be possible for commercial traffic to use West Northern Lights Boulevard as a truck route.

While 2 or 3 stop lights along West Northern Lights Boulevard may add an additional few minutes of commuting time for the residents, they will go a long way towards deterring the use of West Northern Lights as a short cut, high speed route to the airport. This should add immeasureably to the elimination of what problem now exists.

The unspoken State purpose in developing a five lane road appears to be the desire to develop commercial property at the north end of the north/south runway. A five lane road from Minnesota along Northern Lights to the north end of the north/south runway, unencumbered by stop lights, will make that state lease land very attractive commercial property. If this is the real reason, then perhaps that fact should be made known to the residents before they are asked to support this proposal. I am sure the vast majority of Turnagain residents would prefer to see any commercial property developed on the north side of the runway use an upgraded road tying into International Airport Road rather than further impacting their neighborhood.

Thank you for your consideration. Should you wish to discuss this matter further, please feel free to contact me.

Very truly yours,

BISS & HOLMES

Roger F. Holmes

RFH:bc

cc: Senator Patrick Rodey
Senator Jalmar Kerttula
Senator John C. Sackett
Senator Donald E. Gilman
Senator Bill Ray
Senator Arliss Sturgulewski
Representative Jce Montgomery
Representative Joe Hayes
Mayor Tony Knowles
Assemblyman Rick Mystrom
Assemblyman Dave Walsh

ALASKA UNIVERSITY OF ALASKA UNIVERSITY OF A' ASKA UNIVERSITY OF ALASKA UNIVERSITY OF ALASKA

-FILE-

president's report 1980-81



## Board of Regents

Edward Rasmuson
President
Anchorage

Jeffry Cook
Vice President
Fairbanks

Herbert Lang
Treasurer
Anchorage

Donald B. Abel, Jr.
Secretary
Juneau

Hugh B. Fate, Jr.
Past President
Fairbanks

Mildred Banfield
Juneau

Sam Kito, Jr.
Anchorage

Margaret J. Hall
Kodiak

Thomas Miklautsch
Fairbanks

John Shively
Anchorage

Timothy Burgess
Student Representative
Fairbanks

## Administration

Jay Barton
President

Sherman Carter
Executive Vice President and
Vice President for Finance

George C. West
Vice President for Academic Affairs

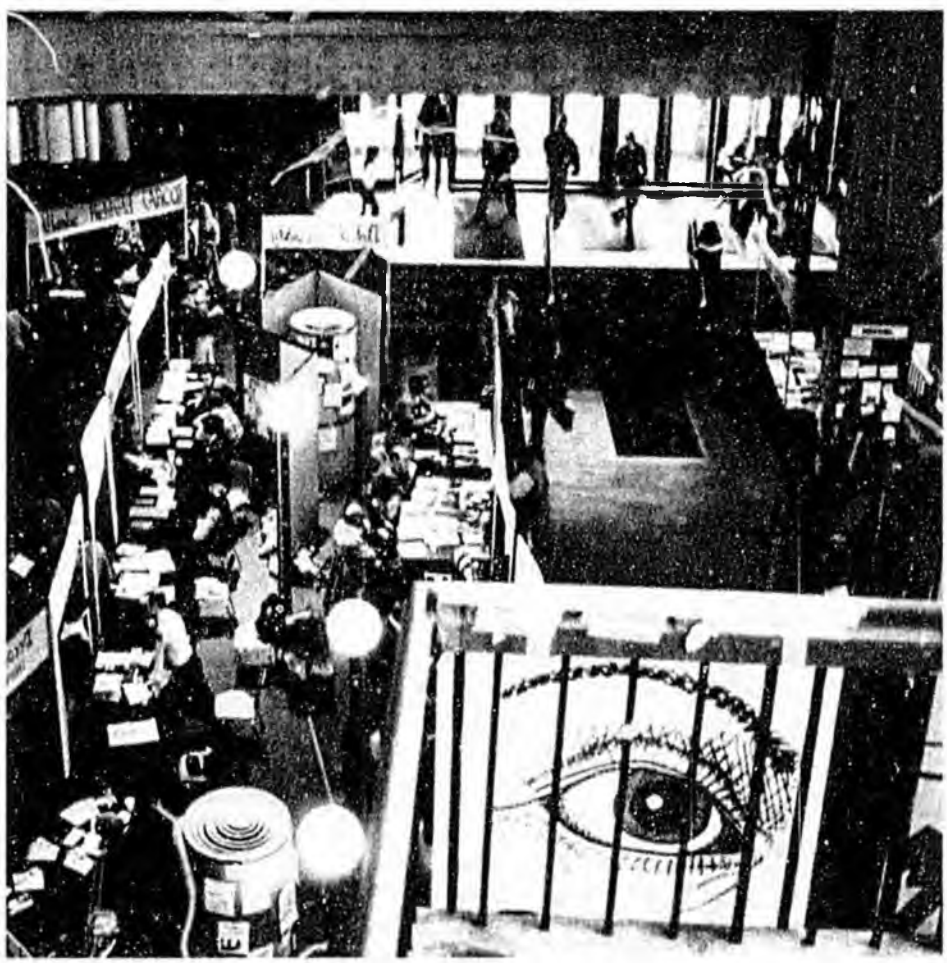
## Campus Administrators

Patrick J. O'Rourke
Chancellor
Fairbanks

David Outcalt
Acting Chancellor
Anchorage

Michael Paradise
Chancellor
Juneau

Edwin Biggerstaff
Interim Chancellor
Community Colleges, Rural Education
and Extension



# president's report 1980-81

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3 UNIVERSITY OF ALASKA UNIT LOCATION MAP
4 THE YEAR IN REVIEW
14 FINANCIAL REVIEW



TO: His Excellency Governor Jay Hammond, Members of the State Legislature, Citizens of the State of Alaska, Friends of the University of Alaska

This has been a good year for the University of Alaska. More degrees were awarded than in any other year. Enrollments were up across the entire State. No greater compliment can be paid to any University than to have qualified students seeking admission to its educational programs.

Once again the University's external auditors have given its financial accounting a clean and unqualified opinion. The University's accountability for the public funds with which it has been entrusted has never been stronger.

National recognition has given us confidence in the quality of our research and public service programs as well. The Secretary of Commerce, this year, named the University of Alaska a Sea Grant College after assessing the quality of our activities over the last 10 years in fisheries and marine science. The Marine Advisory Program, a key portion of the Sea Grant College activities, received especially high marks for its contributions to the fishing industry of Alaska.



The year has turned up some problems too. The University of Alaska, Juneau, according to the Northwest Commission on Schools and Colleges, needs some significant strengthening to develop full quality education programs. Our intentions are to meet these requirements in order that the University of Alaska, Juneau, can more effectively serve Juneau and the Southeast.

Problems with rural education have renewed the debate over increasing access to higher education versus focusing and concentrating our resources. The thinness of Alaska's population, coupled with the tremendous difficulties in travel and communication, makes the issue of more than passing significance. Newly developing cooperative programs with the Department of Education will enable us to use educational resources in rural Alaska with greater effectiveness. The telecommunication programs, initiated by the Legislature a year ago, are reaching completion. The new technology offers tremendous potential for education in the State.

This year also witnessed the development of a collaborative plan in petroleum technology involving Kenai Peninsula Community College, Tanana Valley Community College and the University of Alaska, Fairbanks. Collaborative efforts such as this may well be more and more the shape of the future as we attempt to use our resources more effectively, while at the same time maximizing access to higher education.

I continue to be pleased to serve one of the State's most important resources — its University. It is a real pleasure to be part of an enterprise that can command the loyalty and dedication of so many hundreds of students, faculty and staff across the State.

Respectfully,

Jay Barton
President

The University of Alaska is a statewide system of higher education comprising major campuses at Fairbanks, Anchorage and Juneau, 10 community colleges, 12 rural education centers, a Cooperative Extension Service, and a number of research facilities located around the state. The University, founded at Fairbanks in 1917 as the Alaska Agricultural College and School of Mines, admitted its first students in 1922. It gained university status in 1935 by action of the territorial legislature. Before 1966, construction was confined to the original campus at Fairbanks but since that year the emphasis has been on building the total University. The Anchorage campus, drawing students from the state's most heavily populated area, has grown rapidly. Growth of the Fairbanks and Juneau campuses has been substantial. Most of the community colleges now have their own physical plants, and construction of facilities to house the rural education centers has begun.



## Providing Educational Opportunities

As a land-grant institution, the University of Alaska strives to offer appropriate instruction of the highest quality to all who have the interest, dedication and ability to learn, and during 1980-81 it served more Alaskans than ever before with a wide array of educational and community interest programs. In the fall of 1980, a total of 40,925 persons, approximately 10 percent of the State's population, enrolled in one or more university classes.

The budget granted by the State enabled the University to add 16 new degree and certificate programs and approximately 70 people to its instructional staff, greatly strengthening the total educational program.

Reorganization of the University of Alaska, Juneau (UAJ) into a four-year institution through the merger of Juneau-Douglas Community College and the Southeast Senior College units was successfully completed during the year. The change permitted more efficient use of faculty and resources while increasing the programs of the college.

Responding to needs of industry and the State, the University in 1980-81 further broadened and improved its fisheries and fisheries-related programs. The University was designated a Sea Grant College, the 16th in the nation, during the year. To complement this designation, a statewide Fisheries Planning Committee made up of university personnel and a group of distinguished fishery experts drafted a 10-year plan to (1) increase the quality and quantity of programs to train fisheries managers, biologists, fisheries scientists and industry leaders while providing scientific information on the wise and appropriate uses of the freshwater and marine resources of Alaska; and (2) join with the fishing industry to provide training opportunities, carry out research and development for the fishing and processing industries, and to promote the transfer of a maximum amount of information and technology to the industry.

The plan involves all major units of the University. Fisheries management and fishery science programs will be conducted by UAJ; fishery technology and extension programs by the Fishery Industrial Technology Center, a new unit to be located in Kodiak; seafood marketing, fishery economics and marine law, and social science programs by the University of Alaska, Anchorage (UAA); and fisheries oceanography, freshwater fisheries and related marine science, limnology and marine biology programs by the University of Alaska, Fairbanks (UAF). Under the plan, overall coordination of the program is to be provided by the recently activated Office for Fisheries, headed by Donald Rosenberg and located in the Office of the President.

A key element of the plan is the Fishery Industrial Technology Center. The legislation authorizing it, sponsored by Representative Fred Zharoff of Kodiak, was approved by the Legislature and signed by the Governor. An initial appropriation of $175,000 will be used to complete plans for the center and its activities.





In 1979 the University and State Department of Education jointly developed an instructional telecommunications program that promised to augment substantially existing educational delivery systems, particularly in rural Alaska. In 1980-81 considerable progress was made in completing the network to implement the program. The University of Alaska Instructional Telecommunications Consortium was created to direct the university phase of the overall program. Jane Demmert heads this unit.

Plans called for instructional programs to be transmitted throughout the State by television and audio conferencing systems. Computing services were to be made available through the university computer network in areas served by community colleges. By the end of the year, 59 audio conferencing terminals had been installed in 31 communities.

The University's computer network, which at the outset of the year served the Fairbanks, Anchorage and Juneau campuses and four community colleges, was extended to five of the six remaining community colleges with the linkage to Ketchikan expected in the near future. The consortium arranged for the licensing of a new satellite television channel which it will operate for itself and the State Department of Education.

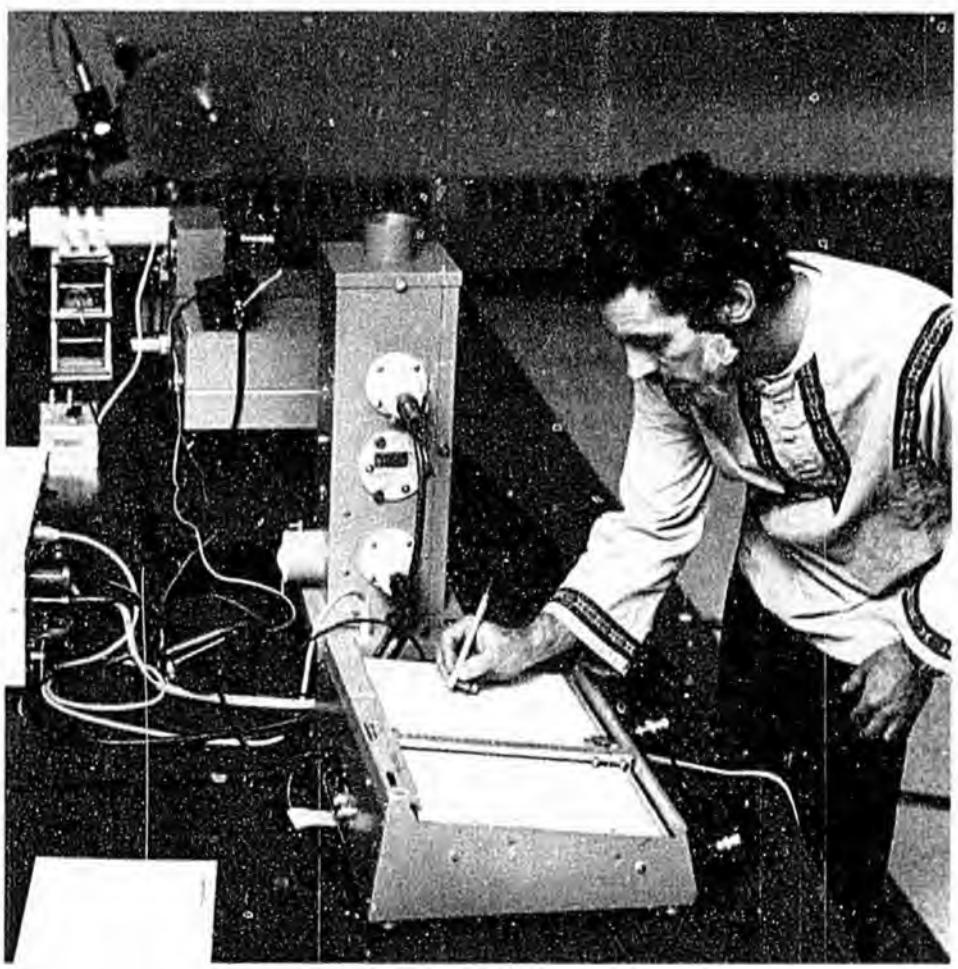
Cleve Mathews occupied the new Atwood Chair of Journalism at UAA for the year, lending substantial strength to the campus' communications program. Mathews is professor of journalism and assistant dean of Syracuse University's S.I Newhouse School of Public Communications and a former *New York Times* editor and director of news and public affairs for National Public Radio. The UAA journalism chair is supported by a $100,000 gift from *Anchorage Times* editor and publisher Robert B. Atwood and his wife Evangeline.

The Alaska Native Language Center, headed by Irene Reed, continued its vital efforts to preserve the Alaska native languages—teaching native languages and training persons to teach these languages in the Alaska school systems; producing native language texts, including language dictionaries, for use in schools and by the public; translating documents and other informational materials into native languages; and providing consultant services to social scientists, school districts and state agencies.

The Cross-Cultural Educational Development Program at UAF carried on its important work, providing teacher training in small communities throughout rural Alaska. Started in 1970 as a possible answer to the problem of high teacher turnover in rural schools, the program trains people living in rural Alaska to become certificated teachers. Some 120 students were enrolled in the program this year.

UAJ's Center for Educational Rehabilitation Services grew during the year from a local program to a statewide educational program fully integrated with the State Division of Corrections to offer education and training at all nine state prisons. More than 500 inmates participated in the program. The campus also entered into agreement with the Juneau School District to provide vocational-technical programs for high school and college students. This joint effort is the first such cooperative arrangement in the State and involves the sharing of facilities.

Development of a coordinated outreach education program by UAJ's new Division of Continuing Education and Public Service was given high priority during the year, and educational services were made available to a number of Southeast Alaska communities.



A statewide Petroleum Extension Program was established to provide the trained personnel needed for jobs in industry. The cooperative program, coordinated by Dennis Steffy of Kenai Peninsula Community College, involves that college, the state-operated Alaska Skill Center at Seward, Tanana Valley Community College, and UAF. The petroleum industry provided substantial financial support and equipment and formed an advisory group which helped to give direction to the program.

In preparing the 1980-81 budget request, the University sought to make resource reallocations within each of the major administrative units and from one such unit to another to carry out its renewed commitment to rural and Native Alaska. As a result of this farsighted planning, the request for the Division of Community Colleges, Rural Education and Extension was increased by approximately $450,000.

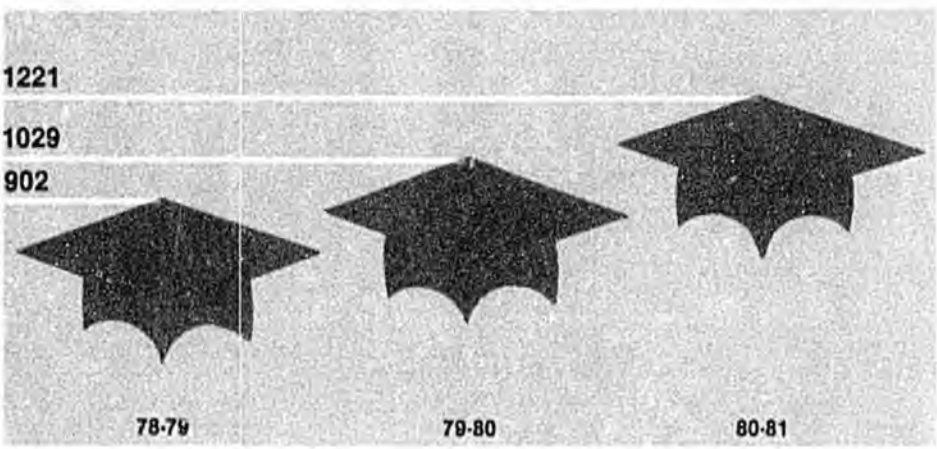
Legislative action again caused the funding for operation of Chukchi Community College at Kotzebue to be given to the Northwest Arctic School District instead of the University. The Governor vetoed the appropriation; however, in doing so he called upon the University, the State Department of Education and the Commission on Postsecondary Education to resolve the problems involving the delivery of postsecondary education to rural Alaska.

The Board of Regents reviewed procedures for establishing community colleges and developed a uniform policy requiring specific criteria including application procedures, student population requirements, staffing, transferability of credits and cost-sharing to insure that the institutions are a viable part of the overall university educational community.

The Northwest Association of Schools and Colleges denied full accreditation of UAJ during the year but continued the accreditation candidacy status of the campus for another two years.

Problems noted by the accreditation agency's evaluation team included a lack of student housing, inadequate library holdings and space, inadequate student services, insufficient funding for faculty and staff development and an overreliance on part-time faculty. The university administration and Board of Regents are committed to taking the steps necessary to provide quality educational delivery in Southeast Alaska.

**Degrees Awarded 1978-1981**








## Strengthening the University

The second Alaska Community College Conference, sponsored by Anchorage Community College, drew nearly 300 instructors and support staff to Anchorage in May 1981 for three days of workshops, professional development activities, and discussions on delivery of postsecondary education in the State. Five nationally prominent educators lectured and assisted in conducting the workshops which dealt with such topics as instructional telecommunications, developmental education, educational equality and community service. Special service meetings were held for community college council members, administrators, and other personnel.

During 1980-81 employee salaries were increased by an average 7.6 percent. The University and community college teachers' union (Alaska Community College Federation of Teachers, AFL-CIO) agreed to a one-year extension of the existing collective bargaining contract, and the University sought and received from the Legislature funding for a salary increase for union members.

How University of Alaska salaries compare with those paid by other employers in Alaska and employers in other states was the question addressed by consultants in 1980 during the first phase of the review of university compensation practices.

After adjusting for differences in cost of living in Alaska and elsewhere, Frank B. Manley and Company found that University of Alaska salaries are reasonably competitive. With regard to faculty, salaries for instructors and full professors were slightly low in comparison with adjusted "market" averages, while assistant and associate professors' salaries appeared slightly above the market. The relationships varied by academic disciplines.

For administrative, professional and technical (APT) employees, salaries were found to be somewhat above market at the lower and middle APT grades and below market at the higher APT grades. Classified salary ranges generally began at the average of the Alaska market so that the maximum earnings potential (as represented by the top of each grade) is the most significantly above market of any employee group. However, two-thirds of classified employees are paid in the lower steps of their grades which means the actual average salaries are only slightly above market.



**Bachelor Degrees Awarded by Academic Area 1980-81**

| | | |
|---|---|---|
| Agriculture & Natural Resources | 5.65% | 26 |
| Biological Sciences | 9.35% | 43 |
| Business Management | 15.22% | 70 |
| Education | 15.87% | 73 |
| Engineering | 8.70% | 40 |
| Health Professions | 6.52% | 30 |
| Letters | 2.17% | 10 |
| Physical Sciences | 3.04% | 14 |
| Psychology | 5.65% | 26 |
| Public Affairs & Services | 5.00% | 23 |
| Social Sciences | 9.35% | 43 |
| Other | 13.48% | 62 |

Total 460

The consulting firm found that the University of Alaska benefits program compares favorably with those at other universities. A task force has been formed to consider the findings and recommendations and to develop its own recommendations for the president and Board of Regents.

The Office of Human Resource Development evolved out of the former statewide personnel office during 1979-80 and was substantially strengthened during 1980-81. It was so named by President Barton to emphasize that the University looks upon its people as its most important resource. During the year the University upgraded the managerial level of the program and began a search for an associate vice president to take charge of the office, which had been headed by a director.

In the interest of broadening communication with employees, the University at the outset of the academic year began publishing the *University Report*, a biweekly newsletter which was distributed with paychecks. Additionally, special reports were sent to employees informing them of specific developments or actions when they occurred.

In March 1981, employees voted two to one to withdraw from the federal Social Security System. The voting followed an intensive informational effort by the university administration to make clear what benefits are afforded by Social Security and what the University could offer in their place. The administration subsequently recommended withdrawal and the Board of Regents in May voted unanimously to withdraw from the federal system and provide replacement benefits.

In its continuing effort to afford equal employment opportunities to more people, the University made significant progress during the year. From September 1980 through June 1981, the number of minority employees grew from 270 to 309.

On the technological side, there were significant advances during 1980-81. On January 1, 1981, the University activated a new computerized, automated financial accounting system with three components—a fund accounting system, an on-line accounts payable system, and an on-line accounts receivable system. The new system has substantially improved financial reporting and administration. Work to refine and improve it is continuing.

## Serving the Public

Around the State in 1980-81 the University offered workshops and conferences on survival skills for fliers and outdoorsmen, on prospecting, the needs of senior citizens, economic development, fisheries education and development, the education of handicapped children, real estate education and research, alcoholism and drug abuse, writing and the arts, and careers in the law aimed principally at Alaska Natives and other minorities. Additionally, the University assisted in the training of energy auditors for the State's energy conservation program and provided other sustaining programs of community interest throughout the State.

Through their service on various public and professional governing and advisory bodies, university personnel made significant contributions to their communities, state and nation and to their academic disciplines.




**Master Degrees Awarded by Academic Area 1980-81**

| | | |
|---|---|---|
| Agriculture & Natural Resources | 7.45% | 14 |
| Biological Sciences | 3.19% | 6 |
| Business & Management | 8.51% | 16 |
| Education | 41.49% | 78 |
| Engineering | 16.49% | 31 |
| Letters | 3.19% | 6 |
| Physical Sciences | 6.92% | 13 |
| Psychology | 3.19% | 6 |
| Social Sciences | 3.72% | 7 |
| Other | 5.85% | 11 |

Total 188

At the request of the Alaska Eskimo Whaling Commission, John Kelley of the University's Institute of Marine Science, the former scientific director of the Naval Arctic Research Laboratory at Barrow, established a scientific committee to advise the commission. The whaling commission in March 1981 was given authority by the National Oceanic and Atmospheric Administration to manage the bowhead whale hunt in 1981 and 1982.

The UAA Justice Center and an Anchorage public television station won the Alaska Press Club's prestigious Public Service Award in May 1981 for producing *Williams v. Zobel*, a televised Alaska Supreme Court hearing on the legal challenge of Alaska laws relative to the income tax and permanent fund dividends. The Justice Center's John Havelock, assisted by Douglas Barry, provided the professional commentary.

Other examples of individual service to the state are cited elsewhere in this report.

One of the University's oldest public service institutions is the Cooperative Extension Service, which in 1980-81 celebrated its 50 years of service to Alaskans which began with support of the original Matanuska Valley Colony. Through personal contact, telephone, and television and radio presentations, the Cooperative Extension Service and Marine Advisory Program served more than 78,000 persons during the year. They distributed 368,000 publications and mailed out nearly 133,000 newsletters. Personnel worked out of 17 extension and marine advisory offices located around the State.

The Bartlett Lecture Series in March 1981 brought Soviet exile and human rights activist Alexander Ginzburg to Fairbanks, Anchorage and Juneau. The distinguished lecture series is financed by the Bartlett Memorial Fund, established in the name of E. L. (Bob) Bartlett, the Territory of Alaska's delegate to Congress from 1945-59 and U.S. Senator from Alaska from 1959 until his death in 1968.

During the year the National Bank of Alaska donated to the Elmer E. Rasmuson Library on the UAF campus a rare book collection considered to be the most significant collection of basic works on the early history of Alaska. The Rasmuson Library was also designated the repository for the papers of former Senator Mike Gravel who represented Alaska in the U.S. Senate for 12 years. The UAA Library acquired the papers of the family of Richard Tighe Harris whose discovery of gold in 1880 with Joe Juneau led to the founding of Juneau. The papers were a gift of the Fred Harris family of Anchorage. Mr. Harris is a grandson of Richard Harris.

The University of Alaska Foundation received from WOMETCO Enterprises, Inc. a major piece of property in downtown Fairbanks with an assessed value of $1.8 million. The foundation also received a gift of a one-third interest in a patented Colorado silver claim (the remaining two-thirds interest is held by the Colorado School of Mines) from Mr. Cleland Conwell, a Fairbanks mining engineer and alumnus of the University.

The foundation is a nonprofit corporation organized to raise funds from private sources for the enhancement of the University.

## RECOGNITION

The University conferred honorary degrees on eight distinguished individuals at 1981 commencement exercises in Fairbanks, Anchorage and Juneau. The honorees:

- The late William Berry, a prominent Alaskan artist.
- Robert (Bobby) Sheldon, a former legislator and pioneer in the use of motor vehicles in Alaska for public transportation.
- Leslie Nerland, a former member of the Board of Regents and delegate to the Alaska Constitutional Convention of 1955-56.
- Dr. Albert Lincoln Washburn, professor emeritus of the University of Washington and chairman of the National Academy of Science's Polar Research Board.
- Jay Rabinowitz, chief justice of the Alaska Supreme Court (at the time of award).
- George Sullivan, longtime mayor of Anchorage and a former legislator.
- Lew Williams, Jr., publisher of the *Ketchikan Daily News* long involved in Alaska journalism.
- Mildred Sparks, widely known Alaskan artist and native leader.

## Research

In his address to the 32nd Alaska Science Conference held on the Fairbanks campus in August 1981, John Bligh, director of UAF's Division of Life Sciences and the conference chairman, noted that "If . . . one reads between the abstracts of the papers presented at the conference, one will see that the greater part of the biological researches being done in Alaska is being done for the . . . welfare of Alaska and Alaskans."

Bligh's observation would apply equally well to all the research endeavors carried on by the University. The University strives to produce a body of fundamental and applied knowledge beneficial to the State and its people. The University's work is well thought of in the government's granting agencies. It continues to rank near the top among the 100 public universities most frequently chosen to carry out federally supported research projects.

Some highlights of the University's 1980-81 research report:

- The Geophysical Institute's new VAX 11/780 computer (obtained through a grant from the Fleischmann Foundation) gave institute scientists an unprecedented capability for scientific research in large-scale data analysis and the modeling of geophysical processes from the magnetosphere to the lower atmosphere to glaciers and to the core of the earth.

- Landsat (satellite) imagery was used by the Geophysical Institute to map nearly 500 ice floe displacements in the vicinity of Norton Sound (a shallow-water arm of the Bering Sea extending eastward into Alaska). The motion of the ice in this area is now much better understood in terms of ocean currents, the wind direction and the flow through the Bering Sea. Satellite (or high-flying aircraft) imagery has also been used successfully in studies of, for example, geothermal sources at Pilgrim Springs to evaluate the area as an energy resource; inventorying the range of the reindeer in Northwest Alaska; and estimating the amount of timber that could be used as fuel in Alaska.

- Development of the Seward Marine Center (on the Kenai Peninsula) was emphasized during the year by the Institute of Marine Sciences. The center is the home port of the R/V *Alpha Helix*, a research vessel operated by the University for the National Science Foundation. Work was begun on a new public education building at Seward which will include a display area, library, conference room and, eventually, an aquarium.

- The massive multi-institutional and multi-disciplinary long-term program known as PROBES (Processes and Resources of the Bering Sea shelf) was continued during the year by the Institute of Marine Science.

- Research of the Institute of Arctic Biology has responded to an immediate need for information applicable to the reindeer industry. Studies concentrated on disease control, utilization of barley grown in the Delta region of interior Alaska, and the feasibility of reintroducing a reindeer industry as a means of supplying red meat for peoples of the Kuskokwim region of Southwest Alaska. A health-aid manual was developed for reindeer herders, and the book *Alaskan Wildlife Diseases*, three years in preparation, was published.

- Under the auspicies of the WAMI (Washington-Alaska-Montana-Idaho) regional medical education program, the University developed policy alternatives for health planning relative to large-scale construction projects such as the oil and gas pipeline projects and potential mineral exploitation. These projects are of special interest, not only because of their size but because of their remoteness from conventional health care delivery services.

- The University conducted a wide range of energy-related projects of great potential benefit to Alaska, including studies of gas hydrates, which are crystalline solid mixtures of water and natural gas. Decomposition of gas hydrates during drilling can pose special problems for petroleum extraction, but the most interesting aspect is that there may be a huge natural gas resource locked up in hydrates under Alaska's North Slope and offshore.

- Studies conducted by the Agricultural Experiment Station in the Delta Junction area showed that the best-adapted varieties of barley gave higher yields than the U.S. average. A three-year trial of several early-maturing varieties of buckwheat has demonstrated which are best adapted to different areas of Alaska (buckwheat is a crop having high potential in Asian markets).

- Potato-breeding research at the Palmer Research Center in cooperation with the U.S. Department of Agriculture resulted in the release in 1981 of a new white-skinned, scab-resistant potato. This potato was introduced in 1975 and is now proven to be scab-resistant as a result of field trials ranging from Southeast Alaska to the Kobuk region of Northwest Alaska, in the Arctic.

## Sea Grant College

The success of its Sea Grant Program and related programs over the past decade resulted in the University's being designated a National Sea Grant College in 1980.

This designation was granted "in recognition of the sustained excellence of (the University's) marine programs and services . . ." the U.S. Secretary of Commerce wrote President Jay Barton.

"On behalf of the Department of Commerce, I welcome the University into this exclusive group of academic institutions, and I congratulate you and the people of Alaska on this noteworthy achievement."

The University became the 16th institution to receive the Sea Grant College designation since the program was established in 1966.

- The Mineral Industry Research Laboratory continued its studies of Alaskan coals, particularly with a view to export markets. The characteristics of 35 Alaskan coal seams have now been documented in terms of washability, dehydration, petrology and mineralogy, sulfur and ash content. (Alaska has enormous quantities of coal, as well as most other mineral resources). The laboratory also recently completed work on mercury-antimony-tungsten metal-bearing provinces of Alaska.

- The third and final phase of the Man-in-the-Arctic program was completed by the Institute of Social and Economic Research. The program was designed to study the socioeconomic forces in Alaska and to apply the knowledge gained to critical problems of Alaskan development.

The foregoing represents only a portion of the total research conducted during the year by the University.

With regard to future research, there were some developments during 1980-81 which tended to temper optimism. The Naval Arctic Research Laboratory at Barrow, operated by the University for many years, was reduced to caretaker status. With no other federal agency coming forward to operate it, the facility is destined for closure in 1982. NARL is the last federally sponsored arctic laboratory. It has served national needs for more than 33 years. The University and Alaska's congressional delegation are now pressing for a national arctic policy which will assure that vital research will continue to be carried on in that important region.

The national administration's efforts to reduce governmental spending also promised to curtail research—in Alaska and elsewhere in the nation—to a degree which has yet to be fully calculated.









## Campus Development

Capital improvement projects with a total cost of more than $17 million were completed during 1980-81. One of the largest improvements was the installation of a new turbine generator at UAF, financed through the sale of some $5.2 million in revenue bonds. The UAF campus is now self-sufficient in electricity and heat production.

Among other major improvements completed during the year (funded by general obligation bonds and direct legislative appropriations):

- UAA/Anchorage Community College Performing Arts Center addition.
- UAA/Anchorage Community College physical education building.
- Offices for members of the collective bargaining unit at Anchorage Community College.
- Kodiak Community College classroom and library additions.
- Maintenance warehouse and building addition at Kenai Peninsula Community College.
- Addition to Matanuska-Susitna Community College.
- Dillingham Rural Education Center.
- Classroom, technical laboratory and career education buildings at UAJ.

Contracts were awarded for a number of other projects, including rural education centers at Delta and Fort Yukon, a hangar and classroom/office building for Anchorage Community College, additions to the Bill Ray Center and fisheries building at Juneau, and a central receiving facility at Fairbanks.

Further campus development was assured in November 1980 when voters solidly endorsed an educational bond issue that included $37.3 million for the University.

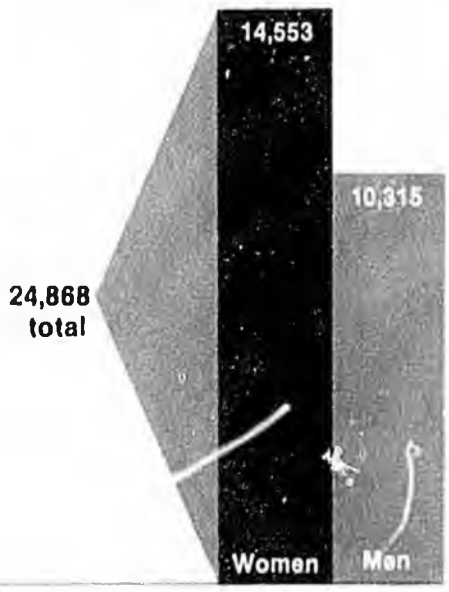
The University's Office of Land Management completed a technical inventory of all university landholdings to determine current status. Natural resource inventories were begun on landholdings in various parts of the state to determine timber, mineral and material development potential.

Tracts of land in Juneau, Nome and Fort Yukon were purchased for educational purposes.

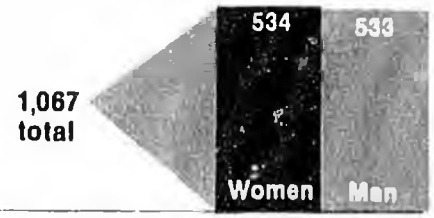
In what may be a landmark decision relative to University trust lands, the Alaska Supreme Court ruled in February 1981 that University trust lands cannot be taken without compensation.



**Credit Headcount Enrollment, Fall 1980**




Undergraduate




Graduate

## Looking Ahead

As the year drew to a close, there was ample evidence that ever greater demands would be made upon the University. With an unprecedented number of applications on file for admission to the university centers in 1981-82, it appeared likely that enrollment records would be set at those centers in the fall of 1981. The operating funds provided by the State for 1981-82—$124.8 million—were less than requested by the University but still constituted, in President Barton's words, "a very comfortable budget" that would enable the University to fulfill its basic responsibilities.

Speaking before the Fairbanks chapter of the Alaska Press Club in August 1981, Barton said: "I can report to you that the University is in very good health. It has a greatly renewed sense of purpose, much better morale and a sense of excitement that things are moving."



## SERVICE TO STATE, EDUCATION

University personnel accepting appointment to State governing and advisory bodies during the year included the following:

**Mike Metty**, president of Northwest Community College (Nome), reappointed to the Governor's Manpower Planning Council.

**T. Neil Davis**, professor of geophysics at UAF, reappointed to the Alaska Council on Science and Technology.

**Charles K. Ray**, dean of UAF's School of Education, appointed to the new State Task Force on Effective Schooling.

**James H. Chase**, UAA affirmative action officer, reappointed to the State Commission for Human Rights.

**Paul McCarthy**, archivist at UAF's Rasmuson Library, appointed to the Alaska Historical Commission.

**Bette Anne Philip**, associate professor of medical science in the WAMI (Washington-Alaska-Montana-Idaho) program of regional medical education at UAF, appointed to the Citizens' Advisory Committee on Petrochemicals.

**Wayne Myers**, director of the WAMI program, reappointed to the Alaska Medical Facilities Authority Board. (He was also appointed a consultant to the Division of Medicine in the U.S. Department of Health and Human Services' Bureau of Health Professionals).

**Jack O'Bar**, director of the UAA library, appointed to the State Advisory Council on Libraries.

**Donald Triplehorn**, professor of geology at UAF, reappointed to the Royalty Oil and Gas Development Advisory Board.

Some other significant affiliations during the year in the area of public service and the advancement of the professions and education in general:

**Edith Wells**, instructor in Anchorage Community College's Office Occupations Program, appointed to the American Vocational Association's Region V Policy Committee.

**Frederick Milan**, professor of human ecology at UAF, appointed to a committee on polar biomedical research established by the National Research Council's Polar Research Board.

**Randall Ackley**, director of UAJ's Center for Educational Rehabilitation, elected to the executive committee of the University Without Walls International Council, at the First International Conference on Nontraditional Education held in Toronto, Canada.

**Tom Healey**, director of planning and research for the Division of Community Colleges, Rural Education and Extension (CCREE), elected chairman of the Alaska Vocational Education Planning Council.

**Rene Blahuta**, of the archives staff at UAF appointed to the City of Fairbanks' Commission of Historic Preservation.

**Dennis Dammert**, assistant to President Jay Barton, appointed to the board of directors of the Fairbanks-based Institute of Alaska Native Arts, Inc.

President **Jay Barton** elected to the board of directors of the Public Service Satellite Consortium, a nonprofit corporation open to public or private nonprofit institutions or organizations which use telecommunications for educational, health care or other public service purposes.

**Vincent S. Haneman**, Jr., dean of the UAF School of Engineering, appointed a delegate to the Educational Affairs Council by the American Society for Engineering Education.

**Juan Roederer**, director of the Geophysical Institute, appointed to the National Academy of Science's Panel on Geophysical Data and Public Policy.

**Steve Langdon**, assistant professor of anthropology at UAA, appointed to the Scientific and Statistical Committee of the North Pacific Fishery Management Council, the federal regional body given primary responsibility for managing and regulating the fisheries within the 200-mile limit off the Alaskan coast.

**Robert Hunsucker**, professor of geophysics and electrical engineering at UAF, appointed to the U.S. delegation to the 20th General Assembly of the International Union of Radio Science (held in Washington, D.C. in August 1981).

**Claus Naske**, professor of history at UAF, elected to the board of editors of the *Pacific Northwest Quarterly*, published by the University of Washington. (Naske was also named Historian of the Year by the board of directors of the Alaska Historical Society).

## Report of Independent Certified Public Accountant

The Board of Regents
University of Alaska:

We have examined the balance sheet of the University of Alaska as of June 30, 1981, and the related statements of changes in fund balances and current funds expenditures for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. The financial statements of the University of Alaska as of and for the year ended June 30, 1980 were examined by other auditors whose report dated October 23, 1980 expressed an unqualified opinion on those financial statements, totals of which are included for comparative purposes only.

In our opinion, the aforementioned financial statements present fairly the financial position of the University of Alaska at June 30, 1981, and the changes in fund balances and current funds expenditures for the year then ended, in conformity with generally accepted accounting principles, applied on a basis consistent with that of the preceding year.

Peat, Marwick, Mitchell & Co.

October 30, 1981

## Balance Sheet
June 30, 1981

(with comparative totals only at June 30, 1980)
(000's omitted)

| | |
|---|---|
| **Assets** | |
| Cash and temporary investments | |
| Investments | |
| Accounts and notes receivable, less allowances of $902 in 1981 and $1,376 in 1980 | |
| Due from State of Alaska | |
| Inventories | |
| Other assets | |
| Investment in plant | |
| **Total assets** | |
| **Liabilities** | |
| Accounts payable and accrued expenses | |
| Accrued annual leave | |
| Due to State of Alaska – Lapsed state appropriations | |
| Long-term debt | |
| **Total liabilities** | |
| **Interfund balances** | |
| **Fund Balances** | |
| Unrestricted: | |
| Unallocated | |
| Designated | |
| Restricted: | |
| Grants refundable | |
| Established by donors | |
| Unexpended plant | |
| Replacements and renewals | |
| Retirement of indebtedness | |
| Net investment in plant | |
| **Total fund balances** | |
| **Total liabilities and fund balances** | |

| Current Funds | | Student | Endowment and Similar | Plant | Totals | |
|---|---|---|---|---|---|---|
| Unrestricted | Restricted | Loan Funds | Funds | Funds | 1981 | 1980 |
| $12,814 | | $ 230 | $ 612 | $ 3,521 | $ 17,177 | $ 11,317 |
| 7 | $ 23 | | 5,568 | 1,665 | 7,263 | 7,151 |
| 2,498 | 7,581 | 1,203 | 73 | 207 | 11,562 | 15,199 |
| 210 | | | | 66,070 | 66,280 | 58,625 |
| 1,681 | | | | | 1,681 | 1,630 |
| 351 | | | | | 351 | 64 |
| | | | | 279,183 | 279,183 | 247,300 |
| $17,561 | $7,604 | $1,433 | $6,253 | $350,646 | $383,497 | $341,286 |
| $11,946 | | | $ 6 | $ 2,776 | $ 14,728 | $ 18,909 |
| 4,002 | | | | | 4,002 | 3,647 |
| 1,535 | | | | | 1,535 | 2,113 |
| | | | | 27,405 | 27,405 | 27,489 |
| 17,483 | | | 6 | 30,181 | 47,670 | 52,158 |
| (6,311) | 6,669 | $ (95) | 111 | (374) | | |
| (3,504) | | | | | (3,504) | (3,695) |
| 9,893 | | 3 | 299 | | 10,195 | 5,959 |
| | 935 | 1,854 | | | 2,789 | 3,936 |
| | | (329) | 5,837 | | 5,508 | 5,736 |
| | | | | 65,538 | 65,538 | 54,257 |
| | | | | 2,303 | 2,303 | 1,805 |
| | | | | 1,293 | 1,293 | 1,405 |
| | | | | 251,705 | 251,705 | 219,725 |
| 6,389 | 935 | 1,528 | 6,136 | 320,839 | 335,827 | 289,128 |
| $17,561 | $7,604 | $1,433 | $6,253 | $350,646 | $383,497 | $341,286 |

The accompanying notes are an integral part of the financial statements.

# Statement of Changes in Fund Balances

for the year ended June 30, 1981
(000's omitted)

## Revenues and other additions:

Educational and general:
- Student fees
- Government appropriations
- Endowment generated income and donations
- Sponsored programs
- Recovery of indirect costs
- Sales and services of educational departments
- Interest income
- Other sources

Auxiliary enterprises

**Total revenues**

## Expenditures and other decreases:

Current fund expenditures
Recovery of indirect costs
Expended for plant facilities
Retirement of indebtedness
Interest on indebtedness
Provision for doubtful notes
State appropriations lapsed
Other

## Other changes:

Additions to plant facilities includes donations of $1,163 and $4,818 from current fund expense
Retirement of indebtedness
Retirement of plant assets
Increase in indebtedness
Other additions

## Transfers between funds:

**Mandatory:**

Retirement of indebtedness:
- Educational plant
- Auxiliary enterprise plant

Renewals and replacements:
- Educational

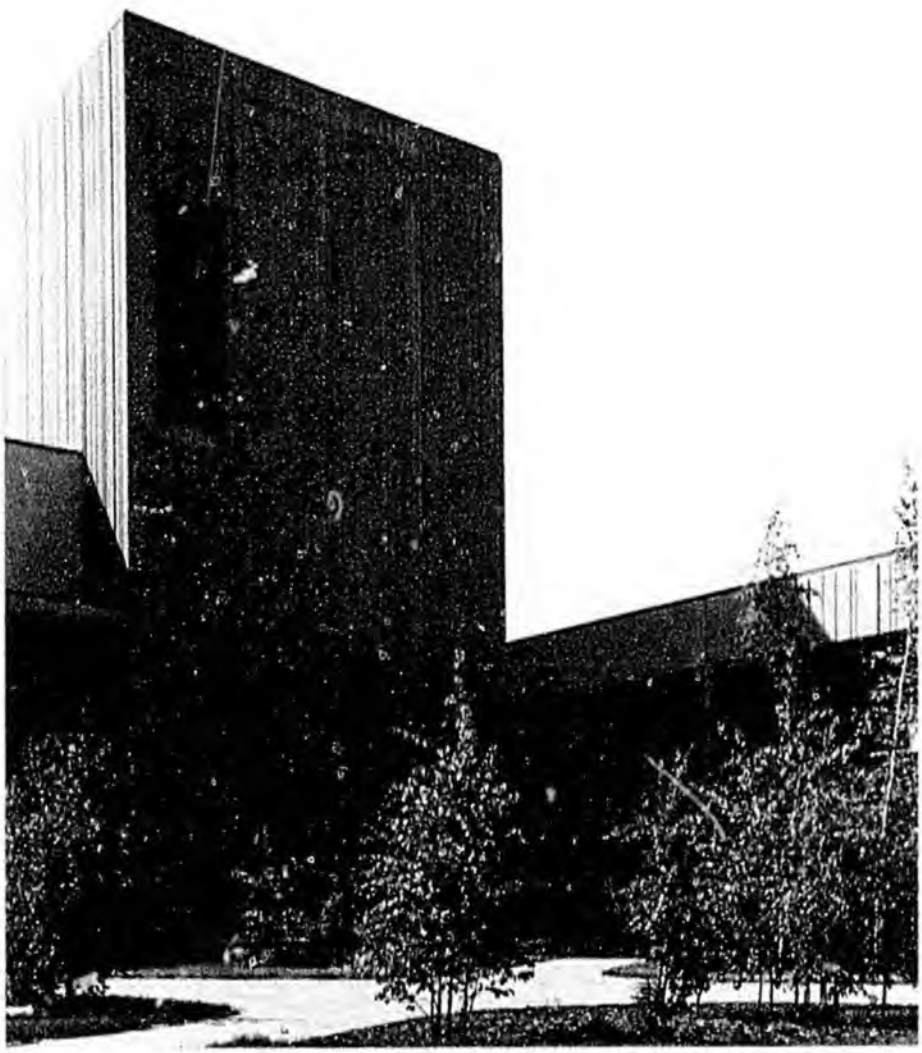
Student loan matching

**Non-mandatory**

**Net increase (decrease) in fund balance**

**Fund balances (deficit), beginning**

**Fund balances, ending**



| Current Funds | | Student Loan Funds | Endowment and Similar Funds | Plant Funds | | | |
|---|---|---|---|---|---|---|---|
| Unrestricted | Restricted | | | Unexpended | Renewals and Replacements | Retirement of Indebtedness | Investment in Plant |
| $ 8,147 | | | | | | | |
| 110,391 | | | | $38,439 | | | |
| 48 | $ 97 | | $ 353 | | | | |
| | 34,408 | $ 232 | | | | | |
| 5,196 | | | | | | | |
| 401 | | | | | | | |
| 1,934 | | 28 | | 267 | $ 215 | $ 120 | |
| 4,181 | | | | 31 | | | |
| 6,976 | | | | | | | |
| 137,274 | 34,505 | 260 | 353 | 38,737 | 215 | 120 | |
| 128,553 | 30,682 | | | | | | |
| | 5,196 | | | | | | |
| | | | | 26,999 | | | |
| | | | | | | 1,488 | |
| | | | | | | 1,750 | |
| | | 15 | 85 | | | | |
| 1,535 | | | | 114 | | | |
| | | 79 | 21 | 216 | 2 | 10 | |
| 130,088 | 35,878 | 94 | 106 | 27,329 | 2 | 3,248 | |
| | | | | | | | 33,175 |
| | | | | | | | 1,488 |
| | | | | | | | (1,293) |
| | | | | | | | (1,403) |
| | | | | | | | 13 |
| (1,887) | (17) | | | | (497) | 2,401 | |
| (793) | | | | | 48 | 745 | |
| (991) | | | | | 991 | | |
| (13) | (13) | 26 | | | | | |
| 473 | 24 | 17 | | (127) | (257) | (130) | |
| 3,975 | (1,379) | 209 | 247 | 11,281 | 498 | (112) | 31,980 |
| 2,414 | 2,314 | 1,319 | 5,889 | 54,257 | 1,805 | 1,405 | 219,725 |
| $ 6,389 | $ 935 | $1,528 | $6,136 | $65,538 | $2,303 | $1,293 | $251,705 |

The accompanying notes are an integral part of the financial statements.

# Statement of Current Funds Expenditures

for the year ended June 30, 1981

(with comparative totals only for 1980)

(000's omitted)

| | Unrestricted | Restricted | Totals 1981 | Totals 1980 |
|---|---|---|---|---|
| Instruction | $ 46,188 | $ 4,706 | $ 50,894 | $ 40,284 |
| Academic support | 12,391 | 706 | 13,097 | 11,376 |
| Organized research | 15,879 | 20,675 | 36,554 | 42,403 |
| Public service | 4,569 | 716 | 5,285 | 5,320 |
| Student service | 6,572 | 1,814 | 8,386 | 7,511 |
| Operation & maintenance of plant | 14,711 | 241 | 14,952 | 12,462 |
| General administration & institutional expense | 21,550 | 460 | 22,010 | 17,027 |
| Student aid | 127 | 1,364 | 1,491 | 1,089 |
| **Total educational & general activities** | 121,987 | 30,682 | 152,669 | 137,472 |
| Auxiliary enterprises | 6,566 | | 6,566 | 5,946 |
| **Total** | $128,553 | $30,682 | $159,235 | $143,418 |

The accompanying notes are an integral part of the financial statements.





# Notes to Financial Statements

## 1. Significant Accounting Policies:

**Fund Accounting**

In order to ensure observance of limitations and restrictions placed on use of resources available to the University, accounts of the University are maintained in accordance with the principles of "fund accounting." This is the procedure by which resources for various purposes are classified for accounting and reporting purposes into funds that are in accordance with activities or objectives specified. Separate accounts are maintained for each fund. In the accompanying financial statements, funds that have similar characteristics have been combined into fund groups.

Within each fund group, fund balances restricted by outside sources are so indicated and are distinguished from unrestricted funds designated for specific purposes by action of the Board of Regents. Externally restricted funds may only be utilized in accordance with purposes established by the source. The Board of Regents retains full control over use of unrestricted funds.

Endowment funds are subject to restriction of gift instruments requiring that the principal be invested and income only be utilized. While quasi-endowment funds have been established by the Board of Regents for the same purposes as endowment funds, any portion of quasi-endowment funds may be expended. Such funds are included as "designated" funds in the balance sheet.

Gains and losses arising from sale, collection or other disposition of investments and other non-cash assets are accounted for in the fund which owned such assets. Ordinary income derived from investments, receivables and the like is accounted for in the fund to which it is restricted or, if unrestricted, as revenues in unrestricted current funds.

All other unrestricted revenue is accounted for in the unrestricted current fund. Restricted gifts, grants, appropriations, endowment income and other restricted resources are accounted for in the appropriate restricted funds. Restricted current funds are reported as revenues and expenditures when expended for current operating purposes.

**Accrual Basis**

Financial statements of the University have been prepared on the accrual basis, except for depreciation accounting as explained under Investment in Plant below.

**Current Funds**

The statement of changes in current funds balances (revenues, expenditures, and other changes) is a statement of financial activities of current funds related to the current reporting period. It does not purport to present results of operation or net income or loss for the period as would a statement of income or a statement of revenues and expenses.

To the extent that unrestricted current funds are used to finance plant asset acquisitions, amounts are accounted for as 1) expenditures in the case of normal replacement of movable equipment and library books or, 2) mandatory transfers in the case of required provisions for debt amortization and interest and equipment renewal and replacement.

Encumbrances representing outstanding purchase orders and other commitments for materials or services not received as of June 30 are not reported as expenditures or included as liabilities. Such encumbrances are included as designated unrestricted current funds.

**Investment in Plant**

Plant and equipment are stated at cost at date of acquisition or fair value at date of donation in the case of gifts. Museum collections, with the exception of art work are excluded. Depreciation is not recorded, in conformity with educational institutional accounting practices.

**Investments**

Investments are stated at cost, or market at date of donation.

**Inventories**

Inventories are principally stated at the lower of first-in, first-out cost or market.

## 2. State Appropriations:

Alaska Statute 37.25.010 states that unexpended balances of a one-year appropriation will lapse on June 30 of the fiscal year for which appropriated. This statute prohibits the University from eliminating its accumulated current funds deficit without special consideration by the State. The University recorded a liability of $1,534,766 for appropriations that lapsed at June 30, 1981.

The State of Alaska funded an addition to the working capital fund during fiscal year 1981 of $2,500,000, and approved placement of $676,522 of fiscal year 1981 income into the fund. This fund is included in the current unrestricted, designated fund balance at June 30, 1981.

2. State Appropriation, Continued:

For fiscal year 1981, the legislature provided that some funds appropriated for the organized research units would lapse on December 31, 1981, rather than June 30, 1981. Accordingly the unexpended balance of these funds, $2,021,466 at June 30, 1981, is included in current unrestricted, designated fund balance.

3. Investments

At June 30, 1981 the University held the following investments:

| | Book Value | Market Value* |
|---|---|---|
| Cash and certificates of deposits | $2,161,402 | $2,161,402 |
| United States government securities | 4,894,413 | 4,461,515 |
| Other bonds and notes | 63,997 | 63,856 |
| Common stocks | 23,564 | 33,267 |
| Real property | 117,805 | 117,805 |
| Other | 2,953 | 2,953 |
| | $7,264,134 | $6,840,798 |
| **Fund Group** | | |
| Unrestricted current funds | $ 7,344 | $ 7,344 |
| Restricted current funds | 22,980 | 32,695 |
| Endowment and similar funds | 5,568,481 | 5,230,409 |
| Plant funds | 1,665,329 | 1,570,350 |
| | $7,264,134 | $6,840,798 |

*Book value is used where a quoted market value is not available.

Funds held in trust by others are not included in University investments. Such investments, which are administered by, and in custody of independent fiduciary agencies, have a cost basis of $1,050,770 and estimated market value of $984,922 at June 30, 1981. Income of $63,154 was received by the University during 1981 for general and designated purposes.

4. Investment in Plant:

Investment in plant at June 30, 1981 is as follows:

| | |
|---|---|
| Land | $ 5,214,418 |
| Buildings | 180,207,862 |
| Improvements other than buildings | 16,478,188 |
| Equipment (including library books and museum artworks) | 43,832,706 |
| Construction in progress | 33,450,300 |
| | $279,183,474 |

At June 30, 1981 the University held equipment with a cost of $6,259,000 which was acquired for use under various federal contracts and grants. Since title to this equipment is retained by the Federal government, it is not included in the financial statements.

5. Long-Term Debt:

A summary of long-term debt at June 30, 1981 is as follows:

| | Total | Current Maturities 1981-82 |
|---|---|---|
| Notes | $ 5,022,222 | $ 164,919 |
| Revenue bonds | 13,478,000 | 423,000 |
| State of Alaska general obligation bonds | 855,000 | 190,000 |
| Installment contracts | 1,341,257 | 419,810 |
| Principal of leasehold obligations | 7,450,000 | 500,000 |
| | 28,146,479 | 1,697,729 |
| Less borrowed funds not expended | 742,081 | |
| Total outstanding | $27,404,398 | |
| Interest | | 1,663,594 |
| Total debt service | | $3,361,323 |

Repayment terms and interest rates on all debt are described below in sections by type of obligation. Total principal maturities occur as follows: $1,697,729 in FY82, $1,753,258 in FY83, $1,494,175 in FY84, $1,309,859 in FY85, $1,001,276 in FY86 with the balance of $20,890,182 maturing in subsequent years.

5. Long-Term Debt, Continued:

**Notes**

| | Principal Outstanding |
|---|---|
| 5% note to State of Alaska for construction loan to finance the Campus Activity Center at Fairbanks. Student fee revenues are pledged on the note which is payable in annual installments of approximately $284,000 including interest to June 1995. | $ 2,809,000 |
| 8½% note collateralized by Yak Estates housing project and payable in monthly installments of $15,995 including interest to May 2012. | 2,092,286 |
| 8% mortgage note collateralized by deed of trust for the Community College Building in Anchorage payable in annual installments of $16,940 including interest to October 1991. | 120,936 |
| | $ 5,022,222 |

**Revenue Bonds**

| | Interest Rate | Principal Outstanding |
|---|---|---|
| Housing System due serially to 2008 | 3% to 3¾% | $ 8,263,000 |
| Anchorage Campus Student Center due serially to 2000 | 7¾% to 8% | 4,795,000 |
| Dormitories due serially to 1988 | 3% | 420,000 |
| | | $13,478,000 |

Housing system bonds are collateralized by a pledge of all revenue of the Housing System except that portion necessary to pay current expenses in excess of $79,273. The University has established reserves for future debt service and for major repairs and replacements.

Debt service for the Anchorage Campus Student Center bonds is to be provided from an allocation of Anchorage student fees and such other special fee assessments as are necessary.

Net rentals from dormitories are pledged to fund debt service on dormitory bonds.

**State of Alaska General Obligation Bonds**

State of Alaska general obligation bonds of $855,000, issued to finance the Anchorage Energy Utility System, mature serially to 1988, with interest of 7.6% to 8%. Debt service is to be provided by State appropriation.

**Installment Contracts**

| | Principal Outstanding |
|---|---|
| Honeywell Information Systems, Inc. | $ 949,645 |
| United Banclease | 85,415 |
| Hewlett-Packard Company | 289,883 |
| International Business Machines Corp. | 16,314 |
| | $1,341,257 |

Installment contracts with Honeywell are for the purchase of data processing equipment costing $1,970,717. The contracts provide for equal monthly payments over 72 to 96 months of $26,923 including interest of 4.5% to 6.1%.

The University has acquired equipment costing $284,506 by installment contracts with United Banclease. The contracts are payable in monthly installments of $5,402 over 6 years and include interest of approximately 11%.

The installment contract with Hewlett-Packard is for the purchase of data processing equipment costing $369,537. The contract provides for equal monthly payments over 53 to 60 months of $7,948 including interest of 7.5% to 8.75%.

The installment contracts with IBM are for the purchase of typewriter equipment costing $24,997. The contracts provide for equal monthly payments over 60 months of $499 including interest of 7.75% to 10.50%.

5. Long-Term Debt, Continued:

**Principal of Leasehold Obligations**

The University has leased its heating facility through 2011. Payments of principal and interest remaining under terms of the 49-year lease are $13,198,169. Permanent structures existing in 2011 become property of the University. The heating facility is included in plant fund assets and the related liability is included as "principal of leasehold obligation payable."

Lease payments by the University equal lessor's payments on the bonds. At June 30, 1981, the lessor's bonds outstanding consist of:

| | |
|---|---|
| 1962 Series payable serially to 1983 (4.75 %) | $ 570,000 |
| 1969 Series payable serially to 1992 (5.05-6.5%) | 1,680,000 |
| 1978 Series payable serially to 2000 (7.1-9.5%) | 5,200,000 |
| | $7,450,000 |

6. Building Program and Construction Commitments:

Major construction projects of the University are funded by State of Alaska general obligation bonds, revenue bonds and direct appropriations. At June 30, 1981 the University's unexpended plant funds include appropriations receivable from the State of Alaska as follows:

| | |
|---|---|
| 1970 Bonds | $ 51,361 |
| 1974 Bonds | 1,614,701 |
| 1978 Bonds | 3,662,494 |
| 1980 Bonds | 37,270,000 |
| 1978 Direct Appropriation | 317,700 |
| 1978 Direct Appropriation through Department of Transportation | 54,723 |
| 1979 Direct Appropriation | 359,500 |
| 1980 Direct Appropriation | 22,174,700 |
| 1981 Direct Appropriation | 565,000 |
| | $66,070,179 |

Construction commitments at June 30, 1981 aggregated $6,822,264.

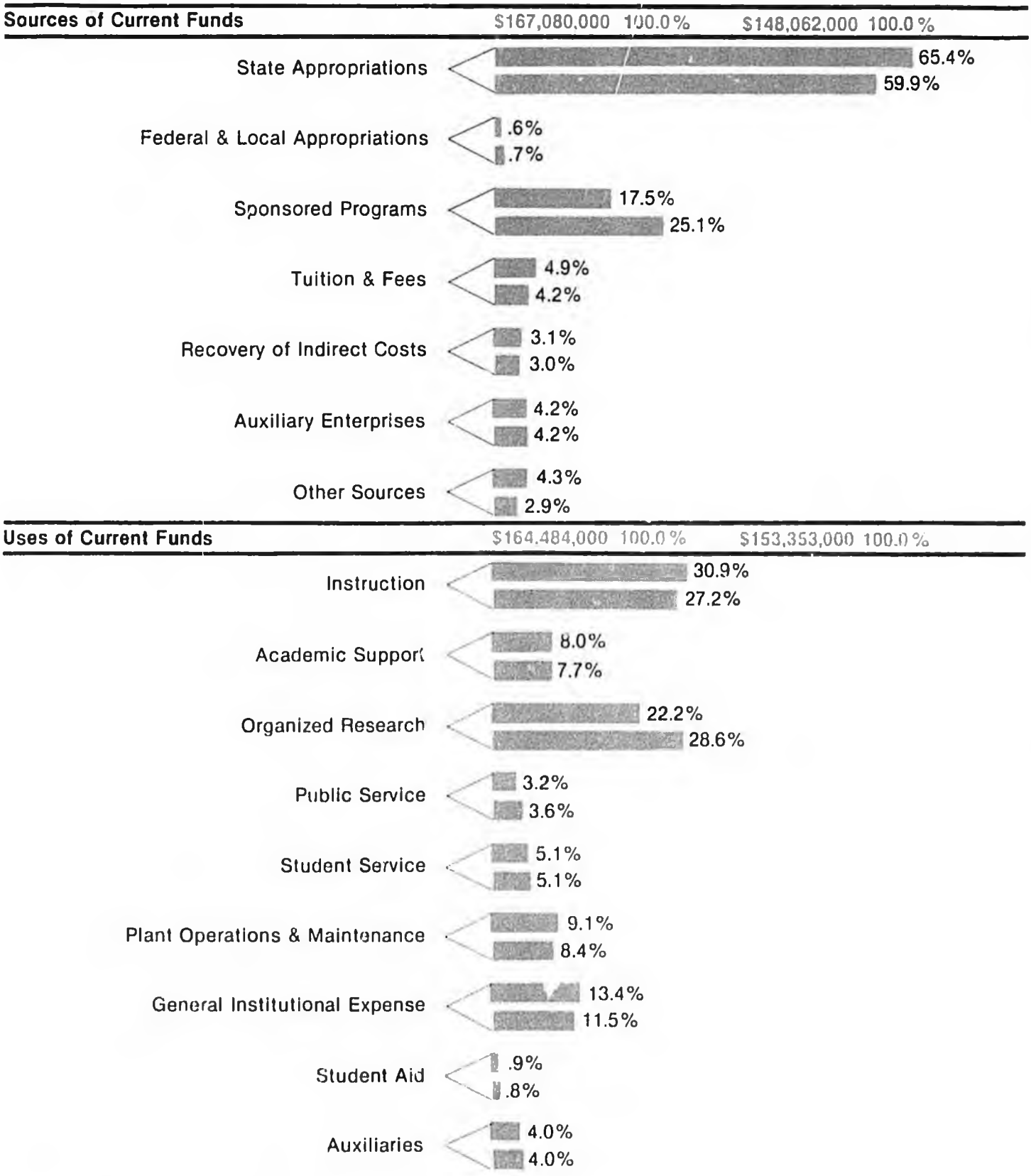
7. Pension Plans:

Substantially all full-time employees of the University are covered under the Public Employees' Retirement System of Alaska or the State of Alaska Teachers' Retirement System contributory pension plans. Total pension expense for the year was $7,098,537. This included a provision to amortize prior service costs of the Public Employees' Retirement System of Alaska and the Teachers' Retirement System over periods of 25 and 30 years, respectively.

8. Litigation

The University is involved in a number of legal actions. While outcomes cannot be determined at this time, management and counsel are of the opinion that liability, if any, from these actions will not have a material effect on the University's financial position.

# Sources and Utilization of Current Funds



## The Board of Regents



Edward Rasmuson, President



Jeffry Cook, Vice President



Herbert Lang, Treasurer



Donald B. Abel, Jr., Secretary



Hugh B. Fate, Jr. (Past President)



Mildred Banfield



Timothy Burgess (Student Representative)



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Sam Kito, Jr.



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PHOTO CREDITS

Inside:

Inside front cover, Barbara Phillco; contents page, P. Walsh; page 2, Sabra McCracken; page 4, left, Sabra McCracken, right, Dale Mohr; page 5, Geophysical Institute; page 6, top, Sabra McCracken; bottom, Kathy Kollodge; page 7, Lesley Stilinovitch; page 8, Doreen Fitzgerald; page 11, top left, Bill Marchese, top right, Geophysical Institute; bottom left and right, Sabra McCracken; page 12, Kodiak Community College; page 13, Herb Holeman; page 16, Lin Bauer, page 18, left, Kodiak Community College, right, Lesley Stilinovitch

cover, left to right:

Sabra McCracken, UAJ Public Affairs, Sabra McCracken
Roger Romen, P. Walsh, Sabra McCracken
Geophysical Institute, Dale Mohr, Geophysical Institute

Published by the Statewide Office of Information Services

SB

728

March 4, 1982

Werner and Leslie Egloff
P.O. Box 575
Girdwood, Alaska 99587

Dear Mr. and Mrs. Egloff:

This is to acknowledge receipt of your letter of March 1 concerning Senate Bill 728 relating to the Girdwood-Alyeska pathway.

Senate Bill 728 passed out of the Senate Transportation Committee on February 16 and it is currently in Senate Finance awaiting action.

You may be assured that I am supportive of this legislation. I appreciate your sharing with me your thoughts on this bill.

Sincerely,

Bill Ray
Senator
District C

ANS - Am supportive

THE BAKE SHOP
WERNER EGLOFF
P. O. BOX 575
GIRDWOOD, ALASKA 99587
TELEPHONE (907) 783-6102

3/1/82

SENATOR BILL RAY

CHAIRMAN
SENATE TRANSPORTATION COMMITTEE
ALASKA STATE LEGISLATURE
POUCH V (MS 3100)
JUNEAU / ALASKA 99811

DEAR SENATOR RAY,

PLEASE SUPPORT SENATE BILL 728 REGARDING THE GIRDWOOD WALKWAY. THIS WALKWAY SHOULD HAVE BEEN BUILT YEARS AGO AND IS NOW AN ABSOLUTE NECESSITY BEFORE MORE PEOPLE GET KILLED WHEN THEY HAVE TO WALK ON THE HIWAY.

Wern Egloff
Leslie Egloff

March 5, 1982

Jonnie Victor-Myers
Box 421
Girdwood, Alaska 99587

Dear Ms. Victor-Myers:

This is to acknowledge receipt of your correspondence concerning Senate Bill 728, relating to the Girdwood-Alyeska pathway.

Senate Bill 728 was reported out of the Senate Transportation Committee on February 16 and is currently awaiting action in Senate Finance.

I appreciate your taking the time to write and share your thoughts. You may be assured that I am supportive of this legislation.

Sincerely,

Bill Ray
Senator
District C

AGK - I SUPPORT

Box 421
Girdwood, Ak 99587

Senator Bill Ray
Alaska State Legislature
Pouch V(MS3100)
Juneau, Ak 99811

Feb 25, 1982

Dear Senator Ray:

I urge you to consider Senator Mike Colletta's bill #728. This bill concerns construction of the Girdwood Walkway. As a resident of Girdwood for only 5 years, I have allready witnessed the death of three children on our main road. There are far too many pedestrians in our community , with an unlit road as the main path from one end of the valley to the other. The only way to save the lives of our children and ourselves and still have the freedom to walk through our community is the overdue construction of a walkway. I stongly urge you to consider this bill. Thank you.

Sincerely,

Jonnie Victor-Myers

Jonnie Victor-Myers

March 2, 1982

Jacquelyn and Kenneth Graham
Box 272
Girdwood, Alaska 99587

Dear Mr. and Mrs. Graham:

This is to acknowledge receipt of your telegram of February 24 concerning Senate Bill 728 relating to the Girdwood-Alyeska pathway.

Senate Bill 728 passed out of the Senate Transportation Committee on February 16 and is currently in Senate Finance awaiting action.

You may be assured that I do support this legislation. I appreciate your sending me your support for this bill.

Sincerely,

Bill Ray
Senator
District C

ANS - I DO

MSGR

TELEGRAM

ALASCOM, INC.

#

02522 POM IDA GIRDWOOD AK 15 02-24 0628P AST

PMS SEN BILL RAY

JUNEAU

I URGE YOU TO SUPPORT SENATE BILL 728 REGARDING THE GIRDWOOD WALKWAY.

JACQUELYN AND KENNETH GRAHAM

BOX 272

GIRDWOOD AK 99587

SB

793

- File

GEORGE C. SILIDES
REGISTERED CIVIL ENGINEER
BOX 746
FAIRBANKS, ALASKA
(907) 456-1110

HAROLD H. GALLIETT, JR.
REGISTERED CIVIL ENGINEER
746 "F" STREET
ANCHORAGE, ALASKA
(907) 272-9212

A JOINT VENTURE

Senator Bill Ray
Chairman
Senate Transportation Committee
Alaska State Senate
Pouch V, State Capitol
Juneau, Alaska 99811

March 30, 1982

Re: Progress Report,
Port of Whittier Access Study,
Period February 18, 1982 - March 30, 1982

Dear Senator Ray,

On 18 March 1982 the project was personally reviewed with Senator Dankworth. At that time, the general findings developed since our Preliminary Report of 1 February were discussed. Also reviewed were the Proposed Alignment Sheet, Construction Conditions Sheet, and various photos of actual and potential avalanche conditions.

The written Report, with accompanying route mapping, is being put into final format. It is proposed to deliver the Final Report on or before 15 April 1982.

We are submitting our Invoice to the Legislative Affairs Agency, representing a 20% incremental project completion.

Sincerely yours,

GALLIETT & SILIDES
A JOINT VENTURE

George C. Silides

George C. Silides, P. E.

CC:

Senator Jay Kerttula, Senate President
Senator Ed Dankworth, Project Director
Mr. Myrton Charney
Mrs. Janelle King

— FILE —

# Alaska State Legislature

Senator Vic Fischer • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

M E M O R A N D U M

TO: Sen. Bill Ray

FROM: Sen. Vic Fischer

DATE: March 3, 1982

RE: SB 793--Whittier Access

Enclosed for your information is an Anchorage Assembly resolution supporting improved access from Portage to Whittier, development of Shotgun Cove and (!) construction of a small boat harbor at LaTouche Island.

cc: Sen. Gilman
Sen. Kerttula
Sen. Dankworth
Sen. Sackett

APPROVED
Date: 2-2-82

Submitted by: Assemblyman Don Smith
Prepared by: Municipal Clerk's Office
For Reading: February 2, 1982

ANCHORAGE, ALASKA

AR NO. 82-40

A RESOLUTION OF THE ANCHORAGE ASSEMBLY SUPPORTING BUDGET PROPOSALS TO FUND IMPROVED RAIL SHUTTLE SERVICE BETWEEN PORTAGE AND PRINCE WILLIAM SOUND FOR RECREATIONAL DEVELOPMENT.

WHEREAS, the Prince William Sound Region is one of the most magnificent and spectacular areas in Southcentral Alaska and has become a major tourist attraction and recreational area, and

WHEREAS, this area would be readily accessible to over one-half the population of Alaska if reasonable highway access were provided, and

WHEREAS, improved access is particularly important to the people of the Anchorage Municipality, inasmuch as over 6,000 pleasure boats are registered in the Anchorage Area and the small boat harbor is being tripled in size, and

WHEREAS, the Alaska Marine Highway has indicated an intention to increase the level of ferry service to Whittier from Southeast ports if ready access is provided to Anchorage, and

WHEREAS, there are currently proposals before the Legislature to appropriate funds to initiate construction of a highway from Portage and Bear Valley and to provide frequent and convenient shuttle service through the tunnel, until a permanent highway connection can be completed.

NOW, THEREFORE, BE IT RESOLVED, that the Anchorage Municipal Assembly endorses and supports budget proposals to fund recreational development in Prince William Sound, including the following:

1. Construction of a road from Portage to Whittier, or in the alternative, substantially expanded rail service.

2. Construction of a road, or ferry service from Whittier to Shotgun Cove and development of a small boat harbor.

3. Construction of a small boat harbor at LaTouche Island.

# Alaska State Legislature

Senator Vic Fischer • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

February 16, 1982

To: Members of the Senate and interested parties

From: Senator Vic Fischer

Re: SB 793 - relating to capital costs for improving access and support faciliites in Whittier and Prince William Sound.

Prince William Sound is a recreation area of national segnificance in close proximity to Alaska's population centers. Demand for access to the Sound has reached a critical state because current facilities are totally inadequate.

Getting to Whittier and into Prince William Sound is difficult and costly both for local residents and visitors. Whittier residents face a two-day round trip to reach Anchorage, have no on-site medical service, and are often isolated for days at a time by bad weather and shuttle breakdowns.

Using the waters of the Sound through Valdez or Whittier is a two-day round trip for railbelt Alaskans and tourists alike. The time and expenses prohibit most people from enjoying the recreation potentials of the area.

This appropriation would provide funds to upgrade the road and rail system connecting Portage and Whittier. It will allow one-day round trips, increase carrying capacity and extend hours of operation, and construct support facilities.

Lack of adequate boat moorage to accommodate the boating public is another critical problem in the Sound. The moorage at Whittier is completely filled, with waiting lists several years long. There is no room to expand the current harbor facilities.

This bill provides funding for construction of a road from Whittier to Shotgun Cove, the best available new harbor site. Design of a small boat harbor will be carried under SB 793. Once costs are established, a capital appropriation will be proposed.

Capital improvements under this bill would improve the existing Whittier-Valdez segment of the State Marine Highway System and provide an attractive tourist resource. The possibility also exists for increased demand associated with natural resource development and expanded port activity.

The need for these projects is covered in the interim report on Prince William Sound recreation by the Senate Resources Subcommittee on Parks and Recreation, chaired by Senator Fischer.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

# Alaska State Legislature

Senator Vic Fischer · Pouch V · Juneau, Alaska 99811 · (907) 465-4954


4 February 1982

To: Chair, Senator Bettye Fahrenkamp and
Members - Senate Resources Committee

From: Senator Vic Fischer, Chair
Subcommittee on Parks and Recreation

Subject: Prince William Sound Recreation

Attached is a report on the public meeting and teleconference held December 15, 1982.

It is clear that recreation potentials of the Sound are among the most important in Alaska, serving the needs of Alaskans as well as visitors to the state. While everyone agrees that the natural environment must be protected, problems of access, land availability, and adequate facilities are yet to be resolved.

Several important land transfers are currently pending, and federal and private development plans are in final stages of completion. Legislation establishing the Alaska Marine Parks System is being drafted for introduction in the Senate next week. Recommendations for other legislative action will be witheld pending further work on Prince William Sound recreation development.

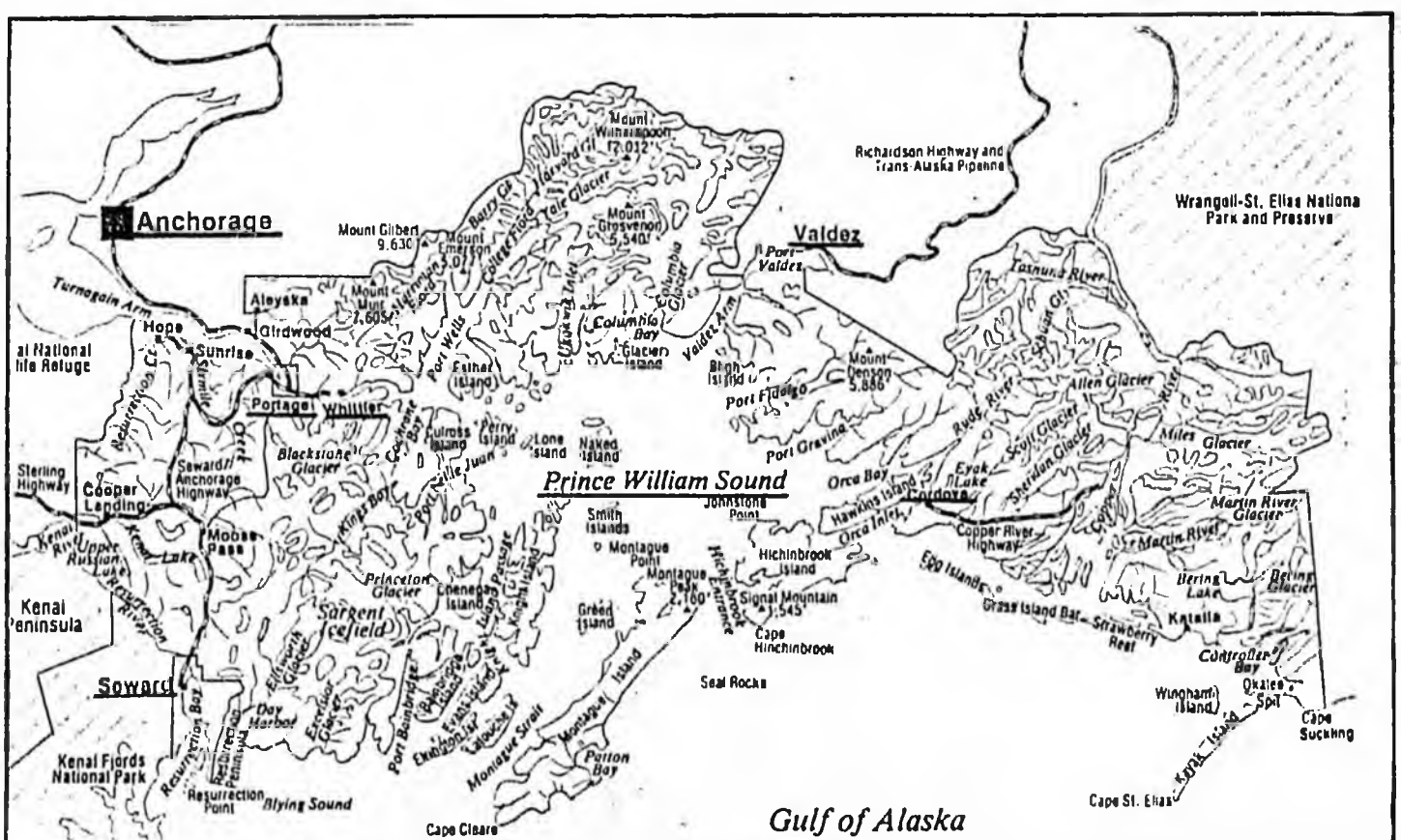
cc Senate President Jalmar Kerttula
Other Legislators
Teleconference participants
Agencies

PRINCE WILLIAM SOUND RECREATION

Report and Summary of public meeting/teleconference
PARKS AND RECREATION SUBCOMMITTEE
SENATE RESOURCES COMMITTEE
December 15, 1982
Anchorage, Alaska

Although the scenic beauty and recreation possibilities of Prince William Sound have long been recognized, limited access, lack of facilities, land status problems, and high costs have prevented the Sound's potentials from being realized.

The significance of the Sound to Anchorage and other population centers is seen by a glance at the map. The vast majority of recreational users in Alaska, both resident and tourist, are in close proximity to the Sound. Nearly half of all visitors to Alaska stop in Anchorage. Combined with tourists entering the Sound through Valdez, they represent the largest piece of the tourist pie outside of Southeastern Alaska.




Reproduced from: ALASKA NATIONAL INTEREST LANDS (Alaska Geographic, Vol. 8., No.4/1981)

In the words of Westours director Jack Musiel," Prince William Sound has the potential of providing a water related vacation experience that, with proper consumer awareness and unlimited access, could rival Alaska's Inside Passage in consumer demand."

A unique public resource of national significance, the wealth of recreation, scenic, biologic, and cultural resources in the Sound argues strongly for cooperative management. Coordination and cooperation among landowner/managers, local residents, and user groups within the Sound is essential to protect and promote its recreational potential.

Recent negotiations have opened the way for settlement of serious land use and ownership conflicts. Rapidly escalating use, potential conflicts between user groups, need for public investments and concern over the quality and pace of development prompted a Senate Subcommittee on Parks and Recreation public hearing to provide a meeting ground for interested parties.

Testimony was pesented by residents,as well as by municipal employees from Valdez, Whittier, Cordova, and Anchorage representatives of the tourist industry, wilderness guiding operations, commercial fishermen, private developers, and recreational users. Representatives of Native village and regional corporations, U.S. Forest Service, Alaska railroad, state Department of Transportation and Public Facilities, and the state Division of Parks testified during the teleconference.

This initial report concentrates on some of the principal problems preventing full use of the recreation potential of the Sound, on suggestions for alleviating those problems, and on policy considerations presented in public testimony before the subcommittee.

CURRENT LANDOWNERS/MANAGERS

The most serious problem with overall management of the recreation potential of Prince William Sound thus far has been the question of land status and ownership.

Five major groups currently comprise the landowners/managers within the Sound. They are: (1) federal government through Chugach National Forest (U.S. Forest Service) and, to a lesser extent, National Park Service; (2) state government, primarily through Department of Natural Resources, Division of Parks; (3) Chugach Natives Inc. and village corporations within it; (4) private landowners, including commercial developers; and (5) municipal governments.

1. Federal - The boundaries of Chugach National Forest include the entire Sound, although approximately 195,700 acres are being conveyed to the villages of Chenega, Tatitlek, and Eyak. Additional acreage will be transferred under Section 1428 of the Alaska National Interest Lands Conservations Act (ANILCA). Future land exchanges and conveyances are uncertain, however, in the wake of the recently completed Chugach Region Study, section 1429 of ANILCA and Section 14(h)(1) of the Alaska Native Claims Settlement Act (ANSCA).

The Forest Service is in the process of classifying lands within the Sound area and testimony noted their intent to identify locations complimenting sites approved in state selection for the Marine Park System. Also approved are some land transfers under the Alaska

Statehood Act in the vicinity of Whittier, Valdez, Cordova, and elsewhere.

The Chugach National Forest land management plan, in which management of the Sound is a key element, will be released in March 1982. It will be followed by a 90 day comment period. The Forest Service hopes to have the final plan ready by fall of 1982.

2. State - In 1977 the state, through the Division of Parks, began a program to select statehood entitlements from the National Forest and to lay groundwork for the Alaska Marine Park System.

This system, modeled after a similar one in British Columbia and Washington state, resulted from concern over federal timber harvesting practices and a recognition of the importance of the Sound for resident and visitor recreation. This led to the state's selection of several bays and islands from the Tongass and Chugach National Forest for possible future establishment - by an act of the state legislature - of an Alaska Marine Park System.

Of the 36 sites proposed in 1977, only 18 have been approved by the Forest Service and will be conveyed to the state by the Bureau of Land Management. The Division of Parks has filed a complaint against the Forest Service to obtain approval of the remaining sites and discussions on joint management possibilities have produced no agreements thus far.

The primary management goal for the Marine Park System is protection of natural and cultural resources for long-term public use and enjoyment. State park officials see neither the need nor desirability for commercial developments within any of the potential marine park sites in the Sound and held that basic services should be provided by the private sector.

3. Native Landowner/managers - Chugach Natives, Inc. (CNI), the second smallest regional corporation created under ANCSA, has not yet received its entitlements under provisions of the act. Initial negotiations with the Forest Service were unsatisfactory, particularly from the point of view of CNI, and a study of ownership patterns in the Chugach region was initiated under Sec. 14.30 of ANILCA, to help provide a meeting ground for Chugach Natives Inc., U.S. Forest Service, and the Division of Parks.

Testimony before the subcommittee suggested that Chugach Natives, Inc. felt that land status conflicts revealed through the recently completed Chugach Region Study must be settled immediately and while partial settlement was possible, it was unlikely either party would agree to entitlement without a view of the "total picture". Both the Forest Service and the state Division of Parks agreed that settlement of proposed land status questions was essential before any reasonable and responsible development of the Sound could occur.

Gail Evanaugh of Chenega Corporation testified that the natural harbor of Crab Bay at the new Chenega townsite, is ideally located to accomodate development to serve the area's recreational potential.

Families are expected to move into new community housing by fall of 1982.

Chenega's development plans, scheduled for release in March 1982, include recreational use by non-shareholders on a controlled basis. Chenega intends to request regular state ferry service to the townsite. Carl Propes of Chugach Natives Inc., said they plan to "aggressively develop" suitable unsettled areas and were considerably hampered in those efforts by problems of land ownership/management questions.

4. Private/Commercial Landowner/managers - Although less than 5% of Prince William Sound is in private ownership,other than Native corporation entitlements, private holdings do exist at the head of Nelson Bay, near Katalla, Port Fidalgo, Tatitlek, and on the abandoned townsite of Latouche. Additionally, there are numerous individuals holding homesite leases from the Forest Service, and there are lighthouse reserves at Cape Hinchinbrook, Cape St. Elias, the south end of Elrington Island, and near the entrance to Port Nellie Juan.

Probably the single most significant private landholding is on Latouche Island where nearly 200 parcels of private land have been sold and a model recreational community is planned.

Gliff Groh, attorney for Rarearth Inc,. the company responsible for the development and sale of the Latouche land, discussed the extent of private holdings and plans for the future. He argued that private land is hard to come by in the Sound and that the state should have a compelling interest in making private land usable and accessible to residents. Since private land held by Native corporations would allow non-shareholder use only on a "controlled basis", Latouche presented the only real possibility for the general public to own and manage land within the sound.

However, most personal and written testimony argued that private development should not be supplemented or subsidized by the state in the form of roads, airports, improved harbors, or hydroelectric projects unless: (1) there was an existing need for services the private sector was unable to provide, (2) the greater public interest was being served and, (3) public funding did not interfere with nor compete with private interests.

Various local residents and land owners in the Sound area testified they felt it was improper that public money was being used to develop support facilities at Latouche when already existing facilities at Port San Juan, a regular ferry stop, are in great need of repair. Local residents testified that whereas Clam Ba (new Chenega townsite) was one of the best natural harbors in the Sound, Latouche was notoriously one of the worst.

Groh defended the state's choice of developing a harbor at Latouche by pointing out that copper companies shipped thousands of tons of ore from this site over a long period of time and "they must have known what they were doing". Dave Noten, one of the 194 private landholders at Latouche

also testified in favor of using public funds to develop basic support facilities.

ACCESS

Testimony about access to Prince William Sound concerned itself almost exclusively with transportation from Portage to Whittier.

The Sound can be accessed through Whittier by airplane or railroad. The nature of the weather prevents air transportation from being a reasonable alternative and no highway access exists beyond Portage.

A presentation by the Department of Transportation and Public Facilities (DOTPF) of the Whittier Transportations Options Study outlined various alternatives considered during the study. They included:

1. Improvement of existing Portage-Whittier Shuttle with a Bear Valley/Whittier auto/passenger shuttle. Total capital cost would be approximately $20 million for the initial system (350 vehicles per day each direction and approximately 2,100 passengers) and about $24 million for expanded service (590 vehicles and 3,900 passengers per day). Annual operating and maintenance costs were estimated at $559,000 for initial service and just over $1 million for the expanded system.

2. Improved rail passenger service, including four shuttle trips each way plus three round trips between Whittier and Anchorage. Estimated capital cost is $22 million for initial (four shuttle trips plus three round trips ) and $26 million for expanded service (eight shuttle trips and four round trips). Annual operating costs were estimated at $793,000 for initial and $1.5 million for expanded service.

3. One-way joint use by vehicles and rail of existing tunnel. Capital cost for this alternative is estimated at $36.7 million with maintenance and operating costs at $390,000 per year.

4. Two-way joint use of widened, existing tunnel. Capital costs for this alternative are estimated at $64.3 million, with annual operating and maintenance costs of $440,000.

5. New two-way highway tunnel. The most expensive alternative, capital costs are estimated at $68.3, with operating and maintenance costs estimated at $440,000.

6. Portage Pass Highway. While it's possible to build a good highway, controlling the weather is, according to DOTPF, the most serious drawback to this alternative. Combinations of heavy snow fall with accompanying avalanche dangers, icing conditions, year-round high winds, steep grades (up to 9%) and heavy winter storms makes a high probability of having to close the highway for periods in the winter, particularly during adverse weather conditions. Since rail service may be eliminated if the highway were built, it could mean long periods of near total isolation for Whittier residents. Total capital costs are estimated at $47.8 million, with maintenance and operating costs of $270,000.

Although representatives from the tourism industry strongly supported the Portage Pass Highway, DOTPF preferred the Bear Valley/Whitter auto/passenger shuttle when evaluated for overall cost and service effectiveness.

Testimony from local residents supported the idea of improved rail service over creation of a new highway, both from a convenience and need standpoint and because they believed it would have the least negative impact on the protected lifestyle they enjoy in the Sound. Their emphasis was on access with the least negative impact on the environment.

Frank Jones of the Alaska Railroad suggested the state subsidize passenger service by improving support facilities, such as track changes in Whittier or Portage, a camper park and a visitor center near the ferry port for visitors to acquaint themselves with Prince William Sound offerings. Questions about future ownership of the railroad, in view of current negotiations between federal and state agencies, considerably hamper any long-term planning for improvement of rail services, according to Jones.

GENERAL COMMENTS

It was evident from testimony that both residents of the Sound and recreational users were concerned with the quality and pace of development.

Testimony suggested that as many as 40% of recreational users of the Sound seek an "off the beaten track" or "primitive" experience in close proximity to population and transportation centers. Local residents stressed that low population, lack of facilities, and isolation were the fabric of their lives and not something they wanted to "overcome".

At the same time, residents were concerned about the lack of emergency medical care or dependable transportation in emergencies, especially in view of the expected increase in search and rescue operations resulting from the rising use of the Sound by people unfamiliar with the area. Considerable anger was expressed that local residents transportation and timing needs were apparently not a priority with agencies planning the railroad and ferry schedules.

Testimony supported the concept that no or slow development was preferred to inappropriate or unplanned development. Local fishing communities expressed the fear that recreational use would interfere with the primary resource of the Sound - fishing.

The state-proposed Alaska Marine Parks System received universal support. Representives from the tourist industry urged the state to educate recreational users of the Sound regarding harrassment of marine mammals, eagles, other marine shore wildlife and spawning salmon. They also urged stronger anti-littering enforcement and education.

RECOMMENDATIONS

Based on the testimony presented during the public meeting and the process of soliciting that testimony, some suggestions became apparent. They are:

1. Establish and support the Alaska Marine Parks System as designed by the Alaska Department of Natural Resources, Divison of Parks.

2. Support rapid settlement of land status questions between the Forest Service and other land owner/managers within the Sound.

3. Institute measures to assure communities, residents and user groups within the Sound area are informed about pending policy issues in a timely enough manner for them to have appropriate input. Adequate notice alone would do much to alleviate public anger. Notice of public meetings should reach residents at least two weeks in advance.

4. Form a permanent Prince William Sound Recreation Advisory Committee comprised of representatives of local residents, user groups, land owner/managers, and other interested parties. Require that this Committee submit a yearly report reflecting overall planning for recreational development in the Sound as well as needs identified through public meetings.

5. Schedule another public meeting by this subcommittee probably in April or May of 1982 after release of the draft plan by Chugach National Forest and the Chenega Corporation development plan. At that time, a further look should be taken at land uses in the Prince William Sound area, Whittier access alternatives and development of other facilities.

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.




# THE CITY OF WHITTIER

8 December 1981

Commissioner Robert Ward
Department of Transportation
and Public Facilities
Pouch Z
Juneau, Alaska 99811

Re: $85,000.00 Shuttle Track Changes Grant

Dear Commissioner Ward:

The matter of acceptance of the referenced $85,000.00 Shuttle Track Changes Grant has come up at two Whittier City Council meeting and been tabled at both sessions. The reason for this has been frankly that Whittier did not have enough information about the grant, and the City Council wisely deferred the matter until I was able to make inquiries and obtain additional information concerning the grant.

We could not locate in our files any application for such funds. As it turned out the City of Whittier had never applied for such funds. Upon making inquiries to our State representatives, it was determined that we could not change the purpose of the grant to construction of facilities or improvements that was more to our chosing.

Last week I had a discussion with the Chief Engineer of the Alaska Railroad, Mr. Francis C. "Obie" Weeks, and traced down the grant application as having been made by the Alaska Railroad.

The Alaska Railroad
DEC 1.. 198!
OFFICE OF
GENERAL MANAGER

P.O. Box 608 Whittier, Alaska 99693 (907) 472-2327

(See letter to Commissioner Ward from Frank Jones, Alaska Railroad General Manager, dated 15 September 1981; see also letter to Senator Dankworth also from Mr. Jones dated 29 January 1981 at page 3, third paragraph.)

The manner in which the grant was issued appears to be very irregular. It is almost as if Whittier is being asked to "launder" funds given by the State to the Alaska Railroad - i.e. the Federal Government. This is not to deprecate the purpose of the grant, but only to call into question the manner of the grant issuance and the proposed mode of administration.

The City of Whittier does not wish to placed in the position as a "spoiler" of a clearly beneficial public capital improvement. But neither does the City of Whittier want to be used as some sort of back door conduit for State subsidization of the Federal Government.

One of the fundamental precepts of a government of a free people is that the government must be fully accountable for public expenditures.

How can the City of Whittier be accountable for the expenditure of funds over which we have no say, for which we did not make application, which benefits a much broader class of the public than the City of Whittier itself, (e.g. Anchorage, State tourism, etc.) and which are merely passed through our hands with no discretion on Whittier's part?

Whittier is placed in a double bind by this predicament.

If we accept the funds for pass through without raising questions, we may be discredited from applying for additional funds for some other railroad related project of our choosing in the future under the rationale that we have already received our due under the $85,000.00 grant.

If we do not accept the funds for pass through, we are cast in the role of a spoiler, and thus discredited from applying for future funds because of our failure to cooperate.

I would appreciate any advice which you could offer to the City of Whittier with regards to this particular grant. I shall keep you posted of any actions by the City Council.

Thank you for your time and consideration.

Sincerely,

George E. Weiss
Whittier City Manager

cc: Frank Jones, Alaska Railroad
Senator Jay Kerttula
Senator Ed Dankworth
Representative Betty Cato
Whittier City Council
Senator Mike Colletta

file - PRINCE WILLIAM SOUND
- WHITTIER

**Anchorage Convention & Visitors Bureau**
*Plaza 201 East Third Avenue (907) 276-4118*
*Anchorage, AK 99501*

October 8, 1981

Senator Vic Fischer
Alaska State Legislature
221 East Seventh #204
Anchorage, AK 99501

Dear Senator Fischer:

Thank you for joining with myself and members of the ACVB Board of Directors and staff on the site inspection of Whittier access to Prince William Sound. I hope that we were able to share some understanding for what will be a major issue.

I promised to review in writing some of the points that were discussed during our summary aboard the Glacier Queen II:

* The delays of the day were not prearranged or for that matter unusual. Thousand of visitors to Alaska are inconvenienced this way each year.

* The DOT Study of the problem (summary enclosed) is seriously flawed. The study examines six alternatives to Whittier access. Unfortunately, visitor demand is drastically underestimated and therefore the cost effectiveness of the "better" access alternatives is not properly presented.

On page S-11 of the study summary, it should be corrected that Anchorage already experiences 700,000 visitors a year. It will pass the number projected for the year 2000 in 1985. The study should also be corrected to show that 70% of the visitors to Alaska visit Anchorage rather than the 47% shown. This is documented in state studies done in the late 1970's.

However, the major flaw in the study occurred when it used the amount of developable Whittier land as the constraint for visitor demand. This approach assumes that visitors now and in the future will stay in hotels in Whittier. This is not the case now, nor will it be in the future. The attraction is Prince William Sound. Visitors have proven that they would rather stay in the already well-developed hotel base in Anchorage and experience the Sound as a one day activity. While we are certain that additional lodging facilities in the Prince William Sound area will be developed and can be properly and successfully marketed, it is clear that the growth market for visitors will continue to be those people that want

INCVB
Professional Member
National Association of
Convention & Visitor Bureaus

to experience the Sound as quickly and conveniently as possible so that they can move on to other attractions and activities the next day without the hassle of changing hotels and traveling long distances. The only constraint on visitor development as it relates to the Sound is Whittier access not Whittier's potential for development.

* We suspect an underlying political consideration to the DOT study. Many people feel that Valdez will vehemently oppose access to Whittier because it will undercut traffic through Valdez. While there is every indication that this unfortunate concern may have influenced the recommendations of the study, it is even more tragic because it demonstrates further a lack of understanding about visitors to the Sound.

The people that visit the Sound through Valdez are seeking a special experience and there is every evidence that they will continue to seek that experience after Whittier has better access. Those visitors are either coming from Tok to Anchorage and transit the Sound because it is beautiful and convenient or they are seeking a one day cruise combined with a one day motorcoach tour from Valdez to Anchorage.

The vast majority of visitors to Anchorage and Alaska are denied the Prince William Sound experience because they don't have the time, money or inclination to experience the Sound the way it must be experienced through Valdez. Better access through Whittier will not impact Valdez. That market segment will continue to grow and flourish. However, Whittier access is essential if we are to broaden the visitor season into the spring and fall and reach the vast "baby boom" market that seeks shorter, one day, less travel intensive experiences. This is the market that is now being reached by the ACVB and the state through very successful visitor promotions. If we are to continue to develop jobs and visitor spending, it is also important that we be able to provide the experiences they are seeking.

* Anchorage has a high stake in visitor development. Not only is the ACVB the largest non-profit contributor to the State's cooperative marketing program, but we now spend over a million dollars each year promoting Anchorage and southcentral Alaska as a visitor destination.

Recent studies also show that the Anchorage area is in the best position to expand the Alaska visitor season because it has good or potential access to the State's most popular attractions...Mt. McKinley, glaciers, wildlife, the railroad and marine cruises. Better access will mean that these attractions can be better positioned to draw visitors during more months...creating jobs, making others year round and spreading purchasing power.

While the ACVB has been most concerned with this problem because we are involved in the promotion and service of Anchorage and southcentral Alaska as a visitor destination, we have approached other organizations as well.

Following our lead, the Alaska Visitors Association, a chamber of commerce type organization for visitor companies, endorsed the concept of improved access to Whittier during their annual meeting last year. Within the next few months, we expect that the Anchorage Chamber of Commerce and Commonwealth North will also focus on this issue. We know that while access to Prince William Sound will have an important impact on visitor development, we also realize that it will also impact shipping, public safety, national defense and recreation/quality of life for a majority of Alaskans.

I hope that you will work together with other Anchorage based legislators during the next session to find a solution to the problem of access to Prince William Sound. If there is anything that the Anchorage Convention & Visitors Bureau can do to assist, we are ready.

Thank you again for your concern and dedication.

Sincerely,

Reynol E. Bowman
President

REB:sw

Enclosure

WALTER J. HICKEL II
EXECUTIVE VICE PRESIDENT



The hotel
Captain Cook

P.O. BOX 2280, ANCHORAGE, ALASKA 99510
PHONE (907) 276-6000

December 28, 1981

Honorable Vic Fischer
221 E 7th Avenue, #204
Anchorage, Alaska 99501

Dear Senator Fischer:

Thank you very much for inviting the Anchorage Convention and Visitors Bureau to present testimony before your committee.

Prince William Sound has the potential of becoming as popular as Mount McKinley is now to our visitors. The only catch being the lack of fast and efficient transportation to and from Whittier.

The Board of Directors of the ACVB has made this access problem a top priority for 1982. If we can offer any further assistance on our part, please Senator, give me a call.

Sincerely,

THE HOTEL CAPTAIN COOK

Walter J. Hickel II
Executive Vice President
Chairman of the Board
Anchorage Convention and Visitors Bureau

WJH:jfb

cc: Reyn Bowman, President
Anchorage Convention and Visitors Bureau

Bowman
Anch. Conv + Visitors Bureau



**Anchorage Convention & Visitors Bureau**
*Plaza 201 East Third Avenue (907) 276-4118*
*Anchorage, AK 99501*

December 15, 1981

Mr. Chairman, members of the committee and staff, my name is Reyn Bowman. I am president of the Anchorage Convention & Visitors Bureau. I am sorry that I will not be able to deliver this testimony in person. Unfortunately, I will be out of town on business on December 15th.

The Anchorage Convention & Visitors Bureau is an independent, non-profit, visitor development organization. For some time, our research has revealed that Prince William Sound has the potential to become one of Alaska's most popular and most accessible attractions. The reasons are becoming more and more obvious as we progress into the 1980's.

Marine cruise experiences are sited as a "high priority" by 9 out of 10 potential visitors to Alaska. But the traveler of the 80's also wants shorter, more intensive, more frequent trips with more seasonal variation, and a greater mix of passive and active experiences. Prince William Sound is a natural. It offers everything the more traditional Alaska cruise experiences do, but it is more easily accessible from a major entry point and physical plant...Anchorage.

An experience in Prince William Sound can be provided less expensively, on a shorter time frame than other trips and still leave time to get back to a nice hotel for a full evening and a different activity the next day. The only drawback is access.

IACVB
Professional Member

Presently, it is very difficult to visit Prince William Sound on a convenient one day trip. It is only truly accessible during the summer months although its attractions can be provided from April through October. The traditional trip requires a visitor to spend two days to experience the Sound and only one of those days is spent on a cruise. In addition, visitors are frequently inconvenienced by priority conflicts with the railroad.

The ACVB feels that a highway should be built to Whittier that will enable year-round, convenient access to Prince William Sound on a one day basis. The visitors that want the summer only two day experience will still have it, but the great majority of visitors that do not have the time, money or inclination for the traditional trip will now have an opportunity to experience a very special part of Alaska.

It must be clarified that improved access through Whittier will not undermine the two day tours of Columbia Glacier through Valdez. Valdez will continue to be an attraction for those visitors transiting from central Alaska to Anchorage and it is highly unlikely that a person wanting a two day trip will buy down to a one. But improved access to the Sound through Whittier will indeed make this great attraction accessible to the majority of travelers that now miss the marine experience altogether.

As you know, a recent study by the Department of Transportation recommended against a highway. Unfortunately, the study was flawed with respect to

visitor projections and tour formats. The study used the land development potential of Whittier as a base for upper limit visitor demand. The study did not recognize that very few visitors stay overnight in Whittier. For most, the Sound experience will be a one day outing with a return to Anchorage.

Anchorage already has 700,000 visitors each year. More than 75% of the visitors to the state include Anchorage. We expect to reach 1 million visitors per year by 1985. Access to Prince William Sound will provide a convenient, controlled attraction for these visitors and the visitors will help the highway be cost-effective.

We think there are other reasons for a highway to Whittier. National defense, shipping, resident quality of life and recreation, and many others must be taken into account. We hope that we have successfully voiced our belief in this area and its great potential and we appreciate the opportunity to present this testimony.

WANDERING STAR
Alaska Maritime Wilderness Cruises

Testimony of Carl Gidlund
Before Parks & Recreation Subcommittee,
Senate Resources Committee

Anchorage, Alaska
December 15, 1981

Good afternoon Senator,

My name is Carl Gidlund. I am an Anchorage resident, a recreational boater out of Whittier and the owner of two vessels engaged in the tourist trade out of that port -- the six passenger Wandering Star, and the 30 passenger Northern Star coming on line in the spring. Incidentally, I am a director of the Alaska Visitors Association.

In terms of both recreation and business, a road must be pushed through to Whittier -- or provision made to use the railroad tunnels for vehicular traffic -- at the earliest possible opportunity.

As you know Senator, from personal experience -- the legislative familiarization trip conducted by the Convention and Visitors Bureau -- train service is very unreliable. Delays of an hour or more are common and two and three hour delays are not unheard of. When you have a customer who has paid up to a hundred dollars for a five hour trip on the Sound, he can get mighty irate when he's cheated of almost half that time. It reflects badly on your business, on our Alaska tourism industry, and it's a situation over which we have no control.

Because there's no other way but the railroad in and out of Whittier, the Anchorage recreationist with the trailerable boat doesn't have an enjoyable weekend on the Sound. First he must leave work early on Friday to get in line at the train in Portage. Lines are long, and unless he gets his boat on the train Friday night, he will have to wait until the following morning, at least, on the siding, if he misses it. The situation repeats on Sunday. He must pull out of his anchorage early that morning, scoot back to port, get in line for the evening train by about 1:00 p.m. If he doesn't, he'll be there until the next day.

Now that's a potentially fine, long relaxing weekend shot while you sweat it out in lines. Several friends of mine have given up on the Sound -- the loveliest water in Alaska -- and now boat out of Seward and Homer. Even though they're farther from Anchorage, it's a lot more convenient to get there, and faster too -- especially to Resurrection, and often, to Kachemak.

During the winter we who leave our vessels in Whittier must have a position, rather than a job. When we have work to do on a boat we have to give up at least two days if the job is going to take more than three hours. That's

1577 C Street, Suite 202 • Anchorage, Alaska 99501
(907) 274-1623 Telex 25-170

because the train runs only three (3) days a week; it remains in town only 3 1/2 hours maximum; and, by the way, that's when it's pitch dark outside. And, if you can begin and end any job on a boat within three hours, you're a lot handier boatman than I am.

To repeat, a road, or some means of providing do-it-yourself vehicular access must be provided as soon as possible.

As an interim measure, however, we ask for a daily early-morning train schedule to Whittier from Anchorage at least during the summer. I say this primarily from a business point of view, but it would have benefits to the residents of Whittier and recreationists as well.

As it is now, the very earliest any summertime tourist can get to Whittier for a day trip is two in the afternoon. Well, the day's obviously more than half over by that time. And in late August and September, when it gets dark early, he and she are cheated of the sight of some of the most magnificent scenery in the world.

Ideally, we would like to see a train leave Anchorage at eight in the morning with arrival in Whittier at ten. Late afternoon or early evening departures would permit a fine day on the Sound, a visit to Whittier, a leisurely meal before returning to Anchorage.

In summary, we ask for a road from Portage to Whittier as soon as possible. Without it, its recreational opportunities will never be realized -- for Alaskans, for visitors. Until it's built, we ask for better railroad schedules.

Thank you,

Carl Gidlund

Carl Gidlund

# ALASKAN WILDERNESS SAILING SAFARIS

P.O. Box 701 • Whittier, Alaska 99693 • Phone (907) 277-0160 (message)

WINTER ADDRESS:
P.O. Box 2236 • Valdez, Alaska 99686


December 23, 1981

Sen. Vic Fischer
Parks and Recreation Subcommittee
511 West 4th Ave., Stuite 5
Anchorage, AK 99501

Dear Senator Fischer,

Thank you for inviting comments on the recreational potential and development of Prince William Sound. As Alaska's oldest and largest charter sail business and pioneers in the recreational development of Prince William Sound, we appreciate this opportunity to express our views.

Alaskan Wilderness Sailing Safaris is devoted to providing high quality wilderness boating and hiking experiences to Alaskans and visitors. Since the adventure travel segment of the tourism industry continues its rapid growth even during the difficult economic times of recent years, we feel that wilderness-oriented recreational development is the highest use of the Prince William Sound/Chugach National Forest region. As you undoubtedly know, the wilderness resource is a non-renewable and dramatically shrinking US resource, while demand for it is rapidly increasing among all age groups. You may not know that Prince William Sound represents one of the finest wilderness cruising areas in the entire US (including Alaska), because of its absence of strong tidal currents. Sailors, kayakers, canoests all use the area for professional and personal recreation.

We strongly support formal wilderness classification under the National Wilderness Preservation System for the Forest Service's proposed Nellie Juan Wilderness Study Area and the College Fiord/Columbia Glacier Wilderness area including the shoreline from Pigot Pt. to Point Freemantle.

Whittier access alternatives: As a business, we have successfully used the Alaska Railroad for the past eight years much to the delight of our Alaskan and non-Alaskan guests. We support the present transportation system as adequate to existing needs and more cost effective than alternative proposals.

Boat Moorage and Service Facilities: We support the development of different types of recreational facilities in the PWS region, but believe these should be done through working with the Chugach National Forest's Land Management Planning process so that present users who have spent considerable time and money developing the wilderness recreational potential of the area are not adversely affected.

We also believe that private, not state funds, should be used in the development of recreational facilities. As a business that has done all its own feasibility, advertising, resource development, etc., we do not support the use of state funds to develop recreational or tourist facilities. If they are cost effective, then private enterprise will develop them.

In the lower 48, private enterprise is developing boat moorage facilities. This should be the model for Alaska. Recently, the Los Angeles Times ran an article criticizing the State of Alaska for its use of state funds maintaining that the State was so oil rich that it could waste its revenue on developments like the Dankworth Latouche project, over the objections of area residents. We do not think the State of Alaska should jeopardize in Congress its current federal benefits by initiating or passing legislation such as the Latouche project. We strongly encourage you to introduce legislation to repeal funding for the Latouche project.

Provisions for Tourism Services: Although we believe in privately funded tourism development and services, we do feel there are areas where conflicting uses of state resources demand that the state take a role to protect its resources. Over the past decade, we have witnessed and heard reports of harassement of marine mammals, eagles, and other marine and shore wildlife, including birds. We have personally witnessed recreational boaters permitting, even encouraging, their children and dogs to chase spawning salmon in the streams and intertidal zones. We have watched with dismay the proliferation of heavy duty plastic garbage bags along the shoreline (filled with garbage). To protect the State's fisheries and wildlife resources, we feel that the State should put up displays at all State boat harbors and ramps explaining State and Federal Laws to boaters, educating boaters on the salmon spawning process and the importance of not disturbing spawning salmon, and encouraging boaters to bring their garbage bags back to the port facilities rather than dumping it overboard or caching it along the shorelines.

Thank you for your interest in developing Prince William Sound. We hope you will work with us to promote the development in a way beneficial to us all.

Sincerely yours,

Nancy L. Lethcoe

Jim and Nancy Lethcoe

# Testimony of H. J. Musiel

I am H. J. Musiel, Chairman and Chief Executive Officer of Westours, Inc. I have been in the travel industry continuously since 1945 and associated with Westours, Inc. since 1951. During my 30 years with Westours I have been almost totally involved in the development, marketing and sale of tourist travel to Alaska. In addition to this corporation interest I have served on the Board of Directors, including two terms as President, of the Alaska Visitors Association since 1960. The AVA also addresses itself to Alaska tourist travel development.

I.

THE BUSINESS OF WESTOURS, INC. Headquartered in Seattle, Washington, Westours is the largest wholesale operator of "package tours" to Alaska. We estimate that approximately 65% of all those people traveling on package tours to Alaska, travel on a Westours' package, either F.I.T. or group. In addition to tour operations, Westours also has complete marketing, sales and reservations responsibility for the largest capacity of Alaska Inside Passage cruise ship accommodations than any other one operator. In addition to tour and cruise operations, Westours owns and operates three hotels in Alaska and the Yukon and the largest fleet of highway and sightseeing motorcoach equipment in the North Country. These operating assets have been developed over our 34 years involvement in the Alaska tourist business for the primary purpose of accommodating those people traveling on our package tours.

II.

ALASKA CRUISES VS. ALASKA TOURS. We estimate that in 1981 there were a total of 41,000 people traveling on Alaska package tours. Cruise ships serving Alaska in 1981 offered a capacity of 86,000 berths to the travelling public. We estimate that only 25% of the total Alaska cruise berth capacity was utilized on a one way basis as a component of an Alaska air/sea package tour and the balance was sold on a roundtrip cruise basis.

III.

AIR TOURS VS. AIR/SEA TOURS. Throughout the history of Westours, the company has offered Alaska package tours including air transportation to and

from Alaska with no cruise ship component included as well as air/sea tours which include a cruise component to or from Alaska. Historically, the sale of "air tours" has accounted for only 3.4% of Westours total package tour business. We, therefore, are of the firm belief that the water related or "cruise" experience as an inclusion to Alaska package tours is of paramount importance to the sales appeal of package tour offerings.

IV.

PRINCE WILLIAM SOUND AS A "WATER EXPERIENCE" VS. INSIDE PASSAGE. In 1982 thirteen cruise ships are scheduled to make 149 cruises to Alaska providing a total cruise capacity of 99,337 berths. One hundred twenty five of the scheduled sailings with a capacity of 73,197 berths will visit southeast Alaska only. Overall, a very small percentage of those people who have at least somewhat been motivated to visit Alaska because of a water experience, will see more of Alaska than three or four port towns or cities at which their cruise ship calls, and for a very limited time at each port. Further, the average cost for an Alaska cruise in 1982 will be approximately $200.00 per day per person.

It is the opinion of Westours that Prince William Sound has the potential of providing a water related vacation experience that, with proper consumer awareness and unlimited access, could rival Alaska's Inside Passage in consumer demand. We also believe that water related services and activities that could be readily developed within Prince William Sound would have appeal to a far greater potential market than cruises of the Inside Passage aboard a cruise ship and be of far greater economic benefit to Alaska.

V.

REQUIRED WHITTIER ACCESS. Westours has for several years been featuring a travel routing for tourists between the Yukon and Southwestern Alaska involving our motorcoach service between Whitehorse and Valdez, water transportation between Valdez and Whittier and our motorcoach service in combination with the Alaska railroad between Whittier and Anchorage via Portage. Since 1975, tourist traffic over the water route between Valdez and Whittier has had an average annual increase of 14%. To accommodate this increase, our company encouraged the development and inauguration of day boat type service between Valdez and Whittier in each direction to augment the service of the Alaska state ferries. All of those passengers using the aforementioned Valdez/Whittier water service include visits

to and stopovers in many other Alaska communities in the course of their tour itineraries.

In addition to our aforementioned use of a cruise in Prince William Sound from Whittier as one terminal for the cruise in our tour programs, we envision many other uses of the Prince William Sound area as a vacation experience to encourage increased development of Alaskan tourism. During the summer of 1979 I, in the company of the Regional Director of the National Forest Service, made a complete survey trip of the Prince William Sound area between Whittier and Valdez. The result of this survey was a complete conviction that there were many obvious opportunities for development of new and different travel experiences in the area that we are confident would have great appeal not only to our present market but to new markets which we so very much need to develop for real growth. In all of our considerations, the primary obstacle to total confidence and enthusiasm was the limited access to and from Whittier.

It appears to the writer that the "Whittier Access Study" prepared for the State Department of Transportation, primarily addresses local traffic potentials and use of Whittier as a ferry terminal and/or a pleasure boating terminal. It does not appear to me that appropriate consideration was given to the potential that improved Whittier access could provide for greatly increased tourism from outside of Alaska to not only the Prince William Sound area but all of Alaska. We do not believe that the ferry service should be considered as a limiting component and are of the firm belief that a major potential exists for such additional activities as:

1. Increased water sightseeing excursions between Valdez and Whittier in each direction.
2. Mini-cruise ship operations with vessels that could provide cruises of one or more nights in Prince William Sound with complete facilities available aboard ship.
3. Development of lodges and resorts that could be served by regular scheduled water and/or air transportation for people while travelling enroute between Whittier and Valdez in either direction.
4. One day water sightseeing excursions from Whittier as well as Valdez.
5. Whittier as a regular cruise ship port offering overland shore excursions to Anchorage and other points of interest.

In reviewing all of the suggested alternatives for improved access to Whittier, it is our considered opinion that only unrestricted highway access to Whittier would justify the investments necessary to accomplish the aforementioned potential development, and more.

# Alaska State Legislature

Senator Vic Fischer • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

M E M O R A N D U M

TO: Sen. Bill Ray

FROM: Sen. Vic Fischer Vic

DATE: March 3, 1982

RE: SB 793--Whittier Access

Enclosed for your information is an Anchorage Assembly resolution supporting improved access from Portage to Whittier, development of Shotgun Cove and (!) construction of a small boat harbor at LaTouche Island.

cc: Sen. Gilman
Sen. Kerttula
Sen. Dankworth
Sen. Sackett

APPROVED
Date: 2-2-82

Submitted by: Assemblyman Don Smith
Prepared by: Municipal Clerk's Office
For Reading: February 2, 1982

ANCHORAGE, ALASKA

AR NO. 82-40

A RESOLUTION OF THE ANCHORAGE ASSEMBLY SUPPORTING BUDGET PROPOSALS TO FUND IMPROVED RAIL SHUTTLE SERVICE BETWEEN PORTAGE AND PRINCE WILLIAM SOUND FOR RECREATIONAL DEVELOPMENT.

WHEREAS, the Prince William Sound Region is one of the most magnificent and spectacular areas in Southcentral Alaska and has become a major tourist attraction and recreational area, and

WHEREAS, this area would be readily accessible to over one-half the population of Alaska if reasonable highway access were provided, and

WHEREAS, improved access is particularly important to the people of the Anchorage Municipality, inasmuch as over 6,000 pleasure boats are registered in the Anchorage Area and the small boat harbor is being tripled in size, and

WHEREAS, the Alaska Marine Highway has indicated an intention to increase the level of ferry service to Whittier from Southeast ports if ready access is provided to Anchorage, and

WHEREAS, there are currently proposals before the Legislature to appropriate funds to initiate construction of a highway from Portage and Bear Valley and to provide frequent and convenient shuttle service through the tunnel, until a permanent highway connection can be completed.

NOW, THEREFORE, BE IT RESOLVED, that the Anchorage Municipal Assembly endorses and supports budget proposals to fund recreational development in Prince William Sound, including the following:

1. Construction of a road from Portage to Whittier, or in the alternative, substantially expanded rail service.

2. Construction of a road, or ferry service from Whittier to Shotgun Cove and development of a small boat harbor.

3. Construction of a small boat harbor at LaTouche Island.

AND, BE IT FURTHER RESOLVED, that copies of this resolution be sent to all members of the Legislature and to Governor Hammond.

PASSED and APPROVED by the Anchorage Assembly this 2nd day of February, 1982.

Don Smith
Chairman

ATTEST:

Ruby E. Smith
Municipal Clerk

SB

824

FILE WITH BILL

SENATE TRANSPORTATION COMMITTEE

COMMITTEE REPORT - SB 824

The Transportation Committee has considered SB 824, relating to the establishment and operation of in bond merchandise businesses at state owned and operated international airports. The purpose of this report is to express the Committee's understanding of the purposes of the bill and to make clear the Committee's intent with regard to certain aspects of the bill.

In bond merchandise, which includes merchandise of foreign origin (not manufactured in the United States) and United States alcoholic beverages and tobacco products handled in bond, is sold to foreign-bound passengers. For a number of years, the state has entered into exclusive contracts authorizing the establishment and operation of an in bond merchandise business at each of the state's international airports. These exclusive contracts have been extremely beneficial to the state by providing substantial revenue to the state, increasing employment in the state, and aiding the tourism industry, while at the same time facilitating the orderly administration of the state's international airports. For the reasons stated in Section 1 of the bill and elaborated upon by the official of the Department of Transportation and Public Facilities who testified before the Committee in support of the bill, the Committee believes that conferring exclusive rights for the establishment and operation of an in bond merchandise business at each international airport is good state policy.

Recently, legal questions have been raised concerning the granting of exclusive in bond contracts. This bill is designed to resolve any legal questions once and for all with regard to all existing and future exclusive in bond contracts. In particular, SB 824 is designed to ensure that "state action" immunity from the operation of the federal antitrust laws (see California Retail Liquor Dealers Assn. v. Midcal Aluminum, Inc., 445 U.S. 97 (1980)) exists with regard to the establishment and operation of in bond merchandise businesses at international airports in the State of Alaska, including the conferral of exclusive rights in this field. Thus, the bill clearly and affirmatively states that it is the policy of the State of Alaska that only an exclusive contractor be allowed to offer to sell, sell and deliver in bond merchandise at each international airport, and that the Department of Transportation and Public Facilities may not permit, nor confer any right upon, any other person to offer to sell, sell or deliver in bond merchandise at any international airport. In addition, the bill requires the issuance of exclusive in bond contracts in the future, and requires that the Department actively supervise the operations under each exclusive in bond contract. SB 824 is also specifically intended to, and does, provide an express immunity and exemption from the operation of Alaska's antitrust laws A.S. 45.50.562 et. seq., and any other applicable state laws, with regard to the subject matter of the bill. See e.g., Section 1(e) of the bill. By providing these

immunities and exemptions, SB 824 will enable in bond merchandise sales in Alaska to continue to be maximized, thereby maximizing the state's revenue from this source and providing the other benefits described above.

The Committee also intends that the exclusive rights mandated under Section 2 of this bill do not apply to deliveries of in bond merchandise as cargo to airlines. As defined in Section 4 of the bill, cargo is intended to have four characteristics. First, cargo is carried by an airline in return for payments made by the shipper to the airline, which payments are computed by reference to a specific cargo tariff; in contrast, the carriage of baggage is included in the price of a passenger ticket (with any additional charges computed on the basis of the excess number of pieces and baggage, or the excess weight of baggage, to be carried, according to an excess baggage schedule). Second, cargo is carried under an airway bill, rather than under a passenger ticket. The portion of the definition of cargo that refers to goods carried "under an agreement between the shipper and the airline other than a passenger ticket" is intended to include these two characteristics. Third, cargo is accepted, carried and handled at facilities, and under procedures, different from those used for baggage. Finally, cargo is delivered by the airline at the destination airport to a facility (e.g., an air cargo terminal) separate from that which receives baggage to be delivered to deplaning passengers, and is not brought to a baggage claim area, but must be picked up by the consignee at the facility described above. To qualify as cargo, all of these criteria must be satisfied.

Dated March _____, 1982.

_____
Senator Ray
Chairman

_____ _____
Senator Senator

_____ _____
Senator Senator

STATEMENT OF BERTRAM L. WAGNON

BEFORE SENATE TRANSPORTATION COMMITTEE

ON SENATE BILL NO. 824

My name is Bertram L. Wagnon. I am Assistant Deputy Commissioner with the Department of Transportation and Public Facilities. I present this statement on behalf of the Administration in support of Senate Bill No. 824, which was introduced in the Senate on March 2, 1982.

Senate Bill No. 824 concerns the in bond merchandise business in Alaska. In bond merchandise includes a wide variety of merchandise handled in bond, including:

1. Merchandise of foreign origin which because of its in bond nature, such merchandise is not subject to United States Customs duties; and

2. United States alcoholic beverages and tobacco products. Because of its in bond nature, such merchandise is not subject to United States Internal Revenue excise taxes.

In bond merchandise is sold only to foreign-bound travelers.

Since 1969, under contracts executed by the department, an in bond merchandise concession has been operated at Anchorage International Airport. In addition, since 1971 successive contracts have covered an in bond merchandise concession at Fairbanks International Airport. These contracts have accorded exclusive rights upon the persons contracting with the department.

In the view of the department, the results under these exclusive contracts have been successful for the state, in that they have provided substantial revenue

airport operations. Recently, however, legal questions have been raised concerning the granting of these exclusive contracts. It is the purpose of Senate Bill No. 824 to resolve once and for all any such legal questions, and thereby to ensure that the state is able to continue to enjoy the substantial benefits resulting from exclusive in bond contracts.

The Supreme Court of the United States has held that, under the "state action" doctrine, conduct that is (1) clearly articulated and affirmatively expressed as state policy, and (2) actively supervised by the state, is immune from the operation of the federal antitrust laws. Senate Bill No. 824 is designed to ensure that such immunity exists with regard to the establishment and operation of in bond merchandise businesses at international airports in the State of Alaska, including the long-standing policy of exclusive rights and contracts in this field. Thus, the bill clearly and affirmatively expresses that it is the policy of the State of Alaska that solicitations of sale, sales and deliveries of in bond merchandise at the state's international airports be made only pursuant to exclusive contract; the bill specifically provides that only a single contractor shall be allowed to offer to sell, sell and deliver in bond merchandise at each international airport, and that the department shall not permit, nor confer any right upon, any other person to offer to sell, sell or deliver in bond merchandise at any international airport.

Accordingly, this bill is designed to ensure that the in bond merchandise business is protected by the "state action" immunity. Moreover, Senate Bill No. 824 is specifically intended to, and does, provide an express immunity and exemption from the operation of Alaska's antitrust laws.

In short, this bill will allow the present and future exclusive in bond concessions to operate without fear of such legal attacks.

Payments for the right to sell and deliver in bond merchandise to foreign-bound passengers at international airports go to the International Airports Revenue Fund. These payments comprise a substantial portion of the monies directed to the Fund, and therefore are a major factor in defraying international airport operating expenses, supporting international airport improvement programs and securing international airport revenue bonds. Absent the conferral of exclusive rights upon the in bond contractor at each international airport, this flow of revenue would be substantially reduced. The in bond concession payments are largely dependent upon the amount of in bond merchandise business done at the state's international airports. And, it is our view that maximization of such business is contingent upon the granting of exclusive rights to the contractor at each international airport; allowing any other person to offer to sell, sell or deliver in bond merchandise at any international airport would substantially impair the in bond business in Alaska and accordingly, reduce the state's revenues.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

LAW OFFICES OF

Groh, Eggers, Robinson, Price & Johnson

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(907) 272-6474
(907) 274-9547

February 26, 1982

Patrick P. Ryan
Deputy Commissioner
Maintenance and Operations
State of Alaska, Department
of Transporation & Public Facilities
Pouch 6900
Anchorage, Alaska 99502

Dear Mr. Ryan:

We represent Liz Duty Free, Ltd. My client is interested in bidding on the duty free space in the new International Terminal which is to be advertised for bid in 1983. We request that our client be placed on the bidders' list and that we be provided with the specifications and blue-prints, if available.

At our client's request we respectfully suggest that the State of Alaska consider having two duty free concessionaires at the airport. If the State selects only one duty free concessionaire it is possible that it may be violating anti-trust laws. The advantage of two concessionaires is that there would be competition between them, the State might achieve higher revenue because of the ability to have more sales and the international traveler would have a choice of duty free shops. I would assume that the space available to each concessionaire would be approximately the same.

I would prefer the opportunity to discuss this with you at your earliest convenience. Thank you very much for your cooperation.

Sincerely,

GROH, EGGERS, ROBINSON,
PRICE & JOHNSON

:hf

Clifford J. Groh

# Free Hand OKd in Duty-Free Permits

By Russ Lynch
Star-Bulletin Writer

Decisions on whether competition should be allowed in the airport duty-free sales business should be made by the state Department of Transportation, a legislative committee decided yesterday.

Rather than vote out a bill that would have continued the present allowance for a maximum of two duty-free concessions at Honolulu Airport with no off-airport competition, the Senate Transportation Committee opted to leave it up to the department.

Sen. Mary George, R-3rd Dist. (Windward Oahu), chairman of the Transportation Committee, told the Star-Bulletin the committee wanted to give the department the flexibility to make quick responses to events such as last year's decision of Host International to drop out after only eight months of trying to compete with long-time airport concessionaire Duty Free Shoppers Ltd.

The department should be able to react on its own to court antitrust decisions, the fragility of the tourism business, decisions by foreign governments, such as changes in the allowance for personal imports, and other circumstances, she said.

The Legislature must enact a new law this session because the old one, which allowed a maximum of two airport duty-free concessions and no off-airport duty-free permittees, has a "drop dead" clause that after June 30 would leave the state with no control over the duty-free business.

THE COMMITTEE version now goes to the Senate Ways and Means Committee and a similar bill is being processed in a House committee.

Legislators in both houses are grappling with the sensitive issue of what to do about a business that, though it amounts to a protected monopoly, produces more than 40 percent of the revenues of the entire state airport system and the George committee report is only one of the options to be considered.

It would allow the Transportation Department to issue permits for bonded warehouses away from the airports that could sell duty-free goods and deliver them to departing foreign-bound passengers.

However, certain guidelines would have to be met first.

For example, the department would have to consider its own revenue requirements, whether the return from fees paid by licensees is the maximum available, and whether the duty-free business and the tourist and airline businesses are being enhanced by its decision.

By leaving it to the department to decide what form duty-free sales should take, George's committee did not answer the key argument in the Legislature between proponents of the current airport-only and maximum-of-two-concessions system and those who want to run off-airport operations.

DUTY FREE SHOPPERS, which had sales of more than $150 million in Honolulu in 1980, the year before the Legislature allowed Host to come in and compete, has argued vigorously that off-airport competition would invest little in Hawaii, employ very few people and take the cream of the sales — the liquor, tobacco and perfume business which is the basis of duty-free sales everywhere.

The result, said Duty Free Shoppers, would be a reduction in revenues to the state, a drop that would have to be made up by the others who pay for rights to use the airport, the airlines.

Even if the other operators paid the same 20 percent fee to the state as Duty Free Shoppers, that company says, state revenues would still drop because the other operators do not have the same skill in building sales with each individual customer.

Two companies seeking to operate off-airport bonded warehouses and deliver duty-free goods to foreign-bound travelers at the airport argued just as vigorously that the more people there are selling, the greater the sales will be and the greater, therefore, the revenues to the state.

In the background, the Legislature, as it did last year, has to battle with charges of fostering a monopoly by protecting Duty Free Shoppers, but at the same time faces the highly sensitive choice of possibly damaging a business the state has lived with comfortably for 15 years.

AND THE LEGISLATURE also must weigh the revenue question seriously because Duty Free Shoppers by itself pays in more than 40 percent of the fees coming into the total statewide airport system.

In 1980, for example, Duty Free Shoppers paid the state more than $30 million for the right to operate the airport since and its own off-airport duty-free shop on Royal Hawaiian Avenue in Waikiki.

The company guarantees the state a minimum of $20 million a year and pays the state 20 percent of its gross revenues.

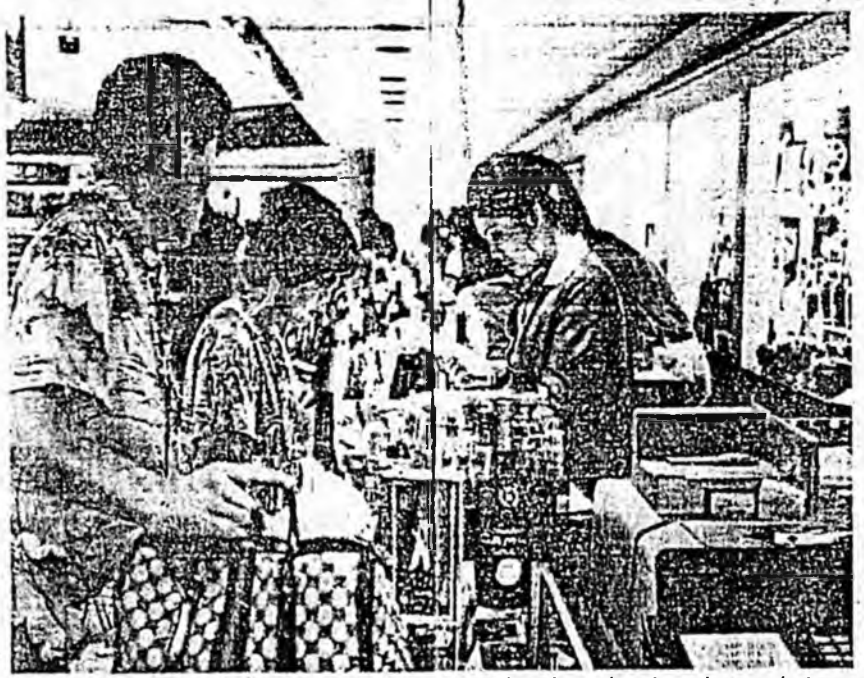
One of the would-be competitors, Liz Duty Free, headquartered in France, has said it would pay only what it thought state services were worth and it probably would not amount to 20 percent.

But another challenger, a Honolulu firm called Maison Canon, has said it is more than willing to pay 20 percent off the top.

The bill as redrafted by George's committee would require anyone going into the duty-free business to pay the same 20 percent fee as Duty Free Shoppers does.

Honolulu businessman George Corniotis, president of Maison Canon, pushed for opening the business up to competition.

The original draft of the bill, he told George's committee last week, was "clearly intended to keep us out of the duty-free business" by continuing to rule out off-airport permits.



DUTY-FREE BROWSING—After showing plane tickets at the door, foreign-bound travelers, mostly Japanese, check merchandise in Duty Free Shoppers' bonded store in Waikiki. —Star-Bulletin Photo by Terry Luke.

Star-Bulletin

The THURSDAY REPORT

A weekly business feature section

Honolulu March 4, 1982

THE TRANSPORTATION Committee's own study, Corniotis said, described the duty-free business as expanding and he said permittees would increase revenues to the state.

An attorney for Liz Duty Free had testified that the state actually could not stop his client from setting up a bonded warehouse since all it needs is U.S. Customs approval to do that.

And the state would risk running afoul of laws against interference in international commerce if it stopped someone delivering goods to a departing aircraft, he said.

In a recent interview, Robert Futoran, board chairman and chief executive officer of Duty Free Shoppers, repeated the case he made to the Legislature and added some points in favor of the status quo — a maximum of two operators.

He said that since Customs has made it clear that under new federal cutbacks it will not have enough staff to supervise another airport operation, the state is effectively kept to one duty-free concession, his.

But he said antitrust cases have shown that the state can do that if it chooses.

Futoran said the off-airport operators would go for the "LTP" — liquor, tobacco and perfume — sales and do most of the selling to travelers, especially the Japanese, through catalogs.

HIS ORGANIZATION through experience has built up a specialized sales staff able to generate greater sales from each customer and since the state gets 20 percent of everything that comes into the cash register, the state would lose if sales decline.

Anyway, Futoran said, Duty Free Shoppers already has competition. Waikiki these days is full of stores selling the foreign-made specialty items that make up the bulk of Duty Free Shoppers' "non-LTP" business, such as Gucci handbags and Cartier watches.

And these stores are competing by offering discounts Duty Free Shoppers sometimes has to adjust its own prices downward to match a retail discount price in a store nearby, he said.

Some of these people are "very terrific competitors," he said.

But most of all, Duty Free Shoppers is arguing that it deserves to be protected because it has served the state well since getting into the business here in 1967. The company employs 1,400 people in Hawaii, pays taxes like any other business and participates in community activities.

"What's under attack is a company that has been a good citizen of Hawaii for years," Futoran said.

# HSTA says bombing, threats mishandled

The Hawaii State Teachers Association is objecting to the way Castle High School administrators responded when a small explosive device went off at the school Monday morning and when bomb threats were phoned in last week.

The room was empty when the explosion occurred minutes before special education students were scheduled to use the room. Kaneohe police were called and reported $5 in damages.

The teachers' union, which referred to the incident as "life-threatening," said the blast blew apart a half-inch-thick plywood board and threw large wooden splinters around the room.

At a press conference yesterday, union officials said the administration did not order an evacuation or search and the teacher and students remained in the classroom after the explosion.

HSTA President Jim Williams said the union has asked Schools Superintendent Dennis Thompson to investigate the incident and take disciplinary action if necessary.

Williams also said the union may file a grievance in the matter.

Castle Principal Richard Hadama said he could not discuss the matter because of the possible grievance, but said "under the circumstances, what we did was prudent."

He said there was no need to evacuate because of the bomb threats since school was out and students were already leaving or gone.

# Committee recommends change in duty-free setup

By Sandra Oshiro
*Advertiser Capitol Bureau*

The state Transportation Department should have the "flexibility" to allow as many duty-free operations at Honolulu Airport as it sees fit, a key legislative committee is recommending.

The Senate Transportation Committee also indicated this week that it doesn't think the state should continue to limit the number of duty-free operators to two, as is done now.

In a report on its recommendation, the committee concludes that because of various factors in setting up duty-free operations, keeping the present situation would, in effect, give one operator a monopoly.

The committee concludes that a monopoly would result because only Duty Free Shoppers continues to operate under a contract to the state and there aren't enough federal customs officials to take care of a second concessionaire.

Host Duty Free had operated under state contract as well, but pulled out of the arrangement because it wasn't making enough money.

Lawmakers agreed last year to keep the "duopoly" for one year until studies could be conducted on whether the state would be hurt if more operators were allowed access to the airport.

The controversy over the number of duty-free operators is important to the state because the contract with Duty Free Shoppers brings in roughly $35 million in guaranteed fees each year.

The money goes into an airport improvement fund and frees the state and airlines from putting out huge sums for runways, terminals and other building projects.

Transportation officials worry that too many duty-free operations might deplete the amount of revenues paid to the state, and they are asking lawmakers to continue to limit the number of duty-free operations to two.

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STANDING COMMITTEE REPORT NO. 208-82

Honolulu, Hawaii
Mar. 3, 1982

Honorable Richard S. H. Wong
President of the Senate
Eleventh State Legislature
Regular Session of 1982
State of Hawaii

Sir:

RE: S.B. No. 2261-82

Your Committee on Transportation to which was referred S.B. No. 2261-82 entitled:

"A BILL FOR AN ACT RELATING TO TRANSPORTATION",

begs leave to report as follows:

The purpose of this bill is to amend Section 261-7(a) of the Hawaii Revised Statutes, which provides that until June 30, 1982, the department of transportation may not enter into contracts for the sale and delivery of in-bond merchandise at Honolulu International Airport with more than two concessionaires.

Your Committee heard testimony from the department of transportation, Duty Free Shoppers, Ltd., the Chamber of Commerce of Hawaii, and the Honolulu Airlines Committee supporting the bill and emphasizing the importance of duty-free revenues to the health of the Airport Special Fund. Representatives from Maison Canon, Ltd., spoke against the bill, pointing out that the study done by Coopers & Lybrand for the department suggested that the present duopoly is not the best way to maximize airport revenues and that the history of the duty-free business indicates it is dynamic and expanding.

The primary concern of your Committee is the enhancement of duty-free revenues to the State. These revenues are affected by the vagaries of local, national, and international economic fluctuations. Further, the duty-free business is an unpredictable one, depending on such factors as foreign government customs regulations and the traditions and buying habits of foreign travelers. Rather than tie the hands of

the department by specifying a particular system for the operation of duty-free contracts, your Committee feels that the department should be given the flexibility to change the system at the airport in response to changing conditions and circumstances. Your Committee was particularly persuaded of this need for flexibility by a letter received last year from the Federal Trade Commission which stated:

> We suggest that ... legislation that permits DOT to determine the number of airport stores and permittees upon consideration of foreign tourism, airport conditions, store operations, and revenue needs might satisfy the purposes of the proposed legislation and yet retain for the state the flexibility to meet future changes in conditions. If, for example, the airport were expanded to allow additional stores or if prices charged were found to be excessive, additional concessions permits could be granted. Additional concessions could be granted upon expiration of the then current concessions in order to avoid diminishing the value of the concessions already operating. Only administrative action by DOT would then stand in the way of potential competitors for duty-free sales. The state itself would be freer to respond to changing conditions of tourism, airport use, store operations and revenue needs.

In providing the department with this flexibility, your Committee feels that guidelines should be given to the department so that in awarding contracts for the sale and/or delivery of in-bond merchandise at HIA, consideration will be given to revenue requirements, maximization of revenues, the protection and enhancement of the duty-free business and the tourist industry in the State, the health of the airline industry, the availability and capacity of airport facilities, the ability of the applicant to comply with the State rules and regulations concerning sale and/or delivery of in-bond merchandise, and the reputation, experience and financial capability of the applicant.

To further protect the State's duty-free revenues, your Committee believes that the department should not enter into any contracts for sale and/or delivery of in-bond merchandise unless the applicant agrees to pay twenty per cent of gross receipts, the same percentage the present concessionaire is paying. This restriction should apply at least until June 30, 1988, at which time the present concessionaire's contract will expire.

Presently, the department is required to supervise the operations of duty-free contractors because of the restriction on the number of contracts into which the department can enter. Your Committee feels that while this supervision must continue if the department elects to have only one contractor, in the event that there is more than one contractor, then the forces of competition in the marketplace should be allowed to regulate the industry and no departmental supervision should be required.

Your Committee has heard testimony to the effect that there is not sufficient customs personnel presently available to allow a second concessionaire at the airport. Thus, if we continue to operate under the current statute which allows a duopoly, it will almost certainly mean continuation of the present monopoly for the foreseeable future. The Coopers & Lybrand study indicates that of the various options that may be available to the department, a monopoly is a poor choice for maximizing revenues.

Your Committee has amended the bill to add a findings and purpose section, to provide the department with guidelines for granting contracts to duty-free operators, to require that all duty-free operators pay twenty per cent of gross receipts through June 30, 1988, and to relieve the department of supervision of duty-free operations should it elect to have more than one contractor.

Your Committee on Transportation is in accord with the intent and purpose of S.B. No. 2261-82, as amended herein, and recommends that it pass Second Reading in the form attached hereto as S.B. No. 2261-82, S.D. 1, and be referred to the Committee on Ways and Means.

Respectfully submitted,

Mary George
MARY GEORGE, Chairman

excused
DUKE T. KAWASAKI, Vice Chairman

Steve Cobb
STEVE COBB, Member

Ann Kobayashi
ANN KOBAYASHI, Member

excused
JOSEPH T. KURODA, Member

W. Buddy Soares
W. BUDDY SOARES, Member

excused
GEORGE H. TOYOFUKU, Member

(To be made one and twelve copies)

THE SENATE B-12..
ELEVENTH LEGISLATURE, 1982
STATE OF HAWAII

S.B. NO. 2261-82 S.D. 1

# A BILL FOR AN ACT

RELATING TO TRANSPORTATION.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

SECTION 1. Findings and purpose. The legislature finds that the State of Hawaii receives substantial revenues from the sale and delivery of in-bond merchandise to foreign-bound travelers departing from Honolulu International Airport. These revenues are expended by the department of transportation to provide for the orderly administration of the airport, which in turn benefits the airline industry, and ultimately supports and bolsters tourism in the State. Thus, the necessity and importance of maintaining a substantial and stable flow of in-bond merchandise revenue cannot be underestimated.

Rapid economic fluctuations locally, nationally, and internationally have affected and will continue to affect airport operations. It is the purpose of this Act to provide the department with the flexibility to meet future changes in the economic sphere and to respond to such changes effectively, efficiently, and in a timely fashion in order to minimize any adverse impact on the flow of in-bound merchandise revenue which

is vital to the administration of the airport.

SECTION 2. Section 261-7, Hawaii Revised Statutes, is amended by amending subsection (a) to read:

"(a) Under department operation. In operating an airport or air navigation facility owned or controlled by the department of transportation, or in which it has a right or interest, the department may enter into contracts, leases, licenses, and other arrangements with any person:

(1) Granting the privilege of using or improving the airport or air navigation facility or any portion or facility thereof or space therein for commercial purposes;

(2) Conferring the privilege of supplying goods, commodities, things, services, or facilities at the airport or air navigation facility;

(3) Making available services, facilities, goods, commodities, or other things to be furnished by the department or its agents at the airport or air navigation facility; or

(4) Granting the use and occupancy on a temporary basis by license or otherwise any portion of the land under its jurisdiction which for the time being may not be required by the department so that it may put the area to economic use and thereby derive revenue therefrom.

All the arrangements shall contain a clause that the land may be repossessed by the department when needed for aeronautics purposes upon giving the tenant temporarily occupying the same not less than thirty days' notice in writing of intention to repossess.

Except as otherwise provided in this section, in each case mentioned in paragraphs (1), (2), (3) and (4), the department may establish the terms and conditions of the contract, lease, license, or other arrangement, and may fix the charges, rentals, or fees for the privileges, services, or things granted, conferred, or made available, for the purpose of meeting the expenditures of the statewide system of airports set forth in section 261-5(a), which includes expenditures for capital improvement projects approved by the legislature. Such charges shall be reasonable and uniform for the same class of privilege, service, or thing.

[The department shall enter into separate contracts with no more than two persons ("contractors") for the sale and delivery of in-bond merchandise at Honolulu International Airport, in the manner provided by law. Each such contract shall confer the right to operate and maintain commercial facilities within the airport for the sale of in-bond merchandise and the right to deliver to the airport in-bond merchandise for sale to

departing foreign-bound passengers.

The department shall grant such contracts pursuant to the laws of this State and may take into consideration:

(1) The payment to be made on in-bond merchandise sold at Honolulu International Airport and on in-bond merchandise displayed or sold elsewhere in the State and delivered to the airport;

(2) The ability of the applicant to comply with all federal and state rules and regulations concerning the sale and delivery of in-bond merchandise; and

(3) The reputation, experience, and financial capability of the applicant.]

The department may enter into contracts, leases, licenses, and other arrangements with any person ("contractor") for the sale and/or delivery of in-bond merchandise at Honolulu International Airport, in the manner provided by law. In granting such contracts, leases, licenses, and other arrangements, the department shall take into consideration:

(1) The revenue requirements of the department;

(2) The number of contractors, lessees and/or licensees necessary to insure that the department receive the maximum revenue available from the sale and/or delivery of in-bond merchandise;

(3) The protection and enhancement of the duty free business in the State of Hawaii;

(4) The protection and enhancement of the tourist and airlines industries in the State of Hawaii;

(5) The availability and capacity of airport facilities;

(6) The ability of the applicant to comply with all state rules and regulations concerning the sale and/or delivery of in-bond merchandise; and

(7) The reputation, experience, and financial capability of the applicant.

During the period January 1, 1981, through June 30, 1988, the department shall confer no right upon any person to sell or deliver in-bond merchandise at Honolulu International Airport unless such person agrees to pay a percentage fee equal to twenty per cent of the person's monthly gross receipts derived from selling and/or delivering in-bond merchandise to the airport.

In the event that the department elects to have a single contractor, [The department] it shall actively supervise the operation of [the] such contractor[s] to insure its effectiveness. The department shall develop and implement such guidelines as it may find necessary and proper to actively supervise the operations of such contractor[s], and shall include guidelines relating to the department's review of the reasonableness of the [contractors'] contractor's price schedules, quality

of merchandise, merchandise assortment, operations, and service to customers.

In the event that the department elects to have more than one contractor, then the forces of competition in the marketplace will be allowed to regulate the industry and no departmental supervision shall be required.

Apart from the contracts, leases, licenses, and other arrangements described above, [during the period ending June 30, 1982,] the department shall confer no right upon any person to offer to sell, sell, or deliver in-bond merchandise at Honolulu International Airport[.]; provided that nothing in this subsection shall be construed so as to impede the flow of duty-free items consigned as cargo to foreign destinations."

SECTION 3. Section 5, Act 243, Session Laws of Hawaii 1981, which provides for the expiration of said Act 243 on June 30, 1982, is repealed.

SECTION 4. Statutory material to be repealed is bracketed. New material is underscored.

SECTION 5. This Act shall take effect upon its approval.

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

JAY S. HAMMOND
GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

March 2, 1982

The Honorable Jalmar Kerttula
President of the Senate
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Mr. President:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill relating to the sale and delivery of in-bond or duty-free merchandise at state international airports.

As you may know, for years the state has entered into exclusive contracts which grant the privilege of using commercial space at state-owned and -operated international airports for the sale and delivery of duty-free merchandise to foreign-bound passengers. Under these contracts, the state receives substantial revenues for the International Airport Revenue Fund. Last year, for example, the fund received approximately $5,300,000 from these contract payments. If this source of revenue is diminished, the lost revenues will have to be made up from other sources, such as increased landing fees and fuel flowage fees which would be passed on by the airlines to passengers in the form of higher fares. The obvious detrimental effects of these increases on Alaska's tourism industry could be serious.

Recently, legal questions have been raised concerning the granting of these exclusive contracts. Decisions from the United States Supreme Court and from other courts indicate that these legal questions can be resolved through state legislation that (1) makes it clear that the granting of exclusive contracts furthers an important state policy, and (2) provides a level of oversight by the state on the activity performed under the exclusive contracts.

This bill includes legislative findings that clearly express the important state benefits that are fostered through exclusive contracts for the sale and delivery of duty-free merchandise. Additionally, the bill directs that the Department of Transportation and Public Facilities shall grant exclusive contracts for the sale and delivery of duty-free merchandise at state international airports. The bill also provides guidelines for the department's oversight of the contractors' activities.

Since I am in favor of fostering competition, in this particular instance I am convinced that exclusive contracting is clearly in the best interests of the state only after competitive bidding. This bill will resolve once and for all any legal questions surrounding the state's granting of exclusive contracts for in-bond merchandise at airports.

Sincerely,

Jay S. Hammond
Governor

02274 NL ANCHORAGE AK 994 03-25 0641P AST
PMS SEN BILL RAY
JUNEAU AK

ON MARCH 2, 1982 THE SIX (6) LOBBYISTS EMPLOYED BY DUTY FREE SHOPPERS LTD (A CORPORATION REGISTERED IN THE NETHERLANDS ANTILLES AND HEADQUARTERED IN HONGKONG THUS AVOIDING US CORPORATE TAXATION) PREVAILED ON THE ADMINISTRATION OF THE STATE OF ALASKA TO REQUEST INTRODUCTION OF SB 824 QUOTE AN ACT RELATING TO THE SALE AND DELIVERY OF IN BOND MERCHANDISE AT INTERNATIONAL AIRPORTS...UNQUOTE INTO THE ALASKA STATE SENATE.

THE BILL PROVIDES THAT ONLY AN AUTHORIZED CONCESSIONAIRE SHOULD BE ALLOWED TO SELLAND DELIVER IN BOND MERCHANDISE AT INTERNATIONAL AIRPORTS; THAT SUCH CONCESSIONAIRE SHOULD BE GRANTED AN EXCLUSIVE CONTRACT BY THE STATE; AND THAT THE EXCLUSIVE CONTRACT WHICH CURRENTLY EXISTS SHOULD BE CONTINUED IN THE FUTURE.

THE BILL FAILS TO PROVIDE FOR COMPETITIVE BIDDING ON THIS EXCLUSIVE CONTRACT.

THE BILL ERRONEOUSLY ASSUMES THAT SUCH COMPETITION WOULD DIMINISH THE LEVEL OF REVENUES PRESENTLY DERIVED BY THE STATE.

THE BILL WOULD RIVE THE ONLY CORPORATION CAPABLE OF PROVIDING SUCH COMPETITION OUT OF BUSINESS.

THE BILL WOULD INCREASE THE STATE OPERATING BUDGET OF THE DEPT OF TRANSPORTATION.

THE BILL WOULD RESULT IN DUPLICATION OF CONSUMER PROTECTION ENFORCEMENT AUTHORITY AND INCREASE THE NUMBER OF STATE EMPLOYEES REQUIRED FOR SUCH ENFORCEMENT.

THE BILL IS IN VIOLATION OF ΦHE PROVISIONS OF THE SHERMAN ANTI TRUST LAW 15 USC SECTION 1 AND 2.

THE BILL WOULD RESULT IN THE LOSS OF JOBS FOR ALASKANS.

THE BILL WOULD ESTABLISH A MONOPOLY.

SB 824 PROPONENTS ARGUE THAT UNLESS THE STATE CONTINUES ITS PRESENT RELATIONSHIP OF EXCLUSIVITY WITH THE CURRENT HOLDER OF THE DUTY FREE FRANCHISE AT FAIRBANKS AND ANCHORAGE INTL AIRPORT REVENUES DERIVED BY THE STATE FROM THIS SOURCE WOULD DIMINISH RESULTING IN INCREASED OPERATING COSTS WHICH WOULD HAVE TO BE BORNE BY THE AIRCARRIERS SERVING THOSE FACILITIES FURTHER RESULTING IN THOSE COSTS BEING PASSED ON TO THE PASSENGERS ALL OF WHICH WOULD RESULT IN DIMINISHED NUMBERS OF VISITORS TO ALASKA.

NOTHING COULD BE FARTHER FROM THE TRUTH.

THE CURRENT HOLDER OF THE EXCLUSIVE CONTRACT WITH THE STATE FOR DUTY FREE OPERATIONS AT INTL AIRPORTS PAYS THE STATE 13.75 PERCENT OF GROSS SALES ON DUTY FREE MERCHANDISE WHICH RESULTED IN DLRS5.4 MILLION IN REVENUES PAID TO THE STATE LAST YEAR. THIS PERCENTAGE OF GROSS REVENUES IS GROSSLY UNDER COMPETITIVE MARKET RATES. IN HONOLULU FOR EXAMPLE THE FRANCHISEE PAYS 20 PERCENT OF THE GROSS TO THE STATE OF HAWAII. THUS IN FACT THE STATE OF ALASKA IS PRESENTLY LOSING MILLIONS OF DOLLARS A YEAR UNDER THE CURRENT NON COMPETITIVE SITUATION. LAST YEAR HAD THE STATE RECEIVED A 20 PERCENT RETURN AS DID HAWAII AN ADDITIONAL DLRS2.4 MILLION WOULD HAVE GONE INTO THE STATE TREASURY. SMALL WONDER THAT THE PRESENT FRANCHISEE CAN AFFORD TO HIRE 6 LOBBYISTS TO ATTEMPT TO MAINTAIN THEIR EXCLUSIVE SWEETHEART ARRANGEMENT.

TWO AUTHORIZED VENDORS OF DUTY FREE MERCHANDISE IN ALASKA

WOULD ACTUALLY INCREASE REVENUES DERIVED BY THE STATE BY FIRST CAUSING THE PERCENTAGE OF GROSS SALES TO MORE ACCURATELY REFLECT TRUE MARKET RATES. SECONDLY POINTS OF SALE AT THE INTL AIRPORT TERMINALS WOULD BE INCREASED EXPOSNG THE CONSUMER TO MORE OPPORTUNITIES TO BUY. THIRDLY LIZ DUTY FREE HAS ALREADY NEGOTIATED THREE ADDITIONAL SHOWROOMS IN DOWNTOWN ANCHORAGE AND PLANS TO EXPAND THESE OPERATIONS IN OTHER MAJOR TOURIST CITIES THROUGHOUT THE STATE FURTHER INCREASING EXPOSURE OPPORTUNITITES. FOURTH THE JOBS CREATED BY THIS NEW OPERATION WILL NUMBER 50 ON MAY 1, 1982 AND IF ALLOWED TO COMPETE AT THE NEW INTERNATIONAL TERMINAL WILL EDCEED 150 BEFORE THE END OF THE YEAR ALL OF WHICH WILL GO TO ALASKANS. FINALLY THE SALES MOTIVATION AND EFFORTS WILL INCREASE IF THE PRESENT MONOPOLY IS ELIMINATED - A FACT READILY ATTESTED TO BY PRESENT SUCCESSFUL SALESPERSONS IN ANY COMPETITIVE LINE.

THE BILL IF ENACTED, WOULD NOT ONLY BE A GROSS INFRINGEMENT ON THE LEGAL RIGHTS OF LIZ DUTY FREE LTD, IT WOULD EFFECTIVELY DRIVE THIS CORPORATION OUT OF BUSINESS IN ALASKA LEAVING THE STATE AT THE MERCY OF A SINGLE CONCESSIONAIRE. INDEED LIZ DUTY FREE IS THE ONLY POTENTIAL COMPETITOR TO THE PRESENT CONCESSIONAIRE IN ALASKA AND ACCORDING TO THE STATE DEPT OF TRANSPORTATION WOULD BE THE ONLY FIRM WITH THE REQUIRED THREE YEARS OF EXPERIENCE IN DUTY FREE OPERATIONS WHICH COULD COMPETE FOR THE STATE CONTRACT -- COULD COMPETE THAT IS ONLY IF THE BILL ALLOWED SUCH COMPETITION WHICH IT PRESENTLY DOES NOT.

WE BELIEVE THE BILL, AS PROPOSED IS A PATENT VIOLATION OF FEDERAL ANTI TRUST STATUTES. PRIOR TO ANY FURTHER CONSIDERATION OF THE BILL, IT BEHOOVES THE LEGISLATIVE LEADERSHIP TO SEEK LEGAL OPINIONS FROM BOTH THE US DEPT OF JUSTICE AND THE STATE ATTORNEY GENERAL.

UNDER PRESENT STATE LAW, CONSUMERS ARE PROTECTED FROM FAULTY MERCHANDISE SALES, MISLEADING ADVERTISING AND FRAUD. THESE PROTECTIONS ARE ENFORCED BY THE CONSUMER PROTECTION AGENCY OF THE STATE ATTORNEY GENERALS OFFICE AND THE FRAUD UNIT OF THE ALASKA STATE TROOPERS. THE BILL IF ENACTED WOULD IMPOSE AN ADDITIONAL LAYER OF BUREAUCRACY ACTIVE IN ENFORCEING CONSUMER PROTECTION IN THE DEPT OF TRANSPORTATION AND PUBLIC FACILITIES. NOT ONLY IS THIS AN ABSURD EXPANSION WHICH WILL RESULT IN MORE STATE EMPLOYEES, IT WILL ALSO RESULT IN AN INCREASE IN THE STATES OPERATING BUDGET AND AGGREVATE DUPLICATION ALREADY INHERENT IN STATE PROGRAMS.

WHAT ALASKAN WANTS TO BE TOLD TO BUY HIS OR HER HOUSE FROM THE STATE APPROVED REAL ESTATE AGENT? SUPPOSE WE COULD ONLY BUY OUR BLUE JEANS FROM THE STORE WHICH HAD AN EXCLUSIVE CONTRACT WITH THE STATE BECAUSE SOMEONE CONVINCED THE STATE THAT THATS THE A WAY IT SHOUD BE IF STATE REVENUES ARE TO BE MAINTAINED? HOW ABOUT GETTING OUR TEETH PULLED AT THE STATE APPROVED DENTAL CLINIC? THE STATE MIGHT EVEN LIKE TO GET INTO THE BUSINESS OF GOING EXCLUSIVE WITH THE RESTUARANTS IF THEY COULD BE CONVINCED THAT THROUGH THAT APPROACH MORE REVENUES COULD FLOW INTO STATE COFFERS.

WE RESPECTFULLY REQUEST YOU, AS A MEMBER OF THE ALASKA STATE LEGISLATURE WHICH REPRESENTS THE INTERESTS OF THE PEOPLE OF ALASKA, TO OPPOSE SB 824 AND ANY BILL WHICH SEEKS TO ESTABLISH A MONOPOLY AS IT DOES.

MR EJ MILLER VICE PRESIDENT

SB

837

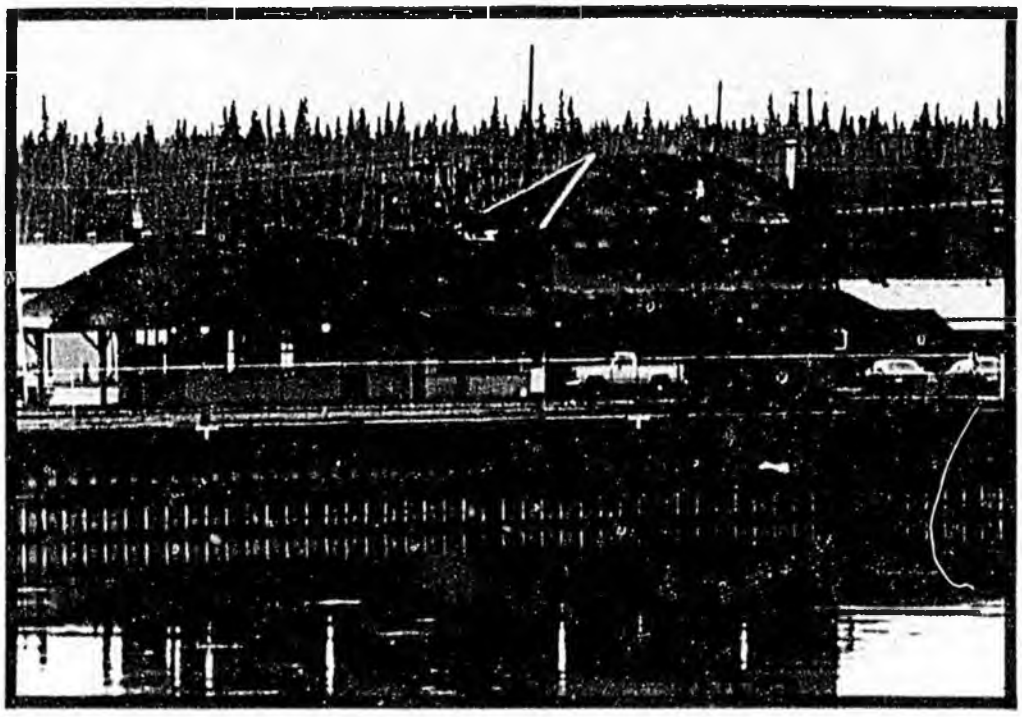
LETTER OF INTENT

Senate Bill 837 is being forwarded to the next committee of referral, which is the Senate Finance Committee, due to its financial implications. The committee recommends that this be placed as a bonding proposition to be considered by the voters in the next general election rather than making a direct appropriation.

Bill Ray

Senator Bill Ray, Chairman
Committee on Transportation

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT



# PORT OF NENANA
# ALASKA

# BULKHEAD EXPANSION STUDY

# 1981

Peratrovich & Nottingham, Inc.
Engineering Consultants

**Peratrovich & Nottingham, Inc.**

**Engineering Consultants**

1506 W. 36th Ave • Suite 101 • Anchorage, Alaska 99503 • 907-272-8491

January 6, 1982 P&N 81080

Mr. Steve Bainbridge, City Engineer
City of Nenana
P.O. Box 177
Nenana, Alaska 99760

Re: Port of Nenena Bulkhead Expansion

Dear Mr. Bainbridge:

In accordance with your authorization, we have completed a preliminary study for the above-referenced project. Included in this report are our initial findings and a projected budget that contains certain cost assumptions, as will be discussed.

Parts of this study included a site visit to Nenana, contact with the USGS in Fairbanks regarding river parameters, inspection of Alaska Railroad-owned salvaged sheetpile material in Anchorage, and research of Alaska Railroad files and documents.

From this effort, we have concluded the following:

1. A 1,000-foot bulkhead extension, as shown on the attached drawing appears possible.

2. This extension, properly placed, would create a longer usable dock and avoid riverbed deposition.

3. Sufficient suitable salvaged sheetpile material exists in Alaska to accomplish the project.

4. About 2.5 acres of additional improved marine use uplands would be created, and at least 800 linear feet of usable dock frontage would result.

5. Flood elevations are not expected to be significantly impacted, although this needs to be accurately established through more engineering work.

6. Suitable fill and riprap is available near Nenana.

7. Riverbed materials are suitable for the type of construction envisioned.

Immediate additional work required, which may impact fall 1982 completion, is permit preparation. Due to an apparent constriction and the potential to raise flood levels, the Corps of Engineers will probably require an accurate analysis to show that flood levels will not increase significantly, usually less than one foot.

The attached cost estimate has been prepared by using some cost assumptions connected with used sheetpiles. However, we feel that it will be an accurate starting point upon which future decisions can be made.

We hope this report addresses your needs; and should you have any questions, please contact us at any time.

Sincerely,

PERATROVICH & NOTTINGHAM, INC.

Dennis Nottingham
President

DN/glh/L2-h

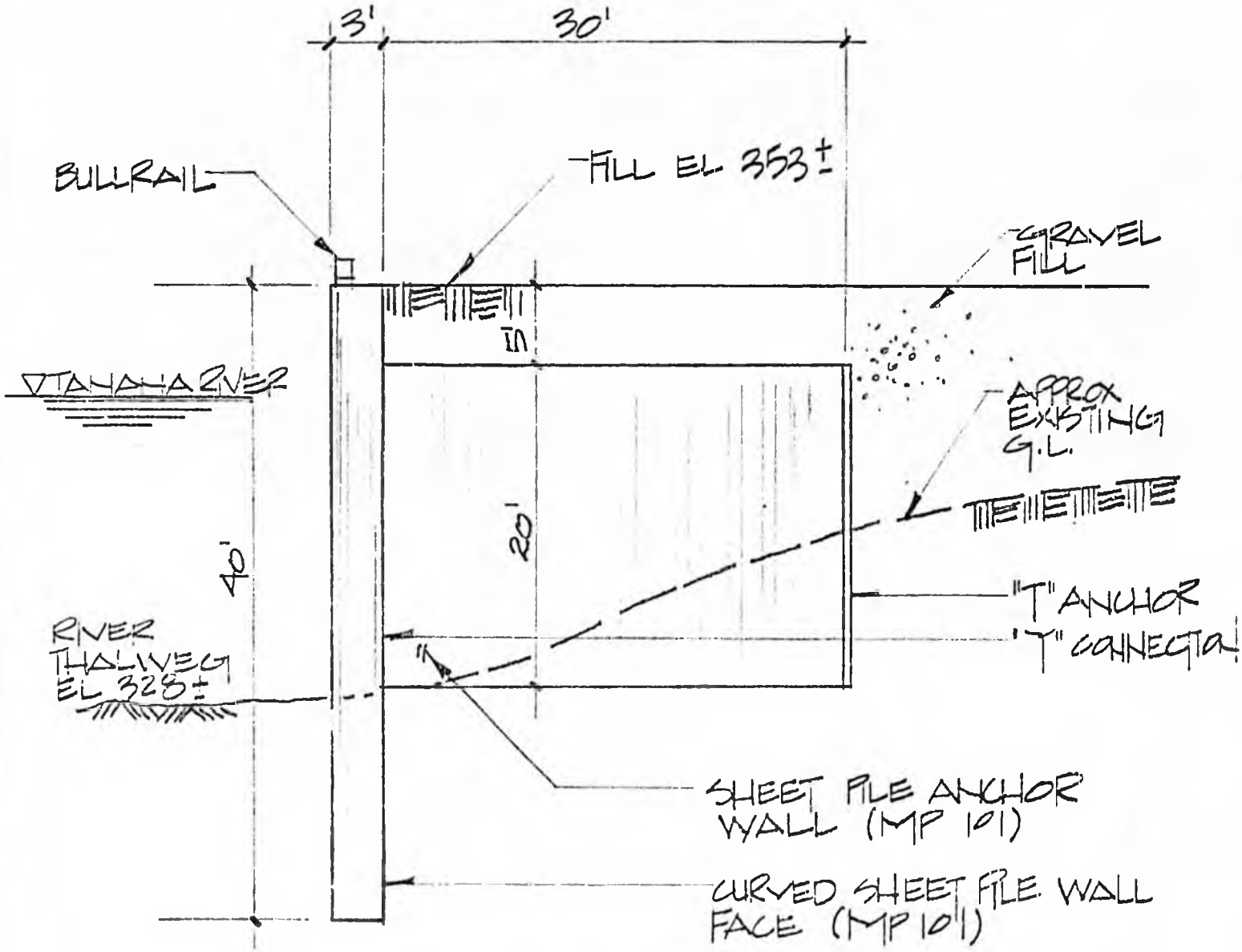
PORT OF NENANA
PROPOSED BULKHEAD EXPANSION
Estimate and Recommended Budget

| | |
|---|---|
| **Sheetpiles Supply** | |
| 2,275,000# @ 0.10 = (mainly shipping and handling) | $ 227,500 |
| **Sheetpile Fabrication** | |
| 45 "Y" connections @ 2,100# = 143,850# @ 0.60 = 47 "T" connections @ 1,050# | 86,310 |
| **Sheetpile Erection** | |
| 2,635 LF @ $230 = | 606,050 |
| **Bull Rail Supply** | |
| 1,100 ft. @ 85# = 94,000# @ $0.10 = | 9,400 |
| **Bull Rail Erection** | |
| 94,000# @ $0.50 = | 47,000 |
| **Fill** | |
| 60,000 CY @ $6 = | 360,000 |
| **Riprap** | |
| 500 CY @ $30 = | 15,000 |
| Mobilization and Demobilization = | 100,000 |
| | $1,451,260 |
| 10% Contingency | 145,126 |
| Surveys, soils and permit preparation | 20,000 |
| 5% Administration and construction engineering | 72,563 |
| 6% Design engineering | 87,076 |
| Total Estimated 1982 Project Cost | $1,776,025 |

Recommended Project Budget = $1.8 Million




# TYPICAL EXISTING BULKHEAD
# PORT OF NENANA



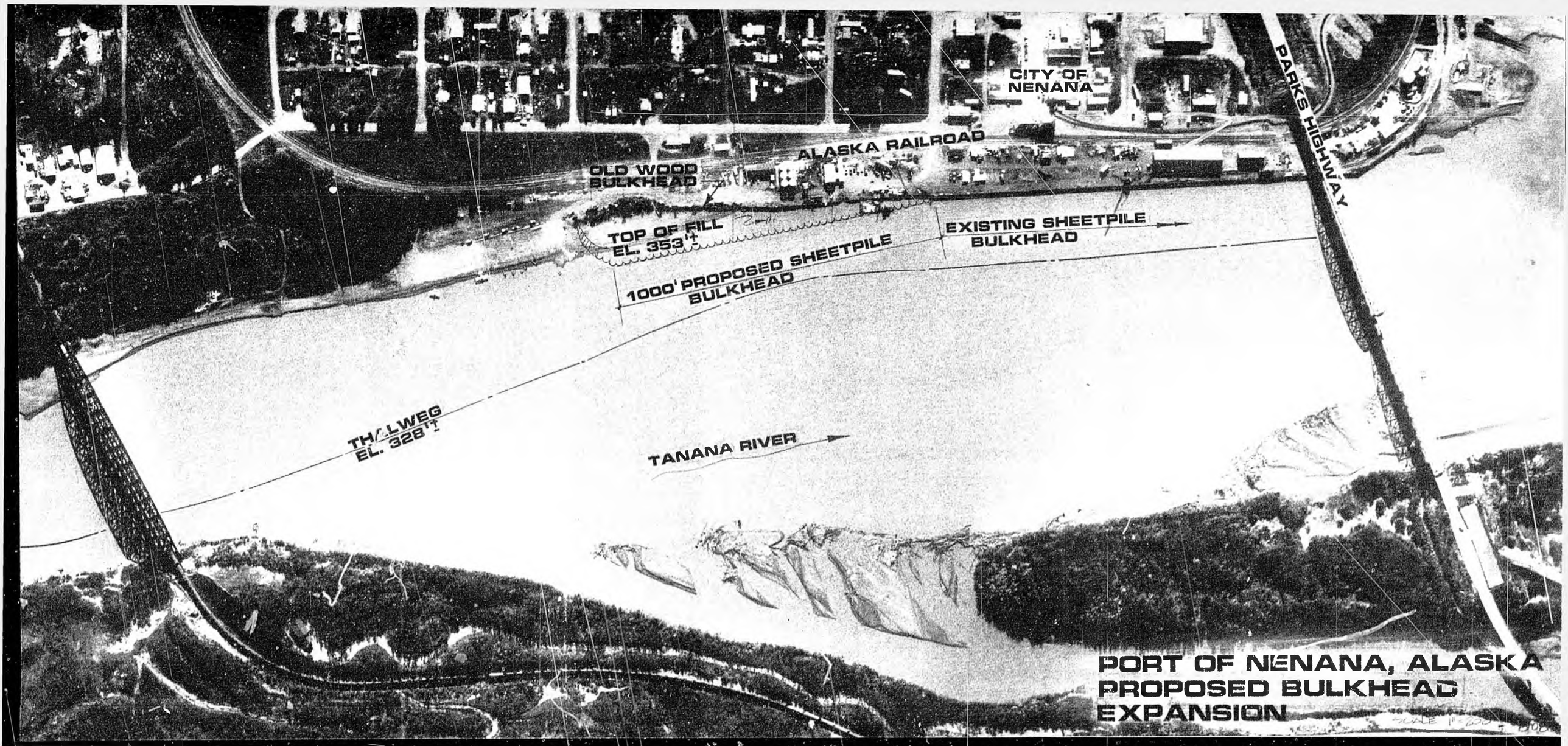

## TYPICAL BULKHEAD SECTION

**PORT OF NENANA, ALASKA**

**PROPOSED BULKHEAD EXPANSION**

**PLEASE NOTE**

THE ORGINAL FILE CONTAINS AN OVERSIZED DOCUMENT THAT IS UNSUITABLE FOR FILMING. PLEASE REFER TO THE ALASKA STATE ARCHIVES TO VIEW THE ORIGINAL.


CITY OF NENANA
PARKS HIGHWAY
ALASKA RAILROAD
OLD WOOD BULKHEAD
TOP OF FILL EL. 353'±
EXISTING SHEETPILE BULKHEAD
1000' PROPOSED SHEETPILE BULKHEAD
THALWEG EL. 328'±
TANANA RIVER
PORT OF NENANA, ALASKA
PROPOSED BULKHEAD EXPANSION

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

SB

838

April 1, 1982

Lyman Hoffman, City Manager
Dan Boyette, Capital Projects Director
City of Bethel
P.O. Box 388
Bethel, Alaska 99559

Dear Mr. Hoffman and Mr. Boyette:

This is to acknowledge receipt of your correspondence of March 25 concerning the teleconference to Bethel on SB 838.

No apologies are necessary. Perhaps the person was acutely nervous and tried to make a joke to relieve her own intensity of feeling.

Thank you, though, for taking the time to show your concern. It was my pleasure to help.

Sincerely,

Bill Ray
Senator
District C

Ans - NR - No apology necessary. I thought the person was acutely nervous and tried to make a joke to relieve her own intensity of feeling. My pleasure to help.

# CITY OF BETHEL

P.O. Box 388 • Bethel, Alaska 99559

543-2297—Area Code 907

March 25, 1982

Senator Bill Ray
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator,

We wish to thank you for all your help in our effort to try and realize riverbank stabilization along the Bethel riverfront. This goal of checked erosion must be realized if Bethel is ever to achieve any degree of economic self sufficiency. The project of building a seawall has been on Bethel's list of needs since 1934. With your help, and the help of all the Senate, we now see the means to achieve this goal within our grasp.

We also wish to apologize for the behavior of a Bethel resident during the Teleconference Hearing with the Senate Transportation Committee on March 18, 1982. Although we cannot guarantee that all people will behave with the proper respect, we will accept responsibility for the individual's actions and sincerely hope that this sort of thing will not happen again. Needless to say, those of us who were in attendance were extremely embarrassed and regret that this ever happened.

We recognize the important role of the Senate Transportation Committee in serving the people of Alaska and don't believe your committee bears any resemblance to any game show.

Sincerely,

Lyman Hoffman
City Manager

Dan Boyette
Capital Projects Director

cc: Senator Nels Anderson
Tundra Drums Newspaper

# MASTER PLAN AND REPORT

# FOR

# PORT DEVELOPMENT

# AT

# BETHEL, ALASKA

## GENERAL CARGO DOCK
## PETROLEUM PRODUCTS DOCK
## RIVERBANK STABILIZATION

Prepared For

THE CITY OF BETHEL







Prepared By

Harold H. Galliett, Jr.
Consulting Engineer
Anchorage, Alaska

George C. Silides
Consulting Engineer
Fairbanks, Alaska

April 1981

Revised
February 1982

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facility described in the following Plan Report. This construction is now taking place, and is scheduled for completion in time for arrival of the first ocean vessel in the spring of 1982. In addition to improving the operational efficiency of the Port, timing of the construction project has resulted in significant winter month employment at Bethel.

The construction drawings and contract documents for the Petroleum Dock and Cargo Dock Extension are being prepared, and advertisement for bids is proposed to begin by March 1, 1982. It is expected that material purchase and construction contracts will be awarded in time to have the necessary material arrive on the first vessel to Bethel in mid to late May 1982, with construction commencing soon thereafter.

The drawings and contract documents are being prepared with deductive alternates, to accommodate existing funds. For the available funds, the Petroleum Dock and tank farm protection will receive first priority. Cargo Dock Extension will proceed as funds become available.

## PROPOSED CONSTRUCTION 1982-1983 (FY 83)

### A. CHANGES

The 1982-1983 and 1982-1984 proposed program shown on Page IV - 2 has been changed, as follows:

Item B.1.(a), 1000 feet of articulated mat, originally shown for construction in 1982-1983, has been deferred to the 1983-1984 season.

Item C.1.(a), 800 feet of bulkhead to Lot 11, Block 20, has been moved up to the 1982-1983 season. This results in a total of 1200 feet of bulkhead proposed for 1982-1983, to complete industrial area protection and waterfront use.

B. REASONS FOR CHANGE

1. It is believed that some bank stabilization and protection upstream of the bulk fuel storage facility can be accomplished by non-structural means. It is proposed to use a combination of sloping, terracing, seeding and sodding in the vicinity of the former PHS hospital. The use of a floating breakwater to reduce wave action against the banks will result in a sheltered moorage for smaller boats during the summer. Depending on the success of this alternative, savings may range from 0.20 to 0.65 million dollars.

2. Additional development in the Industrial Area during 1981 requires earlier attention to this part of the Port of Bethel Development. The non-structural alternative described above facilitates this change.

Because of the work now under-way at the General Cargo Dock and the Petroleum Dock, savings can be realized by earlier sequencing of segments having similar methods of construction.

Design and construction improvements indicate that the 1200 linear feet of bulkhead between Main Street and Lot 11, Block 20 can be built for less than originally estimated in April 1981. The

change in schedule will keep this saving from being lost to inflation.

F.Y. 1983 CONSTRUCTION DOLLAR NEEDS

| | |
|---|---|
| FY 1982 Funds Requested | $6,870,000 |
| FY 1982 Funds Received | $5,250,000 |
| Needed To Complete FY 1982 Construction | $1,620,000 |
| Non Structural Bank Protection & Stabilization FY 1983 | 331,200 |
| Industrial Area Docking And Bank Stabilization, 1200 Linear Feet Steel Bulkhead, FY 1983 | $3,812,425 |
| Total Legislative Funding Requested FY 1983 Capital Improvements Budget | $5,763,625 |

# PORT OF BETHEL IMPROVEMENTS

## I. CONCLUSIONS AND EXECUTIVE SUMMARY

1. The economic and cultural development of the City of Bethel and of the Bethel Service Area depends largely on the successful retention and development of the Bethel waterfront.

2. Without the immediate undertaking of a sustained program of riverbank stabilization, the Bethel waterfront, including the present location of the bulk fuel tank farm and the future location of the general cargo dock and industrial area, will be lost.

3. The evidence gathered from our studies since 1970, and from 1974 general cargo dock construction, show that port improvements and their protective appurtenances result in permanent, or very long-term riverbank stabilization.

4. Construction should commence in 1981 if possible, or in 1982 at the latest, to prevent the loss of the bulk fuel storage tank farm, and to relieve the expensive congestion at the general cargo handling facility.

5. Once begun, the entire program of port development/riverbank stabilization should be wholly completed with all reasonable dispatch to lessen the penalties of inflation, and to lessen the

chance of losing the partially completed improvements from any eccentricities of the Kuskokwim River.

6. The benefits to Southwest Alaska from Bethel port improvements and bank stabilization exceed the cost of facility construction.

7. Funding of the Bethel port development/riverbank stabilization program is in keeping with legislative fiscal policy of development.

8. That an adequate sum to fund at least the 1981-1982 construction phase should be appropriated from the general fund to the Department of Transportation and Public Facilities for use by the City of Bethel, as per the master plan for port development, upon submission by the City of Bethel of the necessary design and construction plans and specifications.

9. General freight tonnage and volume being handled by the municipally operated Port of Bethel has increased from 15,000 tons in 1972 to 27,000 tons in 1980. It is estimated that general freight handled will reach 40,000 tons by 1985.

10. That it is essential that the present port staging area be immediately enlarged in the interest of safety, order, and economy of motion. To provide adequate staging area through 1984, the City of Bethel must immediately require all of Block 19, and Lots 3 - 8, inclusive, of Block 20.

11. In all phases, <u>time is of the essence</u>.

## II. PORT OF BETHEL SERVICE AREA

The City of Bethel occupies a central location in Southwest Alaska. As the upper limit for oceangoing vessels, the Port of Bethel is the deep water entry port of Southwest Alaska.

The Port of Bethel presently serves a huge region of over 100,000 square miles. The City of Bethel has developed into the center of trade, transportation, distribution, communications, administration, education, health care and cultural activity for over sixty communities located on Kuskokwim Bay and the Kuskokwim River.

The region's complexity and isolation makes water transporation the most cost effective means of moving general cargo and bulk petroleum products in and out of Bethel. These are unloaded at the Port of Bethel and transshipped to other communities by tugs and barges better suited to ply river and shallow coastal waters.

When the Yukon River and the Kuskokwim River are joined together by the Yukon-Kuskokwim Crossing[1], now being investigated for the Senate Transportation Committee, the Port of Bethel will be the deep water

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1 Preliminary Engineering Report Yukon-Kuskokwim Crossing, Galliett & Silides, December 31, 1980.

terminus of a major river transportation system, on a par with those of the Mississippi and the Amazon systems in terms of length and relative importance to the area served. At that time it will become feasible to ship goods to and from the Yukon River system through Bethel, to the advantage of communities along both rivers.

In addition to general cargo and bulk fuel, it is anticipated that the Port of Bethel will then also handle diverse shipments such as timber harvested along the Yukon and Kuskokwim Rivers, the grain and red meat output of the Nenana Agricultural Project, and NGL's and refined crude oil products from the Fairbanks area. At that time, the Port of Bethel will increase its fuel service area toward Bristol Bay, the Alaska Peninsula, and to Norton Sound. Ties to the Asian Pacific Rim will be established for the shipment of grain, red meat and timber.

Without a plan of development, and a concerted effort to accomplish that plan, the Port of Bethel will never fulfill its future potential. Indeed, unless steps are taken to protect and expand the existing facilities, the port will fail to meet even its present obligations to its service area.

## III. THE PROBLEM

The problem facing the Port of Bethel can best be described as;

### A. INADEQUATE SIZE

1. The general cargo dock and staging area are too small.

The first, and last, permanent improvement to the Port of Bethel was made in 1974 to accommodate receipt and efficient handling of incoming cargo. Volume of general cargo had increased from 9000 tons in 1967 to 12,000 tons in 1972. About 25% of this cargo was transshipped.

An important additional consideration for port construction in 1974 was the abatement of riverbank loss.

General cargo incoming volumes in 1980, were in the vicinity of 20,000 tons. Transshipped tonnage was approximately 7000-8000 tons, or a processed total of about 27,000 tons. By 1985 this volume of annually processed cargo is estimated in the vicinity of 40,000 tons. In addition, approximately 40,000 tons of gravel were processed in 1980.

Bulk fuel handlings were 16.5 million gallons (1075 barrels/day), up from 6 million gallons in 1967 and 11 million gallons in 1977. Over half of the incoming bulk fuel is presently redistributed, resulting in the handling of approximately 24 million gallons annually through the port.

General cargo is now off-loaded at several locations because of the inability of the dock staging area to receive all of this cargo. The extra cost of re-handling the cargo is presently about $20/ton. This extra handling penalty will increase as the dock becomes more congested.

Further, because of the size and frequency of incoming oceangoing barges, the transshipping barges must be anchored offshore when the ocean barges are unloading. This displacement effectively halts loading for transshipping, requiring even more staging area. In 1980, thirty-six days of river navigation period were lost. This lost time becomes more serious as volumes for transshipping increase. It is necessary to provide separate mooring facilities and additional staging area for the transshipping vessels.

2. The construction of the present general cargo dock and staging area is composed of four circular sheet steel pile cells and wing walls, giving a working frontage of approximately 240 feet. By the end of the 1980's decade, the Port of Bethel will require a general cargo dock and staging area having a frontal working area of 1000 feet for oceangoing vessels, plus several hundred feet of mooring facility in Brown's Slough for the activities related to the tugs and barges engaged in transhipping.

3. It is proposed that, during the 1981 and 1982 construction seasons, the river frontage of the dock be extended westward by the addition of two circular cells. Working frontage would thus be increased fron the present 240 feet to approximately 360 feet, and offer greater security to the dock from loss by erosion.

To enable the simultaneous mooring and working of the transshipping vessels and the oceangoing barges, it is proposed, during 1981 and 1982, to widen Brown's Slough and construct 900 feet of

wall type bulkhead.* The proposed improvements in Brown's Slough will also provide adequate, safe moorage for the numerous small boats that are so important to the lives of the residents of Bethel, and of the visitors to Bethel from nearby villages.

It is proposed that the additional 675 feet of general cargo dock along the river front be constructed as rapidly as funding permits to, a) provide adequate space, b) to combat inflation, and c) to provide positive protection from erosion.

4. Essential Warehousing immediately adjacent to dock side is non-existent. When warehouse financing becomes available, the obviously best location would be at the general cargo dock, or in the immediately adjacent industrial area. No such warehousing and industrial area can be safely developed until the cargo handling facility is enlarged, and some further steps taken toward stabilizing the adjacent eroding riverbank.

5. Construction Cost Estimates** for the expansion and more efficient utilization of the Port of Bethel General Cargo Handling Facility, expressed in 1982 dollars, are as follows;

| | |
|---|---|
| Brown's Slough Extension | $2,220,000 |
| Extend Dock from 240' to 360' | $1,448,000 |
| Extend Dock From 240' to 1,000' | $9,432,000 |
| Construct Warehouse | $1,000,000 |

These figures do not include the total cost of land acquisition which is subsequently discussed.

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* Under Construction

** Revised February 1982)

## B. RIVERBANK EROSION

1. Absent the necessary sustained expansion of the general cargo handling dock and staging area as proposed in the 1971 Bethel Port Study Report[2], a permanent petroleum dock, warehousing and industrial area, and appurtenant bank stabilization installation, the riverbank available for these improvements is suffering serious loss from erosion. That erosion has reached a crisis stage, threatening property improvements having a replacement value of between 35-50 million dollars. Relocation costs are estimated at about $25 million.

2. The area of immediate, crucial concern is the bulk fuel storage tank farm. A sudden, massive bank loss just upstream of the tank farm, plus lesser but substantial losses downstream makes it evident that if steps are not taken during 1981-82 to avoid a total $9 million loss, the tank farm must;

a) Relocate, temporarily, further from the riverbank (the plant has moved twice before), or

b) Relocate at some locale other than Bethel.

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2 Medium Draft Port Facility At Bethel, Alaska, Galliett & Silides, November 1971

The cost of a temporary relocation is estimated at $3 million, exclusive of land acquisition costs. The estimated 1981-1982 cost of the riverbank stabilization program designed to provide the Port of Bethel with a petroleum dock and to secure the safety of the bulk fuel storage facility, is estimated at $3,230,000. The 1981-1982 facilities are envisaged as a permanent circular cell type dock, wing walls, bulkhead, and articulated concrete mat.

To assist in maintenance, repair, and monetary contribution to following Phases of port development and bank stabilization, the City of Bethel is considering the imposition of a wharfage fee of between 1¢ to 3¢ per gallon handled over the petroleum dock. Such a fee, added to the cargo dock lease and wharfage fees, will spread the maintenance cost to all of the people in the Bethel service area, and provide a dedicated fund for matching funds to State participation in subsequent phases.

Relocation of the bulk fuel tank farm to a locality other than at Bethel will add approximately 25¢ per gallon lighterage fee to all fuel brought to Bethel and the upriver communities. At the 1980 volume

brought in and stored at Bethel, the added cost to the consumer would be $4 million each year.

3. Industrial Expansion of marine oriented industry is severly inhibited by continuous danger posed by the unstabilized riverbank. The prime example of this is the fishing and fish processing industry.

Currently the value of fish sold at Bethel has an average wholesale value of between $6-$10 million. The majority of the fish are exported either semidressed (gutted) or in the round. Most were exported by air. Although barge companies have indicated a willingness to stage freezer vans for backhaul in Bethel, there is no place on the waterfront for such staging.

The value of the locally caught fish product would be substantially increased if finished pack processing could occur at Bethel. However, fish processing facilities require direct access to the river system. Before such fish processing facilities can become a reality, riverbank stabilization and dock space must occur. Lacking such stabilization and space it is impossible to attract long-term capital investment to waterfront industry. Nevertheless, development of such industry is essential to Bethel and its service area.

4. Causes of Erosion. Basically, riverbank erosion is caused by permafrost degradation, rain, wind, water run-off, and wave action generated by wind and passing boats. The erosion is not caused

directly by breakup and attendant high water. What happens is that the permafrost melts, the thawed soil sluffs to the toe and is only then removed by the river which acts as a carrier during high water periods, or when the sluffed soil is carried into the river by wave action. When that soil is removed a new layer is exposed and the process repeats itself.

5. Remedial Measures. It appears that the best method of halting the erosion process is to interpose a covering structure between the soil and the action of the wind, sun, rain, and wave. The structure(s) should have as high a utilitarian value as practical. Once begun, the entire program of port development/riverbank stabilization should be wholly completed with all reasonable speed to lessen the chance of loosing the partially completed portion from eccentricities of the river

Expansion of the general cargo dock and staging area, development of a warehousing and industrial area, and the construction of a petroleum dock and appurtenances are de facto permanent, or very long-term, methods of riverbank stabilization and utilitarian use of the waterfront.

Our experience to date has shown that the safest, longest life construction is that of circular cells, such as those which comprise the existing general cargo dock. This type of

construction is also the most expensive. It is most cost effective when used for dock purposes to accommodate large oceangoing cargo vessels and fuel barges, and to absorb the impact of mooring or of very heavy cargo handling equipment.

For the mooring of the smaller transshipping vessels, a temporary small boat harbor, and for the stabilization of the warehousing/industrial area, the general cargo dock is being extended by constructing a 900 foot bulkhead along Brown's Slough, at a cost of $2,200,000. Given the soil structure at Bethel, and the uncertainties of river bottom migration, wall type construction along the riverfront does not provide the assurance of cellular construction. However, the cost per linear frontage foot is only 40% of the cost of cellular construction. Expressed in 1982 dollars our estimate for a 1200 foot long wall type bulkhead, extending from Lot 11, Block 20 to the West side of Main Street, is $3,812,000.*

Less certain, but, we believe, highly useful and of adequate life expectancy, is an articulated, concrete mat. We propose that such a protective concrete mat be installed between the bulk fuel storage tank farm and Main Street. In 1982 dollars, the estimated installed cost is $5,402,000.* The cost per linear frontage foot of articulated mat construction is approximately one-tenth the cost of circular cells and one fourth that of wall type bulkhead. However, it has little utilitarian use beyond the abatement of riverbank loss and small riverboat access and tie-up.

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* Revised February 1982

6. Alternative To Riverbank Stabilization. Failure to undertake an adequate riverbank stabilization program such as outlined above will result in loss past First Street by the year 2000, including likely isolation of the cargo docking facility. Loss of the tank farm is an early certainty. By the year 2030 erosion will have reached Second Avenue in some places, and will include loss of the dock. Economic and cultural losses from non-development are not calculable.

## C. LAND OWNERSHIP, DESIGNATION, AND ACQUISITION

### 1. Ownership and Present Use

Present ownership and land use within the port development/bank stabilization area is a mixture of sometimes unrelated activity. The economic future of Bethel and the Bethel Service Area would benefit greatly from the logical resorting of these activities and land uses.

### 2. Needed Area Designation and Allocation

The port development/bank stabilization area described below, and shown on the plats accompanying this report, should be rezoned to port development use. It should be resubdivided, if necessary, and space for specific uses, i.e., docking, staging, warehousing, industrial, should be allocated. A dedicated street should be provided immediately adjacent to pierside for universal public access, and for dock/bulkhead/articulated mat construction, maintenance, and use. All

property within the designated area needed for construction, or which is not in conforming port development use, should be acquired by the City.

3. General Description of Port Development Area

The area that should be designated for port development/ bank stabilization purposes is described as follows;

a) Vacated Second Avenue East of Bridge Avenue, and

b) Between Brown's Slough and Main Street, all property south of Second Avenue and Bridge Avenue, and

c) West of Main Street, all of Tract E, Tract B lying south and east of Mission Lake Road except Lots 33 through 41 of Block 3, all property south of First Avenue to U. S. Survey No. 4000 (PHS property), and

d) All of U. S. Survey No. 4000 south of the State Highway, and

e) Tracts 42, 43, and 44 west of U. S. Survey No. 4000.

4. Land Acquisition

a) 1981-1982 Construction. For the 1981-1982 general cargo dock and staging area expansion, and to satisfy the projected space need to 1984, the City must acquire the following;

- Lots 3, 4, 5, 6, 7, and 8, Block 20
- Lots 1, 2, and 3, Block 19, and
- Vacation of Second Avenue east of Bridge Avenue.
- While not crucial for access from Bridge Avenue to the cargo staging area, the triangular wedge of land between Bridge Avenue and the northeast corner of Block 19 should also be acquired as soon as funds permit.

After 1984, additional space will be needed.

For the petroleum port and construction to protect the bulk fuel storage tank farm, an entry permit will be needed from the Public Health Service.

b) Future Construction and Development

It is proposed that the City purchase or otherwise acquire such property within the port development/riverbank stabilization area (project) that is necessary for construction and/or is not being used in conformity with this Master Plan.

The City should immediately seek the acquisition of all vacated Public Health Service property within the designated project area for use in connection with the petroleum products port and probably secondary general cargo port facilities. Such public lands should be transferred free of cost. The acquisition of any private

property necessary to future construction and development can be aided through the use of part of the petroleum dock gallonage fee and general cargo wharfage fees.

5. Land Costs

The cost of land acquisition for proposed 1981-82 general dock expansion and Brown's Slough widening and moorage is included in the construction estimates shown herein. Total cost of land acquisition for port development depends greatly on the cooperation of all present inholders and potential beneficiaries. Therefore, this total land acquisition cost must await the 1982-1983 annual updating of the Port Development Master Plan and the City of Bethel Comprehensive Plan.

## IV. MAXIMUM TERM CONSTRUCTION SCHEDULE (Revised, February 1982)

The following schedule of improvements is the maximum reasonably allowable term of construction to first protect vital existing facilities, and then to develop the economic potential of the Port of Bethel. An accelerated construction program would lessen the chance of the entire problem becoming moot through loss of existing and partially completed improvements from eccentricities of the Kuskokwim River.

### A. 1981 - 1982

1. Petroleum Dock And Tank Farm Protection

    a) One 60 foot diameter circular cell

    b) 200 feet of wall type bulkhead

    c) Approximately 700 feet of concrete mat

2. Transshipping vessel moorage

    a) Widen Brown's Slough

    b) 900 feet of wall type bulkhead*

    c) Dredging and backfill

3. Enlarge General Cargo Dock

    a) Two 60 foot diameter circular cells

    b) Acquire land

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* Under construction, February 1982

4. Industrial Area Protection

a) Acquire Land (In progress February 1982)

b) Construct warehouse (Pending funding, February 1982)

B. 1982 - 1983 (Revised February 1982)

1. Industrial Area

a) 1200 linear feet of bulkhead, proceeding upstream from Main Street the southwest corner of Lot 11, Block 20, the proposed junction with the general cargo dock extension.

2. General Bank Stabilization

a) Continue non-structural sloping, terracing, seeding and sodding, if alternative appears feasible.

C. 1983 - 1984

1. General Bank Stabilization

a) 1000 linear feet of articulated concrete mat.

D. 1985 - 1986

1. General Area Bank Stabilization

a) Approximately 3,200 linear feet of articulated concrete mat, to complete bank stabilization other than industrial and cargo dock areas.

E. 1987 - 1990

1. Protection and Completion of General Cargo Dock and Staging Area.

   a) Incrementally extend general cargo dock and staging area to the SW Corner of Lot 11, Block 20 through the construction of eight additional 60 foot diameter circular cells.

F. 1981 - 1990

1. Designate Port of Bethel development area limits, to include all of the lands described in Section III C 3, General Description of Port Development Area.

2. Acquire the lands necessary for immediate expansion of the port general cargo staging area, as described in Section III C-4(a).

3. Acquire all vacated Public Health land for use and lease in connection with the petroleum products docking and storage facility and secondary general cargo dock.

4. Acquire all other available vacated Federal lands within the Port of Bethel development area.

5. Resubdivide and allocate lands within port development area for specific uses.

6. In addition to lands in 2, above, acquire such property that is presently in non-conforming, port development, use.

# V. CONSTRUCTION COST ESTIMATES

## A. NOTES

1. Inflation. The following construction cost estimates for alternatives A - D include a 15% annual increase attributable to inflation in material and labor costs.

2. Design. Estimates are based on existing state-of-the-art. Technical advances and innovative design may reduce the costs shown. For example, in 1972 we were told that, "nothing can be done at Bethel." The existing medium draft cargo handling facility refuted that contention.

3. Effect of Accelerated Schedule. Accelerated construction schedules can reduce costs by taking advantage of economies of scale, and by offsetting the penalty of annual inflation. Moreover, quick completion reduces potential loss of existing and partially completed facilities, from riverbank erosion, prior to completion of the total port facility/bank stabilization program described herein.

B. ESTIMATES (In Thousands)
REVISED, February 1982

| 1. Alternative A | | $1982 | $ Future |
|---|---|---|---|
| 1981-1982 | General Cargo Dock | 3,640 | 3,640 |
| | Petroleum Dock and Protection | 3,230 | 3,230 |
| | 1981-1982 Project | 6,870 | 6,870 |
| | Funded F.Y. 82 | 5,250 | 5,250 |
| | Shortfall | 1,620 | 1,620 |
| 1982-1983 | 1200 Linear feet bulkhead Main Street to Lot 11 Block 20 | 3,812 | 4,383 |
| | Non-structural Bank Stabilization | 0,331 | 0,381 |
| | Cargo Dock Completion | 1,620 | 1,863 |
| | 1982-1983 Project | 5,763 | 6,627 |
| 1983-1984 | 1000 linear feet concrete mat protection | 1,286 | 1,479 |
| 1985 | 1600 linear feet concrete mat protection | 2,058 | 2,984 |
| 1986 | 1600 linear feet concrete mat protection | 2,058 | 3,293 |
| 1987 | Cargo Dock Extension | 1,448 | 2,913 |
| 1988 | Cargo Dock Extension | 1,448 | 3,350 |
| 1989 | Cargo Dock Extension | 1,448 | 3,852 |
| 1990 | Cargo Dock Extension | 1,448 | 4,430 |
| TOTAL PROGRAM 1981-1990 | | 22,207 | 34,178 |

Recapitulation of Alternative A, By Allocation (Revised February 1982)

| (In Thousands) | $ 1982 | $ Future |
|---|---|---|
| 1. General Cargo Dock | $9,432 | $18,428 |
| 2. Petroleum Dock & Tank Farm Protection | $3,230 | $3,230 |
| 3. Waterfront Industrial Area Protection | $3,812 | $4,383 |
| 4. General Area Riverbank Protection | $5,733 | $8,137 |
| 5. Warehouse 1982 | $1,000 | $1,000 |
| | $23,207 | $35,178 |

Alternative A gives maximum benefit per dollar invested. It allows cargo handling facilities and industrial area to reach fullest potential while simultaneously providing for bank stabilization.

Construction cost savings can be realized by shortening completion period. Accelerated construction will take advantage of economies of scale and offset inflation.

2. Alternative B (Revised February 1982)

| | |
|---|---|
| 1981-1982 Cargo Dock | $ 3,640 |
| 1981-1982 Petroleum Dock & Protection | 3,230 |
| 1982-1983 1200 feet bulkhead | 4,383 |
| 1983-1984 8000 feet mat protection | 13,376 |
| | $24,629 |

Alternative B continues to provide the needed industrial area and bank protection. It does not allow the general carge handling facilities to reach their needed size and, therefore, will add to cargo handling costs.

3. Alternative C

| | |
|---|---|
| 1981-1982 Cargo Dock | $ 3,640 |
| 1981-1982 Petroleum Dock & Protection | 3,230 |
| 1982-1983 9000 feet mat protection | 13,311 |
| | $20,181 |

Alternative C provides the minimum reasonable alternative. Though it provides bank stabilization for an indeterminate period, possibly 25 years, it provides only temporary relief to the increasing problem of efficient cargo handling. Under this alternative, expansion of the general cargo dock will require removal of earlier construction.

4. Alternative D

1982-1983 10,000 linear feet of mat protection $13,825

Alternative D is an emergency measure to safeguard existing facilities only. It provides the minimum acceptable alternative.

SB

849

FROM: Frank Jones
General Manager, Alaska Railroad

The following conforms with the Alaska Railroad's contractual agreement with the operating unions:

(a) No person operating an Interstate Commerce Commission-regulated railroad offering passenger service in this state may operate a train or engine, outside of yard limits, regardless of the form of energy used for propulsion, unless it meets the following requirements:

(1) a passenger train or a mixed passenger-freight train with more than two cars carrying passengers shall have at least a minimum passenger crew, which shall consist of one locomotive engineer, one locomotive fireman (or helper), one conductor, [ONE BRAKEMAN,] and one flagman;

(2) a freight train shall have at least a minimum freight crew, which shall consist of one locomotive engineer [, ONE LOCOMOTIVE FIREMAN] (or helper), one conductor, and one [TWO] brakemen;

(3) a light engine without cars shall have at least a minimum light engine crew, which shall consist of one locomotive engineer, one locomotive fireman (or helper), or [AND] one conductor.

(b) Except for hostling movements and duties as negotiated for each railroad company, no person operating an Interstate Commerce Commission-regulated railroad offering passenger service in this state may operate an engine or locomotive, regardless of the form of energy used for propulsion, for switching cars or in transfer movements, unless every engine or locomotive is manned by a minimum crew consisting of one locomotive engineer, [ONE LOCOMOTIVE FIREMAN (OR HELPER),] one conductor, and one brakeman [TWO HELPERS].

FILE WITH BILL



united transportation union

March 15, 1982

To: Senator Bill Ray

This letter should provide you with some information on [illegible] to Bill Number 849, "an act relating to train crews", a bill to which our membership is definitely opposed. I have put this brief together to explain how this bill affects us here in Skagway.

This is a critical issue to us in Skagway, and we would certainly appreciate any assistance which you could give us in this matter. We request your disposal for further information and dialogue at any time.

Thank you very much.

I remain,

Corrigan L. Gates

Corrigan L. Gates
Legislative Representative
United Transportation Union
Local 1787

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

united transportation union

March 15, 1982

U.T.U. Brief on Senate Bill Number AS 23.10.420(a)

Background Information

The White Pass & Yukon Route Railroad, a Canadian-owned corporation with home offices in White Horse, Yukon Territory, is the last operating common carrier three-foot wide narrow gauge railroad in North America. Built at the height of the Klondike Gold Rush in 1898, it runs 110 miles from tidewater at Skagway, Alaska, to Whitehorse in the Yukon Territory. Since 1970, American crews (who used to operate all trains on the railroad) run the 41 miles to Lake Bennett, B.C., the division point, and Canadian crews take the trains the balance of the distance to Whitehorse.

Though "modern" in some respects, such as diesel locomotives and a containerized freight handling system, the WP&YR contends with some of the worst terrain and climate conditions in the world. The Canadian side from Bennett to Whitehorse is flat with only a few grades; the U.S. division is the "trickiest part of the road".

Alaskan crews must drag their trains up 21 miles of 3.6% grade to reach the summit, and then contend with another pass and two short (but equally steep) grades before reaching Bennett. The return to Skagway presents the problem of controlling 60-car trains of lead-zinc ore concentrates on the steepest railroad grade in America.

The railroad is interspaced with high wooden trestles and cliff-like retaining walls which perch the track a thousand feet above the canyon floor for miles. Blizzards have dumped over four hundred inches on the summit of White Pass, and though there are "good" years, the railroad has been blocked sometimes for weeks on end. The worst storm shut down the road for 21 days.

The geography and weather create more than just maintenance problems; they compound the dangers of railroading to the highest extent. Even on a well-maintained railroad, meeting safe operational standards is critical. Here it is very literally a matter of life and death. Avalanches and rock slides periodically wipe cars over the side, and derailments (which occur very frequently) could mean disaster at many locations. Such a disaster would even be environmental in its scope, since the prospect of tons of lead and zinc ore into the Skagway River would certainly affect life in the water, and down to the sea.

Train crews have learned to take safety as more than just the title page in the rule book. After all, we're the ones out there in the middle of it. Five-man crews on the [illegible] exist primarily for safety, in spite of management's stand on this bill. Here are a few examples:

1. Ice building up between the wheels and the brake shoes can cause winter brake failures. The Company has refused to upgrade their equipment, and this leaves the crew to deal with problems out on the road.

2. Bridges and trestles on the road are not equipped with walkways. A train which is stretched across a bridge leaves no walking (or climbing) room at the edge. Therefore, a brakeman cannot walk from one end of the train to the other, and a second brakeman is needed to walk the other end in emergencies. This can be critical.

3. In winter months it often takes the combined strength of two men to set a good safe handbrake on a car, and the same force of two men to "knock-down" or remove the brake. On older cars with faulty handbrakes this applies all year, even with brake clubs.

4. The "sophisticated communications systems" (two-way radios) in use are continually in for repair and are prone to failure. The crews do not rely on them because of this safety hazard, and hand signals are regularly used in switching moves.

5. The primary job of the crew while underway is to watch for any hint of trouble on or around the train. The railroad is twisted like a piece of spaghetti with 16 to 24° curves, and there are documented cases of the fireman, riding on the left-hand side of the locomotive, spotting danger which was out of the engineer's line of sight and stopping the train. Similarly, brakemen ride at both ends and watch over the train for hotboxes, loads shifting or breaking loose, broken axles or wheels, downed brake rigging, derailed cars, broken rails, fires, washouts, etc. Thus, the manning positions at the head-end with the engineer and fireman watching the track from the lead unit, a brakeman riding the "rear" or trailing unit watching over the train behind, and a conductor and rear-brakeman overseeing the train ahead of the caboose (and the track behind for signs of dragging brake rigging or derailed equipment) have been established for the safe operation

tion of [illegible] while underway. Dozens of documented cases exist of crew men at their position spotting trouble which would have gone unseen by other crew members, and thus saving the Company thousands of dollars in repairs and wreck clean-up operations.

. Most important to the crew members in the light of safety on the road is the grim fact that besides dealing with faulty locomotives, antiquated equipment, and track and bridge maintenance which barely meets the job at hand, employees have to deal with snowslides and cliffs over which a train's plunge would mean certain injury or death. The spector of a passenger train loaded with 400 tourists going through a rotten trestle, or derailing high above "Dead Horse Gulch", or being hit by a rock slide (on top of the 1900-era wood-roofed parlor cars with their old oil stoves) brings shudders to the men who actually are on board as well as to management. Crew members to deal with such accidents are essential. Even more frightening in the winter season are the snowslides. There has been an increase in winter passenger traffic over the last few years, and thus the crew is faced with the added burden of protecting their valuables as well as themselves.

I. [illegible] Ltd. of Vancouver [illegible] Federal Industries, Ltd. of Winnipeg. [illegible] management is in [illegible] over-all cost-cutting [illegible] this time, and is trying to eliminate [illegible] tion. [illegible] has included the [illegible] track [illegible] major rail [illegible] knocked out of [illegible] money-- [illegible] it 'til it [illegible] which are [illegible] years old and in [illegible] replacement or complete long-term overhaul. Because traffic is so heavy at this time, the company can't take their engines out of service much more than stop-gap, repairs on the worst problems. Engine failures or malfunctions are a common occurance on the railroad. It is also worth noting that the average train length in 1969 was 30 cars, operated by five men. Today the same five men have to run trains that can be 100 cars long out of White Pass. This is actually more work for each man involved, with more weight to contend with, more cars to watch (and to walk when checking the train, or in emergencies), and definitely more hazardous.

. Remarkable but true in light of the terrain and operational hazards on the WP&YR is the fact that White Pass does not legally have to comply with Federal laws concerning safety and operation. The reason: White Pass is "narrow gauge" instead of "standard gauge" ( " wide track), and as such the Company can usually run by under requirements and regulations which would close down a standard gauge road "outside". This appears to be an oversight by the Federal Railroad Administration, but is understandable since the little known and obscure White Pass is the last narrow gauge common carrier left in the U.S. Also, it is generally viewed as a Canadian company. The 20 miles within Alaska under jurisdiction of American law, usually slide by unnoticed.

. Much of the freight equipment, passenger equipment and airbrake equipment is antiquated and of museum vintage. Crews must deal with this as well as other problems, leading to operational hazards.

. Because of all the previous factors, it is little wonder that the White Pass accident and safety record is atrocious. Summer travel has increased each year, and with it the number of accident reports. Employees must be extra alert at all times to prevent injury or death from faulty equipment, dangerous operational procedures, or management decisions affecting train movement. White Pass enjoys saying that they have "never lost a passenger's life" in their 82-year history. The men who ride the trains can only count the number of dead employees over the years, and knock on wood. The Company is playing Russian roulette with human lives, and their own odds are poor. By reducing the number of men on board a train to [illegible] available to deal with the expected-- and unexpected--hazards of operating trains under the most extreme condition .

Statement of Position of the United Transportation Union

s of the United Transportation Union, Local [illegible], are [illegible] to see to it that [illegible] will aid a non-[illegible] Canadian corporation [illegible] in Alaskan jobs [illegible]. This is [illegible] international [illegible], worthy of close attention-- [illegible] particularly in light of the proposed State [illegible].

Few people even know that there is a railroad in Southeast Alaska. Instead of repealing the present law, we propose rather should be altered that would exempt state owned railroads.

Lastly, very few individuals are aware of the delicate balance that exists in Skagway between labor and management. We feel that the introduction of this bill is an attempt by the Company to further drain our union treasury attending a battery of hearings in Juneau. The last time we had to testify it involved long hours and much expense--something which the Company can easily afford.

Given this situation, our membership has nothing except the present State law to protect us from the whims of a foreign corporation. Our only defense at present lies in "An Act relating to train crews" as set forth in State law. It would thus seem beyond comprehension for our own lawmakers--our own elected representatives--to vote to repeal the only security which we in Skagway have in these difficult days.

Corrigan L. Gates
Legislative Representative
United Transportation Union
Local 1737
Skagway, Alaska 99840

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

FROM: Bill Miles

## POSITION PAPER

A.S. 23.10.420 sets forth certain minimum crew requirements for the operation of trains or engines in the State of Alaska, if the railroad is operating under an Interstate Commerce Commission license. The only railroad in Alaska regulated under the statute is the Pacific and Arctic Railway and Navigation Company, also known as the "White Pass and Yukon". That railroad operates out of Skagway, Alaska. The U.S.-Canadian Border is less than 50 miles away from Skagway. It is necessary to amend the statute to reflect current needs and technology.

A.S. 23.10.420 was passed during 1970 in Alaska, at a time when most other states had repealed, or were repealing, similar laws then in existence. Across the country, railroads had demonstrated that trains could be operated safely with fewer crew members than required under laws similar to Alaska's. Even since the passage of the Alaska statute, many states have repealed their minimum crew laws. One striking example can be found in the Arkansas Full Crew Law. The Alaska statute currently in existence was patterned after the Arkansas law. Two years after passage of the Alaska statute, Arkansas repealed the very law that the Alaska statute was modeled after.

Full crew laws stem back to the days of steam locomotives, where braking systems were very rudimentary, and signaling was carried out by hand. Today, with modern diesel locomotives, automatic continuous braking systems, and sophisticated communication systems, traditional needs no longer exist.

Rather than repealing the Alaska Minimum Crew Statute, the proposed bill offers a compromise approach. It retains provisions dealing with minimum crews for passenger trains while deleting such requirements for freight trains. Therefore, con-

cerns regarding passenger safety continue to be met by the amended legislation.

Further, provisions identical to the statute in existence, A.S. 23.10.420, are presently incorporated into a collective bargaining agreement between the railroad and the applicable union. Therefore, the present relationship between the railroad and the union would continue to exist until such time as the existing collective bargaining agreement expired and further negotiations were held. The amendment to A.S. 23.10.420, removing unnecessary provisions in the statute, would simply insure that during future labor negotiations parties would negotiate without undue advantage to either party. The parties would be able to negotiate from equal starting positions, a concept which is fundamental to American labor relations.

Lastly, the effect of the current law penalizes one Alaska railroad. It is important to maintain this railroad in Alaska. Simple economics indicate that, for the railroad to survive, it must either increase its revenues or decrease unnecessary costs. Though the Company continues to vigorously pursue new forms of revenue, initial capital outlays preclude rapid development of new sources of revenue. The amended legislation would serve to decrease unnecessary costs for the railroad. Pacific and Arctic Railway and Navigation Company not only creates employment for many Alaskans, but provides essential services in Alaska.

Wall Street Journal
March 18, 1982

# *Will Cabooses Ride Off Into the Sunset? Railroads Hope So*

* * *

## Unions Say They Are Needed For Safety, Even Though Other Uses Are Obsolete

By John D. Williams
*Staff Reporter of* The Wall Street Journal

If the nation's railroads have their way, the jaunty red caboose soon may be clattering off into oblivion.

To streamline operations, the railroads would like to permanently uncouple these little lookout cars from freight trains. "Cabooses are dead weight," says a vice president of a Western railroad. "They are inefficient and belong to a different era."

Cabooses have also emerged as a symbol of the railroad industry's latest efforts to modernize operations in the face of bitter opposition from the men who ride the rails. Engineers, conductors, brakemen—and their unions—argue that cabooses are a vital safety feature. "If you see something from the caboose that averts just one accident, it has paid for itself," declares John Mogan, an official with the 160,000-member United Transportation Union.

In talks described as "fighting and scratching" by one union man, both sides are sporadically bargaining in Washington. Besides the fate of cabooses, the agenda concerns the revision of a freightload of work and pay rules dating back to the days of the horse and buggy.

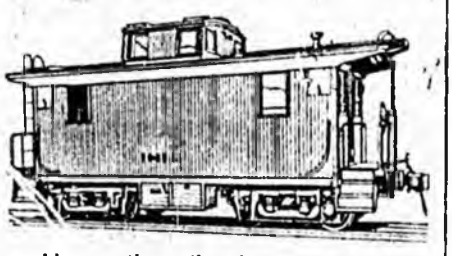
### Paying by the Mile

The most distasteful of these, in management's view, is the currently accepted measure of the day's pay on the railroads: traveling a distance of 100 miles. Formulated back when trains crept along at some 10 miles an hour, the rule often allows crew members to pocket fat paychecks for a few hours' work. For example, an engineer who makes the six-hour, 216-mile run between terminals in West Virginia and Ohio collects over two days' pays', or about $200. (If paid by the hour, he would make only about $70.)

Then there is the matter of "arbitraries." Under current rules, management makes these extra payments for certain tasks that it argues should be routine duties. Crews on some railroads, for example, get $5.37 a day extra for coupling or uncoupling air hoses. And the extra pay goes to each member of the train crew, even though only one man does the work.

For over two decades, railroads have been trying with varying degrees of intensity to unsnarl this tangled thicket of work rules. Now that recent mergers have extended the distances spanned by single rail systems – and with more such mergers planned—the struggle has taken on new urgency. Railroads, eyeing a new growth era hauling coal and other bulk products longer distances, are determined to end costly labor practices they see as obstructing that goal.

The stakes are high. Ending the 100-mile-day basis of pay and paying by the hour



would save the railroads hundreds of millions of dollars annually. The issue is so controversial that it will probably be handed over to a special study commission. Ending arbitraries alone would save between $250 million and $445 million a year, estimates an industry negotiator, a vice president of labor relations for a major carrier. And scuttling the nation's fleet of 13,000 cabooses, he says, could mean annual savings of $381 million. "But we surely won't be able to win all we want," he concedes.

### Comfortable Cabooses

Indeed, the unions seem unwilling to budge much on the caboose issue, or on any other. Countering management's demands, the UTU has even asked several railroads to add amenities like air conditioning and shock absorbers to make cabooses more comfortable.

Derived from the Dutch word "kabuis," meaning ship's galley, cabooses first were hitched to trains around 1855. Initially little more than converted boxcars, they were mainly a refuge for the crew, who gathered here to eat, sleep and spin yarns. These kerosene-lit, coal-heated shelters quickly acquired a host of nicknames, many of them—like "glory wagon," "chariot" and "doghouse"—laden with irony.

By the 1920s, observation cupolas had been added, and the caboose was serving a multitude of practical functions. It was a place for the conductor to do his paper work, and it was a perch from which to flag down approaching trains or to watch for "hotboxes," the smoldering axles that cause derailments.

Today, even union men concede that cabooses have outlived much of their past usefulness. Railroads put crews up overnight in motels, paper work is fed into computers,

*Please Turn to Page 18, Column 1*

# Will Cabooses Ride Off Into the Sunset? Railroads Hope So

*Continued From First Page*

and track-side electronic devices monitor for hotboxes or signal when a rear-end collision threatens.

On the issue of safety, however, the unions refuse to yield. "Some trains today are a mile long," a UTU spokesman says. "There could be a derailment in the middle without the engineer knowing it, unless the conductor called him on the radio from the caboose." He adds that the automatic safety equipment is neither fail-safe nor in universal use.

Moreover, cabooses have undeniable nostalgic appeal as one of the last surviving links to the early days of railroading. With railroads figuring so prominently in the settlement of the West, the caboose became a stock fixture in Tom Mix serials and other early Westerns. Hardly an episode went by without a harrowing leap to or from a caboose by a long succession of desperadoes.

The price of keeping these antiquities rolling is considerable. A newly minted caboose, depending on refinements, costs somewhere between $50,000 and $100,000 today. Demand has been soft of late, according to the nation's largest caboose maker, the International Car division of Paccar Inc., the Bellevue, Wash., castings and forgings concern. International Car suspended production at its Kenton, Ohio, plant four months ago for lack of orders. In 1969—its peak year—the plant turned out 299 cabooses.

## "A Headache"

"The caboose is very romantic and picturesque, but for modern-day railroads, they're a headache," says a vice president of an Eastern railroad. Besides their cost and the need to regularly maintain them, he says, they tend to get in the way when trains are being formed or broken up in switchyards.

Reluctantly, the UTU has permitted several railroads to run short trains without cabooses as an experiment. The Illinois Central Gulf Railroad, a unit of IC Industries Inc., ran such a freight train successfully from 1974 until last January, when the contract expired.

And in 1968, the Southern Railway became so fed up with cabooses that it simply stopped using them—until the UTU won a federal court order forcing their reinstatement.

The current labor dispute heated up last December, after the railroads with little fuss, reached agreement on a pay package with 10 rail unions representing workers not directly involved in train operations. However, snags developed when management got down to bargaining with the two major unions, the UTU and the Brotherhood of Locomotive Engineers. Insisting that by precedent work rules and cabooses are local bargaining matters, the UTU is negotiating on those issues with only three large, profitable railroads: the Atchison, Topeka & Santa Fe, the Seaboard Coast Line and Burlington Northern Inc.

## Legal Battle Ahead

The National Railway Labor Conference, the industry's bargaining body, has gone to court to block such local bargaining. The conference, representing 117 railroads, recently filed suit against the UTU in a federal court in Washington to prevent a strike against any carrier while national bargaining continues.

While a protracted legal battle looms, at least one railroad chief executive suggests that a brief strike could result. Meanwhile, the recession is hardening management's resolve to update work rules that have helped push the average salary of a freight engineer up to $42,000 a year and that of a freight conductor to $38,000 a year.

High on management's hit list: rules concerning "deadheading," "lap backs" and "penalty pay." Railroads want to pay crews by the hour—rather than by the higher mileage rate—while they are deadheading, or riding home as a passenger after the end of a work shift. They also want to eliminate the lap-back penalty, whereby crews receive a second full day's pay if, while on a run over 100 miles, they are ordered back in the opposite direction even a few miles. Management would also abolish penalty pay, by which both the train crew and the switchyard crew are paid a bonus if either performs the work of the other.

-FILE-

# Alaska State Legislature

## Senate

### Office of the President

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

Sen. Bill Ray

March 25, 1982

Corrigan L. Gates, Legislative Representative
United Transportation Union
Local 1787
Skagway, Alaska 99804

Dear Mr. Gates:

Your recent correspondence regarding SB 849 has been received in my office.

I enjoyed your presentation and will be happy to work with you and Senator Ray (your Senator) on this issue.

Sincerely,

Senator Jay Kerttula
Senate President

JK/gt/bb

THURSDAY

united transportation union

March 15, 1982

To: Senator Jalmar M. Kerttula

This letter should provide you with some information on [illegible] Bill Number 49, "an act relating to train crews", a bill to which our membership is definitely opposed. I have put this brief together to explain how this bill affects us here in Skagway.

This is a critical issue to us in Skagway, and we would certainly appreciate any assistance which you could give us in the matter. We're at your disposal for further information and dialogue at any time.

Thank you very much.

I remain,

Corrigan L. Gates

Corrigan L. Gates
Legislative Representative
United Transportation Union
Local 1787

BILL MILES / LOBBYIST
FOR WHITEPASS REQUEST
SB 849

United [illegible] Union

March 15, 1982

"T.U." Brief on Senate Bill Number AS 23.10.420(a)

Background Information

The White Pass & Yukon Route Railroad, a Canadian-owned corporation with home offices in White Horse, Yukon Territory, is the last operating common carrier three-foot wide narrow gauge railroad in North America. Built at the height of the Klondike Gold Rush in 1898, it runs 110 miles from tidewater at Skagway, Alaska, to Whitehorse in the Yukon Territory. Since 1970, American crews (who used to operate all trains on the railroad) run the 41 miles to Lake Bennett, B.C., the division point, and Canadian crews take the trains the balance of the distance to Whitehorse.

Though "modern" in some respects, such as diesel locomotives and a containerized freight handling system, the WP&YR contends with some of the worst terrain and climate conditions in the world. The Canadian side from Bennett to Whitehorse is flat with only a few grades; the U.S. division is the "trickiest part of the road".

Alaskan crews must drag their trains up 21 miles of [illegible] grade to reach the summit, and then contend with another [illegible] and two short (but equally steep) grades before reaching Bennett. The return to Skagway presents the problem of controlling 70-car trains of lead-zinc ore concentrates on the steepest railroad grade in America.

The railroad is interspaced with high wooden trestles and cliff-like retaining walls which perch the track [illegible] feet above the canyon floor for miles. Climate records have shown over four hundred inches on the summit of White Pass, although there are "good" years, the railroad has been blocked sometimes for weeks on end. The worst storm shut down the road for 21 days.

The geography and weather create more than just maintenance problems; they compound the dangers of railroading to the highest extent. Even on a well-maintained railroad, maintaining safe operational standards is critical. Here it is very literally a matter of life and death. Avalanches and rock slides periodically wipe cars over the side, and derailments (which occur very frequently) could mean disaster at many locations. Such a disaster would even be environmental in many score, since the prospect of tons of lead and zinc [illegible] into the Skagway River would certainly affect life in the water, and down to the sea.

Train crews have learned to take safety as more than just the title page in the rule book. After all, we're the ones out there in the middle of it. Five-man crews on the [illegible] exist primarily for safety, in spite of management's stand on this bill. Here are a few examples:

1. Ice building up between the wheels and the brake shoes can cause winter brake failures. The Company has refused to upgrade their equipment, and this leaves the crew to deal with problems out on the road.

2. Bridges and trestles on the road are not equipped with walkways. A train which is stretched across a bridge leaves no walking (or climbing) room at the edge. Therefore, a brakeman cannot walk from one end of the train to the other, and a second brakeman is needed to walk the other end in emergencies. This can be critical.

3. In winter months it often takes the combined strength of two men to set a good safe handbrake on a car, and the same force of two men to "knock-down" or remove the brake. On older cars with faulty handbrakes this applies all year, even with brake clubs.

4. The "sophisticated communications systems" (two-way radios) in use are continually in for repair and are prone to failure. The crews do not rely on them because of this safety hazard, and hand signals are regularly used in switching moves.

5. The primary job of the crew while underway is to watch for any hint of trouble on or around the train. The railroad is twisted like a piece of spaghetti with 10 to 24° curves, and there are documented cases of the fireman, riding on the left-hand side of the locomotive, spotting sparks which were out of the engineer's line of sight and stopping the train. Similarly, brakemen ride at both ends to watch over the train for hotboxes, load shifting or breaking loads, broken axles or wheels, dragging brake riggings, derailed cars, broken rails, fires, washouts, etc. Thus, the manning positions at the head-end with the engineer and fireman within the track [illegible] unit, the brakeman riding the "rear" of the [illegible] unit watching over the train behind, and conductor and rear brakeman over the train ahead of the caboose (at the trailing for signs of dragging brake riggings or other equipment) have been established for the safe opera-

tion of the train while underway. Dozens of documented cases exist of crew men at their positions spotting trouble which would have gone unseen by other crew members, and thus saving the Company thousands of dollars in repairs and wreck clean-up operations.

4. Most important to the crew members in the light of safety on the road is the grim fact that besides dealing with faulty locomotives, antiquated equipment, and track and bridge maintenance which barely meets the job at hand, employees have to deal with snowslides and cliffs over which a train's plunge would mean certain injury or death. The specter of a passenger train loaded with 400 tourists going through a rotten trestle, or derailing high above "Dead Horse Gulch", or being hit by a rock slide (on top of the 1900-era wood-roofed parlor cars with their old oil stoves) brings shudders to the men who actually are on board as well as to management. Crew members to deal with such accidents are essential. Even more frightening in the winter season are the snowslides. There has been an increase in winter passenger traffic over the last few years, and thus the train is loaded with the added burden of protecting its riders as well as themselves.

5. White Pass and Yukon Ltd. of Vancouver is owned by Federal Industries, Ltd. of Winnipeg. The Company is now [illegible] on an over-all cost-cutting program at this time, and are trying to tighten up their operation. Part of this has included the postponement of track repairs--a major rail replacement program knocked out to save money--and an attitude of "use it 'til it dies" toward their locomotives, some of which are now 35 years old and in critical need of replacement or complete long-term overhaul. Because traffic is so heavy at this time, the Company can't take their engines out of service much more than absolutely necessary, repairs on the worst problems. Engine failures or malfunctions are a common occurance on the railroad. It is also worth noting that the average train length in 1969 was 20 cars, operated by five men. Today the same five men have to run trains that are 100 cars long out of this area. This is actually more work for each man involved, with more weight to contend with, more cars to watch (and to walk when checking the train, or in emergencies), and definitely more risk of injury.

. Remarkable but true in light of the terrain and operational hazards on the WP&YR is the fact that White Pass does not legally have to comply with Federal laws concerning safety and operation. The reason: White Pass is "narrow gauge" instead of "standard gauge" (4' 8½" wide track), and as such the Company can usually sneak by under requirements and regulations which would close down a standard gauge road "outside". This appears to be an oversight by the Federal Railroad Administration, but is understandable since the little known and obscure White Pass is the last narrow gauge common carrier left in the U.S. Also, it is generally viewed as a Canadian company. The 71 miles within Alaska under jurisdiction of American law, usually slide by unnoticed.

. Much of the freight equipment, passenger equipment and air brake equipment is antiquated and of museum vintage. Crews must deal with this as well as other problems, which are operational hazards.

. Because of all the previous factors, it is little wonder that the White Pass accident and safety record is atrocious. Passenger travel has increased each year, and with it the number of accident reports. Employees must be extra alert at all times to prevent injury or death from faulty equipment, hazardous operations, procedures, or management decisions affecting employment. White Pass employees maintain that they have "never lost a passenger's life" in their years of service. The employees risk their lives and can only count the number of close calls over the years, and knock on wood. The Company is playing Russian roulette with human lives, as it is on record for reducing the number of [illegible] personnel available to deal with the unexpected--and the neglected--hazards of working on railroading under the most extreme conditions.

## Statement of Position of the United Transportation Union

[illegible] of the United Transportation Union, Local [illegible], are responsible [illegible] to Congress [illegible], will [illegible] will also [illegible] Canadian corporation [illegible] than [illegible] rail. This is [illegible] interstate [illegible], particularly [illegible] --

[illegible] there is a pride [illegible] also. [illegible] should [illegible]

Lastly, very few individuals are aware of the delicate balance that exists in Ketchikan between labor and management. We feel that the introduction of this bill is an attempt by the Company to further drain our union treasury attending a battery of hearings in Juneau. The last time we had to testify it involved lengthy hours and much expense--something which the Company can easily afford.

Given this situation, our membership has nothing except the present State law to protect us from the whims of a foreign corporation. Our only defense at present lies in "An Act relating to train crews" as set forth in State law. It would thus seem beyond comprehension for our own lawmakers--our own elected representatives--to vote to repeal the only security which we in Ketchikan have in these difficult days.

Morrison L. Bates
Legislative Representative
United Transportation Union
Local 17.7
Ketchikan, Alaska 99901

SB

862

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF COMMERCE & ECONOMIC DEVELOPMENT

OFFICE OF THE COMMISSIONER

POUCH D
JUNEAU, ALASKA 99811
Phone: 465-2500

ALASKA TRANSPORTATION COMMISSION

# BILL ANALYSIS

SB 862: An Act relating to common carriers and contract carriers regulated by the Alaska Transportation Commission.

Senate Bill 862 would not have a fiscal impact on the Alaska Transportation Commission. The proposed amendments to AS 42.10. will not impact the Commission's workload as the amendments do not expand or reduce the Commission's responsibilities.

The passage of Senate Bill 862 would result in five amendments to AS 42.10, Alaska Motor Freight Carrier Act. Since each amendment will leave a different impact, we have elected to present our analysis on each amendment separately.

The first amendment, lines 11 through 19, page 1, basically relieves the Commission of the requirement to find special conditions exist if an application for a permit is processed in less than 30 days. The positive impact would be that the Commission could process applications for permits faster and would not be obligated to define a special condition. The negative impact could be that protestants would not be assured of the opportunity to file their petitions before the Commission acts.

The second amendment, line 23, page 1, simply deletes the words "rules and." The Commission does not see a problem with this deletion as any rules that would require compliance would be promulgated by regulation.

The third amendment, lines 3 to 8, page 2, is probably the most significant. The three elements are that specific minority-owned businesses, carriers utilizing dump type equipment and other designated carriers classified under AS 42.10.250 may be issued a permit without a showing of public convenience and necessity.

The positive aspect would be that certain minority-owned businesses, dump truck operators, and other possible classifications could be granted permits without having to prove public convenience and necessity. Such applicants would have to prove themselves financially able, properly equipped, and capable of conducting the services applied for. While this amendment would not eliminate the possibility of protests, it could limit protests to the issue of financial fitness, adequate equipment and capability to conduct services.

While this amendment would not deregulate these categories of applicants, the entrance of new applicants might be much easier than if they had to show public convenience and necessity for the services they wish to

perform. Currently, even if an applicant can demonstrate fitness, a permit will be denied if current permitted carriers can demonstrate that public convenience and necessity is being met by existing services.

Some people may consider that the amendment does not go far enough in guaranteeing minority-owned businesses entrance in the areas of contract carriage. The language is still permissive in that the term "may be issued" instead of "shall be issued" is used. Further, the group of minority-owned businesses is limited to those prequalified by the Small Business Administration. The amendment does not provide relief to businesses that might qualify as minority-owned by other agencies.

In the case of permits for carriers of commodities in bulk in open dump type equipment, the Commission agrees that the showing of public convenience and necessity should not be an issue when permits are granted.

The fourth and fifth amendments, line 9, page 2, repeal two sections of AS 42.10 that require operators of open dump type equipment to file and adhere to tariffs. The filing of tariffs can be especially burdensome to operators of dump type equipment. The Commission agrees with the repeal of both AS 42.10.280(a) and 42.10.310(b).

H. D. SCOUGAL
ALASKA TRANSPORTATION COMMISSION
April 2, 1982

# Alaska State Legislature

## Senate Committee on State Affairs

Vic Fischer, Chairman • Pouch V • Juneau, Alaska 99811 • (907) 465-4954


Official Business

March 29, 1982

To: Senator Bill Ray, Chair
Senate Transportation Committee

From: Senator Vic Fischer Vic

Re: Backup information on SB 862 - Regulating Common Carriers.

SB 862 changes statutes governing the regulation of dump trucks and requirements for obtaining common carrier permits for some small businesses.

Provisions de-regulating carriers of commodities in bulk in open dump-type equipment were introduced by request from Walter Kubley, of the Alaska Transportation Commission.

According to Kubley, requests for common carrier permits to operate dump trucks are routinely granted without exception. Thus, present restrictions merely create regulatory roadblocks while serving no real public purpose. Under SB 862, current health and safety standards would remain, but the application process would be streamlined both in time and paperwork.

SB 862 also exempts carriers awarded contracts as minority owned businesses through the Small Business Administration from having to show "public convenience and necessity".

A portion of SBA contracts are set aside for minority owned business under Section 8A. These contractors are sometimes required to transport items between federal sites that require traveling over state roads, bringing them under the jurisdiction of the ATC. ATC regulations require every contractor to show public convenience and necessity. If the route is already covered by an existing common carrier, ATC cannot grant a permit to the minority contractor without extensive hearings and arguments. Since these contractors are, by their nature, very small business, the cost of fighting ATC requirements is prohibitive.

State law is presently making implementation of a federal program for minority owned small businesses difficult, if not impossible. Since this problem has affected only two applicants, as far as ATC records indicate, granting exemption should present no significant problem for current carriers.

Since the Senate State Affairs Committee is meeting at the same time as your committee, I will be unable to testify regarding this bill. I hope this memo will assist.

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FROM: CINDY, ANCH TO: JNU INFO
TARGET: LJH2 SUBJ: POM PAGE 0001

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TO: SENATORS FISCHER AND STIMSON, COLLETTA, PARR, BRADLEY, KERTTULA
ALL REPRESENTATIVES

FROM: PHIL PLEASANT,4437 E. 7TH, ANCH 99503 337-1469

BLACK BUSINESS AGAIN DENIED ACCESS TO THE FREE MARKET PLACE. REFER TO APPLICATION PERMIT TO ALASKA TRANSPORTATION COMMISSION, DOCKET #81478 MF/O IN REGARDS TO A PERMIT FOR PYE-PER TRANSPORT, FOR CONTRACT CARRIER PERMIT TO TRANSPORT GOODS FROM ELMENDORF WHICH WAS DENIED. WE NEED TO HAVE SOME LEGISLATIVE ACTION TO INSURE OUR PARTICIPATION IMMEDIATELY, POSSIBLY TOMORROW, AS WE WERE TO BEGIN OPERATIONS JAN. 2, 1982 AND ARE STILL BEING DENIED ACCESS TO THE MARKET PLACE.I AM TOLD BY THE TRANSPORTATION COMMISSION THAT REGULATIONS MUST BE CHANGED IN ORDER FOR US TO OBTAIN ACCESS TO THE MARKET PLACE.

SB862

SB

890

SENATOR
**DON GILMAN**

Juneau Ph.
(907) 465-4934

# Alaska State Legislature

HOME ADDRESS
P.O. BOX 630
KENAI, ALASKA 99611
(907) 283-4182

DURING SESSION
POUCH V
JUNEAU, ALASKA 99811

## State Senate

April 29, 1982

MEMORANDUM

To: Senator Bill Ray

From: Senator Don Gilman

Re: Projects for Inclusion in SB 890 (Bond Bill for Transportation)

I would like the following projects included as amendments in SB 890.

| | |
|---|---|
| (1) Homer Port and Harbor - Phase II | $7,300. |
| (2) Kenai/Funny River Bridge and Approaches | 6,500. |
| (3) Anchor River Road | 7,100. |
| (4) East End Road | 8,750. |

This is an ongoing project with Phase I currently under construction.

Items (2), (3), and (4) appear in the Kenai Regional Transportation Study as prepared by the Department of Transportation (see attachment). They are identified as priority projects which rate high in potential use and provide significant economic benefit to the entire Kenai Peninsula transportation net. Items (2), (3), and (4) are the highest priority items not covered by other funding sources.

Kenai River Bridge (2) has been designed by the Department of Transportation, and the design is in the final stages of approval. Anchor River Road (3) and East End Road (4) are under design by contract through the Kenai Peninsula Borough. Design of these projects will be complete and ready for the 1983 construction season.

Attachment

Chart #3

## HIGH PRIORITY PROJECTS

| | Ongoing DOT/PF Project | Ongoing KPB or Municipal Projects | Community Desires | Economic Development | Use Deficiency (safety, traffic) overload, etc) |
|---|---|---|---|---|---|
| **Roads** | | | | | |
| 1. Anchor Point | | x | x | | |
| 2. Airport Bypass (Kachemak Dr.) | x | | x | | |
| 3. Bear Creek | | x | x | | |
| 4. Big Eddie | | x | x | | |
| 5. Cannery | | | x | | |
| 6. Ciechanski | | | x | | |
| 7. Clam Gulch | | | | x | x |
| 8. Cohoe Loop | | | x | | |
| 9. East End - Phases I, II, & III | x | x | x | | x |
| 10. East End - Phase IV | | | x | x | x |
| 11. East Hill | x | | x | | x |
| 12. Feuding Lane/Kenai Keys | | | x | | |
| 13. Funny River/Bridge/Scout Lake | x | | x | x | |
| 14. Halbouty | | x | x | | |
| 15. Homesite Loop | | | | | |
| 16. Kenai Alternate | | | x | | |
| 17. Kenai Spur | | | x | | |
| 18. Kingsley/Oil Well | x | x | x | x | |
| 19. Lake | | | x | | x |
| 20. Lamplight/Bolt | | x | x | | |
| 21. Lou Morgan/ Scout Lake | x | | x | x | |
| 22. Lowell Point | | | x | | x |
| 23. Meyers/Strawberry | | x | x | | |
| 24. Ninilchik/ Beach | | | x | x | x |
| 25. North Anchor River | | | x | | x |
| 26. North Kenai - Phases I and II | x | | x | | |
| 27. North Kenai - Phase III | | | x | | |
| 28. Olson/Bunnel/Main | | | x | | |
| 29. Pioneer Ave. | | | x | | x |
| 30. Resurrection River | | x | x | x | |
| 31. Seldovia Airport Rd./ Main St. | | | x | | x |
| 32. Seldovia St./ Anderson Way | | | x | | |
| 33. Diamond Ridge/ Olsen Rd. | | x | x | | |
| 34. Soldotna Frontage/Wye | | | | | x |
| 35. Sports/Mackeye Lake Connection | | x | x | | |
| 36. Seward Highway | x | | x | | x |
| 37. Sterling Highway | x | | x | | x |
| 38. Tustumena Lake | x | | | x | |
| 39. West Hill | x | | x | | x |
| **Air** | | | | | |
| 40. English Bay Airport | x | | x | | |
| 41. Homer Apron Airport | x | | x | | x |
| 42. Kenai Airport | | x | x | | x |
| 43. Port Graham Airport | | | x | | |
| 44. Seldovia Airport | | | x | | x |
| 45. Seward Airport | | | x | | x |
| 46. Soldotna Airport | | | x | | x |
| **Marine** | | | | | |
| 47. English Bay Shuttle Ferry Ramp | | | x | | |
| 48. Fourth of July Creek | x | x | x | x | |
| 49. Homer Ferry Terminal and Passenger Bldg. | x | | x | x | x |
| 50. Homer Fish Dock | x | x | x | | |
| 51. Homer Small Boat Harbor | x | x | x | x | |
| 52. Homer Ocean Dock | | | x | | |
| 53. Kachemak Park Shuttle Ferry Ramp | | | | x | |
| 54. Kasilof Harbor | | | x | x | |
| 55. Kenai Small Boat Harbor | | | x | | |
| 56. Ninilchik Harbor | | | x | x | x |
| 57. Port Graham Harbor/Ferry Dock | x | x | x | x | |
| 58. Seldovia Ferry Terminal and Passenger Bldg. | x | | x | x | x |
| 59. Seward Ferry Terminal | | | x | x | x |
| 60. Seward Small Boat Harbor | | | x | x | |
| 61. Shuttle Ferry Vessel | x | x | x | x | |
| 62. Tustumena Replacement | x | | x | | x |
| **Rail** | | | | | |
| 63. Fourth of July R.R. Spur | | | x | | |

SCR

5

# STATE OF ALASKA

JAN 26 1981
JAY S. HAMMOND, GOVERNOR

**DEPARTMENT OF LAW**

OFFICE OF THE ATTORNEY GENERAL

POUCH K–STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3656

January 21, 1981

Daniel L. Behnke
Project Engineer
TETRA TECH, INC.
Suite 101
909 W. 9th Ave.
Anchorage, AK 99501

Re: Proposed Territory Waiver-Nome Causeway. Our file J-66-450-81

Dear Mr. Behnke:

Your December 3, 1980 letter to Mr. Claud Hoffman regarding a possible waiver of any claim the state might make to additional submerged lands based on construction of the proposed Nome causeway has been referred to me.

Following discussion with Robert E. LeResche, Commissioner of the Department of Natural Resources, and Wilson L. Condon, Attorney General, I have been instructed to inform you that we cannot give the requested assurance that construction of the causeway will not extend the state's boundary seaward. The state has given such assurances only once in the past, and then only because failure to do so might have resulted in a failure to obtain maximum production from the Prudhoe Bay oil and gas field.

If you have additional questions, I will be happy to discuss this matter at your convenience.

Sincerely,

WILSON L. CONDON
ATTORNEY GENERAL

By: G. Thomas Koester
G. Thoams Koester
Assistant Attorney General

GTK:dlm

cc: Senator Frank R. Ferguson
Mr. I. Widom, City of Nome
Mr. J. Caruth, Corps of Engineers
Mr. Orin B. Collier, BLM
Mr. Louis F. Claiborne, Deputy Solicitor General
Representative John G. "Jack" Fuller

03-C5LH

POSITION PAPER/Department of Health & Social Services

POSITION PAPER

SENATE CONCURRENT RESOLUTION NO. 5

Purpose: Free travel for severely handicapped Alaskans on the State marine highway system.

Analysis: The resolution requests the Governor to direct the Division of Marine Highways to initiate a program whereby severely handicapped Alaskans may travel on state ferries for no charge on a space-available basis between Alaska's points of embarkation from October 1 to May 15 annually.

We estimate that about 2,000 disabled Alaskans do not have the income or employment potential to allow purchase of ferry tickets without presenting the person with a further hardship. Of this total, about 250 live in areas served by the ferry system.

The Department of Transportation and Public Facilities has initiated the process of making the ferries more accessible to the handicapped. The car and passenger decks on the Columbia, Matunuska, and Taku are accessible by elevator. Continued work is needed for barrier free access to toilet facilities on these ferries and for removing architectural barriers on other ferries.

One suggestion for improving this resolution would be extending the time of this travel throughout the year, since it is to be made available on a space available basis in the original instance.

Departments Position:

The Department supports passage of the resolution.

Recommended by: Verner Stillner, MD
Verner Stillner, Director
Division of Mental Health and
Developmental Disabilities

Date: 2/2/81

Recommended by: David Bruce
David Bruce, Deputy Director
Division of Public Health

Date: 2/2/81

Approved by: Helen D. Beirne
Helen D. Beirne, Commissioner
Department of Health & Social Services

Date: 5/2/81

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

# FISCAL NOTE

I. REQUEST
Bill/Resolution No. Senate Concurrent Resolution No. 5
Title Free travel for severely handicapped Alaskans for the State marine highway system.
Requested by Commissioner's Office Date January 29, 1981

II. FISCAL DETAIL
Agency Affected Department of Health and Social Services
Program Category Affected Division of Marine Highways.
BRU, Program, or Subprogram(s) Affected
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
|---|---|---|---|---|---|---|---|
| 100 | PERSONAL SERVICES | | | | | | |
| 200 | TRAVEL | | | | | | |
| 300 | CONTRACTUAL | | | | | | |
| 400 | COMMODITIES | | | | | | |
| 500 | EQUIPMENT | | | | | | |
| 600 | LAND & STRUCTURES | | | | | | |
| 700 | GRANTS, CLAIMS, ETC. | | | | | | |
| | TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

No cost impact is forseen to the Department of Health & Social Services as a result of this legislation.

IV. DATE January 29, 1981 PREPARED BY Verner Stillner, Director
AGENCY Mental Health & Developmental Disabilities
PHONE 465-3370

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

33-001 (Rev. 12/80

Draft CS for SCR5

Explanation of changes proposed by the sponsor, Senator Eliason.

Took out "severely" throughout the resolution and added the definition of "handicapped person" from the Federal Rehabilitation Act of 1973. The State Department of Transportation felt that a single definition for handicapped was necessary and preferred that it be defined at the legislative level.

Changed "Alaskans" to "persons" throughout to avoid legal challenge on basis of discrimination against out-of-state residents.

Added provision for requiring the signature of a physician verifying that the person meets the established definition of handicapped person. (D.O.T. was also concerned about how to administrate the program.) This method of qualification for the free travel pass would provide uniform criteria, would be simple and inexpensive to administer and most importantly, would protect the privacy and right to medical confidentiality of the handicapped person. The simple yes or no and signature of the doctor negates the need for the handicapped persons to specify or describe their disabilities to any non-medical personnel such as the ferry's purser.

SCR

6

# Alaska State Legislature

## Senate

JUNEAU, ALASKA

6 January 1981

SCR 6 BRIEF

In 1980, the Legislature passed and the voters approved $5,000,000 for the construction of a deep water port facility. Since that time, the Bureau of Land Management has objected to the construction of a causeway that is needed to build the port facility. In turn, the Army Corp of Engineers who is responsible for issuing the permit to construct the causeway, has requested that the State of Alaska waive any claim to the submerged lands that would result from the extension of the causeway outward from the shoreline by 3600 feet.

The Department of Natural Resources and the Attorney General have both denied the request for the waiver. The DNR and AG state that to waive claim would constitute a challenge to the state's three mile territory authority. The DNR and AG's office opinion, coupled with the BLM objection, places the possiblity of lengthy litigation to the forefront. This is not a viable option.

SCR 6 would direct the DNR and AG's office to waive claim to the to additional submerged lands. The AG's office says that they have only once given waiver to additional claims in a case that would have resulted in lengthy litigation and held up the project. Such is the case this time with the Nome port facility. If the project is delayed because of legal entanglements present funding amounts would prove inadequate which would result in more state funding above and beyond what has been appropriated. This is not a fair trade-off.

In addition, there would be severe economic loss in the region with lost jobs, excessive lieterage fees and delayed resource development that is dependent upon the port facility.

STATE OF ALASKA

JAN 26 1981
JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF LAW

OFFICE OF THE ATTORNEY GENERAL

POUCH K–STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3656

January 21, 1981

Daniel L. Behnke
Project Engineer
TETRA TECH, INC.
Suite 101
909 W. 9th Ave.
Anchorage, AK 99501

Re: Proposed Territory Waiver-Nome Causeway. Our file J-66-450-81

Dear Mr. Behnke:

Your December 3, 1980 letter to Mr. Claud Hoffman regarding a possible waiver of any claim the state might make to additional submerged lands based on construction of the proposed Nome causeway has been referred to me.

Following discussion with Robert E. LeResche, Commissioner of the Department of Natural Resources, and Wilson L. Condon, Attorney General, I have been instructed to inform you that we cannot give the requested assurance that construction of the causeway will not extend the state's boundary seaward. The state has given such assurances only once in the past, and then only because failure to do so might have resulted in a failure to obtain maximum production from the Prudhoe Bay oil and gas field.

If you have additional questions, I will be happy to discuss this matter at your convenience.

Sincerely,

WILSON L. CONDON
ATTORNEY GENERAL

By: G. Thomas Koester
G. Thoams Koester
Assistant Attorney General

GTK:dlm

cc: Senator Frank R. Ferguson
Mr. I. Widom, City of Nome
Mr. J. Caruth, Corps of Engineers
Mr. Orin B. Collier, BLM
Mr. Louis F. Claiborne, Deputy Solicitor General
Representative John G. "Jack" Fuller

# MEMORANDUM — State of Alaska

TO: Wilson Condon, Attorney General
Department of Law

DATE: 12/23/80

FILE NO: 2425

Attn: Tom Koester, Assistant Attorney General
Department of Law

TELEPHONE NO: 263-2200

FROM: Claud M. Hoffman, Director
Division of Technical Services

SUBJECT: Apln. for Construction of Causeway in Norton Sound

BY: Irving Zirpel, Jr., Chief
Coastal/Marine Boundary Section

The attached letters are self explanatory requesting a waiver of the State of Alaska's right to extend the boundary of its territorial sea due to the proposed construction of a causeway and docking facility.

We have examined the Norton Sound, Nome Harbor and Approaches Chart#16206 and compared the chart shoreline data with 1980 aerial photography (both black and white and color infrared). We find very little difference due to accretion or erosion. The area involved if the seaward boundary is extended due to the proposed causeway construction consist of approximately 665 acres.

Being as the shoreline in this area appears to be relatively stable and is adequately shown on chart #16206, and the proposed construction is not to extend seaward beyond the 31 ft. depth line, we recommend that the causeway construction be permitted without effecting the seaward boundary of the state's territorial sea.

The above is submitted for your perusal and comments.

RECEIVED
Department of Law
Juneau, Alaska

DEC 30 1980

AM 7,8,9,10,11,12,1,2,3,4,5,6 PM

02-001A(Rev.10/79)

TETRA TECH, INC.
SUITE 101
509 W. 8th AVE.
ANCHORAGE, ALASKA 99501
TELEPHONE (907) 274-4331
TELEX NO 090-25424
TETRATECH PSC

Tom Coste
Wm Condon

December 3, 1980

Please review
& let's discuss

Mr. Claude Hoffman, Director
Division of Technical Services
Department of Natural Resources
State of Alaska
703 W. Northern Lights Blvd.
Suite 200
Anchorage, Alaska 99503

Dear Sir:

This is in regards to an application to the Corps of Engineers by the City of Nome for a permit for construction of a rubblemound causeway and docking facility in Norton Sound, Alaska. The location and orientation of the causeway are shown on the accompanying drawings.

The Corps of Engineers has received a protest from the Division of Cadastral Survey, Bureau of Land Management, (see attached letter) that the construction of the 3,400 foot causeway would alter the existing shoreline, affecting approximately 400 acres of Federal OCS lands. (The length of causeway and dock is presently proposed to be 3600 feet.) They request that permission to build the causeway be withheld unless they receive assurance from the State of Alaska that the construction will not extend the State boundary seaward into what is presently Federal OCS land.

The City of Nome would like to have this potential conflict resolved in a timely manner so that the construction of the port facility is not delayed. Tetra Tech is acting for the City of Nome in this matter, and will be happy to supply any additional information you require.

Sincerely,

Daniel L. Behnke

Daniel L. Behnke
Project Engineer

DLB:am
Enclosure
cc: Mr. I. Widom, City of Nome
Mr. J. Caruth, Corps of Engineers
Mr. Orin Collier, BLM

IN REPLY REFER TO: 17

# United States Department of the Interior

9640.2 (720)
(Corps of Engineers)

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

November 5, 1980

Alaska District, Corps of Engineers
Attention: Regulatory Functions Branch
P.O. Box 7002
Anchorage, Alaska 99510

Gentlemen:

This is in regard to your notice POACO Application No. 071-0YD-2-800311 dated 24 October 1980.

As shown on the plans enclosed with the notice, the proposed rubblemound causeway would extend the present shoreline seaward 3,400 feet to affect about 400 acres with a similar area coverage to the OCS.

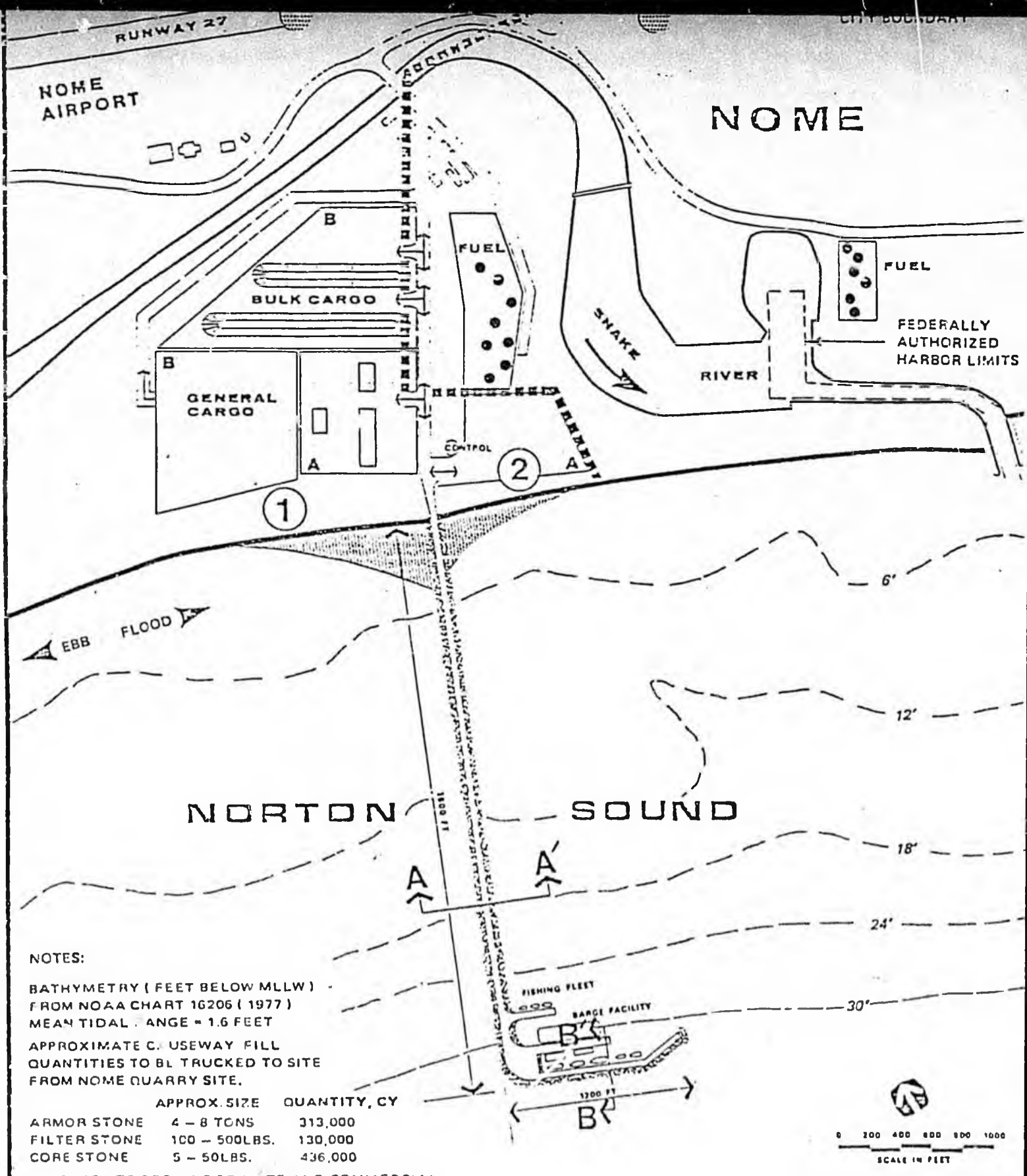
This Bureau is always concerned where a shoreline alteration tends to extend a State boundary seaward to the detriment of the Federal ownership on the OCS.

Accordingly, we must protest the application unless there is assurance by the State of Alaska that the construction will not extend the State boundary seaward.

Sincerely yours,

Orin B. Collier

Orin B. Collier
Acting Chief
Division of Cadastral Survey




NOTES:

BATHYMETRY ( FEET BELOW MLLW ) - FROM NOAA CHART 16206 ( 1977 )
MEAN TIDAL . ANGE = 1.6 FEET

APPROXIMATE C. USEWAY FILL QUANTITIES TO BL TRUCKED TO SITE FROM NOME QUARRY SITE.

| | APPROX. SIZE | QUANTITY, CY |
|---|---|---|
| ARMOR STONE | 4 – 8 TONS | 313,000 |
| FILTER STONE | 100 – 500LBS. | 130,000 |
| CORE STONE | 5 – 50LBS. | 436,000 |

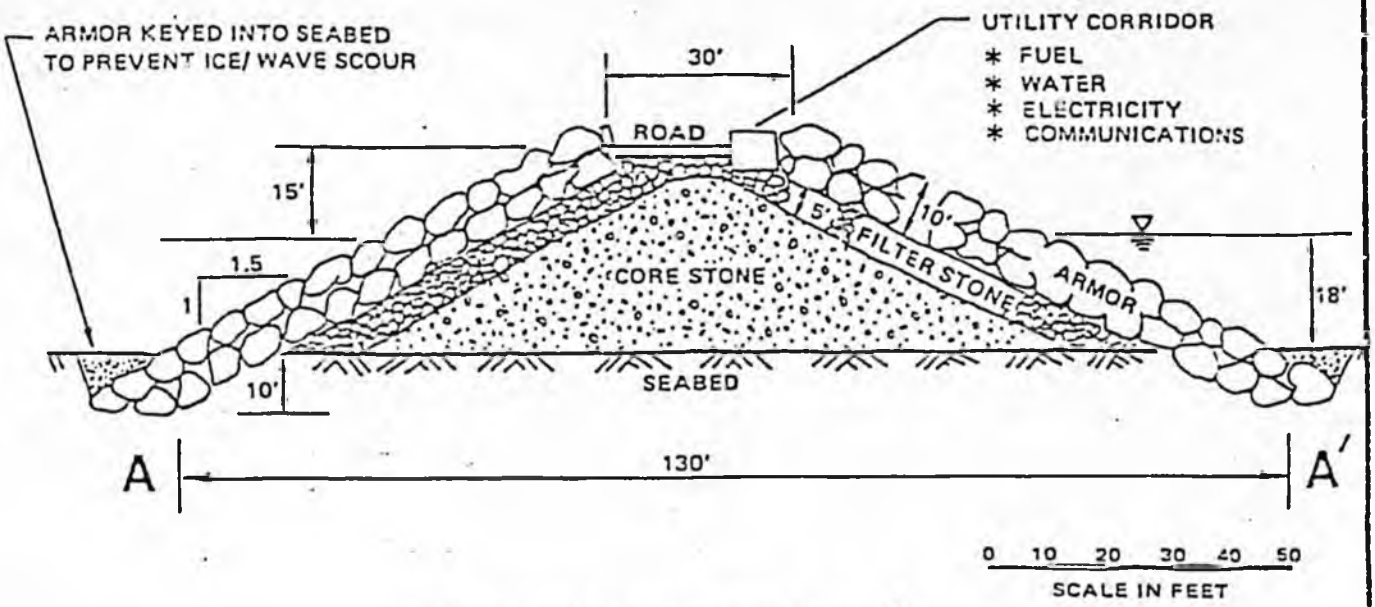
PURPOSE. TO PROVIDE PRIVATE AND COMMERCIAL MEDIUM DRAFT PORT FACILITIES TO CITY AND REGION.

ADJACENT PROPERTY OWNERS: (1) (2) ALASKA GOLD COMPANY

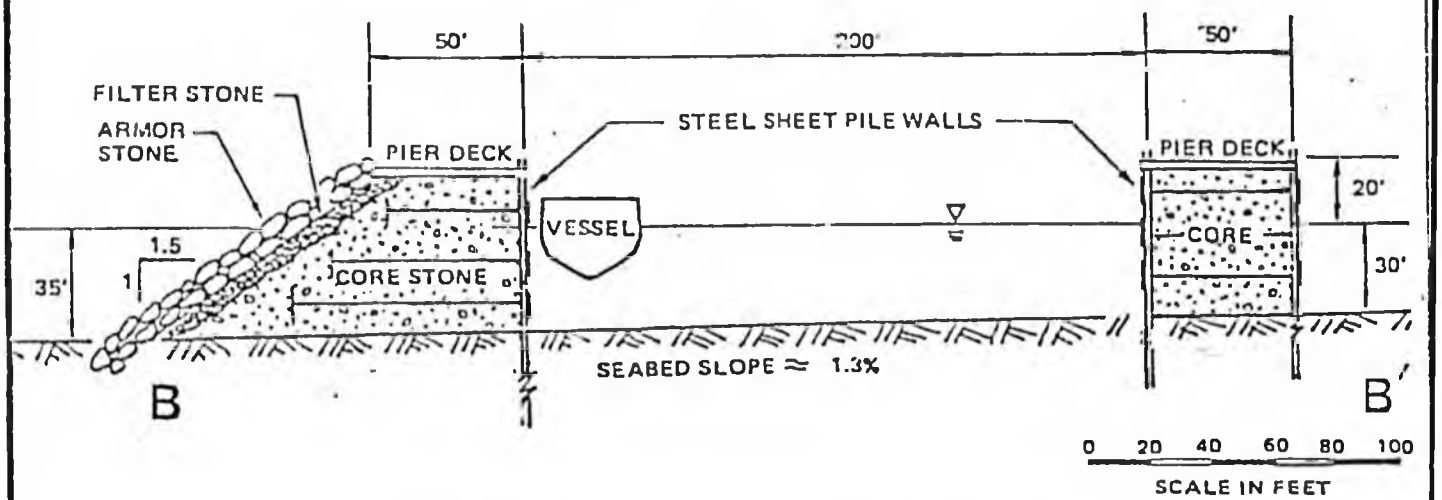
PORT OF NOME
BERING SEA, ALASKA

APPLICANT: CITY OF NOM

SHEET 2 OF 3 . 9/10/8




CAUSEWAY CROSS–SECTION, A–A′



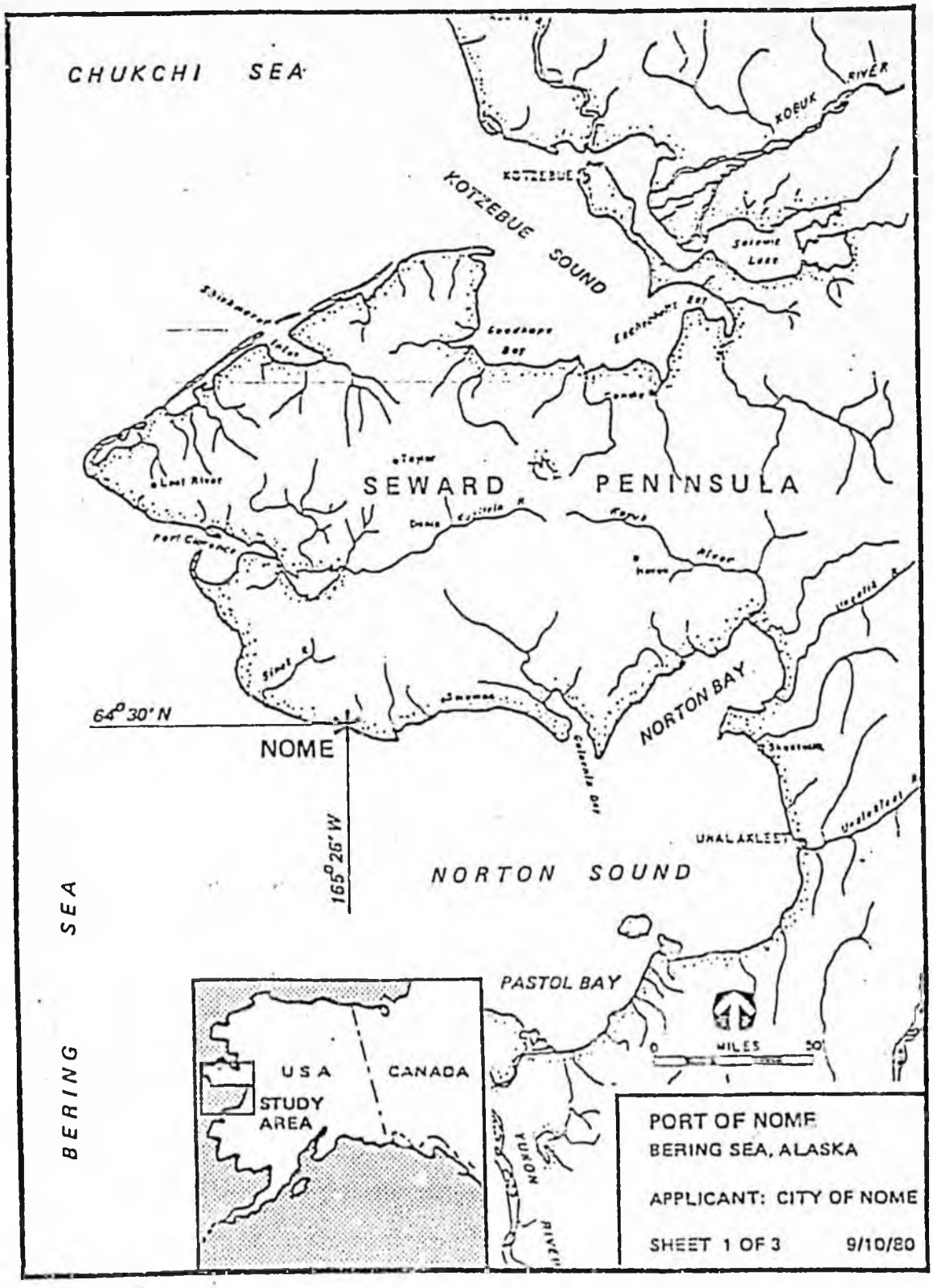

OFFSHORE TERMINAL CROSS–SECTION, B–B′

PORT OF NOME
BERING SEA, ALASKA

APPLICANT: CITY OF NOME

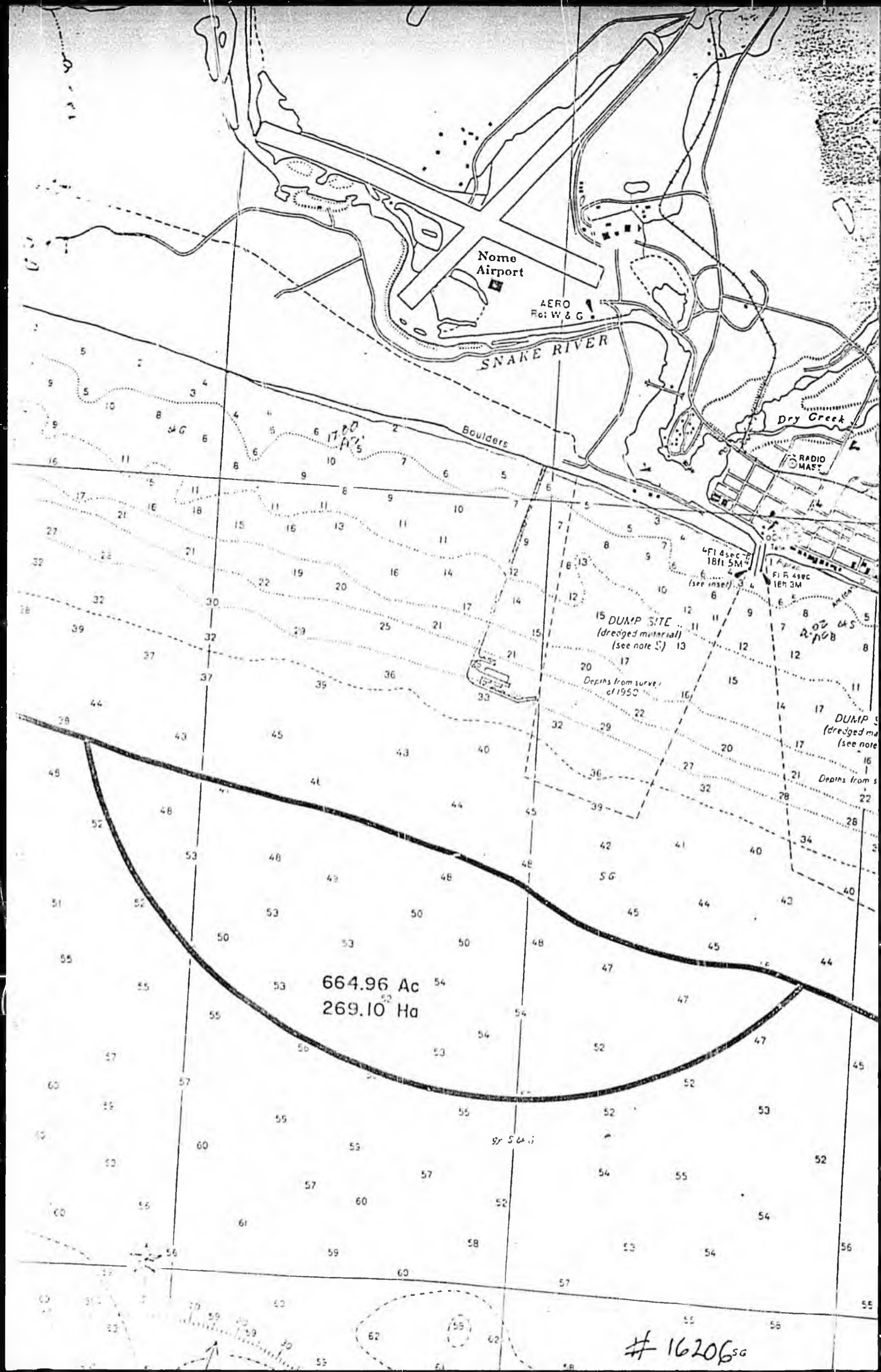
SHEET 3 OF 3 9/10/80

DATUM IS MEAN LOWER LOW WATER


CHUKCHI SEA
KOBUK RIVER
KOTZEBUE
KOTZEBUE SOUND
SEWARD PENINSULA
NORTON BAY
64°30'N
NOME
165°26'W
NORTON SOUND
UNALAKLEET
PASTOL BAY
BERING SEA
USA
CANADA
STUDY AREA
YUKON RIVER
0 MILES 50
PORT OF NOME
BERING SEA, ALASKA
APPLICANT: CITY OF NOME
SHEET 1 OF 3 9/10/80

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.


Nome
Airport
AERO
Ref W & G
SNAKE RIVER
Boulders
Dry Creek
RADIO
MAST
Fl 4 sec
18ft 5M
Fl R 4sec
18ft 3M
(see inset)
DUMP SITE
(dredged material)
(see note 5)
Depths from survey
of 1950
664.96 Ac
269.10 Ha
SG
#16206SG

SCR

35

# Alaska State Legislature

## Senate

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

MEMORANDUM

TO: Senator Bill Ray

FROM: Senator Brad Bradley BB

SUBJ: SCR 35/Petersville Road

**********

Attached is the backup information from Anchorage DOT/PF Office that was delayed in the mail and could not be sent by telex, because the system was down for two days.

Thank you for scheduling. I should be prepared if you will kindly reschedule in the near future.

BB/emb

SCR 35 PETERSVILLE RD.

T.26 & 27 N., R. 687 W., Seward Maridan

USGS Quads Talkeetna (B-1, B-2)

The Petersville road is presently maintained year round from the Parks Highway to Mile 7.4, the bridge at Moose Creek. There are approximately 20 families that live year round at mile 10.

The Department of Natural Resources is presently having open entry land disposals from miles 9 thru 12 on the Petersville Road. This will bring approximately 300 new land owners into this area.

In order to allow access to the present residence and new residencies it is requested that this highway be upgraded to a year round roadway with a 28 foot roadbed from mile 7.4 to mile 12.9 for a 5.5 mile improvement. This will allow access to the disposal area and a 28 foot roadbed will be suitable for school buses.

The Department of Transportation in Anchorage estimates that they will need approximately $400,000 to do the preliminary study and roadwork.

This road continues to Petersville at mile 36, and access is only open in the summer.

Pls SCR 35

type

PETERSVILLE RD.

T.26+27 N., R68W

T.26 & 27 N., R. 68W., SEWARD MERIDAN

USGS QUADS: TALKEETNA (B-1, B-2)

B-1, B-2

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The Department of Transportation in Anchorage estimates that they will need approximately $400,000 to do the preliminary study and footwork.

This road continues to Petersville at mile 36, but access is only open in the summer.

SJR

12

# Alaska State Legislature

## Senate

JUNEAU, ALASKA

SJR 12 BRIEF

In 1980, the Legislature passed and the state voters approved, $5,000.000 to build the Nome port facility. Since that time, the City of Nome has started work to construct the port facility. However, the Bureau of Land Management, Department of Interior, has lodged an objection to the building of a causeway that is needed for port construction to proceed.

BLM has lodged an objection with the Corps of Engineers and has requested that the permit not be granted unless the state waives claim to any of the submerged lands resulting from the "new" shoreline 3600 Ft. out from the existing shoreline.

SJR 12 would recommend that the Corps of Engineers, who is responsible for issuing the permit, disregard the BLM objection and grant the permit.

The deep water port facility in Nome is vital to the economic well being of the entire region. If the causeway permit is not granted and the port facility is not built, the residents of the Nome region will continue to pay excessive cost for literage fees, loss of jobs and delay needed resource development.

# STATE OF ALASKA

JAN 26 1981

JAY S. HAMMOND, GOVERNOR

**DEPARTMENT OF LAW**

OFFICE OF THE ATTORNEY GENERAL

POUCH K-STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3656

January 21, 1981

Daniel L. Behnke
Project Engineer
TETRA TECH, INC.
Suite 101
909 W. 9th Ave.
Anchorage, AK. 99501

Re: Proposed Territory Waiver-Nome Causeway. Our file J-66-450-81

Dear Mr. Behnke:

Your December 3, 1980 letter to Mr. Claud Hoffman regarding a possible waiver of any claim the state might make to additional submerged lands based on construction of the proposed Nome causeway has been referred to me.

Following discussion with Robert E. LeResche, Commissioner of the Department of Natural Resources, and Wilson L. Condon, Attorney General, I have been instructed to inform you that we cannot give the requested assurance that construction of the causeway will not extend the state's boundary seaward. The state has given such assurances only once in the past, and then only because failure to do so might have resulted in a failure to obtain maximum production from the Prudhoe Bay oil and gas field.

If you have additional questions, I will be happy to discuss this matter at your convenience.

Sincerely,

WILSON L. CONDON
ATTORNEY GENERAL

By: G. Thomas Koester
G. Thoams Koester
Assistant Attorney General

GTK:dlm

cc: Senator Frank R. Ferguson
Mr. I. Widom, City of Nome
Mr. J. Caruth, Corps of Engineers
Mr. Orin B. Collier, BLM
Mr. Louis F. Claiborne, Deputy Solicitor General
Representative John G. "Jack" Fuller

03-C5LH

# MEMORANDUM State of Alaska

TO: Wilson Condon, Attorney General
Department of Law

DATE: 12/23/80

FILE NO: 2425

Attn: Tom Koester, Assistant Attorney General
Department of Law

TELEPHONE NO: 263-2200

FROM: Claud M. Hoffman, Director
Division of Technical Services

SUBJECT: Apln. for Construction of Causeway in Norton Sound

BY: Irving Zirpel, Jr., Chief
Coastal/Marine Boundary Section

The attached letters are self explanatory requesting a waiver of the State of Alaska's right to extend the boundary of its territorial sea due to the proposed construction of a causeway and docking facility.

We have examined the Norton Sound, Nome Harbor and Approaches Chart#16206 and compared the chart shoreline data with 1980 aerial photography (both black and white and color infrared). We find very little difference due to accretion or erosion. The area involved if the seaward boundary is extended due to the proposed causeway construction consist of approximately 665 acres.

Being as the shoreline in this area appears to be relatively stable and is adequately shown on chart #16206, and the proposed construction is not to extend seaward beyond the 31 ft. depth line, we recommend that the causeway construction be permitted without effecting the seaward boundary of the state's territorial sea.

The above is submitted for your perusal and comments.

RECEIVED
Department of Law
Juneau, Alaska

DEC 30 1980

AM 7,8,9,10,11,12,1,2,3,4,5,6 PM

4

02-001A(Rev.10/79)

Tom Coster ... June
Wm Condon

DOI Europe
Please review
& let's discuss

TETRA TECH, INC.
SUITE 101
808 W. 9th AVE.
ANCHORAGE, ALASKA 99501
TELEPHONE (907) 274-4531
TELEX NO. 090-25424
TETRATECH PSD

December 3, 1980

Mr. Claude Hoffman, Director
Division of Technical Services
Department of Natural Resources
State of Alaska
703 W. Northern Lights Blvd.
Suite 200
Anchorage, Alaska 99503

Dear Sir:

This is in regards to an application to the Corps of Engineers by the City of Nome for a permit for construction of a rubblemound causeway and docking facility in Norton Sound, Alaska. The location and orientation of the causeway are shown on the accompanying drawings.

The Corps of Engineers has received a protest from the Division of Cadastral Survey, Bureau of Land Management, (see attached letter) that the construction of the 3,400 foot causeway would alter the existing shoreline, affecting approximately 400 acres of Federal OCS lands. (The length of causeway and dock is presently proposed to be 3600 feet.) They request that permission to build the causeway be withheld unless they receive assurance from the State of Alaska that the construction will not extend the State boundary seaward into what is presently Federal OCS land.

The City of Nome would like to have this potential conflict resolved in a timely manner so that the construction of the port facility is not delayed. Tetra Tech is acting for the City of Nome in this matter, and will be happy to supply any additional information you require.

Sincerely,

Daniel L. Behnke

Daniel L. Behnke
Project Engineer

DLB:am
Enclosure
cc: Mr. I. Widom, City of Nome
Mr. J. Caruth, Corps of Engineers
Mr. Orin Collier, BLM

IN REPLY REFER TO: AS

9640.2 (720)
(Corps of Engineers)

# United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

November 5, 1980

Alaska District, Corps of Engineers
Attention: Regulatory Functions Branch
P.O. Box 7002
Anchorage, Alaska 99510

Gentlemen:

This is in regard to your notice NPACO Application No. 071-OYD-2-800311 dated 24 October 1980.

As shown on the plans enclosed with the notice, the proposed rubblemound causeway would extend the present shoreline seaward 3,400 feet to affect about 400 acres with a similar area coverage to the OCS.

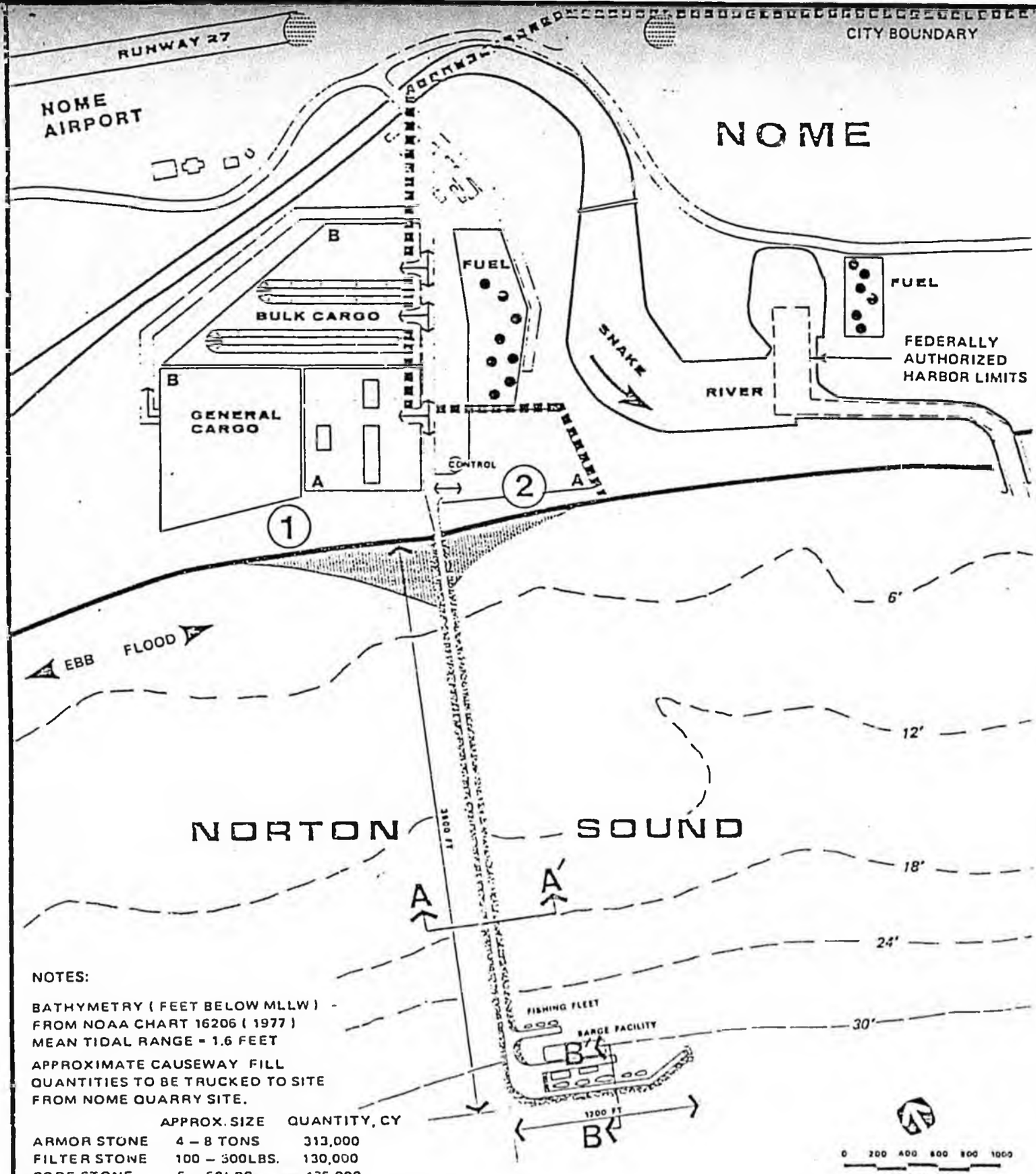
This Bureau is always concerned where a shoreline alteration tends to extend a State boundary seaward to the detriment of the Federal ownership on the OCS.

Accordingly, we must protest the application unless there is assurance by the State of Alaska that the construction will not extend the State boundary seaward.

Sincerely yours,

Orin B. Collier

Orin B. Collier
Acting Chief
Division of Cadastral Survey




NOTES:

BATHYMETRY ( FEET BELOW MLLW ) - FROM NOAA CHART 16206 ( 1977 )
MEAN TIDAL RANGE = 1.6 FEET

APPROXIMATE CAUSEWAY FILL QUANTITIES TO BE TRUCKED TO SITE FROM NOME QUARRY SITE.

| | APPROX. SIZE | QUANTITY, CY |
|---|---|---|
| ARMOR STONE | 4 – 8 TONS | 313,000 |
| FILTER STONE | 100 – 300LBS. | 130,000 |
| CORE STONE | 5 – 50LBS | 436,000 |

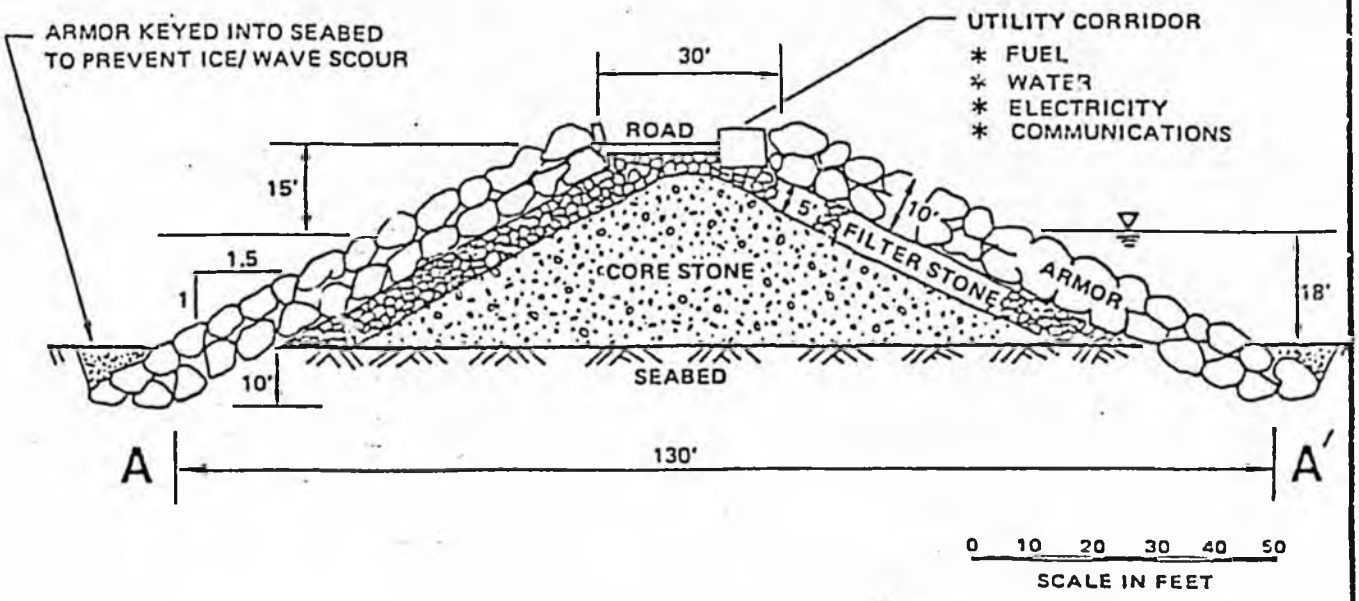
PURPOSE: TO PROVIDE PRIVATE AND COMMERCIAL MEDIUM DRAFT PORT FACILITIES TO CITY AND REGION.

ADJACENT PROPERTY OWNERS: (1) (2) ALASKA GOLD COMPANY

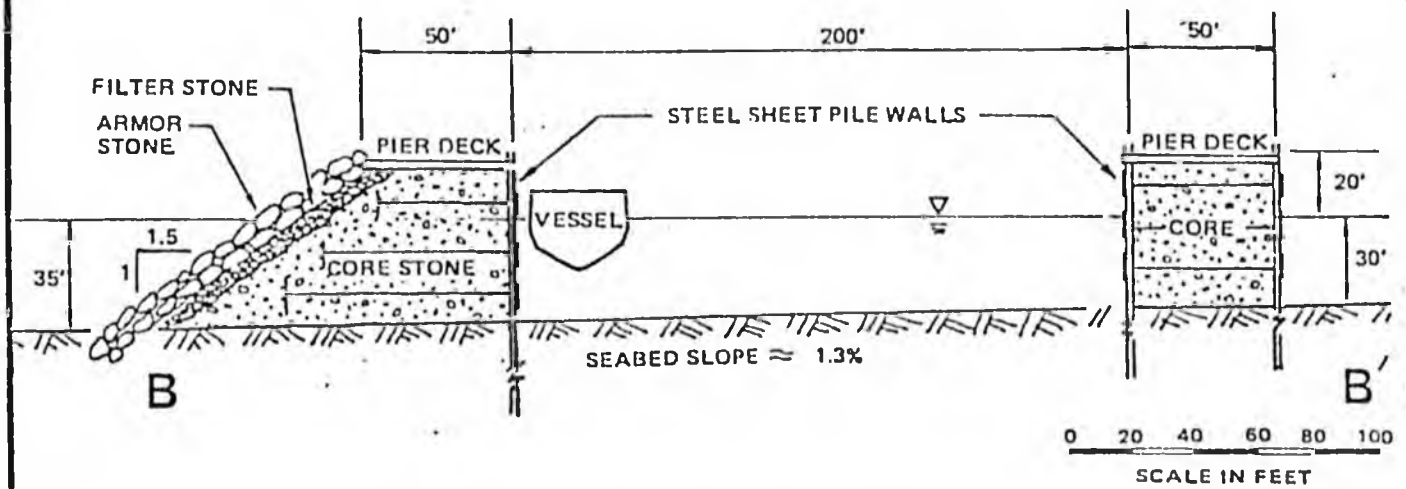
PORT OF NOME
BERING SEA, ALASKA

APPLICANT: CITY OF NOM

SHEET 2 OF 3 9/10/8




CAUSEWAY CROSS–SECTION, A–A′



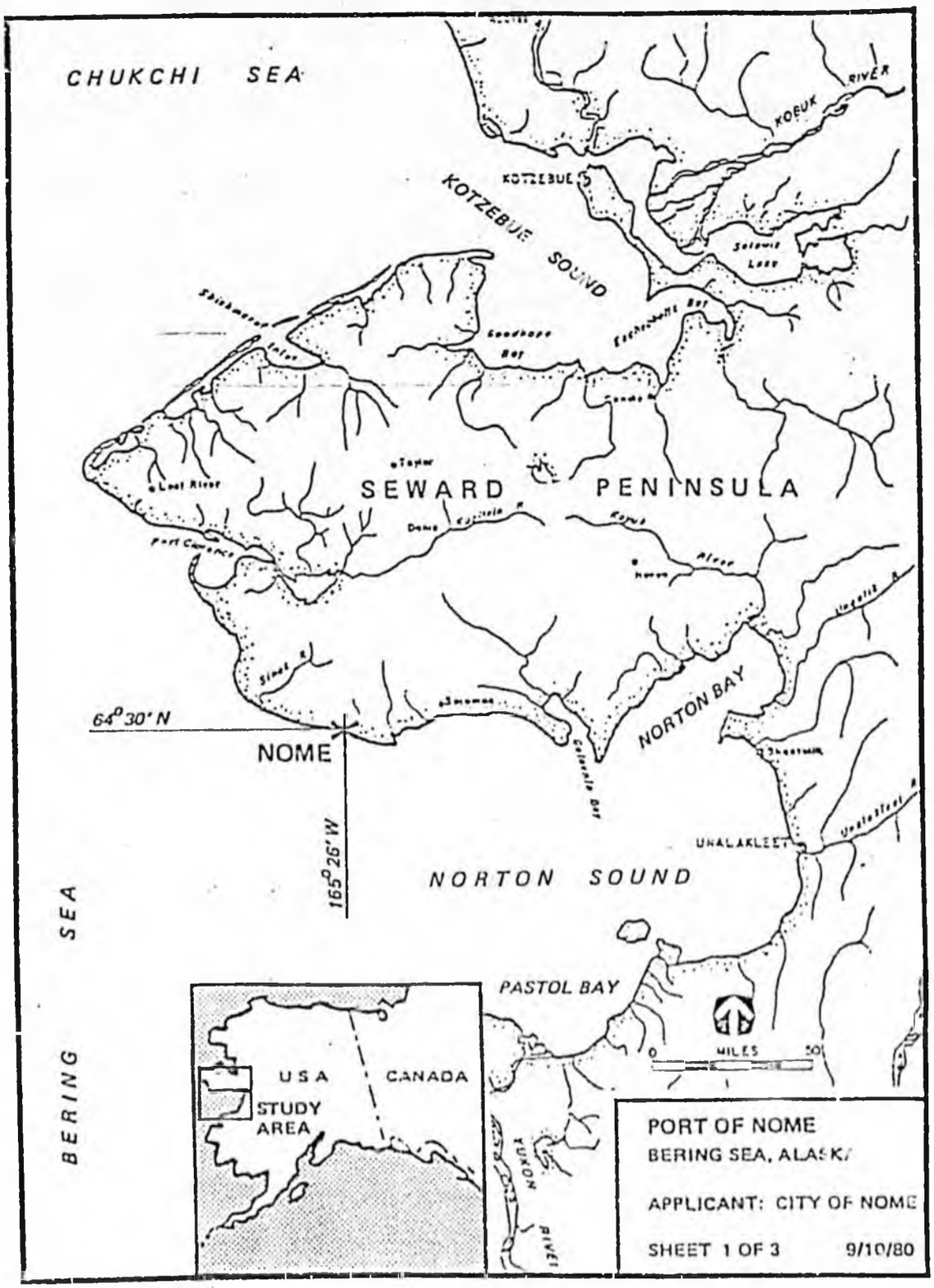

OFFSHORE TERMINAL CROSS–SECTION, B–B′

PORT OF NOME
BERING SEA, ALASKA

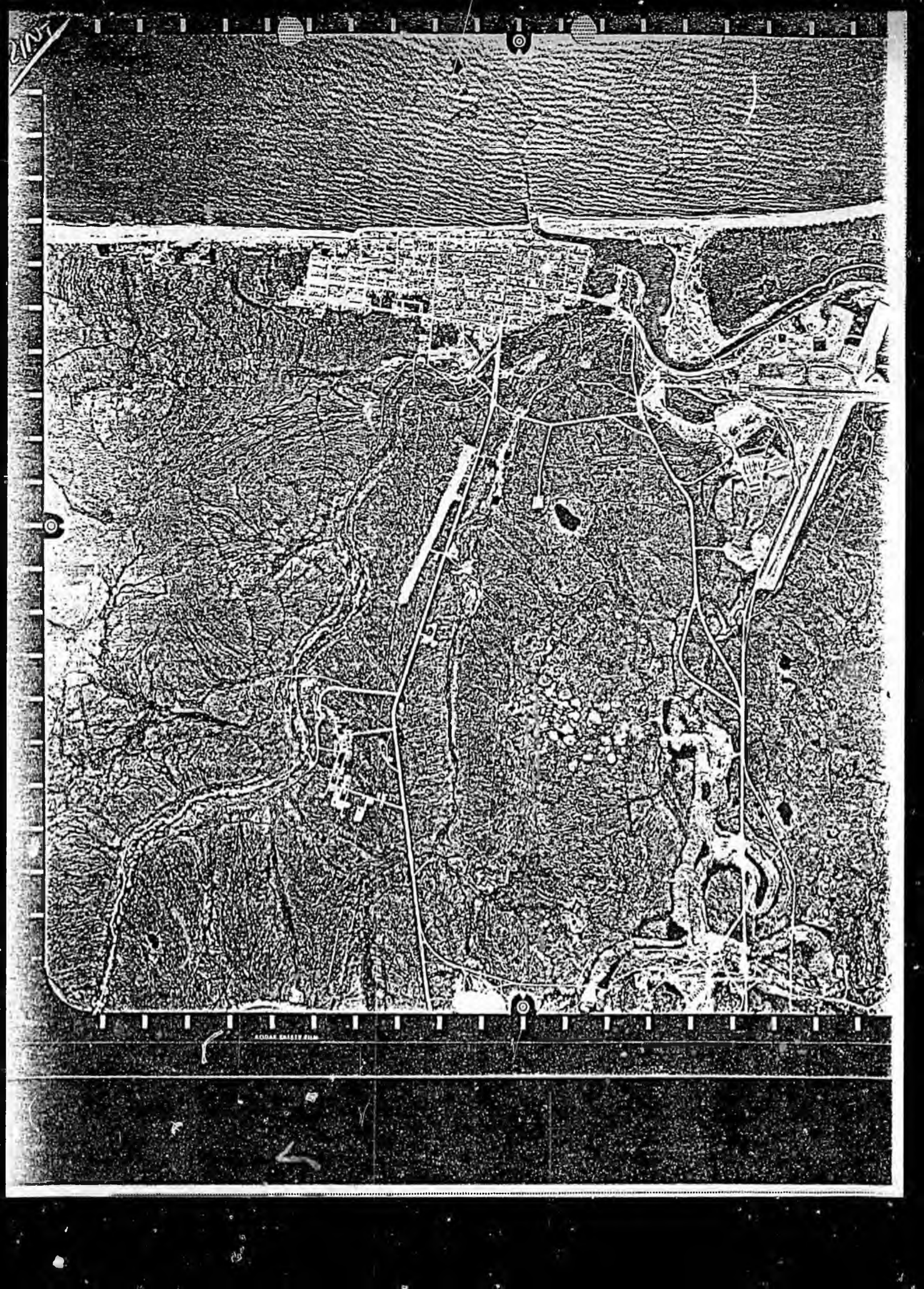
APPLICANT: CITY OF NOME

SHEET 3 OF 3 9/10/80

DATUM IS MEAN LOWER LOW WATER


CHUKCHI SEA
KOBUK RIVER
KOTZEBUE
KOTZEBUE SOUND
SEWARD PENINSULA
NORTON BAY
64°30' N
NOME
165°26' W
NORTON SOUND
UNALAKLEET
BERING SEA
PASTOL BAY
USA
CANADA
STUDY AREA
YUKON RIVER
0 MILES 50
PORT OF NOME
BERING SEA, ALASKA
APPLICANT: CITY OF NOME
SHEET 1 OF 3 9/10/80

THE FOLLOWING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.


2INT
KODAK SAFETY FILM

THE PRECEDING DOCUMENT(S) MAY NOT FILM LEGIBLY BECAUSE OF POOR QUALITY OF THE ORIGINAL.

Marsh

Nome Airport

AERO Rot W & G

SNAKE RIVER

Boulders

Dry Creek

RADIO MAST

Fl 4sec 18ft 5M

(see inset)

Fl R 4sec 18ft 3M

DUMP SITE (dredged material) (see note S)

Depths from survey of 1950

DUMP SI (dredged mat (see note

664.96 Ac
269.10 Ha

gy S & G

SG

# 16206 SG
12/31/77 62

SJR

66

- FILE -

# ALASKA STATE LEGISLATURE - SENATE

SENATOR RICHARD I. ELIASON
P.O. BOX 143
SITKA, ALASKA 99835

POUCH V
JUNEAU, ALASKA 99811

COMMITTEES
FINANCE
RESOURCES
STATE AFFAIRS

February 10, 1982

MEMORANDUM

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Senator Dick Eliason

RE: SJR 66 Regarding Coast Guard User Fees

This morning I introduced SJR 66 regarding the high user fees which the U.S. Coast Guard proposes to charge all boat owners. This is a matter of utmost importance to Alaskan boat owners. According to my calculations the proposed fees would cost the fishermen of Alaska well over $24 million in direct charges per year. The proposed rate structure could effectively put many small fishermen out of business as the lowest fee proposed is $1350 per boat.

As I understand, the U.S. Coast Guard is now in the process of drafting the user fee proposal into bill form which, once approved by the Secretary of Transportation, will be submitted to the Office of Management and Budget and the President for introduction to Congress. This is happening right now and so it is important that the Alaskan Legislature take a stand on the matter through SJR 66 and get this message to the President immediately. I hope that you will be able to schedule an early hearing of this resolution in the Senate Transportation Committee and get it moving towards Senate passage as soon as possible.

I am attaching for the Committee's review, information the Coast Guard has printed about the user fee proposal including rates to be charged, and a copy of a letter which I have written to the Coast Guard with my concerns about the proposal.

Due to an oversight in drafting one "whereas" clause which is not in the resolution, but which ought to be added would be:

> "Whereas Coast Guard services are almost entirely unavailable in many of the remote areas of Alaska, it is inequitable to charge owners in those areas the same fee as vessel owners in areas well serviced by the Coast Guard;"

The committee may want to amend the resolution to include this.

Your scheduling and passage of SJR 66 would be very much appreciated by me and by vessel owners throughout the State. If I can provide any further back-up information, please let me know.

DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD
2ND draft

MAILING ADDRESS:
U.S. COAST GUARD
WASHINGTON, D.C. 20593
PHONE:

DEC 23 1981

(To 158 adressees)

Dear :

Following the series of meetings held in September on the concept of establishing user fees for certain Coast Guard services, the comments received have been carefully reviewed. It was indicated at the meetings that an attempt would be made to inform all the interested groups and individuals of the results of this review and provide an update of the conceptual proposal.

The comments received at the meetings and subsequently were thorough, informative, and responsive. In addition to being responsive to the requests for information in nearly all areas, a number of suggestions were made concerning both the general philosophy of user fees as well as details of the demonstration fee schedule.

In light of the comments and recomendations received, and other information, a conceptual legislative proposal is being developed along with demonstration fee schedule revisions. Of necessity, both the illustrated budget level and the hundred percent recovery level used in the demonstration fee schedules have remained unchanged. As new budget figures and program distributions are developed, revisions in all the areas will be made to reflect the changes.

The enclosure includes a summary of a number of revisions to the demonstration fee schedules and the revised demonstration fee schedules.

A number of commenters expressed concern on some very basic philosophical and practical points. While all of these could not be accommodated, they were given very serious consideration. Many expressed concern over equity among marine users as well as among the various transportation modes. It is believed that the enclosed demonstation fee schedules reflect equity among the user groups. The need for user group input into setting the level of service to be provided was a common concern. It is clear that the services provided should reflect the needs of the users. This may be accomplished by incorporating the views of the users at both the national and local level.

ENCLOSURE(

As indicated, the comments received to date have been very helpful and responsive. The review process is continuing. The information included in the enclosure should be viewed as an "update" and not a final version. Please review the enclosure and make any comments that you feel are appropriate.

Thank you for your cooperation.

Sincerely,

J. W. KIME
Captain, U. S. Coast Guard
Deputy Chief, Office of Marine
Environment and Systems
By direction of the Commandant

Talked with: Wm. Capt. Riedel 426-2274

Enclosures

D.C.
202-426-2008

5. Great Lakes

- All fees similar to same types of commercial vessels in inland or coastal areas

- Domestic icebreaking surcharge during January 15 - March 31 period has been eliminated

6-11. Direct Charges

- Commercial vessel safety fee schedules expanded to present more discreet client identification

- Terminals "sized" with separate fee for very small terminal and a greater spread in terminal sizes

- An incident fee has been established for cargoes of particular hazard

## Introduction

New demonstration fee schedules have been developed based on the comments and responses to the public meetings held in September and written comments and recommendations received subsequently. All comments were given careful review. The budgetary figures used previously and the hundred percent recovery level has been continued. It is recognized that the cost figures will need to be revised to reflect the program costs at the time of implementation.

## Summary of Changes in Fee Schedules

1. Recreational Boats

   + Added internal boats (5 to 8 million)

   - Divided into three groups: Internal, Inland, and Coastal

   - All recreational boating SAR costs distributed to coastal group. Population and other appropriate costs distributed 75-25% between inland and coastal

2. Inland Uninspected Vessels

   - Number of towboats has been refined to reflect a more accurate number using inland waters

   - Classes of horsepower ratings have been changed from 4 to 3

   - Barges have been grouped into two sizes breaking at 1600 gross tons in lieu of 1000 gross tons

3. Fishing Vessels

   - Separated into domestic and foreign fleet

   - Fee is identical for each class of vessel, whether foreign or domestic to provide fair and equal treatment

4. Commercial-Domestic and International

   - Numbers of tugboats have been refined to reflect more accurate number using coastal waters

   - Three groups for tugboats used. Horsepower ratings used to group (similar for coastal and inland fees)

   - Barges have been grouped into two sizes breaking at 1600 gross tons with fees similar to like inland barges

   - A separate fee schedule established for Mobile Offshore Drilling Units (MODU's)

CHART 2A

DEPARTMENT OF TRANSPORTATION

U. S. COAST GUARD

($ in Thousands)

ESTIMATED RECOVERABLE COAST GUARD OPERATING EXPENSE EXPENDITURES FOR FY 1982
COSTS RECOVERABLE BY INDIRECT CHARGES - RECREATIONAL BOATING.

| | Totals | Internal | Inland | Coastal |
|---|---|---|---|---|
| + Search and Rescue..... | $152,655 | - | - | $152,655 |
| + Short Range Aids to Navigation..... | 4,505 | - | $ 3,380 | 1,125 |
| + Radionavigational Aids..... | 366 | - | - | 366 |
| + Commercial Vessel Safety..... | 1,000 | - | 750 | 250 |
| + Recreational Boating Safety..... | 49,794 | 24,000 | 19,345 | 6,449 |
| + Port Safety and Security..... | 291 | - | 216 | 75 |
| + Marine Environmental Protection..... | 4,075 | - | 3,055 | 1,020 |
| Subtotals | $212,606 | $24,000 | $26,746 | $161,940 |
| TOTAL | | | $212,606 | |

# I. RECREATIONAL BOATING

## A. Discussion

1. 100% of all allocated costs recovered.

2. Three groups of recreational boaters established:

   a. Those using only internal waters of states

   b. Those using only inland navigable waters

   c. Those using only coastal areas

3. Those using internal waters only do not benefit from CG operational services (e.g., SAR, aids to navigation) and therefore should not be charged for them.

4. Practically all search and rescue activity takes place in coastal areas. Therefore it is more equitable to charge higher fees for boats which use those waters, than those which restrict their activities to inland waters.

## B. Demonstration Fee Schedule

1. Internal Waters - Annual Fees

| | Number | Fee | Amount (000's) |
|---|---|---|---|
| Recreational Boats | 6,000,000 | $4 | $24,000 |

2. Inland Area - Annual Fee

| Class | Number | Fee | Amount (000's) |
|---|---|---|---|
| Less than 16 feet | 2,600,000 | $ 4 | $10,400 |
| 16 to 26 feet | 1,650,000 | 9 | 14,850 |
| 27 to 40 feet | 57,000 | 15 | 855 |
| 41 to 65 feet | - | | - |
| More than 65 feet | - | | - |
| Total | 4,307,000 | | $26,105 |

3. Coastal Area - Annual Fee

| Class | Number | Fee | Amount (000's) |
|---|---|---|---|
| Less than 16 feet | 400,000 | $ 50 | $20,000 |
| 16 to 26 feet | 750,000 | 110 | 82,500 |
| 27 to 40 feet | 200,000 | 200 | 40,000 |
| 41 to 65 feet | 45,000 | 400 | 18,000 |
| More than 65 feet | 3,000 | 600 | 1,800 |
| Total | 1,398,000 | | $162,300 |

TOTALS $212,405

DEPARTMENT OF TRANSPORTATION

U.S. COAST GUARD

($ In Thousands)

ESTIMATED RECOVERABLE COAST GUARD OPERATING EXPENSE EXPENDITURES FOR FY 1982 (1)

~~COSTS RECOVERABLE BY INDIRECT CHARGES - COMMERCIAL AND RECREATIONAL~~

COSTS RECOVERABLE BY INDIRECT CHARGES - COMMERCIAL AND FISHING.

| | Totals | Inland<br>- Towboats<br>- Barges | Eligible Fleets<br>- Domestic<br>- Foreign | Commercial<br>Domestic & International<br>- Foreign & U.S. Inspected<br>- Domestic (Inspected and Uninspected)<br>- Tug/Towboat<br>- Barge (Inspected and Uninspected)<br>- MMM | Great Lakes<br>- All |
|---|---|---|---|---|---|
| Search and Rescue..... | $113,604 | $ 0 | $ 92,304 | $ 17,750 | $ 3,550 |
| Short Range Aids To Navigation..... | 214,003 | 24,069 | 99,027 | 74,330 | 15,769 |
| Navigational Aids..... | 35,239 | 0 | 29,900 | 4,627 | 712 |
| Bridge Administration..... | 5,050 | 5,050 | 0 | 0 | 0 |
| Domestic Icebreaking..... | 12,630 | 0 | 0 | 3,791 | 8,847 |
| Port Safety and Security..... | 33,147 | 2,466 | 5 | 28,946 | 1,730 |
| Marine Environmental Protection.... | 44,030 | 4,343 | 7 | 30,200 | 2,200 |
| Totals..... | $458,511 | $36,728 | $221,243 | $167,732 | $32,808 |

## II. INLAND UNINSPECTED VESSELS

### A. Assumptions

1. One hundred percent (100%) of allocable costs will be recovered.

2. Continued use of the fuel tax is proposed (P.L. 95-502). The current 4¢/gallon fuel tax applied to less than the total inland towboat fleet is recovering approximately $20 million. Therefore, it is estimated that an additional 6¢/gallon on the whole fleet would yield approximately $36 million.

3. The numbers of towboats listed below includes boats using inland waters. Horsepower ratings generally reflect varying levels of use of applicable Coast Guard programs. Similar horsepower ratings are also used for tugboats and towboats in the domestic coastal trade.

4. Barges have been grouped into two sizes. In addition to the annual fee for indirect services, inspected barges will also be subject to any applicable direct charge.

### B. Demonstration Fee Schedules

1. Annual Fee

| | Class | Number | Annual Fee | Amount (000's) |
|---|---|---|---|---|
| Towboats | - Less than 1000HP | 2,520 | $2,000 | $5,040 |
| | - 1000 to 4999HP | 1,500 | 5,000 | 7,500 |
| | - 5000HP and Over | 160 | 10,000 | 1,600 |
| | Subtotal | 4,180 | | $14,140 |
| Barges | - Less than 1600GT | 20,000 | 800 | $16,000 |
| | - 1600GT and Over | 4,000 | 1,600 | 6,400 |
| | Subtotal | 24,000 | | $22,400 |
| | TOTAL | | | $36,540 |

FISHING FLEETS

[redacted] (DOMESTIC AND FOREIGN)

A. Assumptions

Separate schedules will be proposed for domestic and foreign

1. [redacted] and divided into the same classes the fee schedule reflects an identical fee for each class

2. [redacted] of VESSEL, whether foreign or domestic to provide equal treatment

3. Make-up of foreign category estimated from past fishing permit issuance and indicates the aggregate number of vessels in operation but does not double count where more than one permit is issued to a single vessel.

B. Demonstration Fee Schedule - Fishing Fleets (Domestic/Foreign)

1. Domestic Fishing Vessels — Annual Fees

| Class | Number | Annual Fee | Amount (000's) |
|---|---|---|---|
| Less than 100GT | 120,000 | 1,350 | $162,000 |
| 100 to 199GT | 5,000 | 1,800 | 9,000 |
| 200 to 299GT | 3,800 | 2,000 | 7,600 |
| 300 to 1599GT | 500 | 20,000 | 10,000 |
| 1600GT and Over | 100 | 40,000 | 4,000 |
| Subtotals | 129,400 | | $192,600 |

2. Foreign Fishing Vessels - Annual Fees

| Class | Number | Annual Fee | Amount (000's) |
|---|---|---|---|
| Less than 100GT | 0 | $ 1,350 | $ 0 |
| 100 to 199GT | 0 | 1,800 | 0 |
| 200 to 299GT | 450 | 2,000 | 900 |
| 300 to 1599GT | 450 | 20,000 | 9,000 |
| 1600GT and Over | 450 | 40,000 | 18,000 |
| Subtotals | 1,350 | | $27,900 |
| TOTALS | 130,750 | | $220,500 |

A. Assumptions

1. Vessels in international trade:
   A tonnage fee on gross registered tons will be used and collected by Customs

2. Vessels in domestic coastal trade:
   An annual fee will be used. Same classes and charges as commercial fishing vessels.

3. Towboats/tugs:
   Class sizes by horsepower reflect different levels of use of Coast Guard programs. The same classes and fees apply as to inland towboats and tugs.

B. Demonstration Fee Schedule

1. International Trade - (See Note (1))

| | Net Registered Tons | Fee | Amount(000's) |
|---|---|---|---|
| Tonnage Fee | 500,000,000 | 0.24 | $120,000 |

2. Domestic Coastal Trade (Excludes listings under 3, 4 and 5)
Annual Fee - (See Note (2))

| Class | Number | Annual Fee | Amount(000's) |
|---|---|---|---|
| Less than 100GT | 0 | $1,350 | $ 0 |
| 100 to 199GT | 0 | 1,800 | 0 |
| 200 to 299GT | 4,000 | 2,000 | 8,000 |
| 300 to 9GT | 200 | 20,000 | 4,000 |
| 1600GT Over | 500 | 40,000 | 20,000 |
| Totals | 4,700 | | $32,000 |

3. g/Towboats - Annual Fee

| Class | Number | Annual Fee | Amount(000's) |
|---|---|---|---|
| Less than 1000HP | 1,890 | $ 2,000 | $3,780 |
| 1000 to 4999HP | 860 | 5,000 | 4,300 |
| 5000HP and Over | 120 | 10,000 | 1,200 |
| Subtotal | 2,870 | | $9,280 |

4. Barges - Annual Fee (See Note (2))

| Class | Number | Annual Fee | Amount(000's) |
|---|---|---|---|
| Less than 1600GT | 1,800 | $ 800 | $1,440 |
| 1600GT and Over | 2,400 | 1,600 | 3,840 |
| Subtotal | 4,200 | | $5,280 |

5. MODU's - Annual Fee

| Class | Number | Annual Fee | Amount(000's) |
|---|---|---|---|
| MODU | 580 | $1,000 | $580 |
| TOTAL | | | $167,140 |

NOTE: (1) Tonnage fee similar to limitations of current tonnage tax administered by Customs.

(2) Vessels and barges sailing in both domestic and international trade subject to the greater of the annual fee or the tonnage fee.

# ALASKA STATE LEGISLATURE - SENATE

SENATOR RICHARD I. ELIASON
P.O. BOX 143
SITKA, ALASKA 9983[illegible]

POUCH V
JUNEAU, ALASKA 9[illegible]

COMMITTEES
FINANCE
RESOURCES
STATE AFFAIRS

February 9, 1982

Captain William Riedel
U.S. Coast Guard Headquarters (G - WS/11)
Washington D.C., 20593

Dear Captain Riedel,

Thank you for the information you provided my staff member Mary Levan by telephone and for the additional information you sent by mail. At your suggestion I am writing to express several of my specific concerns about the "user fees" which the federal government proposes to impose on boat owners.

I am enclosing for your review a draft copy of the resolution which I am introducing in the Alaska State Legislature. It touches on many of my concerns about the user fees.

The particularly important point to consider is the high fee proposed for fishing vessels under 100 gross tons. Most fishing vessels in Alaska fit into this category, but many of these are small, ranging from 16 to 40 feet. Using statistics from the Commercial Fisheries Entry Commission on gross weights reported for Commercial Fishing Vessel Licenses, I have figured out that of those which fall under the 100 gross ton category, over 83% are under 25 gross tons. And many of those are considerably smaller than 25 gross tons. It is discriminatory and inequitable to charge the same fee to a 20' foot handtroller whose net income is often about one thousand dollars and a 58 foot seiner who may make $20,000 or more. This is especially unreasonable when the user fee proposed is so high that it would put many small boat fishermen out of business and even be a hardship for many larger boat owners. Many of these fishermen have no alternative means of making a living.

If extra revenue must be collected, I don't believe most boat owners would object as much to higher charges for such direct services as vessel documentation, safety inspections, and special occasions when the Coast Guard patrols and stands-by such as salmon derbies and regattas.

The proposed fees seem inconsistent with President Reagan's philosophy of maintaining taxation on luxury items while providing incentives to encourage private enterprise. In the proposal we see fairly low fees for pleasure craft and exorbitantly high fees for even the very small commercial fisherman. Many of Alaska's fishermen are struggling right now financially and any fees imposed must be in line with their ability to pay this added expense. I suggest a rate structure based on length or weight of vessels beginning with very small boats at a very low rate and adding a small amount for each additional unit of weight.

I am also concerned about the fact that Alaska is dealt with in the proposal exactly as other coastal states are. Alaska has unique circumstances and problems and has special dependence on the Coast Guard. Boat owners are only one of the user groups for Coast Guard Services here. Great distances between towns and the lack of other medical and emergency services make all Alaskans dependent on the Coast Guard. Every resident of coastal areas is dependent upon marine transportation, ferries, and barges to get virtually all of their supplies. This makes each of these people indirect users of navigational aids, ice breaking services, and so on. The aviation industry also makes constant use of marine navigational aids. It is, of course, nearly impossible to collect specific user fees from all of the people dependent on the Coast Guard services, but it is unfair to hit boat owners alone with the burden of support.

Furthermore, there are vast areas in Western Alaska where there are almost no available Coast Guard services - no stations, no navigation aids, and emergency help is so far away as to be of little help in a real emergency. Boat owners in these areas can hardly be expected to pay the same fee as those who live in areas where Coast Guard services are constantly available and used.

Several more concerns are outlined in the attached resolution. These should be self-explanatory. As the resolved clause states, we request a review of the user fee proposal. I seriously question the very concept of imposing user fees for such a basic government service. Government has gotten into many areas over the last few years which are better

left to private enterprise or for which specific users ought to be charged. The Coast Guard, however, is an entity much like the military or the National Guard, an entity to provide basic security functions for the people, services which are appropriate for a democratic government to provide. If however, the user fees are indeed imposed, we implore you to see that they are administered justly and equitably and are not an unbearable burden to the people served.

Sincerely yours,

Dick Eliason
State Senator
District B

cc: Admiral John B. Hayes
Captain J.W. Kime

SJR

67

February 4, 1982

Senator Bill Ray
Chairman
Senate Transportation Committee
Pouch V
Juneau, Alaska 99811

SUBJECT: Response to the request of the Chairman of the Senate Transportation Committee

Dear Senator Ray:

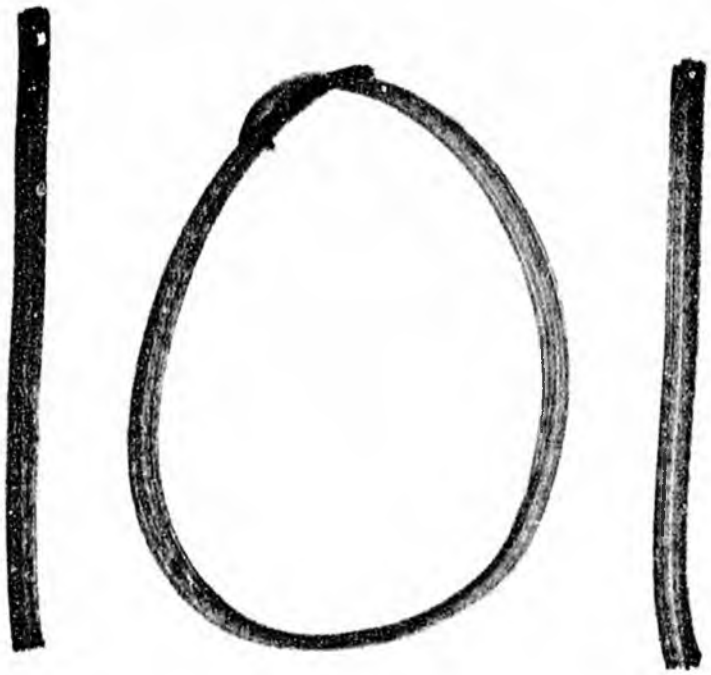
Request the Federal Government (Federal Railroad Administration, U.S. Department of Transportation, Office of Management and Budget) to exempt the Alaska Railroad from employment ceilings and reductions in force. These would adversely effect the Alaska Railroad's financial ability to maximize their gross revenue and profit base during this transition period of ownership from the U.S. Federal Government to the State of Alaska.

The Alaska Railroad has proven their ability to generate a profit and in as much as they will no longer receive congressional appropriations for major maintenance and capital improvements, the profit earned in FY '82 will be required for FY '83 major maintenance and capital improvements. To restrict employment of the ARR would be counter-productive.

Sincerely,

F. H. Jones
General Manager
Alaska Railroad





# Alaska Air Carriers Association

March 19, 1982

Senator Mulcahy
Pouch V
Juneau, AK 99503

Dear Senator Mulcahy:

The membership of the Alaska Air Carriers Association unanimously passed the enclosed resolution to increase the state tax on Avgas from 4¢ per gallon to 4½¢ per gallon and to increase the state tax on Jet Fuel from 2¢ per gallon to 2¼¢ per gallon to fund the Alaskan Aviation Safety Foundation. We estimate that $500,000 will be generated to help provide a grant to the Alaskan Aviation Safety Foundation. We expect the Alaskan Aviation Safety Foundation to eventually be self-sufficient, therefore, we recommend that the tax last for three years.

The fisheries industry has a similar program to fund seafood marketing and salmon enhancement. The state collects a tax from the fishery industry and, through a letter of intent, appropriates funds for the programs.

The Alaska Air Carriers Association recognizes the fiscal constraints on the State of Alaska, and has agreed to pay an additional tax rather than seek a funding from the State treasury.

Governor Hammond has promised his support to the proposal.

Air transportation is vital to Alaska. Over the past five years, the accident rate has not improved. The air carrier industry believes that the programs developed by the Alaskan Aviation Safety Foundation will improve the accident rate.

Michael Charlesworth, the lead underwriter in London for Alaskan insurance, has promised to offer discounts to operators and pilots who complete the training programs developed by the Alaskan Aviation Safety Foundation. Mr. Charlesworth handles the majority of Alaskan insurance in London.

We appreciate your support of our proposal.

Sincerely,

Tulinda Deegan
Executive Director

4790 Business Park Boulevard • Suite 4 • Anchorage, Alaska 99503 • (907) 272-9933

# R E S O L U T I O N

1. RECOGNIZING A NEED TO DO SOMETHING TO IMPROVE THE SAFETY RECORD OF ALASKA AVIATION,

2. RECOGNIZING A NEED FOR FUNDING TO CARRY OUT AN AVIATION SAFETY PROGRAM IN ALASKA,

3. RECOGNIZING THAT THE ALASKAN AVIATION INDUSTRY HAS NO MEANS TO ENFORCE AN ASSESSMENT ON THE INDUSTRY AND FLYING PUBLIC,

4. RECOGNIZING THE FISCAL CONSTRAINTS ON THE STATE OF ALASKA AT THIS TIME:

NOW THEREFORE BE IT RESOLVED THAT THE AACA REQUEST THE LEGISLATURE OF THE STATE OF ALASKA TO INCREASE AVIATION FUEL TAXES FOR AVGAS FROM 4¢ TO 4½¢ PER GALLON AND JET FROM 2¢ TO 2½¢ PER GALLON, SUCH FINAL TAX INCREASE TO BE USED FOR AVIATION SAFETY TRAINING OF THE AVIATION COMMUNITY IN ALASKA.

PASSED FULL AACA MEMBERSHIP MARCH 13, 1982.

ALASKA AIRMEN'S ASSN., INC. P.O. Box 4-1287 Anchorage, Alaska 99509

ALASKAN AVIATION SAFETY FOUNDATION
4790 Business Park Boulevard
Anchorage, Alaska 99503

Atten: Ms Tulinda Deegan,
Executive Director

March 23, 1982

Dear Tulinda,

Per our discussions over a period of time, please allow this letter and its attachments to once again show the unqualified support of the Alaska Airmen's Association, Inc. for the goals and programs of the Foundation. We have enjoyed participating in program development to date, and look forward to the day when the program actually produces a study/training package into which the general aviation folks can sink their teeth.

Aviation safety and the focus of public attention on it has reached critical proportion. The resultant insurance premium inflation presents a major difficulty for this state and the public, as small operators go out of business due to the inability to pay premiums. This at once creates a situation in which the expertise in the local area is lost and where competition is reduced... ... neither of which are a benefit to the public, nor lead to increased safety.

We know that there are private aviators who can no longer afford either hull insurance, or perhaps <u>any</u> insurance. *Unfortunately, not all of them have stopped flying,* and this creates a terrible liability problem for the public as well. We recognize that we absolutely <u>must</u> get a grip on the problem, and we see the Foundation's work to date and plans for implementing the next several stages, as the only viable program even under discussion anywhere, let alone under development.

The moment we heard that you had some encouragement in Juneau for the on-going "seed" money tied to a slight increase in aviation fuel taxes, our board endorsed the concept and de eloped the attached resolution. We recognize that it is never popular to add or increase a tax, and we may all have a "sales job" of our own to some of our members, but we are confident that when it is understood what is coming and what it offers us all, it will be widely accepted, as it is with all of us who have been exposed to it to date.

It is unfortunate that the level of funding that you anticipate at this time is not sufficient to develop all of the programs, but that is why we made our cash donation to the Foundation two weeks ago. We anticipate helping you find private sector donations to assist with the basic grant funds.

RESOLUTION OF THE BOARD OF DIRECTORS
ALASKA AIRMEN'S ASSOCIATION, INCORPORATED

WHEREAS the Alaska Airmen's Association, Inc. is the largest general aviation organization in the State of Alaska, effectively representing the aviation interests of over 12,500 pilots in the State, and;

WHEREAS the Alaska Airmen's Association, Inc. is vitally concerned and involved with aviation safety in the State of Alaska, and;

WHEREAS it is widely recognized that a crisis of major proportions exists relating to the accident rates, liability claims and aviation insurance premium rates with the State of Alaska, and;

WHEREAS the *ALSAKAN AVIATION SAFETY FOUNDATION* has become the definitive authority developing a master plan for a major and effective training program and campaign against the negative safety record, and;

WHEREAS said Foundation has completed is work under the first phase and has developed a program for implementation and requires certain grants and donations for said program implementation, therefore;

BE IT RESOLVED that the Alaska Airmen's Association, Inc. hereby fully supports the proposed increase of ½¢/gallon on aviation gasoline and ½¢/gallon on aviation turbine fuel, with said funds being made available to the Foundation to implement this invaluable program.

FURTHER BE IT RESOLVED, that this Association again fully endorses the goals and programs of the Alaskan Aviation Safety Foundation, and pledges again and with renewed enthusiasm, to assist at any point in the program development, and in participation of the private and general aviation aircrews, owners and maintenance personnel, in the training program so developed.

Adopted by the Board of Directors at its regular
meeting in Anchorage, on Wednesday, 17 March 1982

# Alaska State Legislature

## Senate

Official Business

### Labor & Commerce Committee

Pouch V
State Capitol
Juneau, Alaska 99811

M E M O R A N D U M

1 April, 1982

TO: Ms. Tulinda Deegan, Executive Director
Air Carriers Association

FROM: Michael Thill, AA
Senate Labor and Commerce Committee

The following are revenue projections relative to the proposed aviation fuel tax increases:

Based upon 1981 revenue figures:

| | |
|---|---|
| Jet Fuel: | $344,400 |
| Avgas: | $82,000 |
| | $426,400 |

Fuel consumption increases 1979-1980: 15%
Fuel consumption increases 1980-1981: 9%

If the 1982 fuel consumption increases were 9%, the revenue increases would be $464,776;
If the 1982 fuel consumption increases were 15%, the revenue increases would be $490,360;

The aviation fuel tax bill will be introduced in the morning, receive its number, and committee referrals.

# MEMORANDUM

# State of Alaska
Department of Revenue

TO: Joseph K. Donohue
Deputy Commissioner, Taxation

DATE: March 31, 1982

FILE NO:

TELEPHONE NO:

FROM: Robert Elliott
Research Analyst

SUBJECT: Aviation Fuel Taxes

RECEIVED
APR 1 '82
GOVERNORS OFFICE

The following is a breakdown of aviation fuel taxes for the past three years:

FY 1979

| | |
|---|---|
| Total Revenues Collected | $3,400,000 |
| Jet Fuel | 2,822,000 |
| Aviation Gas | 578,000 |
| Total Shared Revenues | $130,563 |

FY 1980

| | |
|---|---|
| Total Revenues Collected | $4,000,000 |
| Jet Fuel | 3,360,000 |
| Aviation Gas | 640,000 |
| Total Shared Revenues | $133,277 |

FY 1981

| | |
|---|---|
| Total Revenues Collected | $4,100,000 |
| Jet Fuel | 3,444,000 |
| Aviation Gas | 556,000 |
| Total Shared Revenues | $135,039 |

The above is noteworthy in that only three percent of the total aviation fuel taxes is shared back to municipalities. This is due to the tax being shared only to those municipalities who own airports or who operate and maintain state owned airports under lease or contract with the State of Alaska. Currently, there are twelve airports which fall under this provision.

As a result, all other proceeds collected by the aviation fuel tax are paid into the special aviation fuel tax account in the state General Fund. It is important to stress that this is an account which shows the amount available from which the legislature may appropriate funds, there is no dedication of funds. Furthermore, in AS 43.40.010(h) it states, "All motor fuel tax receipts shall be paid into the General Fund and distributed to the proper accounts in the General Fund." There can be no dedicated funds within the General Fund, since each is mutually exclusive of the other. Consequently, there would be no conflict with the aviation fuel tax account's status if the rates of the aviation fuel tax were increased.

#

02039 POM TDA CIRCLE ALASKA 15 04-03 1119P AST

PMS SEN BOB MULCAHY

TELEGRAM

[illegible]

JUNEAU AK

PLEASE SUPPORT FUNDING FOR THE ALASKAN AVIATION SAFETY FOUNDATION THROUGH INCREASING THE AVIATION FUEL TAX.

GORDON MACDONALD, SUNSHINE COPTERS

GENERAL DELIVERY

CIRCLE, ALASKA

To Rm 119
Senator -
Mulcahy
Rep. Vern Hurlberg

# HERMENS AIR

based at St. Marys & Mountain Village

Box 88 • St. Marys, Alaska 99658 • (907) 438-2112

March 24, 1982

Representative Vernon Hurlberg
Pouch V
Juneau, Alaska 99811

Dear Representative Hurlberg,

Air transportation is vital to the State of Alaska. Hermens Air, Inc. serves the Yukon Delta with 8 aircraft.

The Alaskan Aviation Safety Foundation needs funding to implement aviation training programs. The enclosed proposal explains the programs and contains a request for funding.

I urge you to support funding of the Alaskan Aviation Safety Foundation.

Sincerely,

Tan Hermens

Tan Hermens,
Vice-President, HERMENS AIR, INC.

# SAND POINT AIR SERVICE, INC.

GEORGE KIMBALL
President

907/383-3242 · P.O. Box 4 · Sand Point, Alaska 99661




March 22, 1982

The Honorable Robert Mulcahy
Pouch V
Juneau, Ak. 99811

Dear Senator Mulcahy,

Air transportation is vital to the State of Alaska. My company serves Anchorage, the Alaska Peninsula, and the Aleutian Islands with four aircraft.

The Alaskan Aviation Safety Foundation needs funding to implement aviation training programs. The enclosed proposal explains the programs and contains a request for funding.

I urge you to support funding of the Alaskan Aviation Safety Foundation.

Sincerely,

George Kimball,
President

enc.

GK/mp

# Flirite, Inc.



1627 Mill Bay Road
Box 297
Kodiak, Alaska 99615
(907) 486-5867

May 25, 1981

Senator Bob Mulcahy
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

Dear Senator Mulcahy:

Alaskan aviation firms have been faced with extremely high insurance rates, and one clear way to lower them is to improve the Alaskan aviation accident rate.

The Alaskan Aviation Safety Foundation will help to lower this accident rate by providing standardized training to improve the skills of air carrier management and flight crews. The Foundation needs funding for the initial cost of setting up the programs; thereafter the programs will be self-sustaining.

Our firm urges you to support proposals in the Finance Committee to fund this important program.

Sincerely,

Marilyn Buker
Marilyn Buker
President

MB/im



*Fly Right – with Flirite!*



*air charter* *plane rental* *flight instruction*

SOUTHEAST ALASKA AIRLINES

March 22, 1982

GOVERNORS OFFICE

Governor Hammond
Pouch V
Juneau, AK 99811

Dear Governor Hammond,

Air transportation is vital to the State of Alaska. My company serves Ketchikan with sixteen aircraft.

The Alaskan Aviation Safety Foundation needs funding to implement aviation training programs. The enclosed proposal explains the programs and contains a request for funding.

I urge you to support funding of the Alaskan Aviation Safety Foundation.

Sincerely,

Paul H. Breed,
President

P.S. In my 23 years of experience in Alaskan flying, I've heard a lot of talk about improving safety. This is the FIRST honest to God effort to do something about it on a statewide scale. Please fund this program. It could save a lot of lives.

1515 TONGASS AVENUE, KETCHIKAN, ALASKA 99901 • (907) 225-6691
IN CRAIG CALL (907) 826-3372 — IN KLAWOCK CALL (907) 755-2272 • PAUL BREED, President

Cape Smythe Air Service, Inc.

AMERICA'S NORTHERNMOST
AIR TAXI SERVICE

BOX 549
BARROW, ALASKA 99723
(907) 852-6333

CONTRACT AND CHARTER AIRPLANES
SINGLE & MULTI-ENGINE, PROP-JET
& LAND.

RECEIVED
APR 7 1982
GOVERNOR'S OFFICE

March 30, 1982

Governor Hammond
Pouch V
Juneau, AK 99811

Rep. Vern Hulbert
Sen. Frank Murkowski

Sen. Mulchay
Sen. Ted Stevens
Congressman. Don Young

Dear Governor Hammond:

I feel that the Alaskan Aviation Safety Foundation is an important move in the right direction toward reducing the number of aircraft accidents in Alaska.

We operate on the North Slope. We are located at Barrow Alaska. I also know from years past, as I have lived over most of the state, that the conditions are unique to each area, therefore the cost of these training programs is going to be great.

I urge you to support funding of the Alaskan Aviation Safety Foundation.

Sincerely,

Grant Thompson
Cape Smythe Air Service, Inc.

GT:bd

# Tyee Airlines Inc.

RECEIVED
MAR 25
GOVERNORS OFFICE

March 23, 1982

The Honorable Governor Jay Hammond
Pouch A
Juneau, Alaska 99811

Dear Governor Hammond:

Air travel is a vital part of the Alaskan transportation system -- not only the economy but the welfare and survival of the citizens of Alaska. We at Tyee Airlines serve the southeastern part of the state of Alaska with DeHavilland Beavers and Otters.

We believe the Alaskan Aviation Safety Foundation needs funding to implement aviation training programs to assure our safety and the safety of the Alaskan citizens we serve.

We urge you to support funding for the Alaskan Aviation Safety Foundation.

We are forwarding to Representative Oral Freeman a copy of the resolution passed at the 1982 Alaska Air Carriers Association convention requesting the legislature to increase fuel taxes by 1/2 cent to generate revenue to fund the Alaska Aviation Safety Foundation.

Sincerely,

Kirk M. Thomas

Kirk M. Thomas
President

ARM:lj

RADIO FREQ. 4696 ■ PHONE (907)225-6118 ■ P.O. BOX 8331 ■ KETCHIKAN, ALASKA 99901

AIRCRAFT OWNERS AND PILOTS ASSOCIATION

ALASKAN AVIATION SAFETY FOUNDATION, INC.
4790 Business Park Boulevard
Anchorage, Alaska 99503

Atten: Ms Tulinda Deegan, Executive Director 081-26

Dear Tulinda, 22 March 1982

Please allow this letter to confirm our several discussions concerning AOPA's ongoing and sincere support for the goals and programs of the Alaskan Aviation Safety Foundation.

In particular, let us congratulate you and the American Airlines Training Corporation for the excellent package you have developed in the first phase of the study and plan to turn our accident and insurance rates around! As you know, we have supported your venture from the beginning, and that our President, John Baker has given you his personal promise of assistance and coordination. As you also know, the AOPA Safety Foundation exists for almost precisely the same purposes, but on a National level.

We have been very concerned that the program would lose momentum as the first phase becomes completed, and that obtaining the broad-based support and recognition you currently enjoy, could become difficult a year from now as you attempted to develop funds for the on-going implementation phases. We are extremely pleased to hear that you have evidentally been able to find support in Juneau for a partial funding plan tied to a slight increase in aviation fuel taxes.

You should know that AOPA has been working through its regional representatives in a number of locations in the U.S. recently on similar plans. Of note are efforts currently underway in Washington State where private and general aviation members have emerged unanimous in support of increases in fuel taxes even as much as 2 to 3¢/gallon, tied to dedication of those funds to airport development. A very similar program is under way currently in Michigan as well. The program in Montana was similar, but has hit a temporary hitch.

So it should come as no surprise when the largest general aviation organization in the world can readily support an <u>increase</u> in the fuel tax its members will pay in Alaska. Whereas we recognize that there may be some negative concern for the increase on the part of some individual pilots or aircraft owners who do not yet understand the overall program, and may not see where this increase will benefit them directly, we feel confident that once initiated, they will join the broad-based support.

The only other comment we would add to this endorsement, is that it would be our hope that while the statute is being amended, that one small addition be made to the Commerce Committee Bill to facilitate all the aviation fuel taxes going to aviation projects. It is our understanding that the Alaska Airmen's Association has taken a strong position on this matter, and has provided you with material to facilitate this inclusion. We support their position as well.

Thank you so much for keeping us informed and keeping us included in each of the developmental steps to date. I will fly to Juneau on the first of April to assist the Commerce Committee in any way I can in the present effort. Good luck in implementing the next stages of the plan. You are free to release this letter in whole or in part in any manner that will benefit this effort.

KENT LEE WOODMAN,
Regional Representative

cy: Ms Jessie Dodson
Senator Mulcahy
Representatives Adams, Hurlburt and Fuller
Deputy Commissioner Donohue
Alaska Airmen's Association

# Alaskan Aviation Safety Foundation

REQUEST FOR FUNDING

January, 1982

Board of Directors:

Rex I. Bishopp
James Dodson
Kenneth Eichner
George Papas
James Flood
Arlo Livingston
Richard Wien
Chuck Weir
Tom Wardleigh
Lowell Thomas, Jr.

Executive Director:

Tulinda Deegan

4790 Business Park Blvd • Anchorage, Alaska 99503 • 907-274-0674

# INTRODUCTION

This is a request for funds for the Alaskan Aviation Safety Foundation for operating expenses. Included in this request is a description of the purpose of the project, the background on the project, a 1982-83 budget, and description of proposed projects.

## Purpose

Air travel is a vital part of the Alaskan transportation system. Not only the economy of Alaska but the welfare and survival of the citizens is dependent on the link provided among communities by the airplane and pilot.

The safe delivery of aviation services is a concern of all Alaskans, therefore, a decision was made to develop a training system for Alaskan aviation. The first step in implementing such a system is the identification of the training objectives and a description of the training program.

The conditions of weather and terrain in Alaska combine to create unique problems which require special skills and knowledge if aviators are to provide needed services to the public. As a result of the desire to serve others, some Alaskan pilots fly in conditions which exceed the capability of their skills or the design performance of the aircraft. Such flights may result in death and injury to themselves and their passengers. Other pilots, however, have learned unique skills, have defined their capability and know the limits of their aircraft to a degree that permits them to serve the needs of Alaskans while avoiding accidents.

The Alaskan Aviation Safety Foundation has contracted with American Airlines Training Corporation to identify these special skills and knowledge and translate them into training objectives. These objectives will then be combined into training scenarios. A description of the training devices, media, facilities, equipment, and personnel required to train Alaskan aviators to perform the tasks identified in the objectives under the conditions specified will be included.

Funds are now needed to begin the implementation of the programs proposed by American Airlines Training Corporation.

## Background

In December of 1980, Tulinda Deegan, President of Alaska Air Carriers Association (AACA) and Executive Director of the Alaskan Aviation Safety Foundation (AASF), asked American Airlines Training Corporation to submit a proposal to develop a training program for Alaskan aviators. In February, American Airlines Training Corporation (AATC) sent Dr. Michael K. Mitchell to Anchorage to meet with the Alaska Air Carriers Association Board and observe flying conditions in Alaska during the winter. During this first trip, Dr. Mitchell travelled to Aniak, Alaska and flew with pilot Bill Fisher of Harold's Air Service. The flights went to the villages of Crooked Creek, Red Devil, Sleetmute, Stony River, Kalskag, and Holy Cross. On other flights, Dr. Mitchell visited Nome and the airport at Gulkana.

In the report of his observations to the AACA Board, Dr. Mitchell concluded that flying conditions in Alaska were unique. An unsuccessful effort was made to identify and obtain an existing Arctic training program. Inquiries were made of training personnel in the United States Air Force, the Canadian United Forces, and several Scandinavian countries. The training programs, which were being conducted in Alaska, were found to be designed to meet recertification requirements of the Federal Aviation Administration (FAA).

The decision was made to develop a specially designed training program suited to the unique needs of Alaskan aviators. This unique training program could be based on accident records which had been compiled by the FAA or the National Transportation Safety Board (NTSB), but such records were often incomplete and, in fact, represented a list of failures. Instead, it was decided to discover how experienced Alaskan pilots had learned to cope with the many challenging problems faced by Alaskan aviators regularly. The process of discovery was found to have been developed and validated by John Flanagan and reported in Psychological Bulletin in 1954. Flanagan's critical incident methodology is the basis for the interviewing process used in this study.

The successful techniques discovered in the interviews are being correlated with FAA accident data to determine what cues and what actions are appropriate to avoid an accident.

After careful consideration, the Alaska State Legislature provided funding for the American Airlines Training Corporation portion of the AASF proposal. The funds were included in those to be administered by the Alaskan State Department of Education. A contract was signed by AATC and AASF to conduct the study. This contract included a statement of work which listed the activities and specified the deliverables due during and at the conclusion of this study. The final report is due June 1, 1982.

## Interviews

To date, a total of 33 cities have been visited by the interviewers and approximately 100 interviews conducted. A list of companies and persons interviewed and a list of cities visited is included at the end of this report. The American Airlines Training Corporation interview team also visits FAA facilities such as the Flight Service Stations and General Aviation District Office and Flight Standards District Offices in the region in which they are working. Interviews have also been conducted with persons who, though they may not be air taxi operators, possess invaluable knowledge concerning Alaskan aviation. As evidence of their perceived expertise, some of these persons have been identified as opinion leaders in the interviews completed. For example, Tom Wardleigh, Chief Flight Inspection Section for the FAA and Tom Belleau, Flight Training Manager for the office of Aviation Services, were interviewed as was Walt Parker of Walt Parker and Associates.

Several administrative activities were undertaken when the interview team returned to Dallas/Ft. Worth in December. These activities are summarized below:

- Dr. Mitchell and the interview team attended a demonstration of the latest available equipment that could prove appropriate for simulation of the Alaskan flying environment.

- The data collected and organized by the Technical Writer was reviewed by team members. The team feels that the information being collected will definitely aid in the development of training objectives appropriate to an Alaskan pilot training program.

- Discussions were held concerning the question of how much motion-based simulation, if any, is needed to meet perceived training needs.

- Tentative plans were laid for further Program Development involvement as the study moves from the present stage to the actual design and implementation of a training program.

- American Airlines Training Corporation (AATC) management has indicated a readiness to develop and implement a management training component into an Alaskan pilot training program.

Next Step

The next step is to validate the training objectives and operational techniques developed by the process described above. The major activities planned for this validation are the solicitation of the agreement of groups of Alaskan aviation opinion leaders, and the development, processing, and analysis of a Training Emphasis Ranking.

In developing the training objectives, through the process described above, the research team discovered that there exists among Alaskan pilots a wide range of opinions as to the appropriate techniques to use in solving any particular flying problem in Alaska. This diversity of opinion was anticipated in the proposal American Airlines Training Corporation submitted to the Alaskan Aviation Safety Foundation last year. However, the funding provided last year was not adequate to implement the proposed process. Now that the research to develop the training objectives and techniques is nearing completion the need to validate the objectives and techniques is apparent. Without this process, the training program which is ultimately prepared may not be acceptable to the operators who employ our graduates or to the users of our training facilities.

The Alaskan Aviation Safety Foundation proposes to contract to have this validation process done through two methods.

Opinion Leader Ranking - This validation technique involves multiple interviews with highly qualified opinion leaders nominated by respondents during last years study.

The first group of opinion leaders to be selected and asked to participate will be those whose breadth of knowledge and experience is general to the whole state of Alaska. In addition, seven additional groups of regional and/or operational specialists will be contacted to solicit their input regarding specific training programs appropriate to their area of expertise.

Each of these eight groups will be interviewed and asked to validate through a structured process which training objectives and techniques should be emphasized in the preparation of pilots for flying in their area.

Training Emphasis Process - Research has found that by asking groups of first level supervisors, such as chief pilots, to rate training objectives or operational techniques according to appropriateness for training the program developer can rank the objectives and techniques from the most important to the least important. This process is recommended to get the broadest possible input from the population of active chief pilots. The process which will be used is that developed by the United States Air Force to validate and prioritize training objectives and techniques.

The responses from the training emphasis process will be compared with the opinion leaders responses. If agreement between the two groups is statistically established, the program will be based on this data. If agreement is not established, then the two lists will be submitted to the Board of Directors of the Alaskan Aviation Safety Foundation for reconciliation.

Alaskan Aviation Safety Foundation Programs

While AATC is developing the comprehensive training program, the Foundation will be working with other aviation groups to offer their programs in Alaska.

The Aircraft Owners and Pilots Association (AOPA) has developed extensive pilot training courses. Very few of these programs are offered in Alaska because of the high cost of transporting instructors and the training materials to Alaska. The Foundation has worked out a cost-sharing arrangement with AOPA to offer more of these programs in Alaska.

The prevention of accidents in Alaska begins with management. The Alaskan Aviation Management program will be offered in at least five Alaskan communities. The Management program has been offered in the past and is designed specifically for Alaskan aviation operators.

Each year at the Alaska Air Carriers Association Annual Convention, engine and aircraft manufacturers offer seminars for mechanics. These programs are well attended and are the only scheduled opportunity for Alaskan carriers to meet with the manufacturers. The Foundation will expand this program and offer mechanics' seminars throughout the state.

The Foundation has worked with the Employee Assistance Consultants of Alaska (EAC) to develop a program to help employees of air carriers. EAC works with employees and their families to deal with personal problems which may affect their productivity, health, or continued employment. The basic assumption of this program is that a healthy employee is also a safe employee.

The Foundation will provide air carriers with information on aircraft accidents in Alaska. Information such as the cause and the type of aircraft will be prepared in an easy-to-read format and distributed to air carriers.

The air carrier industry estimates that $870,000 will be needed to continue the work of the Alaskan Aviation Safety Foundation. The following budget will provide cost information on each of the programs.

ALASKAN AVIATION SAFETY FOUNDATION
EXPENSES
12 Months
1982 - 1983

| Management | | Programs | |
|---|---|---|---|
| Staff | | AATC Contract | $400,000 |
| (2 professionals 1 clerical salaries and benefits) | $100,000 | AOPA Program 10 programs offered in at least 5 communities | 100,000 |
| Office Rent 4 Offices | 20,000 | | |
| Office Furniture | 5,000 | Management Program 5 programs | 50,000 |
| Office Equipment | 10,000 | | |
| Office Supplies | 5,000 | | |
| Insurance | 10,000 | Mechanics Program programs offered in at least 5 communities | 50,000 |
| Phone/Postage | 10,000 | | |
| TOTAL | $160,000 | Employee Assistance Program | 100,000 |
| | | Accident Analysis Data Collection and Distribution | 10,000 |
| | | TOTAL | $710,000 |

GRAND TOTAL $870,000

## INTERVIEWS TO DATE

1. Air Logistics of Alaska
2. Aero Tech Flight Service
3. Alaska Aeronautical Industries
4. Alaska Air Guide
5. Alaska Air Service
6. Alaska Bush Carriers
7. Alaska Floatplane Service
8. Alaska Helicopters
9. Alaska North Flying Service
10. Alaska Travel Air
11. Alaska Air Service
12. Anchorage Airways
13. Big Red's Flying Service
14. Central Airways
15. Evergreen Helicopters of Alaska
16. Gay Airways
17. Gifford Aviation
18. Gordon's
19. Jonathan Frit
20. International Air Taxi
21. Ketchum Air Service
22. Ray Peterson, Sr.
23. Rust's Flying Service
24. Sea Airmotive
25. Trans-Alaska Helicopters
26. Wilbur's Flight Operations
27. Trail Lake Flying Service
28. Harbor Air Service, Inc.
29. Kenai Aviation
30. South Central Air, Inc.
31. Bishop Brothers
32. Arctic Aviation
33. Kenai Air Alaska
34. Maritime Helicopters

Interviews To Date

35. Kachemak Air Service, Inc.
36. Cook Inlet Aviation, Inc.
37. Beluga Lake Floatplane
38. Homer Air, Inc.
39. Kodiak Western Alaska Airlines, Inc.
40. Hal's Air Service, Inc.
41. Flirite, Inc.
42. Island Air Service
43. Kodiak Air Taxi
44. Ward Air
45. Channel Flying, Inc.
46. Southeast Skyways
47. Livingston Copters
48. Skagway Air Service
49. L.A.B. Flying Service
50. Mountain Aviation
51. Bellair, Inc.
52. Gregerson Leasing, Inc.
53. Era Helicopters
54. Woods Air Service
55. Rocky Mountain Helicopters
56. Bob Tears
57. Alaska Central Airways
58. Tundra Copters
59. Wright's Air Service
60. Aurora Air Service
61. Arctic Circle Air Service
62. Frontier Flying Service
63. The Flying Machine
64. Richard Wien
65. Forty Mile Air Service
66. Air North
67. Ed Peebles
68. R. Tony Schultz
69. Sunshine Copters

Interviews To Date

70. Tom Wardleigh - FAA
71. Flight Training Devices
72. Bill Overway - FAA
73. Jim Moody - Dept. of Transportation & Public Facilities
74. Alden Williams
75. Tom Belleau - OAS
76. Douglas Askerman
77. Northern Air Cargo
78. Alaskan International Airlines
79. Tyee Airlines, Inc.
80. Revilla Flying Services
81. Southeast Alaska Airlines
82. Temsco Helicopters, Inc.
83. Taquan Air Service, Inc.
84. Alaska Island Air, Inc.
85. Wrangell Air Service
86. Dave Werner
87. Gene Eddy
88. Walt Parker
89. Cape Smythe
90. Audi Air
91. Baker Aviation
92. Munz Northern
93. Shellenbarger Aviation
94. Russ Lloyd - Kotzebue Tech Center
95. Lee's Air Service
96. Teller Air Service
97. Bering Air Service

# LIST OF CITIES VISITED
BY
AATC INTERVIEWERS

1. Moose Pass
2. Seward
3. Kenai
4. Soldotna
5. Homer
6. Kodiak
7. Juneau
8. Sitka
9. Anchorage
10. Palmer
11. Fairbanks
12. Circle
13. Anaktuvuk Pass *
14. Allakakel *
15. Birch Creek *
16. Bettles *
17. Tanacross
18. Cordova
19. Skagway
20. Haines
21. Petersburg
22. Wrangell
23. Yakatat
24. Barrow
25. Deadhorse
26. Kotzebue
27. Nome
28. Savoonga
29. Ketchikan
30. King Salmon
31. Naknek
32. Nondalton
33. St. Mary's

* City visited but no interview conducted.

HB

1177

Letter of Intent
North Slope Haul Road
FY 82 Repair Work

It is the intent of the House of Representatives that appropriations for the North Slope Haul Road for FY82 be used in conjunction with each other. House Bill 177 appropriates the sum of $8,000,000 for FY82. It is the House's understanding that last year the legislature approved $2.6 million in general obligation bonds for culvert repair along the North Slope Haul Road (that highway running from the Yukon River bridge to the Arctic Ocean, AS 19.40). Further, that this money is available for FY82. And, the Governor in his FY82 budget has requested $6 million for repairs to the Haul Road.

The House of Representatives intends that the $8 million appropriation to DOT&PF be used for road repairs along the existing highway. This repair work is to include a six inch lift and crown of crushed base. The worst areas shall be completed first.

If the $6 million dollar Governor's request is appropriated, the House of Representatives intends it should be spent to complete road repairs from Atigun north along the existing highway. This work shall include a six inch lift and crown of crushed base. The worst areas shall be completed first.

The House recognizes the need for certain culvert repairs and understands that a $2.6 million general obligation bond established by 118 SLA 80 to DOT&PF for North Slope Haul Road culvert repairs has not yet been spent. It is the intent of the House that the appropriation be used in FY82 to repair the following culverts:

Milk[illegible] Creek
Arthur Creek
Stout Creek
Spoiled Mary Creek
Char Creek
Climb Creek
Terry Creek
Oksrukyik Creek
Polygon Creek
Sylvia Creek
Nina Creek
Sten Creek

If the $2.6 million does not meet the cost for all of the above culvert repairs, any additional monies needed shall be drawn from the Governor's requested $6 million Haul Road upgrade appropriation if that appropriation is adopted.

_____

Transportation Committee Chair

HB 177

March 4, 1981

Honorable Sally Smith
Alaska State Representative
Pouch V
Juneau, Alaska 99811

Dear Representative Smith:

Approximately two weeks ago the subject request was made by one of your staff to our office of Planning and Programming in Fairbanks.

While in the process of obtaining this information, a fiscal note request was made concerning the same subject of upgrading and resurfacing the Haul Road to bring it up to secondary standards.

Rather than duplicate the effort, and in an attempt to avoid generating conflicting cost data or project descriptions, it was decided to wait until this more in-depth information was available.

The Governor's budget request contains $6 million to perform spot resurfacing of the north end of the Haul Road which at this time is considered to be the area needing surface repair the most. The $26,605,000 is an estimate to resurface the entire roadway which was not considered to be needed at this time but was planned to be programmed as needed.

Please find enclosed a copy of the previously referenced fiscal note. I hope this will give you the information you desired in relationship to the original request. If not, please contact me and I will endeavor to provide you with the necessary information.

Sincerely,

John Bates
Deputy Commissioner

JB/HS/ajh

TWELFTH LEGISLATURE

# FISCAL NOTE

I. REQUEST

Bill/Resolution No. H.B. 177

Title Special Appro. to DOT/PF for resurfacing Highway, Yukon River to Arctic Ocean

Requested by Rep. Smith, et al Date 2/20/81

II. FISCAL DETAIL

Agency Affected DOT/PF

Program Category Affected Highway Design & Construction

BRU, Program, or Subprogram(s) Affected

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
|---|---|---|---|---|---|---|---|
| 100 | PERSONAL SERVICES | | | | | | |
| 200 | TRAVEL | | | | | | |
| 300 | CONTRACTUAL | | | | | | |
| 400 | COMMODITIES | | | | | | |
| 500 | EQUIPMENT | | | | | | |
| 600 | LAND & STRUCTURES | | | | | | |
| 700 | GRANTS, CLAIMS, ETC. | | | | | | |
| | | | | | | | |
| | TOTAL | | | | | | |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 8,000,000 | | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | | | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

IV. DATE 2/26/81 PREPARED BY Dave Trueax

AGENCY Planning & Programming, DOT/PF, Interior Regio

PHONE 479-4281

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/80

p3l




# Greater Fairbanks
## CHAMBER OF COMMERCE

Member:
U. S. Chamber of Commerce
Alaska State Chamber of Commerce

In Association With:
Fairbanks Visitor & Convention Bureau
Fairbanks Industrial Development Corporation

(907) 452-1105 550 First Avenue
FAIRBANKS
ALASKA 99701


January, 1981

Rep. Sally Smith
Pouch V
Juneau, Ak. 99811

Dear Rep. Smith,

The attached report represents the accumulation of over 5 months of weekly morning meetings by the members of the Transportation Committee of the New Greater Fairbanks Chamber of Commerce. At those meetings, members listened to various industry and agency representitives alike, explaining how the Transportation system works and what the needs are. Members discussed these issues with other Chamber members and citizens throughout the community. Ultimately the more important needs began to imerge. Once identified, members formed solutions and prepared cost estimates when necessary. Finally this report was prepared. We believe it gives a good perspective of the highway and roadway needs in the Interior. In some instances we have established priorities and in others, we have simply made a list of projects and encourage the legislators to develop priorities.

This effort was undertaken solely for the purpose of providing you, our legislators, the information needed to keep you fully informed concerning the roadway and highway needs in our region. We hope that this effort will provide you with adequate information during the legislative session to make wise choices for the residents of our area. If it does this, we feel our effort has been well worth while.

The New Greater Fairbanks Chamber of Commerce Board of Directors has reviewed this report and agrees with it.

Since this is a first time effort of this nature, we would be quite interested in how helpful this report is to you during and after the legislative session.

Sincerely,

Ron Davis, President

Ralph Seekins, Chairman

The Greater Fairbanks Chamber of Commerce has prioritized these needs. First, and foremost on this list is the North Slope Highway. The North Slope Highway, beginning at Fairbanks and terminating at Prudhoe Bay, is without exception, the most important highway to our state's economic well-being at the present time and for the foreseeable future.

This highway was constructed to secondary standards for the citizens of Alaska at the request of the Alaskan government. Part of this agreement include the obligation of the state to provide maintenance on this road without charge to Alyeska. Federal funds were also utilized in the construction of this road, thus legally making it a public highway.

This highway is the only overland link with the North Slope in Alaska and consequently, it is a major hauling route. Maintenance costs are high but, unless the road is paved they can be expected to go higher. Currently, over 100 trucks use the road daily. According to a study completed by the United States Comptroller General's Office, using data furnished by highway officials, one loaded truck weighing 85,000 pounds requires the same maintenance effort as 9,600 automobiles. Assuming half the trucks using this road are loaded, a maintenance effort to serve 500,000 autos is required.

The North Slope Highway can be divided into four separate sections for improvement purposes.

Fairbanks to Snowshoe Pass

This secton of roadway has been reconstructed and paved. No need has been identifed for this section.

Snowshoe Pass to TAP's Road Intersection

This section of roadway has just been reconstructed to achieve adequate alignment and grade. This section was constructed from Birch Creek Schist, a material that readily breaks down under heavy traffic. Presently, there is no base or traveling course on this road as the DOT/PF realized that puting such a course on would be fruitless as it would soon be lost under heavy

traffic. This is a serious matter, since the road as constructed, will not hold up under the current use it is receiving for even a few years. This section can best be protected by paving; however, it will take at least three inches of pavement to withstand the anticipated traffic.

Presently, DOT/PF has scheduled paving for this section after completion of the gas pipeline. It is feared that such a delay will result in this newly constructed section being lost during the gas line contruction. The DOT/PF experienced a similar situation during the Alyeska effort when the newly constructed Elliot Highway to Snowshoe Pass was lost and had to be reconstructed and paved at a cost comparable to the original construction cost.

If the road way were paved prior to the gas line effort, the road would be similar to other paved roads within the state, provide an operational savings to truckers, protect the current investment in a new highway and increase safety on that road.

TAPs Road Intersection to the Yukon River Bridge

This section was built by the oil company prior to the Alyeska effort. It was buile to secondary standards and is currently open to public use. For safety convenience and lower maintenance cost, this section is recommended for paving. This paving should extend a mile or so beyond the Yukon River Bridge. Presently, bridge maintenance is extra high as trucks drop mud and dirt into the contraction joints. Paving beyond the bridge for a mile or so would help alleviate this problem.

Yukon River Bridge to Prudhoe Bay

This section was turned over to the state in good condition. Since that time, it has deteriorated to the point that truckers get only eight to ten trips per set of tires. This is due to the loss of traveling course through heavy traffic, wind and improper maintenance practices. It now needs a new traveling course.

## CONSEQUENCES OF NO IMPROVEMENT

Maintenance cost will go even higher than the $27,000 per mile per year now necessary although not being spent. Rough and dusty roads will unnecessarily endanger users of this road whether public or commercial. Deterioration of this road will accelerate, damage to equipment will increase as well. Commercial use of the highway will decrease as oil field operators will find alternative routes such as increase sealifts or using the McKenzie River through Canada, either way, by-passing Alaska and Fairbanks. The state will still be required to maintain this road because of the agreement with Alyeska.

## ESTIMATED COST

| | |
|---|---|
| Pave from Wickersham Dome to Livengood (TAPS Road) | $10,300,000 |
| Pave from Livengood to the other side of the Yukon River Bridge | 11,400,000 |
| Shape and place crush gravel surface on remainder of road to Prudhoe Bay | 22,000,000 |
| Total | $43,700,000 |

Cost of Paving in 1986

| | |
|---|---|
| Present worth of Capital Investment* | $39,300,000 |
| Present worth of estimated maintenance cost for unpaved road through 1986 | 5,800,000 |
| Total | $45,100,000 |

Cost of Paving in 1981

| | |
|---|---|
| Present worth of capital investment | $21,700,000 |
| Present worth of estimated maintenance cost for paved road through 1986 | 1,600,000 |
| Total | $23,300,000 |

Savings to taxpayer $45,100,000 - $23,300,000 = $21,800,000

*The reason for the higher paving cost under the 1986 paving scenario is the necessity for reconstruction of major portions of this road destroyed during the gas pipeline effort.

HOUSE JOURNAL

HOUSE FINANCE COMMITTEE

LETTER OF INTENT FOR HB 177

The Department of Transportation and Public Facilities shall begin work on culverts on the North Slope Haul Road at the following locations:

Milke Creek
Arthur Creek
Stout Creek
Spoiled Mary Creek
Char Creek
Climb Creek
Terry Creek
Oksrukyik Creek
Polygon Creek
Sylvia Creek
Nina Creek
Sten Creek

Sam Cotten, Chairman
House Finance Committee
April 21, 1981

LETTER OF INTENT

HB 177

The sum of $8,000,000. is appropriated from the general fund to the Department of Transportation and Public Facilities for resurfacing of the highway from the Arctic Ocean to the Yukon River, beginning at mile 360 (adjacent to the Deadhorse airport) to approximately mile 238 (Antigun River Bridge crossing). The scope of the project shall include the restoration of the highway to the original 28' design width, culvert replacements, and a 6" lift of gravel.

Bette Cato

Rep. Bette Cato, Chairman
House Transportation Committee

HB

538

FILE WITH BILL

# Alaska State Legislature

BETTYE FAHRENKAMP, CHAIRMAN
VIC FISCHER, VICE-CHAIRMAN
BRAD BRADLEY
DICK ELIASON
DON GILMAN
BOB MULCAHY
ARLISS STURGULEWSKI

POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3834
(907) 465-3835

## Senate

## Committee on Resources

TO: Senator Bill Ray, Chairman
Senate Transportation Committee

FROM: Senator Bettye Fahrenkamp, Chairman
Senate Resources Committee

DATE: June 9, 1981

RE: HB 456 and CSHB 538

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Attached is back-up information on HB 456 and CSHB 538 which have passed out of the Resources Committee and are now in your Committee.

Attachments

BF:rk

# Alaska State Legislature

BETTYE FAHRENKAMP, CHAIRMAN
VIC FISCHER, VICE-CHAIRMAN
BRAD BRADLEY
DICK ELIASON
DON GILMAN
BOB MULCAHY
ARLISS STURGULEWSKI

POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3834
(907) 465-3835

## Senate

## Committee on Resources

June 5, 1981
1:30 p.m.

Beltz Room
211 - Capitol

MEMBERS PRESENT

Senator Fahrenkamp
Senator Fischer
Senator Bradley
Senator Sturgulewski
Senator Mulcahy
Senator Eliason
Senator Gilman

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HEARING:

CSHB 535 An Act relating to the Alaska Agricultural Action Council.

HCR 29 Relating to the development of a plan for Alaska agricultural development.

SB 588 An Act relating to mineral leasing.

✓ HB 456 An Act relating to agriculture.

HB 88 An Act relating to the qualifications for the farm or agricultural lands tax exemption.

HB 83 An Act making special appropriations to the Department of Fish and Game for bison management.

✓ HB 538 An Act relating to a small-scale agriculture grant program.

Representative Gardiner, stated that HCR 29 and HB 535 outline the state's policies and goals for agricultural development. HB 535 increases the membership on the Agricultural Action Council from 5 to 7 members.

Senator Sturgulewski put forth the motion to move SCS CSHB 535 with individual recommendations.

Senator Sturgulewski put forth the motion to move HCR 29 and the letter of intent with individual recommendations.

Representative Gardiner stated that the purpose of HB 456 is to promote small scale agriculture.

Representative Rogers suggested an amendment to HB 456 on page 1, line 16, place a period after "state" and delete line 17.

Senator Fischer put forth the motion to accept the amendment. He put forth several technical and grammatical amendments which were accepted.

Senator Fischer put forth the motion to move HB 456 as a Senate Committee Substitute with individual recommendations.

Dick Bishop, Regional Supervisor, Fairbanks, Department of Fish and Game, stated that HB 83 provides funding to develop the Delta Bison range and improve the bison summer range to delay their movement.

Representative Gardiner stated that he had looked at other alternatives and HB 83 was the least expensive to help ease the conflict between bison and agriculture.

Senator Mulcahy put forth the motion to move HB 83 with individual recommendations.

Representative Gardiner stated that HB 538 is designed to help small scale and village agricultural programs. He suggested that the Committee consider a letter of intent stating that the funds should be dispersed throughtout the state and that no single geographical region receive an abnormal amount of the funds.

Senator Mulcahy put forth the motion to move CS HB 538 am with individual recommendations and the letter of intent.

Senator Fahrenkamp put forth the motion to defer consideration of HB 38 .

SB 588 was held until the Committee meeting June 8, 1981.

The Committee adjourned at 3:05 p.m.

LETTER OF INTENT

SENATE RESOURCES COMMITTEE

TO ACCOMPANY CSHB 538(Fin) am

It is the intent of the Alaska State Legislature that the funds appropriated to the Small-scale Agriculture Grant Program be dispersed throughout the state and that no single geographical region receive an abnormal amount of the funds.

# Alaska State Legislature

## House of Representatives

### Committee on Resources

Terry Gardiner, Co-Chairman
Fred F. Zharoff, Co-Chairman
465-3715

Pouch V
State Capitol
Juneau, Alaska 99811

To: Senator Bettye Fahrenkamp, Chairman
Senate Resources

From: Rep. Terry Gardiner, Co-chairman T.G.
House Resources

Date: May 21, 1981

Re: CS HB 538 am - Small Scale Agriculture Grant Program

The House Resources Committee has devoted a great deal of time and energy examining the agriculture industry in Alaska. During a week of hearings on agriculture held in March one need was pointed out which the committee has addressed in HB 538.

HB 538 provides financial assistance to communities throughout the State for small-scale agriculture projects and programs. It was designed to provide assistance to villages and communities in efforts to provide nutritional, locally produced foods for residents, particularly in rural Alaska where fresh produce is often scare, and food costs extremely high. The bill allows all municipalities or villages in the State to apply for funding of smallscale agriculture projects or programs, with a maximum set at $25,000 per recipient. Block grants may be awarded at the discretion of the Commission of DNR to programs serving a number of communities.

Last year the legislature appropriated $2,147,000 for village agriculture programs through HB 60 and other pieces of legislation. House Resources is aware of $2,433,440 in requests from numerous rural communities for agriculture programs for FY 82. These are being handled through the budget process. In order to provide funds to support these agriculture efforts in a more coherent manner, while providing a source of information and technical assistance to groups starting new programs, HB 538 was drafted. Earlier in the year Department of Natural Resources proposed a similar program, and it has been with DNR , numerous individuals involved in village gardening programs and a sub-committee of the Resource committee that we have worked to arrive at the bill before you.

The funding level for the grant program is projected to be $1,000,000. Since this grant program will not be operational until 1982, and it is assumed that the Governor will allocate continuation level funding in FY 83, the request for grant monies for FY 82 is $500,000. The million dollars in the grant fund will clearly not meet the total requests for village agriculture projects, but will provide substantial funds to cover costs of the basic gardening efforts.

# STATE OF ALASKA

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

AUDIT DIVISION
POUCH W — ALASKA OFFICE BUILDING

FINANCE DIVISION
POUCH W — STATE CAPITOL

JUNEAU 99801


M E M O R A N D U M

DATE: February 27, 1981

TO: Mary Hakala
Administrative Assistant
House Resources Committee

FROM: Elmer Lindstrom
Fiscal Analyst
Legislative Finance Division

The following is a summary of state funding for agriculture from 1978 to 1980. Since the first major appropriation for Delta I was approved in 1978, I have not attempted to locate funding prior to that time. All amounts are in thousands of dollars.

Delta I

Sec. 1, Ch. 171, SLA 1978 (Special Appropriation) - Appropriated to the Department of Natural Resources 4,793.0.

| | |
|---|---|
| Land Clearing | 2,700.0 |
| Surveying | 300.0 |
| Test Marketing | 350.0 |
| Environmental Studies | 150.0 |
| Grain Storage Facilities | 1,000.0 |
| Transportation of Grain | 43.0 |
| Administration | 100.0 |
| Miscellaneous | 150.0 |

Sec. 25, Ch. 80, SLA 1979 (General Appropriations Act) - Appropriated to the Department of Commerce & Economic Development 7,070.8.

| | |
|---|---|
| Final Clearing | 4,736.0 |
| Road Construction | 1,080.0 |
| Test Marketing | 900.0 |
| Administration | 127.9 |
| Extension Services | 63.2 |
| Pesticide/Herbicide Research | 78.5 |
| Miscellaneous | 85.2 |

Sec. 53, Ch. 120, SLA 1980 (General Appropriations Act) - Appropriated to the Office of the Governor, Agricultural Action Council 2,000.0.

| | |
|---|---|
| Delta I | 2,000.0 |

Sec. 1, Ch. 40, SLA 79 (Special Appropriation) - Appropriated to the Department of Fish & Game.

| | |
|---|---|
| Delta Bison Management Plan | 20.0 |
| Total | 13,883.8 |

Point McKenzie

Ch. 90, SLA 1980 (Special Appropriation) - Appropriated to the Agricultural Action Council 5,025.0.

| | |
|---|---|
| Survey Costs | 200.0 |
| Land Clearing | 3,600.0 |
| Administration | 150.0 |
| Construction of Access Roads | 1,000.0 |
| Dairy Specialist & Support | 75.0 |
| Total | 5,025.0 |

Nenana/Totchaket

Sec. 281, Ch. 50, SLA 80 (HB 60) - Appropriated to the Office of the Governor, Special Projects Office.

| | |
|---|---|
| Totchaket Agricultural Project | 500.0 |

Department of Natural Resources

Sec. 14, Ch. 113, SLA 1978 (General Appropriations Act)

| | |
|---|---|
| Red Meat Project | 113.1 |

Sec. 286, Ch. 150, SLA 1980 (HB 60)

| | |
|---|---|
| Plant Materials Center Lab Bldg | 150.0 |

Sec. 53, Ch. 120, SLA 1980 (General Appropriations Act)

| | |
|---|---|
| Equipment & Seed Storage Building Palmer | 108.0 |
| Plant Materials Center Animal Enclosure | 14.6 |
| Upgrade Seed Cleaning Building | 110.0 |
| Total | 495.7 |

University of Alaska

Sec. 14, Ch. 113, SLA 1978 (General Appropriations Act)

| | |
|---|---|
| Remodeling/Construction | |
| Sewage Facility, Palmer Agricultural Experiment Station | 50.0 |
| Storage of Hazardous Chemicals - Fbx Agric Experiment Station | 30.0 |
| Renovate Agricultural Experiment Station Bldgs, Fairbanks | 70.0 |

Sec. 25, Ch. 80, SLA 1979 (General Appropriations Act)

| | |
|---|---|
| Organized Research | |
| Feed Mill Bldg & Pellet Mill, Fbx | 80.0 |
| Animal Waste Disposal System, Fbx | 120.0 |

Sec. 286, Ch. 50, SLA 1980 (HB 60)

| | |
|---|---|
| Equipment Replacement & Additions | |
| Equip Agricultural Experiment Station, Fairbanks | 300.0 |
| Building Repair & Renovation | |
| Experimental Farm Renovation, Fbx | 191.3 |
| Other | |
| Facilities & Equip, Agric Experiment Station | 113.0 |
| Fairbanks School of Agriculture, Timber Thinning/Fire | 140.0 |
| Total | 1,094.3 |

Rural Agriculture FY 81

Sec. 25, Ch. 80, SLA 1979 (General Appropriations Act)

| | |
|---|---|
| Dept/Commerce & Economic Development | |
| Koyukon Development Corp - Farm Projects | 400.0 |
| Dept/Natural Resources | |
| Galena Agricultural Fair | 5.0 |
| Tanana Chiefs Conference - Agricultural Equipment | 120.0 |

Sec. 197, Ch. 50, SLA 1980 (HB 60)

| | |
|---|---|
| Dept/Natural Resources | |
| Koyukon Development Corp - Arctic Agriculture Training Program | 117.0 |

Sec. 286, Ch. 50, SLA 1980 (HB 60)

| | |
|---|---|
| Dept/Natural Resources | |
| Selawik Agricultural Project | 412.0 |
| Kuskokwim Native Assn - Agriculture | 200.0 |
| Koyukon Development Corp - Agriculture | 200.0 |
| Minto - Small Scale Agriculture | 104.0 |
| Dept/Community & Regional Affairs | |
| Mauneluk Garden Projects | 61.0 |
| Municipal Grant Account | |
| Bethel - Recreation/Agriculture Facility | 528.0 |
| Total | 2,147.0 * FY 81 |

Agricultural Revolving Loan Fund (ARLF)

| | |
|---|---|
| General Fund Capitalization through FY 81 | 20,000.0 |
| Fund Balance | 20,719.2 |

Governor's Proposed FY 82 Agriculture Capital Projects

| | |
|---|---|
| Dept/Commerce & Economic Development | |
| Agricultural Action Council | |
| Point McKenzie | 328.0 |
| Delta I | 949.0 |
| Delta I - Bison Fencing | 120.0 |
| Delta II - Survey/Disposal | 699.1 |
| Delta II - Clearing Loans | 4,000.0 |
| Delta II - Roads | 2,622.8 |
| Delta II - Clearing Equipment | 30.0 |
| Delta II - Grain Storage Loan | 1,650.0 |
| Grain Export Facility Loan | 4,425.0 |
| Livestock Facility Loan | 2,650.0 |
| Dept/Natural Resources | |
| Economic Development | |
| Kenai Grazing | 280.0 |
| Interior - Plant Materials Center Bldg | 177.0 |
| Plant Materials Center Head House | 25.0 |
| Plant Materials Center Equip | 85.0 |
| Plant Materials Center Alarm System | 11.5 |
| Agriculture Revolving Loan Fund Capitalization | 23,085.0 |
| Total | 41,137.4 |

Operating Budget Programs Related to Agriculture

| | |
|---|---|
| Dept/Natural Resources, Division of Agriculture | |
| FY 79 Authorized: Agriculture Development | |
| State Fairs | 165.5 |
| Plant Materials Center | 406.8 |
| Administration & Support | 138.8 |
| Agricultural Loan Fund | 160.2 |
| FY 80 Authorized: Agricultural Development | |
| State Fairs | 162.3 |
| Plant Materials Center | 343.0 |
| Administration & Support | 129.9 |
| Agricultural Loan Fund | 157.8 |
| FY 81 Authorized: Agricultural Management | |
| Agricultural Development | 353.5 |
| Agric Financing & Promotion | 203.8 |
| Agric Research/Extension Services | 361.9 |
| State Fairs | 294.5 |
| Directors Office | 113.1 |
| University of Alaska | |
| Organized Research - Operating funds for the Agricultural Experiment Stations | — |
| University Center/Fairbanks - Operating funds for the School of Agriculture | — |

NOTE: The University of Alaska's operating budget does not identify agriculture related programs spearately. The University has been requested to provide this information to Legislative Finance for FY 79-FY 81 along with an estimate for FY 82.

Governor's Proposed FY 82 Agriculture Operating Budget

| | |
|---|---|
| Dept/Natural Resources | |
| Agriculture Management | |
| Agricultural Development | 299.4 |
| Agric Financing & Promotion | 359.9 |
| Agric Research/Extension Services | 638.1 |
| State Fairs | 318.1 |
| Dept/Commerce & Economic Development | |
| Agricultural Action Council | 360.7 |
| University of Alaska - Information on Request | |

If I may be of further assistance, please let me know.

EL:vsw

# STATE OF ALASKA

THE LEGISLATURE
BUDGET AND AUDIT COMMITTEE

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

MEMORANDUM

DATE: March 3, 1981

TO: Mary Hakala, Administrative Assistant
House Resources Committee

FROM: Elmer A. Lindstrom, Fiscal Analyst
Legislative Finance Division

SUBJ: University Budget/Agriculture

The following is a summary of agriculture funds contained in the University of Alaska's operating budget for fiscal years 1979 - 1982.

| Program | FY 79 | FY 80 | FY 81 | FY 82 |
|---|---|---|---|---|
| | (thousands of dollars) | | | |
| Agricultural Experiment Station | 3,997.8 | 4,450.2 | 4,780.1 | 5,060.7 |
| School of Agriculture | 194.1 | 224.0 | 400.7 | 636.9 |
| Sea Grant Program | 29.6 | 49.9 | 87.6 | 27.4 |
| Mat-Su Community College | -- | 1.8 | 46.0 | 116.5 |
| Rural Education | -- | 128.2 | 78.4 | 60.0 |
| Cooperative Extension Service | 718.7 | 1,076.5 | 1,200.0 | 1,300.0 |

+ 25% of above 6 yrs. Fcst.

cc: Alison Elgee
Legislative Finance

EL:bf

ILH

# DEVELOPMENT CORPORATION, INC.



GALENA CENTER
BOX 72
GALENA, ALASKA 99741

TO: MARY

FROM: John Quirk, Executive Director

SUBJECT: Agriculture & Transportation DATE: 04/09/81

Christine and I enjoyed our visit with you. I have put in writing some of our conversation of that day. I firmly believe that revealment education will be the cornerstone upon which self sufficient economic entities will be made viable during the coming decades. Local control of budgets and curriculum are vital if these endeavors are to succeed.

Subsistance agriculture can allow Rural Alaskans to sever the end of a long supply chain, reduce prices, instil pride and self determination in a changing life style, and prepare a workforce that will be capable and ready when agriculture becomes a reality. Economic spinoffs from a large scale economic agriculture development is going to impact transportation, building, mechanics, timber products, rural growth, energy, and a host of other related industries.

Transportation costs will be the key in marketing. Present plans call for a grain terminal at Seward. As agriculture developes in Alaska it will be west along the Yukon and Kuskokwim rivers. This will require a backhaul up the river to the railroad down to Seward with an increase in transportation costs. Kuskokwim grain will require a railroad and/or canal to reach the Yukon. Storage facilities costs will be high.

Grain handling is energy inefficient and some areas labor intensified. Handling of grain has not changed much in fifty years. The farmer augers the grain from the combine to the truck, to the graindryer, to the storage elevator, to the railroad car, to the seaport grain terminal, to the ship and than a similar process at destination. This takes time, money, and a unique one commodity storage facility.

The vastness of the Alaskan interior, the potential of grain production, and soaring costs require a new and innovative approach utilizing modern techology in transportation. Grain could be augured from the combine to the truck, to the grain dryer and into sealed containers, barged down to the mouth of the Yukon and Kuskokwim rivers, and loaded by sea going barges on large container ships being built by McClennan shipping that could be the future transportation link between pacific rim markets, and eventually feed lots on the Aluetian chain. The containers could be used for backhaul of commodities. They can have the capability of cooling, refrigeration, and floatation with some commodities in case of accident at sea.

# REPORT ON VILLAGE/SMALL SCALE AGRICULTURE

MR. CHAIRMAN:

MY NAME IS JIMMIE L. FARMER

UNTIL RECENTLY I WAS THE EXECUTIVE DIRECTOR OF THE KOYUKON DEVELOPMENT CORPORATION LOCATED IN GALENA, IN THE INTERIOR. DURING MY TIME AT KOYUKON AN AGRICULTURE PROGRAM WAS STARTED TO TEACH PEOPLE IN OUR AREA HOW TO GROW, PRESERVE AND PREPARE MORE OF THEIR OWN FOOD. THIS EDUCATIONAL EFFORT WAS, AND IS, NEEDED BECUASE PART OF THE EDUCATION IS TEACHING PEOPLE HOW TO GROW VARITIES THAT UP TO THIS POINT WERE ONLY SEEN IN CANS OR DRIED FORM.

THE LEGISLATURE WAS VERY HELPFUL IN THESE EFFORTS BY PROVIDING SOME MONEY FOR EQUIPMENT FOR THIS PROJECT.

KOYUKON WORKED IN 2 VILLAGES IN 1977, 8 VILLAGES IN 1978, AND 20 VILLAGES IN 1979. AS YOU CAN SEE THE DEMAND WAS OUTSTANDING. AS SOON AS PEOPLE HEARD ABOUT THE PROJECT AND TALKED WITH PEOPLE THAT WERE INVOLVED IN IT, THEN THEY REQUESTED IT. THE MAJOR FOCUS WAS, AND IS, ON PRODUCING ENOUGH FOOD FOR USE WITHIN THE VILLAGE. DIRECT FOOD (GARDEN TO TABLE), FOOD PRESERVED FOR LATER USE, AND FOOD STOCKS TO FEED CHICKENS, TURKEYS, AND DUCKS. THESE ARE LATER TURNED INTO PROTIEN FOR THE TABLE. SOME ARE KEPT FOR EGG PRODUCTION. WE ALSO HAVE SOME MILK GOATS (PRIVATE PARTY) FOR MILK PRODUCTION WITHIN THE VILLAGE. THE ACCEPTANCE BY THE LOCAL PEOPLE IS GOOD. WE HAD A RED MEAT EXPERIMENT IN GALENA AND RUBY WHICH TURNED OUT REAL WELL AND PROVED THAT BEEF ANIMALS CAN BE KEPT OVER WINTER WITHOUT HEATED BUILDINGS.

OUR INITIAL GOAL WAS TO SHOW PEOPLE HOW TO IMPROVE THEIR HEALTH AND DIET BY GROWING THEIR OWN FOOD.

THIS HAS BEEN DONE.

WE ARE INTO A PROGRAM OF FOOD PRESERVATION, SO THAT THE SUMMERS EFFORTS WILL EXTEND INTO NEXT SUMMER.

THIS HAS BEEN STARTED, IN ALL 20 VILLAGES. WE NEED TO HAVE FOLLOW UP WORKSHOPS TO INSURE PROPER PROCESSING OF THE FOODS.

FROM THE INCEPTION OF THIS PROJECT IN THE INTERIOR, WE HAVE HAD REQUEST ON HOW TO GET STARTED AND JUST WHAT WAS NEEDED FOR A VILLAGE TO ENABLE THEM TO PRODUCE THEIR OWN FOOD. AS I TALKED TO PEOPLE FROM AROUND THE STATE AND ADDED UP THE VILLAGES THEY HAD THAT WANTED TO GET INTO AGRICULTURE, I COUNTED ABOUT 125 VILLAGES EITHER INVOLVED IN AGRICULTURE OR WANTING TO BECOME INVOLVED. THIS IS MORE THAN HALF OF THE VILLAGES IN ALASKA. THIS DOES NOT INVOLVE THE EFFORTS IN FAIRBANKS, ANCHORAGE, OR JUNEAU. WITH THIS KIND OF DESIRE FROM SO MANY DIVERSE PEOPLES, I FEEL THAT THE MESSAGE IS CLEAR:

HELP US REDUCE OUR DEPENDENCY ON LONG, HIGH ENERGY USE SUPPLY LINES - OUR DEPENDENCE ON IMPORTED FOODS.

DURING THESE TIMES OF AFFLUNCE BY OUR STATE, ONE OF THE BEST USES OF SOME OF THIS MONEY WOULD BE TO HELP CREATE A SYSTEM OR CONDITION WHEREBY THE RESIDENTS OF THE STATE CAN BECOME SELF SUFFICENT IN FOOD PRODUCTION.

THE DELTA AND POINT MCKENZIE PROJECTS ARE GREAT AND NEEDED FOR THE HEALTH OF THE STATE AS A WHOLE, BUT IN LOOKING AT THE LARGER PROJECTS LET US NOT FORGET THE NEEDS OF PEOPLE, THE VILLAGE AGRICULTURE PROJECTS, STATEWIDE.

DURING HISTORIC AGRICULTURE DEVELOPMENT GOVERNMENT CAN ASSIST BUT CANNOT DO THE JOB BY ITSELF. BY ENCOURAGING VILLAGE GARDENING YOU ARE EDUCATING THE STOCKHOLDERS OF THE VILLAGE AND REGIONAL CORPORATIONS AND THESE PEOPLE ARE THE ONES THAT CAN GET THESE CORPORATIONS INVOLVED IN AGRICULTURE. THIS IS PRIVATE CAPITAL. THESE CORPORATIONS WILL OWN OR CONTROL A VERY LARGE BLOCK OF THE AGRICULTURE LAND WITHIN THE STATE IN THE NEAR FUTURE. THIS PROGRAM WILL ALSO PROVIDE A TRAINED CADRE OF AGRICULTURE WORKERS WITHIN THE STATE AND WILL ENSURE NOT HAVING TO IMPORT WORKERS FOR OUR DEVELOPING AGRICULTURE INDUSTRY.

THE PROPER INCLUSION IN THE LONG TERM AGRICULTURE DEVELOPMENT PROGRAM, OF THE VILLAGE NEEDS, THE UPGRADING OF THE TRANSPORTATION SYSTEMS TO ALL AREAS OF THE STATE, THE PROPER BLENDING OF THE VILLAGE AND URBAN NEEDS AS PART OF A WHOLE STATEWIDE PROGRAN OF DEVELOPMENT IS JUST A FEW OF THE THINGS WE NEED.

WITH THE CONTINUING FUEL PRICE INCREASES AND THE ATTENDENT FREIGHT RATE INCREASES, PRICES ARE GETTING SO FAR OUT OF REACH OF EVERYONE. BUT IN THE VILLAGES WITH 80% UNEMPLOYMENT FOR 75% OF THE YEAR AND PRICES THAT RANGE FROM20 - 400% HIGHER THAN ANCHORAGE (AVERAGE 150 - 200 %) IT IS BECOMING LIFE THREATING. EVEN WITH WELFARE AND FOOD STAMPS (WHICH ARE USED BUT NOT REALLY ACCEPTED IN MOST CASES) YOU CANNOT FEED A FAMILY AN ADEQUATE LIFE SUSTAINING DIET.

THE RESULTS OF A RECENT SURVEY DONE IN THE KOYUKON REGION SHOWS THAT 96% OF THE HOUSEHOLDS SURVEYED ARE CURRENTLY INVOLVED IN GROWING SOME OF THEIR OWN FOOD. OUR SURVEY COVERED 49% OF THE HOUSEHOLDS WITHIN THE KOYUKON REGION. 1978 FIGURES FOR OUR AREA SHOWS 974 HOUSEHOLDS AND 5,368 RESIDENTS. WITH NORMAL PROJECTIONS THAT 96% OF ALL OF THE HOUSEHOLDS ARE INVOLVED IN VILLAGE/SMALL SCALE AGRICULTURE THIS SHOULD BE A CLEAR INDICATION OF THE DESIRE OF THE PEOPLE TO HELP THEMSELVES.

THE KOYUKON PROJECT ONLY COVERS ABOUT 8-9% OF THE VILLAGES IN ALASKA, THERE ARE OTHER ORGANIZATIONS THAT ARE TRYING TO ASSIST IN THEIR AREAS, WITH GOOD RESULTS WHERE FUNDING HAS BEEN MADE AVAILABLE. THIS ONLY REINFORCES WHAT HAS BEEN SAID BEFORE, "HELP US HELP OURSELVES".

REMEMBER THE OLD SAYING, "IF YOU EAT, YOU ARE INVOLVED IN AGRICULTURE".

WHEN I STARTED AT KOYUKON, SPRING OF 1977, IT WAS ONE OF MANY REGIONAL NON-PROFITS THAT JUST SEEM TO EXSIST WITHOUT MUCH IMPACT ON THE LIFES OF THE PEOPLE IN THE VILLAGES. SINCE THAT TIME, DUE TO THE POSITIVE DEMANDS MADE ON ME BY THE VILLAGE RESIDENTS AND THE ASSISTANCE OF THE LEGISLATURE AND THE USDA PERSONELL IN ALASKA THE KOYUKON DEVELOPMENT CORPORATION HAS BECOME WELL KNOWN IN JUNEAU AND WASHINGTON, D.C. AS THE MOST AGRESSIVE VILLAGE AGRICULTURE DEVELOPMENT PROGRAM IN THE COUNTRY. I FEEL GRATIFIED TO HAVE BEEN A PART OF THIS. IT WAS THROUGH 16-20 HOUR DAYS, 6-7 DAY WEEKS THAT IT WAS MADE POSSIBLE. ONLY WITH THIS KIND OF PERSONAL COMMITTMENT IS THIS TYPE PROGRAM ABLE TO GET STARTED AND TO BECOME A MODEL FOR OTHERS TO FOLLOW.

WE ANTICAPTE THE PROGRAM WILL CONTINUE UNDER THE NEW MANAGEMENT AT KOYUKON AND REQUEST THE LEGISLATURE TO PROVIDE SUPPORT TO INSURE THAT THEY ARE ABLE TO (CONTINUE).

AT THE CURRENT TIME I FEEL THAT IT IS NECESSARY FOR THE RESOURCES COMMITTEE TO BECOME MORE INVOLVED IN THIS DEVELOPING INDUSTRY. THE DIVISION OF AGRICULTURE IS DOING WHAT IT CAN BUT THEY JUST DO NOT HAVE THE PERSONNEL TO DO THE FOLLOWING JOB. I SUGGEST THAT THE RESOURCES COMMITTEE HIRE SOMEONE TO VIST ALL OF THE REGIONAL PROFIT AND NON-PROFIT ENITIES AROUND THE STATE TO FIND OUT WHAT, IF ANYTHING, THEY HAVE IN THE WAY OF PLANS FOR AGRICULTURE DEVELOPMENT IN THEIR AREA. THIS WOULD COVER DEVELOPMENT WITH THEIR OWN CAPITAL OR WHERE THEY PLANNED TO SEEK STATE ASSISTANCE. ONCE THIS INFORMATION IS GATHERED AND DEVELOPED THEN THE PROPER STATE AGENCIES COULD INCLUDE THIS INTO THEIR PLANNING PROCESSES. ONE OF THE THINGS THAT IS LACKING NOW IS TOTAL CORRIDINATION OF THE PLANNING, AND IT IS REALLY NOONE PERSON OR AGENCIES FAULT. THIS KIND OF INFORMATION IS VITAL TO ALLOW YOU AS A COMMITTEE TO DO YOUR JOB PROPERLY.

THANK YOU FOR ALLOWING ME TO EXPRESS MY VIEWS HERE AND BE ASSURED THAT I AM AVAILABLE FOR ANY ASSISTANCE YOU MAY REQUIRE. I STILL FEEL THAT THIS IS VITAL TO ALASKA AND THE NATION AS A WHOLE.

Jimmie L. Farmer
630 W. 8th Apt 105
Anchorage, ak. 99501
277-8720

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. CS HB 538
Title Small-scale Agriculture Grant Program
Requested by Rep. Terry Gardiner Date May 15 1981

II. FISCAL DETAIL
Agency Affected Department of Natural Resources
Program Category Affected Economic Development
BRU, Program, or Subprogram(s) Affected Ag Management
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | FY 81 | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | | 37.8 | 37.8 | | | |
| 200 TRAVEL | | 10.0 | 10.0 | | | |
| 300 CONTRACTUAL | | 4.2 | 4.2 | | | |
| 400 COMMODITIES | | .3 | .3 | | | |
| 500 EQUIPMENT | | 1.7 | 1.7 | | | |
| 600 LAND & STRUCTURES | | | | | | |
| 700 GRANTS, CLAIMS, ETC. | | 500.0 | 1000.0 | | | |
| TOTAL | | | | | | |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | | 564.0 | 1064.0 | | | |
| FEDERAL FUNDS | | | | | | |
| OTHER (Specify Fund Source) | | | | | | |
| | | | | | | |
| | | | | | | |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | | 1 | 1 | | | |
| PART TIME | | | | | | |
| TEMPORARY | | | | | | |

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

Includes Agronomist (program coordinator) to be added to Division Staff. Position will reduce conflicting and duplicative grants, assist applicants with application and report, and screen applications.

Grant funds would fund already recieved applications and expected requests for FY 82.

IV. DATE May 16, 1981 PREPARED BY [signature]
AGENCY DNR Division of Agriculture
PHONE

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

33-001 (Rev. 12/80)

CS for HB 456 (Finance) am

The bill consists of four main sections related to the agricultural revolving loan fund, an agricultural products board, the soil conservation board, and the Commercial Fishing and Agriculture Bank. The purpose of the bill in its entirety is to aid the development of all scales of agriculture in the state. A sectional analysis follows.

Sec. 1. States the Act's purpose.

Sec. 2. States the policy of the agricultural revolving loan fund -- "to promote the development of agriculture throughout the state by means of low-interest loans."

Sec. 3. Adds greenhouses, marketing, greenhouse gardeners, and cooperatives as eligibles for the ag revolving loan fund and clarifies that all recipients must be residents.

Sec. 4. Raises the interest rate to 8%.

Sec. 5. Raises loan limits to $750,000 for farm development and $500,000 for chattel..

Sec. 6. Adds a new section to identify the ag revolving loan fund as a development fund, not a continuing source of low-interest capital.

Sec. 7. Creates an agriculture products board for quality and marketing. The board, in DNR, has seven resident members representative of agricultural products processors and farmers. Duties are defined in 03.18.030.

Sec. 8-10. Amends the Soil Conservation Board to have five rather than three members, adds representation by ranchers, requires geographical representation, and defines the board's duties.

Sec. 11-13. Amends CFAB to provide for agricultural processing facilities loans.

Sec. 14-15. Transition.

Sec. 16. Effective date July 1, 1981.

Sec. 03.10.010. Declaration of policy. It is the policy of this chapter to promote the more rapid development of agriculture as an industry throughout the state by means of long-term low interest loans. (§ 2 ch 122 SLA 1953)

Am. Jur., ALR and C.J.S. references.—2 Am. Jur., Agriculture, §§ 4, 12 to 16, 20, 24, 30 to 33; 36 Am. Jur., Mortgages, § 1 et seq.; 43 Am. Jur., Public Funds, § 1 et seq.

Power, under statute for stabilization of market for agricultural products in respect of crop loans by state agency and the security therefor, 3 ALR 338.

3 C.J.S. Agriculture §§ 7 to 9; C.J.S. States §§ 132 to 190.

Sec. 03.10.020. Powers of the department. The department may

(1) make loans to individual resident farmers, homesteaders and partnerships or corporations composed of farmers and homesteaders, for development of farms, storage and processing of farm produce, livestock and machinery and to individuals, partnerships or corporations, for storage and processing plants for agricultural products;

(2) designate agents and delegate its powers to them as necessary;

(3) adopt rules and regulations necessary to carry out its functions;

(4) establish amortization plans for repayment of loans, which may include delayed payments of principal and interest for not to exceed five years;

(5) enter into agreements with private lending institutions, other state agencies or agencies of the federal government, to carry out the purposes of this chapter. (§ 4 ch 122 SLA 1953; am § 1 ch 156 SLA 1955; am § 1 ch 41 SLA 1961)

Sec. 03.10.030. Limitations on loans. (a) A farm development loan may not exceed $150,000. The mortgage which secures a farm development loan may be of any priority if the total indebtedness on the real estate, including the secured farm development loan, does not exceed $150,000. A farm development loan which, if granted, would raise the existing indebtedness on the real estate above $150,000, or a farm development loan on real estate which has a prior existing indebtedness of $150,000 or more, may be made only if all prior mortgagees agree to subordinate their mortgages to that of the state for the amount of the farm development loan which exceeds the $150,000 indebtedness limit on the real estate. A loan may not run longer than 30 years nor bear interest exceeding six per cent, and it shall be secured by a real estate or chattel mortgage, or both.

(b) Except for loans for irrigation systems as provided in this subsection, a chattel loan may not exceed $100,000 for each farm unit and may not run longer than seven years or the useful life of the chattel if more than seven years. It may not bear interest

(c) A short term loan, to be amortized within one year, not to exceed $200,000 to any one borrower may be made for operating purposes.

(d) Farm development and chattel loans for irrigation systems may be for terms as determined by the commissioner.

(e) An installment payment is delinquent unless it is mailed by the borrower on or before the 15th day after the date specified for payment in the loan agreement or unless it is received by the department on or before the 15th day after the date specified for payment in the loan agreement. If an installment payment is delinquent, the director shall assess a delinquency penalty. The delinquency penalty shall be an amount equal to seven per cent of the delinquent payment.

(f) A farm product processing loan may not exceed $2,500,000. A mortgage which secures a farm product processing loan may be of any priority if the total indebtedness on the real estate, including the secured farm product processing loan, does not exceed $2,500,000. A farm product processing loan which, if made, would raise the existing indebtedness on the real estate securing the loan above $2,500,000, or a farm product processing loan on real estate which has a prior indebtedness of $2,500,000 or more, may be made only if all prior mortgagees agree to subordinate their mortgages to that of the state for the amount of the farm product processing loan which exceeds the $2,500,000 indebtedness limit on the real estate. A farm product processing loan may not exceed a term of 30 years or bear interest exceeding six percent a year and shall be secured by a real estate or chattel mortgage or both. (§ 4 ch 122 SLA 1953; am § 1 ch 156 SLA 1955; am § 1 ch 41 SLA 1961; am § 1 ch 144 SLA 1966; am § 1 ch 78 SLA 1967; am § 1 ch 135 SLA 1970; am § 1 ch 22 SLA 1974; am § 1 ch 18 SLA 1975; am §§ 1-4 ch 50 SLA 1979; am § 74 ch 106 SLA 1980)

Effect of amendments. — The 1974 amendment, in subsection (c), substituted "$25,000" for "$15,000" and "operating" for "emergency."

The 1975 amendment substituted "$200,000" for "$150,000" throughout subsection (a).

The 1979 amendment substituted "$500,000" r "$200,000" throughout subsection (a), substituted "$300,000" for "$100,000" in the first sentence of subsection (b), substituted "$200,000" for "$25,000" in subsection (c), and added subsection (e).

The 1980 amendment, effective June 21, 1980, added subsection (f).

Editor's note: — Section 7, ch. 50, SLA 1979 provides: "The provisions of AS 03.10.030(e) enacted in sec. 1 of this Act and AS 03.10.035 enacted in sec. 5 of this Act applied to farm development, chattel, and irrigation system loans made after July 1, 1979."

**Sec. 03.10.035. Use or disposal of mortgaged farm land.** (a) A borrower may not use farm land for a non-farm use or sell, lease or otherwise dispose of farm land if that land is encumbered by a mortgage given to secure the payment of a farm development, chattel, or irrigation system loan under this chapter unless the borrower either

(1) pays the outstanding balance of the loan in a lump sum or under other terms agreed to by the commissioner which accelerate payment of the loan; or

paragraph (6) to

amendment, in
meat, fish and
aragraph (3) and

ent, in the

substituted "orders, regulations, quarantines and embargoes" for "rules, orders, regulations and quarantines."

As the rest of the section was not affected by the amendments, it is not set out.

Miscellaneous powers of commissioner. The

e inspection of food animals, fish, poultry and ucts, to protect the public against fraud, disease n this connection he shall promulgate uniform hing standards of identity and composition of these minimum standards of sanitation and handling l phases of slaughtering, processing, storing, ying and selling of these food products; 1978)

substituted "food or "animals and ).

As the rest of the section was not affected by the amendment, it is not set out.

Sale and labeling of frozen meat, fish and fish or poultry which has been frozen may not be advertised as a fresh food.

poultry which has been frozen must be labeled as regulations.

ner shall promulgate regulations which food labels for meat, fish and poultry which has

e examination and inspection of meat, fish and whether it has been frozen. (§ 5 ch 138 SLA 1974)

nspection. On any business day during the usual commissioner or his authorized inspector may, for cting agricultural or fisheries products subject to torehouse, warehouse, cold storage plant, packing se, retail store or other building or place where kept, stored, processed or sold. (§ 33-1-2 ACLA SLA 1955; am § 2 ch 25 SLA 1972; am § 3 ch 58

nt inserted "or e of the section.

Sec. 03.05.050. Products in violation of regulations. An agricultural or fisheries product found by the commissioner, or his authorized inspector, to violate a regulation adopted under this chapter is declared to be a public nuisance injurious to the public interest and shall not be moved by the person in whose possession it may be except upon the specific direction of the commissioner or inspector. (§ 33-1-2 ACLA 1949; am § 1 ch 121 SLA 1955; am § 4 ch 58 SLA 1978)

Effect of amendment. — The 1978 amendment inserted "or fisheries" near the beginning of the section and substituted "regulation adopted under this chapter" for "rule or regulation" near the middle of the section.

Sec. 03.05.100. Definitions. In this chapter,

(1) "agricultural products" does not include fish or fisheries products;

(2) "fish or fisheries products" means any aquatic animal, including amphibians, or aquatic plants or parts of these plants, animals or amphibians that are usable as human food. (§ 5 ch 58 SLA 1978)

## Chapter 10. Alaska Agricultural Loan Act.


| Section | Section |
|---|---|
| 30. Limitations on loans | 40. Creation of fund |
| 35. Use or disposal of mortgaged farm land | 50. Administration of fund |
| | 54. [Repealed] |


Sec. 03.10.030. Limitations on loans. (a) A farm development loan may not exceed $500,000. The mortgage which secures a farm development loan may be of any priority if the total indebtedness on the real estate, including the secured farm development loan, does not exceed $500,000. A farm development loan which, if granted, would raise the existing indebtedness on the real estate above $500,000, or a farm development loan on real estate which has a prior existing indebtedness of $500,000 or more, may be made only if all prior mortgagees agree to subordinate their mortgages to that of the state for the amount of the farm development loan which exceeds the $500,000 indebtedness limit on the real estate. A loan may not run longer than 30 years nor bear interest exceeding six per cent, and it shall be secured by a real estate or chattel mortgage, or both.

(b) Except for loans for irrigation systems as provided in this subsection, a chattel loan may not exceed $300,000 for each farm unit and may not run longer than seven years or the useful life of the chattel if more than seven years. It may not bear interest exceeding six per cent. It shall be secured by a real estate or chattel mortgage, or both. Loans and the real estate and chattel mortgage security on them for irrigation systems may be in amounts and for terms as determined by the commissioner.

HB

651

Alaska State Legislature

Senate Committee on State Affairs

Vic Fischer, Chairman • Pouch V • Juneau, Alaska 99811 • (907) 465-4954

Official Business

MEMORANDUM

TO: Senator Bill Ray, Chairman, Senate Transportation Committee
Senator Ed Dankworth, Co-chairman, Senate Finance
Senator Don Bennet, Co-chairman, Senate Finance

FROM: Senator Vic Fischer, Chairman, Senate State Affairs

RE: CSHB 651, "An Act relating to ferries and ferry terminals and establishing the Alaska Marine Highway Authority", and CSHB 654, "An Act relating to the Department of Transportation and Public Facilities and establishing the Board of Transportation and Public Facilities at the head of the department".

DATE: May 11, 1981

Attatched is a brief resume of DOTPF Commissioner Bob Ward's testimony on both bills.

The State Affairs Committee members gave both bills negative recommendations.

# Alaska State Legislature

## Senate Committee on State Affairs

Vic Fischer, Chairman • Pouch V • Juneau, Alaska 99811 • (907) 465-4954


Official Business

MEMORANDUM

TO: Senator Vic Fischer

FROM: Bob Williams, Staff

RE: A recap of testimony by Commissioner Bob Ward on CSHB 651, "An Act relating to ferries and ferry terminals and establishing the Alaska Marine Highway Authority", and CSHB 654, "An Act relating to the Department of Transportation and Public Facilities and establishing the Board of Transportation and Public Facilities at the head of the department".

DATE: May 10, 1982

On May 7, 1982, Mr. Bob Ward Commissioner of the Department of Transportation and Public Facilities testified before the Senate State Affairs Committee, first stating that even though he (DOTPF) had consistently opposed HB 651 in every committee which the bill has been heard, he had "gotten absolutely no place..."

CSHB 651, an Act which creates the Alaska Marine Transportation Authority, is a House priority bill.

Commissioner Ward then elaborated on three general problems he and the Administration have with the bill. These are:

1) the Authority created under CSHB 651 has none of the power authorities generally have, nor should they,

2) the bill would add new positions and increase DOTPF's operating budget at a time when the Department was trying to trim costs, and

3) it is pointless to re-organize the Department on the eve of a two term Administration.

Commisioner Ward then stated that the DOTPF has not suggested languange or amendments to improve the bills, because "...we don't think they are any good to start with..."

Commissioner Ward was refering to CSHB 654 as well as CSHB 651. CSHB 654 creates the "Board of Transportation".

Problem 1 --- What is an Authority. Ward said basically that CSHB 651 creates an Authority, but doesn't give it any power. He then compared it to the Port of Seattle Authority.

The Port of Seattle (POS) is an authority which runs the Seattle port, but not the ferry system. According to Ward, the POS has the "awesome" power to tax. No existing authority in Alaska has that power, nor, says Ward, "do we want them to".

Ward then says there are different types of Authorities, but all have some ability to raise capital. (Note: This would generally be either through taxation, rate setting, or revenue bonds.) Ward continued by maintaining that if he has had any success in testifying on

this bill it was in eliminating the provision allowing the authority to sell revenue bonds.

Ward explained that presently the ferry system does not generate enough revenue from fares to pay the operating cost or debt service. About one-half of the funds come from the general fund. (Note: Hence, the Authority couldn't sell revenue bonds unless their balance sheet were improved, or there was some sort of "Covenant" or statutory guarantee to insure that bond holders would be paid off in spite of operating losses.)

Finally, Ward said that, since the Authority would be subject to the Executive Budget Act and since the Authority has no power to generate its own capital, you don't really even have an authority if the bill were enacted.

Problem 2 --- the Fiscal Note. HB 651 would cost approximately $2.25 million in the first year (F.Y. 83), but fall to about $1.0 million in F.Y. 84. There are some initial start-up costs that would not be incurred after the first year.

The Authority would require an additional 22 employees, to accomplish "exactly" what the current Division does.

Ward was particularly acrimonius on this point, because it is a time when DOTPF's operating budget is being "held down tightly". Ward said they actually expect to have a lower operating budget next year.

Problem 3 --- Why reorganize a Department on the eve of a two term adminstration? Ward basically said that no matter who is elected, they will have their own ideas on how to organize and manage DOTPF. There is absolutely no point in re-organizing DOTPF at this time.

Senator Bradley then asked for Commissioner Ward's postion on CSHB 654, the bill creating the Transportation Board.

Ward reiterated his point on Problem 3, leave organization and management of DOTPF to the next Administration. He added that if both CSHB 651 and CSHB 654 passed the state would have the "unique experience of a board running a board".

Ward also stated that a Board of Transportation would represent an erosion of Executive power and is not the sort of thing contemplated by the Alaska state constitution.

HB

866

PLEASE NOTE: THE PRECEDING PAGES HERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

FILE WITH 866

# STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

**DEPARTMENT OF REVENUE**

STATE OFFICE BUILDING / POUCH SA - JUNEAU 99811

May 20, 1982

The Honorable Bill Ray, Chairman
Senate Transportation Committee
Pouch V
Juneau, AK 99811

Re: HB 866 and SCS HB 866 (SA) - Providing for an increase in the investment tax credit against the State corporate income tax

Dear Mr. Chairman:

The idea behind this legislation is ill-conceived and represents poor state policy. It is poor state policy because rich corporations stand to get far more benefit from it than poor ones. For example, I did a comparison for Senator Fischer's committee on the effect of the original version of HB 866 on the rate of return for a project standing on its own, versus that same project if it is owned by a affluent company (not even oil-company sized) having $750,000 a year of taxable Alaska income from other business activities. The improvement in the rate of return would be nearly three times greater for the big business than it would be for the little guy just starting out. For the large oil companies, the disproportion would be somewhat greater still.

The Bill is ill-conceived because the effect on investment rates of return as the result of increasing this investment tax credit (ITC) is too small to have any economic meaning, despite claims to the contrary by its supporters. A project will go forward or not go forward, because of other factors than the ITC. Even in the case of the rich corporation that I prepared for Senator Fischer, the improvement in the internal rate of return on the investment was less than one percentage point. The effect of assuming only a 10 percent higher operating margin over the life of the project was four and a quarter times greater. And, that was when the Bill still provided that the new state ITC would be 100% of the federal ITC. Under the State Affairs CS, the state ITC would be only 36% of the federal ITC, which would make the change in the rate of return vanishingly small.

There are other reasons not to pass this Bill or some variation of it. First, mining already enjoys a three-year "holiday" from paying the mining license tax, from the time the mine starts operating. Second, the amount of qualified investment on which the ITC is computed was

04-D4LH

increased last year 40-fold, from $500,000 to $20,000,000; increasing the percentage of that investment which may be deducted dollar for dollar against the income tax is too much of a good thing. Third, corporations last year were given a significant tax break, particularly the smaller ones, by the decrease in state income tax rates on the first $90,000 of taxable income (for example, the first $10,000 of taxable income is taxed now at only one percent, as opposed to 5.4 percent before last year's rate change). Fourth, by whittling away at the non-petroleum tax base of the State, we not only make the State finances more vulnerable to the vagaries of the world oil market, but we also tend to furnish factual support for the type of tax lawsuits which you may recall Dick Donaldson of SOHIO was threatening you and the Legislature with last year.

All in all, this Bill is nothing more than a give-away of State revenues with nothing for the State to show in return that it wouldn't have gotten anyway. Moreover, to the extent it conveys benefits, they are more advantageous to the rich corporations than the poor.

I am enclosing a copy of my letter to Senator Fischer, and I would welcome the opportunity to speak to you or your Committee further on this Bill if you so desire.

Thank you for your consideration.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Enclosure

STATE OF ALASKA
DEPARTMENT OF REVENUE
OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH S
JUNEAU, ALASKA 99811
PHONE: (907) 465-2300

May 15, 1982

The Honorable Vic Fischer, Chairman
Senate State Affairs Committee
Pouch V
Juneau, AK 99811

Re: Effects on Economic Decision-Making from Increasing the State Investment Tax Credit as Proposed in House Bill 866

Dear Mr. Chairman:

In my testimony before the Committee I stated that increasing the State's investment tax credit as proposed in HB 866 would have only a minimal effect on the internal rate of return after taxes for new projects in Alaska. I also said that, to the extent there would be an effect on the rate of return, it would be greater for "fat cat" corporations than for small ones. I now have had the opportunity to prepare an example which demonstrates the truth of both assertions.

Suppose we have a new project in Alaska, and to avoid any distortions by making it too large, suppose further that it costs $1,000,000, takes a year to complete and will employ 25 people. Suppose, too, that after expenses other than income taxes and depreciation, the project yields a net cash flow of $250,000 a year for its first four years of operation, and then each year thereafter the net cash flow decreases by five percent from the previous year. Finally, let us suppose that the project qualifies for Accelerated Capital Recovery System treatment under the new tax law using a 10-year life.

The analysis I have used takes this project and compares the internal rate of return (IRR) on the investment under Alaska's present investment tax credit with the IRR under the credit proposed in HB 866. This comparison is first made with the project standing alone; that is, the investor has no other income to be sheltered from the tax benefits generated from the project. I call this Case 1. Case 2 doesn't involve too fat a "fat cat" corporation, simply one with $750,000 a year of taxable Alaskan net income from other sources.

The tables attached to this letter show what the after-tax cash flows are under Case 1 and Case 2, both with the present investment tax credit and with the one proposed by HB 866. As you can see from those tables, the IRR under the non-"fat cat" case (Case 1) is 18.763% under

the present law and would rise by only 0.363 of a percentage point to 19.126% under HB 866. In contrast, the improvement in the rate of return for the "fat cat" case (Case 2) is nearly three times as great as for the "skinny" cat -- 0.997 of a percentage point (15.772% to 16.769%).

Note also how small a difference there is in the rate of return between present law and HB 866. The extra economic incentive from raising the State's investment tax credit is truly minimal (and you can see why: look how much higher the federal taxes would be during the early years with HB 866 than they are under present law, in both Cases 1 and 2). Other factors have much more effect on the economics of an investment than the amount of investment tax credit. For example, in Case 1, suppose one's assumptions about market prices, labor costs and other operating expenses had a 10 percent margin of error. If the net pre-tax cash flows were only 10 percent higher than the figures in the table, the increase in the rate of return would be 4.25 times that from the extra tax incentive under HB 866.

Without going on excessively, I would only reiterate my objections that HB 866 does too little economically, at too high a price for the State, to the advantage of wealthy corporations over small ones. It scarcely makes economic sense and certainly makes poor State policy.

I hope this information may prove useful to you and your Committee in considering HB 866.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Attachments

P.S. I might add parenthetically that the reason for the lower IRRs in the "fat cat" case is that all income from the project is taxed in the maximum tax bracket under both federal and state tax laws, because of the other $750,000 of taxable income; the project represents incremental income to the corporation. In Case 1 the project stands alone, and so the first $100,000 and first $90,000 are taxed below the maximum rates under the federal and Alaska tax laws, respectively.

## CASE 1. A NEW ALASKAN BUSINESS ON ITS OWN

| | | | With State Investment Tax Credit Under Existing State Law | | | | | | | With State Investment Tax Credit under HB 866 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yr | Pre-Tax Cash Flow from Project | Project Depre-ciation | AK Inc. Tax From Project Before ITC | AK ITC Applied | AK Inc. Tax From Project After ITC | US Inc. Tax From Project Before ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow | AK ITC Applied | AK Inc. Tax From Project After ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow |
| 1 | -1,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,000,000 | 0 | 0 | 0 | 0 | -1,000,000 |
| 2 | 250,000 | 80,000 | 12,020 | 12,020 | 0 | 57,950 | 57,950 | 0 | 250,000 | 12,020 | 0 | 57,950 | 0 | 250,000 |
| 3 | 250,000 | 140,000 | 6,380 | 5,980* | 400 | 30,166 | 30,166 | 0 | 249,600 | 6,380 | 0 | 30,166 | 0 | 250,000 |
| 4 | 250,000 | 120,000 | 8,260 | 0 | 8,260 | 35,750 | 11,884 | 25,866 | 217,874 | 8,260 | 0 | 11,884 | 27,850 | 222,150 |
| 5 | 250,000 | 100,000 | 10,140 | 0 | 10,140 | 44,086 | 0 | 44,086 | 195,774 | 10,140 | 0 | 0 | 48,750 | 201,250 |
| 6 | 237,500 | 100,000 | 8,965 | 0 | 8,965 | 38,876 | 0 | 38,876 | 189,659 | 8,965 | 0 | 0 | 43,000 | 194,500 |
| 7 | 225,625 | 100,000 | 7,849 | 0 | 7,849 | 33,927 | 0 | 33,927 | 183,849 | 7,849 | 0 | 0 | 37,538 | 188,088 |
| 8 | 214,344 | 90,000 | 7,728 | 0 | 7,728 | 33,393 | 0 | 33,393 | 173,222 | 7,728 | 0 | 0 | 36,948 | 177,396 |
| 9 | 203,627 | 90,000 | 6,721 | 0 | 6,721 | 28,927 | 0 | 28,927 | 167,979 | 6,721 | 0 | 0 | 32,018 | 171,609 |
| 10 | 193,445 | 90,000 | 5,764 | 0 | 5,764 | 24,822 | 0 | 24,842 | 162,859 | 5,764 | 0 | 0 | 27,335 | 166,110 |
| 11 | 183,773 | 90,000 | 4,855 | 0 | 4,855 | 21,317 | 0 | 21,317 | 157,601 | 4,855 | 0 | 0 | 23,259 | 160,514 |
| 12 | 174,584 | 0 | 12,451 | 0 | 12,451 | 54,331 | 0 | 54,331 | 107,802 | 12,451 | 0 | 0 | 60,059 | 114,525 |
| 13 | 165,855 | 0 | 11,630 | 0 | 11,630 | 50,693 | 0 | 50,693 | 103,531 | 8,867** | 2,763 | 0 | 54,772 | 108,319 |
| 14 | 157,562 | 0 | 10,851 | 0 | 10,851 | 47,237 | 0 | 47,237 | 99,474 | 0 | 10,851 | 0 | 47,237 | 99,474 |
| 15 | 149,684 | 0 | 10,110 | 0 | 10,110 | 43,954 | 0 | 43,954 | 95,620 | 0 | 10,110 | 0 | 43,954 | 95,620 |
| 16 | 142,200 | 0 | 9,407 | 0 | 9,407 | 40,835 | 0 | 40,835 | 91,958 | 0 | 9,407 | 0 | 40,835 | 91,958 |
| 17 | 135,090 | 0 | 8,738 | 0 | 8,738 | 37,872 | 0 | 37,872 | 88,480 | 0 | 8,738 | 0 | 37,872 | 88,480 |
| 18 | 128,336 | 0 | 8,104 | 0 | 8,104 | 35,057 | 0 | 35,057 | 85,176 | 0 | 8,104 | 0 | 35,057 | 85,176 |
| 19 | 121,919 | 0 | 7,500 | 0 | 7,500 | 32,383 | 0 | 32,383 | 82,036 | 0 | 7,500 | 0 | 32,383 | 82,036 |
| 20 | 115,823 | 0 | 6,927 | 0 | 6,927 | 29,842 | 0 | 29,842 | 79,054 | 0 | 6,927 | 0 | 29,842 | 79,054 |
| 21 | 110,032 | 0 | 6,383 | 0 | 6,383 | 27,429 | 0 | 27,429 | 76,220 | 0 | 6,383 | 0 | 27,429 | 76,220 |
| 22 | 104,530 | 0 | 5,866 | 0 | 5,866 | 25,216 | 0 | 25,216 | 73,449 | 0 | 5,866 | 0 | 25,216 | 73,449 |
| 23 | 99,304 | 0 | 5,375 | 0 | 5,375 | 23,322 | 0 | 23,322 | 70,608 | 0 | 5,375 | 0 | 23,322 | 70,608 |
| 24 | 94,338 | 0 | 4,908 | 0 | 4,908 | 21,522 | 0 | 21,522 | 67,908 | 0 | 4,908 | 0 | 21,522 | 67,908 |
| 25 | 89,621 | 0 | 4,466 | 0 | 4,466 | 19,812 | 0 | 19,812 | 65,343 | 0 | 4,466 | 0 | 19,812 | 65,343 |
| | | | | | | | | | IRR=18.763% | | | | | IRR=19.126% |

* Under present law, Alaska's ITC equals 18% of the federal ITC, or 1.8% of the qualified investment. As with the federal ITC, any ITC that is not used in a tax year may be carried forward into the next tax year. In this case only $12,020 of the $18,000 state ITC was taken in the first year; the balance of $5,980 is taken in the second.

** Under HB 866, Alaska's ITC would equal the federal ITC, or $100,000 in this example. This $8,867 figure represents what remains of the $100,000 ITC after the twelfth year of the project.

CASE 2: A LARGE ONGOING ALASKAN BUSINESS

| | | | With State Investment Tax Credit Under Existing State Law | | | | | | | With State Investment Tax Credit under HB 866 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yr | Pre-Tax Cash Flow from Project | Project Depre-ciation | AK Inc. Tax From Project Before ITC | AK ITC Applied | AK Inc. Tax From Project After ITC | US Inc. Tax From Project Before ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow | AK ITC Applied | AK Inc. Tax From Project After ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow |
| 1 | -1,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,000,000 | 0 | 0 | 0 | 0 | -1,000,000 |
| 2 | 250,000 | 80,000 | 15,980 | 18,000* | -2,020 | 79,129 | 100,000 | -20,871 | 272,891 | 82,520** | -66,540 | 100,000 | 9,738 | 306,802 |
| 3 | 250,000 | 140,000 | 10,340 | 0 | 10,340 | 45,844 | 0 | 45,844 | 193,816 | 17,480 | -7,140 | 0 | 49,123 | 208,012 |
| 4 | 250,000 | 120,000 | 12,220 | 0 | 12,220 | 54,179 | 0 | 54,179 | 183,601 | 0 | 12,220 | 0 | 54,179 | 183,601 |
| 5 | 250,000 | 100,000 | 14,100 | 0 | 14,100 | 62,514 | 0 | 62,514 | 173,386 | 0 | 14,100 | 0 | 62,514 | 173,386 |
| 6 | 237,500 | 100,000 | 12,925 | 0 | 12,925 | 57,305 | 0 | 57,305 | 167,271 | 0 | 12,925 | 0 | 57,305 | 167,271 |
| 7 | 225,625 | 100,000 | 11,809 | 0 | 11,809 | 52,355 | 0 | 52,355 | 161,461 | 0 | 11,809 | 0 | 52,355 | 161,461 |
| 8 | 214,344 | 90,000 | 11,688 | 0 | 11,688 | 51,822 | 0 | 51,822 | 150,834 | 0 | 11,688 | 0 | 51,822 | 150,834 |
| 9 | 203,627 | 90,000 | 10,681 | 0 | 10,681 | 47,355 | 0 | 47,355 | 145,591 | 0 | 10,681 | 0 | 47,355 | 145,591 |
| 10 | 193,445 | 90,000 | 9,724 | 0 | 9,724 | 43,112 | 0 | 43,112 | 140,609 | 0 | 9,724 | 0 | 43,112 | 140,609 |
| 11 | 183,773 | 90,000 | 8,815 | 0 | 8,815 | 39,081 | 0 | 39,081 | 135,878 | 0 | 8,815 | 0 | 39,081 | 135,878 |
| 12 | 174,584 | 0 | 16,411 | 0 | 16,411 | 72,760 | 0 | 72,760 | 85,413 | 0 | 16,411 | 0 | 72,760 | 85,413 |
| 13 | 165,855 | 0 | 15,590 | 0 | 15,590 | 69,122 | 0 | 69,122 | 81,143 | 0 | 15,590 | 0 | 69,122 | 81,143 |
| 14 | 157,562 | 0 | 14,811 | 0 | 14,811 | 65,666 | 0 | 65,666 | 77,086 | 0 | 14,811 | 0 | 65,666 | 77,086 |
| 15 | 149,684 | 0 | 14,070 | 0 | 14,070 | 62,382 | 0 | 62,382 | 73,231 | 0 | 14,070 | 0 | 62,382 | 73,231 |
| 16 | 142,200 | 0 | 13,367 | 0 | 13,367 | 59,263 | 0 | 59,263 | 69,570 | 0 | 13,367 | 0 | 59,263 | 69,570 |
| 17 | 135,090 | 0 | 12,698 | 0 | 12,698 | 56,300 | 0 | 56,300 | 66,091 | 0 | 12,698 | 0 | 56,300 | 66,091 |
| 18 | 128,336 | 0 | 12,064 | 0 | 12,064 | 53,485 | 0 | 53,485 | 62,787 | 0 | 12,064 | 0 | 53,485 | 62,787 |
| 19 | 121,919 | 0 | 11,460 | 0 | 11,460 | 50,811 | 0 | 50,811 | 59,648 | 0 | 11,460 | 0 | 50,811 | 59,648 |
| 20 | 115,823 | 0 | 10,887 | 0 | 10,887 | 48,270 | 0 | 48,270 | 56,665 | 0 | 10,887 | 0 | 48,270 | 56,665 |
| 21 | 110,032 | 0 | 10,343 | 0 | 10,343 | 45,857 | 0 | 45,857 | 53,832 | 0 | 10,343 | 0 | 45,857 | 53,832 |
| 22 | 104,530 | 0 | 9,826 | 0 | 9,826 | 43,564 | 0 | 43,564 | 51,140 | 0 | 9,826 | 0 | 43,564 | 51,140 |
| 23 | 99,304 | 0 | 9,335 | 0 | 9,335 | 41,386 | 0 | 41,386 | 48,583 | 0 | 9,335 | 0 | 41,386 | 48,583 |
| 24 | 94,338 | 0 | 8,868 | 0 | 8,868 | 39,316 | 0 | 39,316 | 46,154 | 0 | 8,868 | 0 | 39,316 | 46,154 |
| 25 | 89,621 | 0 | 8,424 | 0 | 8,424 | 37,350 | 0 | 37,350 | 43,846 | 0 | 8,424 | 0 | 37,350 | 43,846 |
| | | | | | | | | | IRR=15.772% | | | | | IRR=16.769% |

* Under present law, Alaska's ITC equals 18% of the federal ITC, or 1.8% of the qualified investment. Since the corporation has $750,000 of other Alaskan taxable income, the $2020 in ITC not used to shelter income from the project from tax can be used to reduce the tax on this other income. By the same token, the $100,000 federal ITC can all be used in one year to reduce the tax on the other $750,000 of taxable income.

** Under HB 866, Alaska's ITC would equal the federal ITC, or $100,000 in this example. The negative figure reflects the fact that a $100,000 Alaskan ITC would shelter not only all of the $170,000 taxable income from the project, but would reduce to zero the $66,540 tax on the other $750,000 of taxable Alaskan income, and still leave some $17,480 of ITC to spare. This $17,480 is carried over into the next year, where it reduces to zero the $10,340 tax liability generated by the project and reduces the taxes on the other $750,000 by $7,140 (reflected as a negative figure).

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

-FILE-

# Alaska State Legislature

HOME ADDRESS

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA 99811
TELEPHONE

SENATOR
John C. Sackett

SENATE FINANCE COMMITTEE

Senate

M E M O R A N D U M

May 20, 1982

TO: Senator Bill Ray

FROM: Senator John C. Sackett

SUBJECT: House Bill 866

I would appreciate it very much if you would schedule House Bill 866 for a hearing before the Senate Transportation Committee. It still has a further referral to the Senate Finance Committee.

Attached is the back-up on the bill. Although it is a house bill, I still have an interest in it. Thank you for your consideration.

# Alaska State Legislature

## Senate Committee on State Affairs

Vic Fischer, Chairman • Pouch V • Juneau, Alaska 99811 • (907) 465-4954


Official Business

MEMORANDUM

DATE: May 17, 1982

TO: Senator Ed Dankworth, Co-Chairman, Senate Finance Committee
Senator Don Bennett, Co-Chairman, Senate Finance Committee

FROM: Senator Vic Fischer

RE: HB 866, Investment Tax Credit

The House version of HB 866 provided an investment tax credit equal to 100 percent of the investment credit allowed on federal taxes. Corporations investing in farming, fishing, timber or mining would be eligible for the investment credit. Oil and gas investments would not be eligible for the credit.

The Senate CS for HB 866 makes the following amendments:

1. The investment tax credit is changed to 36 percent of the investment credit allowed on federal taxes. The state currently allows an investment tax credit equal to 18 percent of the investment credit allowed on federal taxes.
2. The investment tax credit only applies to mining activities and the activities must be conducted by corporations which have previously not been active in Alaska and be conducted at previously undeveloped sites.
3. The new investment tax credit expires December 31, 1986.

The purpose of the amendments is to channel investment tax credits to initiate new mining investments which would not have been made without the investment tax credit. The committee could not obtain a clear legal judgement as to whether US Borax might qualify and thus obtain a windfall of close to $80 million.

The following reference materials are enclosed:

CS for HB 866
Transcript of State Affairs hearing of May 5, 1982, on HB 866.
Fiscal note on House passed version of HB 866
Letter of May 15, 1982, to Senator Vic Fischer, from Commissioner Williams, regarding Effects on Economic-Decision Making from Increasing the State Investment Tax Credit as Proposed in HB 866
Memorandum of May 12, 1982, to Senator Fischer, regarding Effect of Investment Credit on Projected State Revenues Generated by US Borax
other pertinent material

STATE OF ALASKA
DEPARTMENT OF REVENUE
OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH S
JUNEAU, ALASKA 99811
PHONE: (907) 465-2300

April 27, 1982

The Honorable Vic Fischer
Chairman
Senate State Affairs Committee
Room 423 - Capitol Building
Juneau, Alaska

Re: House Bill No. 866 am

Dear Senator Fischer:

House Bill No. 866 am, an Act establishing a special investment tax credit, upon first reading in the Senate on April 26, 1982 was referred to the Senate State Affairs and Finance Committees.

For the consideration of the Senate State Affairs Committee, I am enclosing a copy of a Fiscal Note prepared by Mr. Robert R. Kessel, Director, Audit Division, Department of Revenue concerning the proposed legislation.

Sincerely,

R. D. Stevenson
Special Assistant

cc: The Honorable Don Bennett
The Honorable M. E. Dankworth
Co-Chairmen
Senate Finance Committee

Joseph K. Donohue
Deputy Commissioner
Department of Revenue

Robert R. Kessel, Director
Audit Division
Department of Revenue

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

# FISCAL NOTE

I. REQUEST
Bill/Resolution Number: HB 866 am
Title: An act establishing a special investment tax credit
Requested by: State Affairs Date: April 26, 1982

II. FISCAL DETAIL
Agency Affected: Department of Revenue
Program Category Affected: Revenue Collection and Management
BRU, Program, or Subprogram(s) Affected: Audit Division
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | - | - | - | - | - | - |
| 200 TRAVEL | - | - | - | - | - | - |
| 300 CONTRACTUAL | - | - | - | - | - | - |
| 400 COMMODITIES | - | - | - | - | - | - |
| 500 EQUIPMENT | - | - | - | - | - | - |
| 600 LAND & STRUCTURES | - | - | - | - | - | - |
| 700 GRANTS,CLAIMS,ETC | - | - | - | - | - | - |
| 800 MISCELLANEOUS | - | - | - | - | - | - |
| TOTAL | - | - | - | - | - | - |

FUNDING (Millions of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | (2.5) | (11.5) | (13.0) | - | - | - |
| FEDERAL FUNDS | - | - | - | - | - | - |
| OTHER (Specify Source) | - | - | - | - | - | - |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | - | - | - | - | - | - |
| PART TIME | - | - | - | - | - | - |
| TEMPORARY | - | - | - | - | - | - |

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

It is assumed that the investment tax credit utilized by the four impacted industries, including carryback of the credit, would essentially equate to the income tax payable by these four groups for the latest year. These four groups account for approximately 33 percent of the Department's revenue projections.

Robert R Kessel

IV. DATE: April 26, 1982

PREPARED BY: Robert R. Kessel
AGENCY: Audit Division
PHONE: 465-2320

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

33-001 (Rev. 12/81)

STATE OF ALASKA
DEPARTMENT OF REVENUE

M E M O R A N D U M

TO: R. D. Stevenson
Special Assistant

FROM: Robert R. Kessel
Director, Audit Division RK

DATE: April 26, 1982

RE: HB 866 am

The bill would substantially expand the Investment Tax Credit for certain corporations. However, the bill falls short of its intended purpose to promote the development of farming, fishing, timber and mining and, in addition, is potentially very expensive.

I am not aware of any study which supports the conclusion that state income tax credits are a strong encouragement for investment in a particular state. Most studies, in fact, reflect that state income taxes have a low importance ranking when investment appraisals are made. In fact, supply of labor, financing, marketability, supply of raw materials, etc., are of the most relevancy.

Experience has shown that when a social or economic problem arises, often the first - and not carefully considered - answer is to use the tax system, whether the proposal comes from government or the private sector. However, tax credits seldom solve the social or economic problem. In fact, tax credits are useful only to those who have income taxes to pay (profitable) and who can therefore make use of the credits. Those who don't pay taxes - those with sufficient or no tax liability - thus receive no assistance from the tax credit program. If a tax credit were to cover these groups - the ones who really need it - it must be refundable; i.e., paid by the state even in the absence of tax liability, and a refundable credit really involves direct spending or subsidy.

It is questionable whether the Federal Investment Tax Credit has provided businesses the incentive to make investments and whether the credit has provided an accelerator effect on the economy as a whole.

Questions that have been asked at the Federal level include:

1. Does the credit flow through to stockholders in the form of dividends rather than used for capital expenditures?

2. Has the credit been used for foreign investment rather than domestic investment thus exporting more jobs overseas?

3. Has the investment tax credit actually increased investment in capital projects?

These very same questions must be asked if Alaska allows the investment tax credit to the extent of HB 866 am.

The extent of the investment tax credit in HB 866 am appears to be grossly misunderstood. The bill would allow the same amount of investment tax credit as is allowed on the Federal return. This is in spite of the tremendously large differentials in tax liabilities at the two levels. For example, if a taxpayer invested $5,000,000 in qualified investment property with the resulting investment credit of $500,000 (10%), the Alaska taxable income needed to absorb that amount would be about $5,400,000. In other words, not a cent of Alaska income tax would be paid if the corporation had a taxable income of $5,400,000. Conversely, the Federal tax liability on that amount, even with the investment tax credit, would be about $2,000,000

If a corporation invested $50,000,000 in qualified property, the Alaska taxable income needed to absorb the investment tax credit would be in excess of $50,000,000 whereas the Federal tax liability on the $50,000,000 would be about $18,000,000.

Since only profitable companies could utilize the investment tax credit, the reduction in Alaska State Income Taxes resulting from HB 866 am would increase Federal taxable income by a like amount. In essence, up to 46% of what is saved at the State level would simply be transferred to the Federal Government in the form of a higher Federal income tax liability.

In addition, Alaska already has an investment tax credit for all industies but limited to 18% of the Federal Tax Credit and a further limitation of $20,000,000 for qualified property eligible for the credit. The 18% directs itself to the fact that the tax rates are so different; i.e., maximum State rate - 9.4%, maximum Federal rate - 46%.

There are more qualified farmers than there is farmland available. The additional investment tax credit would give the existing farmers additional tax benefits but would do little to expand ownership to a new influx of farmers.

Most timber related companies already have more tax credits and carry-over losses than they can utilize. It is markets that are needed.

For fisheries, all except bottom fishing appears overly crowded. That fact is witnessed by the limited entry system controlling the harvest of fishery resources. Tax credits would not expand the market nor provide higher prices.

Mining, in general, is a highly capital intensive industry. The expanded investment tax credit would serve the purpose of providing almost permanent assurance that no tax would be due because of the fifteen year carry-over provision available for the investment tax credit.

Finally, the expanded credit could be very costly particularly in one instance. If U. S. Borax develops its Ketchikan Molybdenum mine to the extent publicly indicated, the investment tax credit to that corporation could be as high as $100,000,000 (based on investment cost of $1 billion). With the fifteen year carry-over provision for the investment tax credit, the investment tax credit of $100,000,000 could equate to the following revenue loss to Alaska (assuming U. S. Borax had sufficient taxable income to absorb):

| | |
|---|---|
| Investment Credit applied against tax liability - per current law | |
| $1,000,000,000 | |
| x 10% Investment Credit amount | |
| x 18% currently allowed for Alaska corporations | $ 18,000,000 |
| Investment Credit applied against tax liability per this bill | |
| $1,000,000,000 | |
| x 10% | 100,000,000 |
| Net Loss in Revenue | $ 82,000,000 |

The above assumes that the entire $1 billion would be eligible for the investment tax credit. The portion actually available could vary from 65-100%.

Borax activity will not impact the immediate future fiscally since production from the Ketchikan mine is not anticipated until the late 1980's.

The bill also creates a carry-back problem The investment tax credit can be carried back and would affect prior year taxes. Therefore, in essence, this bill provides for the potential of a refund of past years taxes. This potentially creates a constitutional question.

HB 866 am adds a provision not contained in HB 866. It is as follows:

> "(K) No Credit shall be allowed under (j) of this section for any investment credit which is allowed as to federal taxes for leased property by reason of Section 168(F)(8) of the Internal Revenue Code (26 U.S.C. 168(F)(8))."

One consequence of the Accelerated Cost Recovery System and revisions of the investment tax credit is that many companies are not able currently to use all their tax deductions and credits. In considering potential investments, these companies are at a competitive disadvantage and can become targets for tax-induced takeovers and merges. The Economic Recovery Tax Act of 1981 (ERTA) establishes what is referred to as a safe-harbor for characterizing transactions as leases rather than as sale. A lease transaction permits the lessee-user of property to transfer tax benefits to a lessor-investor, a sale transaction does not. If a lessee-user transfers the tax benefits back to the lessor, the user receives a significant portion of the tax benefits through reduced rental charges.

The new law provides more ease in transferability and its provisions eliminate many of the arguments which often had occurred between the taxpayer and IRS. However, the substantive law regarding lease transactions has not changed as a result of the Economic Recovery Tax Act (ERTA). Procedural law hs changed and provides for the ease in transferability of the tax benefits from lessee to lessor.

Section 2(K) of HB 866 am provides for an unworkable administrative process for the Department of Revenue. The Department does not have the staffing to determine if the pre-ERTA Federal

law provision would have caused a lease arrangement to be considered a sale. The taxpayer, as under pre-ERTA, would obviously class certain transactions as a lease rather than a sale and await our challenge, as they previously did with the Federal Government. Therefore, no decrease in the fiscal note developed for HB 866 is foreseen and, if any, would be impossible to determine.

RRK/gb

STATE OF ALASKA
DEPARTMENT OF REVENUE
OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH S
JUNEAU, ALASKA 99811
PHONE: (907) 465-2300

May 15, 1982

The Honorable Vic Fischer, Chairman
Senate State Affairs Committee
Pouch V
Juneau, AK 99811

Re: Effects on Economic Decision-Making from Increasing the State Investment Tax Credit as Proposed in House Bill 866

Dear Mr. Chairman:

In my testimony before the Committee I stated that increasing the State's investment tax credit as proposed in HB 866 would have only a minimal effect on the internal rate of return after taxes for new projects in Alaska. I also said that, to the extent there would be an effect on the rate of return, it would be greater for "fat cat" corporations than for small ones. I now have had the opportunity to prepare an example which demonstrates the truth of both assertions.

Suppose we have a new project in Alaska, and to avoid any distortions by making it too large, suppose further that it costs $1,000,000, takes a year to complete and will employ 25 people. Suppose, too, that after expenses other than income taxes and depreciation, the project yields a net cash flow of $250,000 a year for its first four years of operation, and then each year thereafter the net cash flow decreases by five percent from the previous year. Finally, let us suppose that the project qualifies for Accelerated Capital Recovery System treatment under the new tax law using a 10-year life.

The analysis I have used takes this project and compares the internal rate of return (IRR) on the investment under Alaska's present investment tax credit with the IRR under the credit proposed in HB 866. This comparison is first made with the project standing alone; that is, the investor has no other income to be sheltered from the tax benefits generated from the project. I call this Case 1. Case 2 doesn't involve too fat a "fat cat" corporation, simply one with $750,000 a year of taxable Alaskan net income from other sources.

The tables attached to this letter show what the after-tax cash flows are under Case 1 and Case 2, both with the present investment tax credit and with the one proposed by HB 866. As you can see from those tables, the IRR under the non-"fat cat" case (Case 1) is 18.763% under

the present law and would rise by only 0.363 of a percentage point to 19.126% under HB 866. In contrast, the improvement in the rate of return for the "fat cat" case (Case 2) is nearly three times as great as for the "skinny" cat -- 0.997 of a percentage point (15.772% to 16.769%).

Note also how small a difference there is in the rate of return between present law and HB 866. The extra economic incentive from raising the State's investment tax credit is truly minimal (and you can see why: look how much higher the federal taxes would be during the early years with HB 866 than they are under present law, in both Cases 1 and 2). Other factors have much more effect on the economics of an investment than the amount of investment tax credit. For example, in Case 1, suppose one's assumptions about market prices, labor costs and other operating expenses had a 10 percent margin of error. If the net pre-tax cash flows were only 10 percent higher than the figures in the table, the increase in the rate of return would be 4.25 times that from the extra tax incentive under HB 866.

Without going on excessively, I would only reiterate my objections that HB 866 does too little economically, at too high a price for the State, to the advantage of wealthy corporations over small ones. It scarcely makes economic sense and certainly makes poor State policy.

I hope this information may prove useful to you and your Committee in considering HB 866.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Attachments

P.S. I might add parenthetically that the reason for the lower IRRs in the "fat cat" case is that all income from the project is taxed in the maximum tax bracket under both federal and state tax laws, because of the other $750,000 of taxable income; the project represents incremental income to the corporation. In Case 1 the project stands alone, and so the first $100,000 and first $90,000 are taxed below the maximum rates under the federal and Alaska tax laws, respectively.

## CASE 7. A NEW ALASKAN BUSINESS ON ITS OWN

| | | | With State Investment Tax Credit Under Existing State Law | | | | | | | With State Investment Tax Credit under HB 866 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| r | Pre-Tax Cash Flow from Project | Project Depre-ciation | AK Inc. Tax From Project Before ITC | AK ITC Applied | AK Inc. Tax From Project After ITC | US Inc. Tax From Project Before ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow | AK ITC Applied | AK Inc. Tax From Project After ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow |
| 1 | -1,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,000,000 | 0 | 0 | 0 | 0 | -1,000,000 |
| 2 | 250,000 | 80,000 | 12,020 | 12,020 | 0 | 57,950 | 57,950 | 0 | 250,000 | 12,020 | 0 | 57,950 | 0 | 250,000 |
| 3 | 250,000 | 140,000 | 6,380 | 5,980* | 400 | 30,166 | 30,166 | 0 | 249,600 | 6,380 | 0 | 30,166 | 0 | 250,000 |
| 4 | 250,000 | 120,000 | 8,260 | 0 | 8,260 | 35,750 | 11,884 | 25,866 | 217,874 | 8,260 | 0 | 11,884 | 27,850 | 222,150 |
| 5 | 250,000 | 100,000 | 10,140 | 0 | 10,140 | 44,086 | 0 | 44,086 | 195,774 | 10,140 | 0 | 0 | 48,750 | 201,250 |
| 6 | 237,500 | 100,000 | 8,965 | 0 | 8,965 | 38,876 | 0 | 38,876 | 189,659 | 8,965 | 0 | 0 | 43,000 | 194,500 |
| 7 | 225,625 | 100,000 | 7,849 | 0 | 7,849 | 33,927 | 0 | 33,927 | 183,849 | 7,849 | 0 | 0 | 37,538 | 188,088 |
| 8 | 214,344 | 90,000 | 7,728 | 0 | 7,728 | 33,393 | 0 | 33,393 | 173,222 | 7,728 | 0 | 0 | 36,948 | 177,396 |
| 9 | 203,627 | 90,000 | 6,721 | 0 | 6,721 | 28,927 | 0 | 28,927 | 167,979 | 6,721 | 0 | 0 | 32,018 | 171,609 |
| 0 | 193,445 | 90,000 | 5,764 | 0 | 5,764 | 24,822 | 0 | 24,842 | 162,859 | 5,764 | 0 | 0 | 27,335 | 166,110 |
| 1 | 183,773 | 90,000 | 4,855 | 0 | 4,855 | 21,317 | 0 | 21,317 | 157,601 | 4,855 | 0 | 0 | 23,259 | 160,514 |
| 2 | 174,584 | 0 | 12,451 | 0 | 12,451 | 54,331 | 0 | 54,331 | 107,802 | 12,451 | 0 | 0 | 60,059 | 114,525 |
| 3 | 165,855 | 0 | 11,630 | 0 | 11,630 | 50,693 | 0 | 50,693 | 103,531 | 8,867** | 2,763 | 0 | 54,772 | 108,319 |
| 4 | 157,562 | 0 | 10,851 | 0 | 10,851 | 47,237 | 0 | 47,237 | 99,474 | 0 | 10,851 | 0 | 47,237 | 99,474 |
| 5 | 149,684 | 0 | 10,110 | 0 | 10,110 | 43,954 | 0 | 43,954 | 95,620 | 0 | 10,110 | 0 | 43,954 | 95,620 |
| 6 | 142,200 | 0 | 9,407 | 0 | 9,407 | 40,835 | 0 | 40,835 | 91,958 | 0 | 9,407 | 0 | 40,835 | 91,958 |
| 7 | 135,090 | 0 | 8,738 | 0 | 8,738 | 37,872 | 0 | 37,872 | 88,480 | 0 | 8,738 | 0 | 37,872 | 88,480 |
| 8 | 128,336 | 0 | 8,104 | 0 | 8,104 | 35,057 | 0 | 35,057 | 85,176 | 0 | 8,104 | 0 | 35,057 | 85,176 |
| 9 | 121,919 | 0 | 7,500 | 0 | 7,500 | 32,383 | 0 | 32,383 | 82,036 | 0 | 7,500 | 0 | 32,383 | 82,036 |
| 20 | 115,823 | 0 | 6,927 | 0 | 6,927 | 29,842 | 0 | 29,842 | 79,054 | 0 | 6,927 | 0 | 29,842 | 79,054 |
| 21 | 110,032 | 0 | 6,383 | 0 | 6,383 | 27,429 | 0 | 27,429 | 76,220 | 0 | 6,383 | 0 | 27,429 | 76,220 |
| 22 | 104,530 | 0 | 5,866 | 0 | 5,866 | 25,216 | 0 | 25,216 | 73,449 | 0 | 5,866 | 0 | 25,216 | 73,449 |
| 23 | 99,304 | 0 | 5,375 | 0 | 5,375 | 23,322 | 0 | 23,322 | 70,608 | 0 | 5,375 | 0 | 23,322 | 70,608 |
| 24 | 94,338 | 0 | 4,908 | 0 | 4,908 | 21,522 | 0 | 21,522 | 67,908 | 0 | 4,908 | 0 | 21,522 | 67,908 |
| 25 | 89,621 | 0 | 4,466 | 0 | 4,466 | 19,812 | 0 | 19,812 | 65,343 | 0 | 4,466 | 0 | 19,812 | 65,343 |
| | | | | | | | | | IRR=18.763% | | | | | IRR=19.126% |

* Under present law, Alaska's ITC equals 18% of the federal ITC, or 1.8% of the qualified investment. As with the federal ITC, any ITC that is not used in a tax year may be carried forward into the next tax year. In this case only $12,020 of the $18,000 state ITC was taken in the first year; the balance of $5,980 is taken in the second.

** Under HB 866, Alaska's ITC would equal the federal ITC, or $100,000 in this example. This $8,867 figure represents what remains of the $100,000 ITC after the twelfth year of the project.

## CASE 2. A LARGE ONGOING ALASKAN BUSINESS

| | | | With State Investment Tax Credit Under Existing State Law | | | | | | | With State Investment Tax Credit under HB 866 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yr | Pre-Tax Cash Flow from Project | Project Depre-ciation | AK Inc. Tax From Project Before ITC | AK ITC Applied | AK Inc. Tax From Project After ITC | US Inc. Tax From Project Before ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow | AK ITC Applied | AK Inc. Tax From Project After ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow |
| 1 | -1,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,000,000 | 0 | 0 | 0 | 0 | -1,000,000 |
| 2 | 250,000 | 80,000 | 15,980 | 18,000* | -2,020 | 79,129 | 100,000 | -20,871 | 272,891 | 82,520** | -66,540 | 100,000 | 9,738 | 306,802 |
| 3 | 250,000 | 140,000 | 10,340 | 0 | 10,340 | 45,844 | 0 | 45,844 | 193,816 | 17,480 | -7,140 | 0 | 49,128 | 208,012 |
| 4 | 250,000 | 120,000 | 12,220 | 0 | 12,220 | 54,179 | 0 | 54,179 | 183,601 | 0 | 12,220 | 0 | 54,179 | 183,601 |
| 5 | 250,000 | 100,000 | 14,100 | 0 | 14,100 | 62,514 | 0 | 62,514 | 173,386 | 0 | 14,100 | 0 | 62,514 | 173,386 |
| 6 | 237,500 | 100,000 | 12,925 | 0 | 12,925 | 57,305 | 0 | 57,305 | 167,271 | 0 | 12,925 | 0 | 57,305 | 167,271 |
| 7 | 225,625 | 100,000 | 11,809 | 0 | 11,809 | 52,355 | 0 | 52,355 | 161,461 | 0 | 11,809 | 0 | 52,355 | 161,461 |
| 8 | 214,344 | 90,000 | 11,688 | 0 | 11,688 | 51,822 | 0 | 51,822 | 150,834 | 0 | 11,688 | 0 | 51,822 | 150,834 |
| 9 | 203,627 | 90,000 | 10,681 | 0 | 10,681 | 47,355 | 0 | 47,355 | 145,591 | 0 | 10,681 | 0 | 47,355 | 145,591 |
| 10 | 193,445 | 90,000 | 9,724 | 0 | 9,724 | 43,112 | 0 | 43,112 | 140,609 | 0 | 9,724 | 0 | 43,112 | 140,609 |
| 11 | 183,773 | 90,000 | 8,815 | 0 | 8,815 | 39,081 | 0 | 39,081 | 135,878 | 0 | 8,815 | 0 | 39,081 | 135,878 |
| 12 | 174,584 | 0 | 16,411 | 0 | 16,411 | 72,760 | 0 | 72,760 | 85,413 | 0 | 16,411 | 0 | 72,760 | 85,413 |
| 13 | 165,855 | 0 | 15,590 | 0 | 15,590 | 69,122 | 0 | 69,122 | 81,143 | 0 | 15,590 | 0 | 69,122 | 81,143 |
| 14 | 157,562 | 0 | 14,811 | 0 | 14,811 | 65,666 | 0 | 65,666 | 77,086 | 0 | 14,811 | 0 | 65,666 | 77,086 |
| 15 | 149,684 | 0 | 14,070 | 0 | 14,070 | 62,382 | 0 | 62,382 | 73,231 | 0 | 14,070 | 0 | 62,382 | 73,231 |
| 16 | 142,200 | 0 | 13,367 | 0 | 13,367 | 59,263 | 0 | 59,263 | 69,570 | 0 | 13,367 | 0 | 59,263 | 69,570 |
| 17 | 135,090 | 0 | 12,698 | 0 | 12,698 | 56,300 | 0 | 56,300 | 66,091 | 0 | 12,698 | 0 | 56,300 | 66,091 |
| 18 | 128,336 | 0 | 12,064 | 0 | 12,064 | 53,485 | 0 | 53,485 | 62,787 | 0 | 12,064 | 0 | 53,485 | 62,787 |
| 19 | 121,919 | 0 | 11,460 | 0 | 11,460 | 50,811 | 0 | 50,811 | 59,648 | 0 | 11,460 | 0 | 50,811 | 59,648 |
| 20 | 115,823 | 0 | 10,887 | 0 | 10,887 | 48,270 | 0 | 48,270 | 56,665 | 0 | 10,887 | 0 | 48,270 | 56,665 |
| 21 | 110,032 | 0 | 10,343 | 0 | 10,343 | 45,857 | 0 | 45,857 | 53,832 | 0 | 10,343 | 0 | 45,857 | 53,832 |
| 22 | 104,530 | 0 | 9,826 | 0 | 9,826 | 43,564 | 0 | 43,564 | 51,140 | 0 | 9,826 | 0 | 43,564 | 51,140 |
| 23 | 99,304 | 0 | 9,335 | 0 | 9,335 | 41,386 | 0 | 41,386 | 48,583 | 0 | 9,335 | 0 | 41,386 | 48,583 |
| 24 | 94,338 | 0 | 8,868 | 0 | 8,868 | 39,316 | 0 | 39,316 | 46,154 | 0 | 8,868 | 0 | 39,316 | 46,154 |
| 25 | 89,621 | 0 | 8,424 | 0 | 8,424 | 37,350 | 0 | 37,350 | 43,846 | 0 | 8,424 | 0 | 37,350 | 43,846 |
| | | | | | | | | | IRR=15.772% | | | | | IRR=16.769% |

* Under present law, Alaska's ITC equals 18% of the federal ITC, or 1.8% of the qualified investment. Since the corporation has $750,000 of other Alaskan taxable income, the $2020 in ITC not used to shelter income from the project from tax can be used to reduce the tax on this other income. By the same token, the $100,000 federal ITC can all be used in one year to reduce the tax on the other $750,000 of taxable income.

** Under HB 866, Alaska's ITC would equal the federal ITC, or $100,000 in this example. The negative figure reflects the fact that a $100,000 Alaskan ITC would shelter not only all of the $170,000 taxable income from the project, but would reduce to zero the $66,540 tax on the other $750,000 of taxable Alaskan income, and still leave some $17,480 of ITC to spare. This $17,480 is carried over into the next year, where it reduces to zero the $10,340 tax liability generated by the project and reduces the taxes on the other $750,000 by $7,140 (reflected as a negative figure).

MEMORANDUM

DATE: May 12, 1982

TO: Senator Fischer

FROM: Ira Winograd, staff

RE: HB 866 am, (House Passed Version of Investment Tax Credit) Effect of 10% Investment Credit on Projected State Revenues Generated by US Borax

The 10 percent investment credit offered by the House version of HB 866 would exempt Borax from state income taxation for from fourteen to seventeen years. HB 866 would cost the state $45 million in forgone Borax revenue.

The ten percent investment credit would generate approximately $45 million in investment credits for Borax to apply against state income tax liability. Borax could also be the beneficiary of an additional $32. million in excess credits.

Borax estimated that it would be liable for $46.8 million in state income tax for the first fourteen years of operation. More recent estimates indicate that income tax liability during the first seventeen years of operation may be $45.7 million under a high investment scenario.

Methodology

| Low investment scenario | High investment scenario |
|---|---|
| Investment to obtain full production | |
| $870 million* | $1,500 million |
| Investment eligible for investment credit | |
| 548.1 | 950 |
| Investment credit entitlement | |
| 44.9 | 77.9 |
| Directly Useable investment credits | |
| 44.9 | 45.7 |

* In 1982 real dollars.

Investment to obtain full production. Low figure (870) supplied by Borax to the governors office. High figure (1,500) supplied by Borax to Phil Holdsworth of the Alaska Miners Association.

Investment eligible for investment credit. Borax estimates that 63 percent of investment is eligible for investment credit. (The department of revenue estimates that 80% of investment may be eligible for investment credit.)

Investment credit entitlement equals investment eligible for investment credit multiplied by the proposed 8.2 percent net increase in investment credit. The net increase in investment credit is the difference between the H.B. 866 10% credit and the existing 1.8% credit.

Useable investment credits. Borax verified the following stream of state income tax liability (in real 1982 dollars based on an 870 million investment):

| | Tax Liability | net income | adjusted net income | adjusted tax |
|---|---|---|---|---|
| year 1 - | .023 million | .2 | (25.0) | 0 |
| 2 - | .276 | 2.9 | (22.3) | 0 |
| 3 - | .374 | 4.0 | (21.2) | 0 |
| 4 - | .528 | 5.6 | (19.6) | 0 |
| 5 - | .541 | 5.8 | (19.4) | 0 |
| 6 - | 2.6 | 27.7 | 2.5 | .2 |
| 7 - | 4.1 | 43.6 | 18.4 | 1.7 |
| 8 - | 5.1 | 54.3 | 29.1 | 2.7 |
| 9 - | 6.1 | 64.9 | 39.7 | 3.7 |
| 10 - | 6.1 | 64.9 | 39.7 | 3.7 |
| 11 - | 5.9 | 62.8 | | 5.9 |
| 12 - | 5.9 | 52.1 | | 5.9 |
| 13 - | 4.7 | 50.0 | | 4.7 |
| 14 - | 4.6 | 48.9 | | 4.6 |
| 15 - | 4.5 | 47.9 | | 4.5 |
| 16 - | 4.5 | 47.9 | | 4.5 |
| 17 - | 4.6 | 48.9 | | 4.6 |
| Total | | | 21.9 | 45.7 |

The corresponding income is shown in column two, based on the existing 9.4% corporate income tax.

Column three shows the adjusted net income to account for the extra depreciation during the first ten years due to the additioanl 630 million investment under the high investment scenario; (870 low investment, plus 630 additional investment, equals 1,500 high investment). The department of revenue estimates that each additional investment dollar will reduce net income by 40¢ over a ten year depreciation schedule.

The fourth column shows adjusted tax liability based on decreased net income during the first ten years under the high investment scenario.

Useable investment credits cannot exceed net tax liability for the first 15 years after the investment. However, not all investment will be made before the first year of operation. After approximately the seventeenth year of operation, investment credits based on initial investments would no longer be eligible for refund. Under the high investment scenario, only $45.9 would be eligible for credit refund. Excess investment credit would be $32.2 million.

# ALASKA MINERS ASSOCIATION, INC.

509 W. Third Ave., Suite 17, Anchorage, Alaska 99501 (907) 276-0347


May 5, 1982

The Honorable Vic Fisher, Chairman
Senate State Affairs Committee
Alaska State Legislature
Pouch V (MS 3100)
Juneau, Alaska 99811

Dear Senator Fisher:

The Statewide Board of Directors of the Alaska Miners Association unanimously passed the attached resolution urging enactment of HB-866. The Alaska Miners Association represents approximately 1400 miners located throughout Alaska.

The Alaska Miners Association believes that the investment tax credits proposed in HB-866 will broaden Alaska's economic base. The people of Alaska are concerned about our state's dependence upon oil revenues. We feel diversification of our state's economy is very important for the long term economic health of Alaska.

Many members of the legislature may be hesitant to consider a tax credit bill in the face of declining oil revenues. However, HB-866 is an incoming-producing bill. It will send a strong signal to investors that Alaska is seriously attempting to attract mineral development and increase exploration and mining activity. The economic benefits accruing to the state will far outweigh the revenues lost by the tax credit.

The initial reduction in revenues by mineral investment would be small, less than ten million dollars annually. The tax credits will make Alaskan mineral investments more competitive on a world wide basis and lead to the establishment of a long term healthy mining industry.

We are asking for your help to obtain passage of this bill and make an investment in Alaska's long term economic future.

Sincerely yours,

David A. Heatwole
President

DAH/dlw

# ALASKA MINERS ASSOCIATION, INC.

509 W. Third Ave., Suite 17, Anchorage, Alaska 99501 (907) 276-0347


RESOLUTION - HOUSE BILL-866

Whereas the Alaska Miner's Association desires to foster the development of Alaska's mineral resources and,

Whereas the people of Alaska desire to broaden the economic basis of our state and,

Whereas the Investment Tax Credits proposed in HB-866 would provide financial incentives for the development of minerals in Alaska.

The Board of Directors hereby resolves to urge the Speaker of the Alaska State House and the President of the Alaska State Senate, for expeditious passage of HB-866.

Approved

Fairbanks, Alaska

March 30, 1982

David A. Heatwole - President

Sandra M. Thomas - Secretary

SENATOR FISHER AND MEMBERS OF THE COMMITTEE

My name is Lance Anderson and I am Vice President of Finance for Cook Inlet Region, Inc.

Cook Inlet Region, Inc. supports passage of H.B. 866 because we believe:

First, that the bill will encourage additional investments into the State of Alaska's non oil and gas basic resource industries. By encouraging investment in those presently marginal industries through a temporary tax decrease the State is encouraging the private sector to accelerate the diversification of the State's economy and employment base.

Second, we believe passage of this bill sends a clear policy signal that the State is interested in participating and encouraging these industries by rewarding successful capital investment in the State.

During the past several months I have had many opportunities to discuss this bill with many different people. If I may at this time, I would like to answer some of the most common questions asked of me.

WHO QUALIFIES FOR THE TAX CREDIT?

All corporations paying Alaska corporate income taxes to the State could utilize the special tax credit to the extent they invest in qualified investment tax property in the specified targeted industries.

WHAT IS "QUALIFIED INVESTMENT TAX PROPERTY?"

Qualified investment tax property is primarily tangible personal property, i.e., trucks, manufacturing equipment, etc. It does not include roads, buildings, mine sites, feasibility studies, overhead, etc. In a development project the amount of qualifying property will only be a part of the total investment in the project.

HOW IS THE INVESTMENT TAX CREDIT COMPUTED?

First the amount of the actual investment in qualifying property by a corporation is determined. Then the property is grouped by useful lives and the following percentages are multiplied times the property basis:

| | |
|---|---|
| 0 to 3 Years | -0- |
| 3 to 5 Years | -1/3- |
| 5 to 7 Years | -2/3- |
| Excess of 7 Years | All- |

The result is then multiplied by 10% to determine the tax credit.

For example, if a $10,000 truck having a 6 year useful life was purchased and used in a mining project, $6,667 of the basis would qualify and the amount of the credit would be $667. The $667 could then be used to reduce the corporate income tax due on the company's profits.

WHAT IMPACT WOULD THIS BILL HAVE ON PROJECTIONS OF STATE REVENUES?

The bill should have a very minimal impact on current projections of State revenues. At present, only minimal amounts are being invested in the farming, fishing, timber and mining industries by tax paying corporations. If the

passage of this bill succeeds in its intended purpose of increasing the investment in these resources, the fiscal impact on State revenues of the bill should be positive rather than negative. Additionally, investments in these industries could substantially expand local governments' sales and property tax bases.

THEN WHY DOES THE DEPARTMENT OF REVENUE PROJECT A NEGATIVE FISCAL NOTE?

It is difficult to understand the basis of the Department of Revenue's fiscal note. For F.Y. '82, the non oil and gas corporate income tax will only generate approximately 25 to 30 million dollars. For example, for the Department's F.Y. '83 fiscal note to be correct, all of the tax paying corporations in Alaska including Penneys, Safeway, Wien, etc., would have to invest $115,000,000 in qualified property in the four specified industries to generate the projected $11.5 million revenue loss. This is not a realistic assumption.

WON'T THE STATE LOSE $82,000,000 ALONE ON THE U.S. BORAX DEVELOPMENT?

Certainly not. This erroneous calculation was made in the Department of Revenue's fiscal note by assuming all of U.S. Borax's proposed one billion dollar investment would fully qualify for the tax credit. Obviously the substantial portion of U.S. Borax's investment will be for non-qualifying property such as roads, buildings, housing and the mine development itself. Only a limited amount will be expended on the actual mining equipment which would qualify for the special investment tax credit.

ISN'T THIS BILL JUST ANOTHER SUBSIDY TO A SPECIAL INTEREST?

The investment tax credit is not a subsidy but rather a temporary tax reduction directly tied to profitable investment. The impact of the bill is beyond any special interest because of the broad impact it hopefully will have on industries that are Statewide.

WHY IS CIRI SO INTERESTED IN THE PASSAGE OF THIS BILL?

CIRI's interest in passage of this bill is directly related to the company's experiences in attempting to develop its natural resource base including Beluga coal, Seldovia chrome and other hardrock possibilities. When ANCSA passed in 1971 there was great optimism about releasing the "great wealth" held by the Native lands to the Regional Corporations, the stockholders and indirectly to the State economy. To date, to the best of my knowledge, there is not one major subsurface estate development underway on Native lands. The primary reasons for this are:

1. the delay in transfer of the lands.
2. the long lead times necessary to locate and develop mineral properties.
3. the costly infrastructure required and the decline in metal prices.
4. the lack of adequate capital by the Native Corporations for the tremendous investments required, and therefore the need to locate and negotiate major joint venture partners with the expertise and capital necessary.

This bill assists in overcoming some of the problems with attracting capital and convincing joint venture partners of the positive State policy towards development.

WON'T AN INVESTMENT DECISION BE MADE IRREGARDLESS OF A TAX CREDIT?

This is an academic argument that has been debated for twenty years since John F. Kennedy introduced the first investment tax credit in 1961. Since that

time the investment tax credit has been expanded and used on a Federal tax basis to encourage investment in

(1) Historical buildings rehabilitation
(2) Business energy saving devices
(3) Research facilities
(4) Single purpose agriculture structures
(5) Pollution control facilities

Currently discussion is underway to extend the investment tax credit to rehabilitation of the central business core of many of America's larger cities. I think based on the continued expansion of the tax credit I would have to conclude that the conventional wisdom is that the investment tax credit is an effective tool to encourage additional investment in targeted areas.

I thank you for this opportunity to testify and will be pleased to answer any questions you may have.

SENATE STATE AFFAIRS COMMITTEE

Testimony of Dave Heatwole

for

HOUSE BILL 866

MAY 6, 1982

My name is Dave Heatwole and I am here to represent Alaska's mining industry. I am President of the Alaska Miner's Association, representing some 1,400 miners from large and small companies, and I have spent my entire career in the mining industry.

I believe all of you can agree with me that most Alaskans are very concerned about broadening our state's economic base. Why are we so dependent upon oil revenues? What are we going to do when the oil runs out?, are questions frequently asked by Alaskan public forums. What I would like to do today is give you some idea what the future hard rock mining industry could do for Alaska's economy and tell you why House Bill 866 is important to stimulate mining activity in our state.

Historically mining has always been important to Alaska--The discovery of gold at the turn of the century led to Alaska's first great economic boom. Hard rock mining became active in the early 1900's with the development of the Kennecott and Alaska-Juneau mines. Mining was the mainstay of Alaska's economy until men and material restrictions of the second world war forced the closure of Alaska mines. After the war, mining never really got started again, lower 48 and foreign producers attracted investment capital and with the exception of a few gold mines, and major mining activity never really got started again in Alaska.

In the late 1960's - early 70's, a few major mining companies returned to Alaska to begin mineral exploration programs. These companies returned to Alaska to begin mineral exploration programs, because foreign expropriation and pending domestic mineral shortages-made domestic mineral investment much more attractive. Alaska offered the United State's last great unexplored frontier. This recent mineral exploration activity has produced a few major world class discoveries:

- o The Ambler Deposits of Southeast Brooks Range.
- o The Red Dog Deposits in Delong Mts., North of Kotzebue.
- o The Brady Glacier Cu-Ni Deposit.
- o The Quartz Hill Deposit and;

In Juneau's back yard the Green's Creek Deposit.

The Gross Metal value-of these deposits, based on published figures--is on the order of $50 billion, close to the pre- OPEC value of Prudhoe Bay.

The development of these deposits could create a substantial addition to Alaska's economy--mining, unlike oil, is a very labor intensive business, a majority of the new wealth created would stay in the state in the form of wages and goods purchased. John Whitney, a noted mineral economist, in 1979 predicted that the development of the deposits of NW Alaska, Red Dog and Ambler would create over 1,000 new jobs in Alaska and produce annual gross sales on the order of $570 million (1979 dollars). Given the right conditions by the year 2,000, there could be 10 or more developments of this scale in Alaska.

I hope I have convinced you that mining has the potential to significantly impact Alaska's future economy. The development of major mining, depends on two factors:

1. Availability of infrastructure.
2. A stable investment climate.

I am not going to discuss infrastructure today, suffice to say it is of equal importance to investment climate.

Alaskan mineral deposits are going to have to compete on a world-wide basis. Copper produced in Alaska is going to be sold at the same price as that produced in Western U.S., South America, or South Africa. Therefore, to be competetive, costs of production must be comparable. Fortunately, nature has given Alaska some high grade deposits, which will help keep them competetive, but Alaskan costs are high.

The investment tax credits proposed in House Bill 866 will help keep the cost of Alaskan mineral development competetive. It will allow investors to recoup their risk capital quicker, making the Alaskan investment more attractive. But more importantly, enactment of House Bill 866 will send a strong signal to outside investors that the State of Alaska is serious about developing its mineral industry by providing incentives for investment.

As I have stated in my letter, House Bill 866 should be considered an income producing bill. The immediate cost of enactment is very small, but potential impact on the Alaska's future economy is quite substantial. For a diversified economy in Alaska, I urge you to pass this bill.

MEMORANDUM

DATE: May 4, 1982

TO: Seator Vic Vischer

FROM: Ira Winograd, staff

RE: HB 866, Investment Credits - Effect on Borax, and Benefits Already Conferred to Renewable Resource Industries

BORAX

Upon full operation, Borax estimates that state corporate income tax liability will be $5 million per year, and $40 to $60 for the life of the original equipment. Under HB 866, the Department of Revenue estimates that Borax will have $86 million additional state investment credits. Thus, Borax would not pay any income tax. (Borax would still be liable for license fees.) The Department of Revenue estimates that the Borax mine will cause an increase in state budgetary expenditures of $12.5 million per year. (All figures are in 1982 dollars.)

TIMBER

Among tax breaks already given to the timber industry are the following:

corporate income tax revenues. The FY 1981 general [non-petroleum] corporate income tax yield was $34,800,000. .03 x 34.8 = 1.04)

Fisheries revenues ($29.2 million) equaled 1.3 percent of <u>total</u> state revenues ($2,282.6 million) in 1981, and state expenditures on fisheries were 2.2 percent of the state budget.

1. The effect of section 631 of IRS code is that timber companies are only taxed on 60% of their income. (The difference between fair market value and the cost of their own timber is treated as a capital gain. Capital gain maximum tax liability is 28% instead of the maximum 46% tax rate applied to corporate income in non-timber industries. [.6 = .28/.46] The rationale for section 631 is that it encourages reforestation.)

2. Seedlings are typically supplied at a discount through government agencies.

AGRICULTURE

The state has appropriated $114,624,800 since 1979 to develop agriculture. According to the legislative finance division, expenditures are as follows:

| | |
|---|---|
| Delta I | 13,883,000 |
| Pt. McKenzie | 5,025,000 |
| Nenana/Totchaket | 500,000 |
| DNR | 495,700 |
| U of Ak. | 25,749,400 |
| Rural Ag. | 2,147,000 |
| ARLF | 20,719,200 |
| Capital Proj. | 41,137,400 |
| Operating Bud. | 4,967,300 |
| Total | $114,624,800 |

The industry has generated little, if any, corporate tax revenues to offset these expenditures.

Excerpts from, "Financing Agricultural Projects in Alaska", House Research Agency

State programs for financing agriculture include land contracts offered by the Department of Natural Resources, clearing loans through the Agricultural Action Council, and loans for development and operations of both project and non-project commercial agricultural ventures through the Agricultural Revolving Loan Fund.

The ARLF holds about 50 percent of the $47 million of farm credit outstanding in Alaska. Land contracts and clearing loans bring the state share to 80 percent of total farm credit in Alaska.

The state's dominant position in the farm credit market is due primarily to the interest rate differential between state programs and other sources of credit. The current interest rate through state programs is six percent versus the 12 percent or higher available through other major lenders.

If state support continues at current levels, loan demand for operation and development of project acreage is expected to peak at $91 million (1981 dollars) outstanding in 1989. Capital project infrastructure improvements are expected to cost an additional $23 million, with operating losses totaling nearly $5 million per year for several years.

Other projected state expenditures for roads, bridges, surveying, administration, etc. is anticipated to be $49 million (1981 dollars) in land-related appropriations through 1990.

FISHERIES

Excerpts from, "The Alaska Fishing Industry", House Research Agency

State appropriations for programs related to commercial fishing totaled about 120 million in FY 1982. The appropriations were distributed as follows:

| | |
|---|---|
| fisheries financing programs | 56.3 million |
| management and regulation | 30.5 million |
| fisheries development & marketing | 24.1 million |
| capital improvements | 8.8 million |
| total | $119,700,000 |

Fisheries expenditures were 2.2 percent of the state budget in 1978, 79, 80 and 81.

State revenue from non-corporate fish taxes and fees levied on the fishing industry totalled $28.2 million in FY 1981.

I estimate that the fisheries contributed an additional $1,044,000 million in corporate income tax payments in F.Y. 1981. (In 1979 the Dept. of Rev. calculated that the fisheries contributed 3% of general

Forbes May 10, 82

*Here are a few tips on how to read those new annual reports intelligently.*

**Numbers Game**

# Reading between the lines

By Aaron Bernstein

WITH ANNUAL REPORTS arriving in the mail almost daily now, a short primer on what to look for this year may be in order.

### A joyous LIFO

You've probably always thought of LIFO (last in, first out) inventory accounting as a conservative technique that tends to depress earnings. That's generally true. But, since LIFO matches current sales against latest costs, earnings can be dramatically buoyed when inventories are cut and the latest costs get older and older, lower and lower.

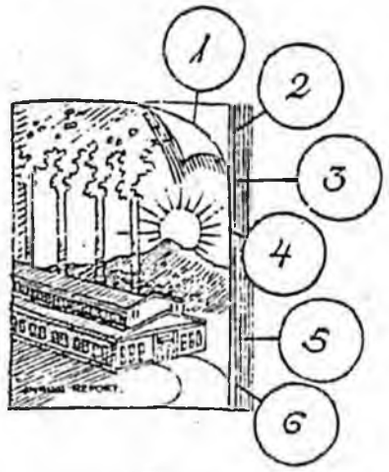
"A full year of high interest rates and slow sales has led to strong pressure to cut inventories," says Seidman & Seidman's Harvey Moskowitz. "This is something I think readers should look for because it inflates earnings."

Take Texaco. High interest rates and an oil glut caused Texaco to cut inventories by 16%. The LIFO cushion that was built into those barrels over the years amounted to $454 million, and transformed what would have been a drop in net income into a modest gain. Texaco's annual report revealed that.

### Spicing up income

Last year a number of firms received a much-needed shot in the arm from the Economic Recovery Tax Act's provision for selling tax benefits. These sales are one-time deals and shouldn't be confused with higher earnings resulting from better sales or margins.

Moore McCormack Resources, a $766 million natural resources conglomerate, for instance, netted a nice $5.5 million from sales of investment credits and depreciation deductions. That brought net income up to $51.3 million in 1981 from $47 million in 1980. Without those sales, income for 1981 is down slightly from the previous year.




### It sounds better in translation

For years now, companies have been complaining about the adverse effect of accounting for foreign currency translations. Now that the FASB has finally taken steps to make translations painless, you can bet that companies aren't going to complain in their presidents' letters that earnings have been improved as a result.

Although the new rule, FASB Statement 52, won't be mandatory until Dec. 15, 1982, a number of firms elected to adopt it last year. In fact, some even picked up the new accounting method retroactively, which the FASB permits.

Xerox chose to take advantage of the new rule this way and altered its results back four years. Net income as reported in their new annual is $7.08 in 1981, up from $6.69 in 1980 and $6.12 in 1979.

Without the new rule, Xerox' 1981 net income drops 31 cents, to $6.77, as compared with increases to $7.24 in 1980 and $6.60 the year before. A somewhat different picture.

### Watch the actuaries

With interest rates seemingly glued to the heavens, a number of firms have changed their assumptions about how much money their pension plans will earn for many years to come. By raising your interest rate assumptions, you can put vastly fewer dollars into the pension plan in a given year. Presto: higher earnings.

General Motors, for instance, explains in a note that it changed its assumed rate of return on its pension fund from 6% to 7% last year. That added 69 cents a share to GM's bottom line—which amounts to over half of its $1.07 net earnings in 1981.

### Selling out

It would appear that last year was a bad one for $1.2 billion (sales) AMF. Net income dropped almost one-third, from $2.58 a share in 1980 to $1.84. But this poor showing is due mostly to sale of unprofitable operations, and doesn't really reflect AMF's true status as a going concern. If you look just at the remaining businesses in each year, profits rose by 23%, from $2.39 a share in 1980 to $2.95 last year.

Says Moskowitz, "The recession last year forced many companies to look hard at operations that weren't carrying their own weight." As a result, it's important to determine to what extent the figures you are examining are for ongoing operations, and to what extent they include one-time writeoffs for discontinued operations.

### Inequitable?

The use of equity accounting—which allows a company to show, as earnings, a percentage of the earnings of other companies in which it has a minority interest of about 20% or more—is misleading in any year. After all, the parent company never really sees any nondividend cash from those equity investments. So, when you're trying to see how much money a company *really* has to spend, subtract those dollars.

At Teledyne, the $3.2 billion conglomerate, net income per share last year was $19.96. Of this, $3.49, or about $72 million, came from equity accounting. That means that about 17% of Teledyne's earnings isn't Teledyne's to spend. The company actually received a mere $18 million in dividends from the investments. ■

STATE OF ALASKA
DEPARTMENT OF REVENUE
JAY S. HAMMOND, GOVERNOR
STATE OFFICE BUILDING / POUCH SA - JUNEAU 99811

May 20, 1982

The Honorable Bill Ray, Chairman
Senate Transportation Committee
Pouch V
Juneau, AK 99811

Re: HB 866 and SCS HB 866 (SA) - Providing for an increase in the investment tax credit against the State corporate income tax

Dear Mr. Chairman:

The idea behind this legislation is ill-conceived and represents poor state policy. It is poor state policy because rich corporations stand to get far more benefit from it than poor ones. For example, I did a comparison for Senator Fischer's committee on the effect of the original version of HB 866 on the rate of return for a project standing on its own, versus that same project if it is owned by a affluent company (not even oil-company sized) having $750,000 a year of taxable Alaska income from other business activities. The improvement in the rate of return would be nearly three times greater for the big business than it would be for the little guy just starting out. For the large oil companies, the disproportion would be somewhat greater still.

The Bill is ill-conceived because the effect on investment rates of return as the result of increasing this investment tax credit (ITC) is too small to have any economic meaning, despite claims to the contrary by its supporters. A project will go forward or not go forward, because of other factors than the ITC. Even in the case of the rich corporation that I prepared for Senator Fischer, the improvement in the internal rate of return on the investment was less than one percentage point. The effect of assuming only a 10 percent higher operating margin over the life of the project was four and a quarter times greater. And, that was when the Bill still provided that the new state ITC would be 100% of the federal ITC. Under the State Affairs CS, the state ITC would be only 36% of the federal ITC, which would make the change in the rate of return vanishingly small.

There are other reasons not to pass this Bill or some variation of it. First, mining already enjoys a three-year "holiday" from paying the mining license tax, from the time the mine starts operating. Second, the amount of qualified investment on which the ITC is computed was

increased last year 40-fold, from $500,000 to $20,000,000; increasing the percentage of that investment which may be deducted dollar for dollar against the income tax is too much of a good thing. Third, corporations last year were given a significant tax break, particularly the smaller ones, by the decrease in state income tax rates on the first $90,000 of taxable income (for example, the first $10,000 of taxable income is taxed now at only one percent, as opposed to 5.4 percent before last year's rate change). Fourth, by whittling away at the non-petroleum tax base of the State, we not only make the State finances more vulnerable to the vagaries of the world oil market, but we also tend to furnish factual support for the type of tax lawsuits which you may recall Dick Donaldson of SOHIO was threatening you and the Legislature with last year.

All in all, this Bill is nothing more than a give-away of State revenues with nothing for the State to show in return that it wouldn't have gotten anyway. Moreover, to the extent it conveys benefits, they are more advantageous to the rich corporations than the poor.

I am enclosing a copy of my letter to Senator Fischer, and I would welcome the opportunity to speak to you or your Committee further on this Bill if you so desire.

Thank you for your consideration.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Enclosure

# STATE OF ALASKA

**DEPARTMENT OF REVENUE**

*OFFICE OF THE COMMISSIONER*

*JAY S. HAMMOND, GOVERNOR*

*POUCH S*
*JUNEAU, ALASKA 99811*
*PHONE: (907) 465-2300*


May 15, 1982

The Honorable Vic Fischer, Chairman
Senate State Affairs Committee
Pouch V
Juneau, AK 99811

Re: Effects on Economic Decision-Making from Increasing the State Investment Tax Credit as Proposed in House Bill 866

Dear Mr. Chairman:

In my testimony before the Committee I stated that increasing the State's investment tax credit as proposed in HB 866 would have only a minimal effect on the internal rate of return after taxes for new projects in Alaska. I also said that, to the extent there would be an effect on the rate of return, it would be greater for "fat cat" corporations than for small ones. I now have had the opportunity to prepare an example which demonstrates the truth of both assertions.

Suppose we have a new project in Alaska, and to avoid any distortions by making it too large, suppose further that it costs $1,000,000, takes a year to complete and will employ 25 people. Suppose, too, that after expenses other than income taxes and depreciation, the project yields a net cash flow of $250,000 a year for its first four years of operation, and then each year thereafter the net cash flow decreases by five percent from the previous year. Finally, let us suppose that the project qualifies for Accelerated Capital Recovery System treatment under the new tax law using a 10-year life.

The analysis I have used takes this project and compares the internal rate of return (IRR) on the investment under Alaska's present investment tax credit with the IRR under the credit proposed in HB 866. This comparison is first made with the project standing alone; that is, the investor has no other income to be sheltered from the tax benefits generated from the project. I call this Case 1. Case 2 doesn't involve too fat a "fat cat" corporation, simply one with $750,000 a year of taxable Alaskan net income from other sources.

The tables attached to this letter show what the after-tax cash flows are under Case 1 and Case 2, both with the present investment tax credit and with the one proposed by HB 866. As you can see from those tables, the IRR under the non-"fat cat" case (Case 1) is 16.763% under

the present law and would rise by only 0.363 of a percentage point to 19.126% under HB 866. In contrast, the improvement in the rate of return for the "fat cat" case (Case 2) is nearly three times as great as for the "skinny" cat -- 0.997 of a percentage point (15.772% to 16.769%).

Note also how small a difference there is in the rate of return between present law and HB 866. The extra economic incentive from raising the State's investment tax credit is truly minimal (and you can see why: look how much higher the federal taxes would be during the early years with HB 866 than they are under present law, in both Cases 1 and 2). Other factors have much more effect on the economics of an investment than the amount of investment tax credit. For example, in Case 1, suppose one's assumptions about market prices, labor costs and other operating expenses had a 10 percent margin of error. If the net pre-tax cash flows were only 10 percent higher than the figures in the table, the increase in the rate of return would be 4.25 times that from the extra tax incentive under HB 866.

Without going on excessively, I would only reiterate my objections that HB 866 does too little economically, at too high a price for the State, to the advantage of wealthy corporations over small ones. It scarcely makes economic sense and certainly makes poor State policy.

I hope this information may prove useful to you and your Committee in considering HB 866.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Attachments

P.S. I might add parenthetically that the reason for the lower IRRs in the "fat cat" case is that all income from the project is taxed in the maximum tax bracket under both federal and state tax laws, because of the other $750,000 of taxable income; the project represents incremental income to the corporation. In Case 1 the project stands alone, and so the first $100,000 and first $90,000 are taxed below the maximum rates under the federal and Alaska tax laws, respectively.

CASE 1. A NEW ALASKAN BUSINESS ON ITS OWN

| | | | With State Investment Tax Credit Under Existing State Law | | | | | | | With State Investment Tax Credit under HB 86 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yr | Pre-Tax Cash Flow from Project | Project Depre-ciation | AK Inc. Tax From Project Before ITC | AK ITC Applied | AK Inc. Tax From Project After ITC | US Inc. Tax From Project Before ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow | AK ITC Applied | AK Inc. Tax From Project After ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Cash F |
| 1 | -1,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,000,000 | 0 | 0 | 0 | 0 | -1,000, |
| 2 | 250,000 | 80,000 | 12,020 | 12,020 | 0 | 57,950 | 57,950 | 0 | 250,000 | 12,020 | 0 | 57,950 | 0 | 250, |
| 3 | 250,000 | 140,000 | 6,380 | 5,980* | 400 | 30,166 | 30,166 | 0 | 249,600 | 6,380 | 0 | 30,166 | 0 | 250, |
| 4 | 250,000 | 120,000 | 8,260 | 0 | 8,260 | 35,750 | 11,884 | 25,866 | 217,874 | 8,260 | 0 | 11,884 | 27,850 | 222, |
| 5 | 250,000 | 100,000 | 10,140 | 0 | 10,140 | 44,086 | 0 | 44,086 | 195,774 | 10,140 | 0 | 0 | 48,750 | 201, |
| 6 | 237,500 | 100,000 | 8,965 | 0 | 8,965 | 38,876 | 0 | 38,876 | 189,659 | 8,965 | 0 | 0 | 43,000 | 194, |
| 7 | 225,625 | 100,000 | 7,849 | 0 | 7,849 | 33,927 | 0 | 33,927 | 183,849 | 7,849 | 0 | 0 | 37,538 | 188, |
| 8 | 214,344 | 90,000 | 7,728 | 0 | 7,728 | 33,393 | 0 | 33,393 | 173,222 | 7,728 | 0 | 0 | 36,948 | 177, |
| 9 | 203,627 | 90,000 | 6,721 | 0 | 6,721 | 28,927 | 0 | 28,927 | 167,979 | 6,721 | 0 | 0 | 32,018 | 171, |
| 10 | 193,445 | 90,000 | 5,764 | 0 | 5,764 | 24,822 | 0 | 24,842 | 162,859 | 5,764 | 0 | 0 | 27,335 | 166, |
| 11 | 183,773 | 90,000 | 4,855 | 0 | 4,855 | 21,317 | 0 | 21,317 | 157,601 | 4,855 | 0 | 0 | 23,259 | 160, |
| 12 | 174,584 | 0 | 12,451 | 0 | 12,451 | 54,331 | 0 | 54,331 | 107,802 | 12,451 | 0 | 0 | 60,059 | 114, |
| 13 | 165,855 | 0 | 11,630 | 0 | 11,630 | 50,693 | 0 | 50,693 | 103,531 | 8,867** | 2,763 | 0 | 54,772 | 108, |
| 14 | 157,562 | 0 | 10,851 | 0 | 10,851 | 47,237 | 0 | 47,237 | 99,474 | 0 | 10,851 | 0 | 47,237 | 99, |
| 15 | 149,684 | 0 | 10,110 | 0 | 10,110 | 43,954 | 0 | 43,954 | 95,620 | 0 | 10,110 | 0 | 43,954 | 95, |
| 16 | 142,200 | 0 | 9,407 | 0 | 9,407 | 40,835 | 0 | 40,835 | 91,958 | 0 | 9,407 | 0 | 40,835 | 91, |
| 17 | 135,090 | 0 | 8,738 | 0 | 8,738 | 37,872 | 0 | 37,872 | 88,480 | 0 | 8,738 | 0 | 37,872 | 88, |
| 18 | 128,336 | 0 | 8,104 | 0 | 8,104 | 35,057 | 0 | 35,057 | 85,176 | 0 | 8,104 | 0 | 35,057 | 85, |
| 19 | 121,919 | 0 | 7,500 | 0 | 7,500 | 32,383 | 0 | 32,383 | 82,036 | 0 | 7,500 | 0 | 32,383 | 82, |
| 20 | 115,823 | 0 | 6,927 | 0 | 6,927 | 29,842 | 0 | 29,842 | 79,054 | 0 | 6,927 | 0 | 29,842 | 79, |
| 21 | 110,032 | 0 | 6,383 | 0 | 6,383 | 27,429 | 0 | 27,429 | 76,220 | 0 | 6,383 | 0 | 27,429 | 76, |
| 22 | 104,530 | 0 | 5,866 | 0 | 5,866 | 25,216 | 0 | 25,216 | 73,449 | 0 | 5,866 | 0 | 25,216 | 73 |
| 23 | 99,304 | 0 | 5,375 | 0 | 5,375 | 23,322 | 0 | 23,322 | 70,608 | 0 | 5,375 | 0 | 23,322 | 70 |
| 24 | 94,338 | 0 | 4,908 | 0 | 4,908 | 21,522 | 0 | 21,522 | 67,908 | 0 | 4,908 | 0 | 21,522 | 67 |
| 25 | 89,621 | 0 | 4,466 | 0 | 4,466 | 19,812 | 0 | 19,812 | 65,343 | 0 | 4,466 | 0 | 19,812 | 65 |
| | | | | | | | | | IRR=18.763% | | | | | IRR=19 |

* Under present law, Alaska's ITC equals 18% of the federal ITC, or 1.8% of the qualified investment. As with the federal ITC, any ITC that is not used in a tax year may be carried forward into the next tax year. In this case only $12,020 of the $18,000 state ITC was taken in the first year; the balance of $5,980 is taken in the second.

** Under HB 866, Alaska's ITC would equal the federal ITC, or $100,000 in this example. This $8,867 figure represents what remains of the $100,000 ITC after the twelfth year of the project.

| | | | With State Investment Tax Credit Under Existing State Law | | | | | | | With State Investment Tax Credit under HB | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yr | Pre-Tax Cash Flow from Project | Project Depre-ciation | AK Inc. Tax From Project Before ITC | AK ITC Applied | AK Inc. Tax From Project After ITC | US Inc. Tax From Project Before ITC | US ITC Applied | US Inc. Tax From Project After ITC | Net After-Tax Cash Flow | AK ITC Applied | AK Inc. Tax From Project After ITC | US ITC Applied | US Inc. Tax From Project After ITC | Aft Cas |
| 1 | -1,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | -1,000,000 | 0 | 0 | 0 | 0 | -1,0 |
| 2 | 250,000 | 80,000 | 15,980 | 18,000* | -2,020 | 79,129 | 100,000 | -20,871 | 272,891 | 82,520** | -66,540 | 100,000 | 9,738 | 3 |
| 3 | 250,000 | 140,000 | 10,340 | 0 | 10,340 | 45,844 | 0 | 45,844 | 193,816 | 17,480 | -7,140 | 0 | 49,123 | 2 |
| 4 | 250,000 | 120,000 | 12,220 | 0 | 12,220 | 54,179 | 0 | 54,179 | 183,601 | 0 | 12,220 | 0 | 54,179 | 1 |
| 5 | 250,000 | 100,000 | 14,100 | 0 | 14,100 | 62,514 | 0 | 62,514 | 173,386 | 0 | 14,100 | 0 | 62,514 | 1 |
| 6 | 237,500 | 100,000 | 12,925 | 0 | 12,925 | 57,305 | 0 | 57,305 | 167,271 | 0 | 12,925 | 0 | 57,305 | 1 |
| 7 | 225,625 | 100,000 | 11,809 | 0 | 11,809 | 52,355 | 0 | 52,355 | 161,461 | 0 | 11,809 | 0 | 52,355 | 1 |
| 8 | 214,344 | 90,000 | 11,688 | 0 | 11,688 | 51,822 | 0 | 51,822 | 150,834 | 0 | 11,688 | 0 | 51,822 | 1 |
| 9 | 203,627 | 90,000 | 10,681 | 0 | 10,681 | 47,355 | 0 | 47,355 | 145,591 | 0 | 10,681 | 0 | 47,355 | 1 |
| 10 | 193,445 | 90,000 | 9,724 | 0 | 9,724 | 43,112 | 0 | 43,112 | 140,609 | 0 | 9,724 | 0 | 43,112 | 1 |
| 11 | 183,773 | 90,000 | 8,815 | 0 | 8,815 | 39,081 | 0 | 39,081 | 135,878 | 0 | 8,815 | 0 | 39,081 | 1 |
| 12 | 174,584 | 0 | 16,411 | 0 | 16,411 | 72,760 | 0 | 72,760 | 85,413 | 0 | 16,411 | 0 | 72,760 | |
| 13 | 165,855 | 0 | 15,590 | 0 | 15,590 | 69,122 | 0 | 69,122 | 81,143 | 0 | 15,590 | 0 | 69,122 | |
| 14 | 157,562 | 0 | 14,811 | 0 | 14,811 | 65,666 | 0 | 65,666 | 77,086 | 0 | 14,811 | 0 | 65,666 | |
| 15 | 149,684 | 0 | 14,070 | 0 | 14,070 | 62,382 | 0 | 62,382 | 73,231 | 0 | 14,070 | 0 | 62,382 | |
| 16 | 142,200 | 0 | 13,367 | 0 | 13,367 | 59,263 | 0 | 59,263 | 69,570 | 0 | 13,367 | 0 | 59,263 | |
| 17 | 135,090 | 0 | 12,698 | 0 | 12,698 | 56,300 | 0 | 56,300 | 66,091 | 0 | 12,698 | 0 | 56,300 | |
| 18 | 128,336 | 0 | 12,064 | 0 | 12,064 | 53,485 | 0 | 53,485 | 62,787 | 0 | 12,064 | 0 | 53,485 | |
| 19 | 121,919 | 0 | 11,460 | 0 | 11,460 | 50,811 | 0 | 50,811 | 59,648 | 0 | 11,460 | 0 | 50,811 | |
| 20 | 115,823 | 0 | 10,887 | 0 | 10,887 | 48,270 | 0 | 48,270 | 56,665 | 0 | 10,887 | 0 | 48,270 | |
| 21 | 110,032 | 0 | 10,343 | 0 | 10,343 | 45,857 | 0 | 45,857 | 53,832 | 0 | 10,343 | 0 | 45,857 | |
| 22 | 104,530 | 0 | 9,826 | 0 | 9,826 | 43,564 | 0 | 43,564 | 51,140 | 0 | 9,826 | 0 | 43,564 | |
| 23 | 99,304 | 0 | 9,335 | 0 | 9,335 | 41,386 | 0 | 41,386 | 48,583 | 0 | 9,335 | 0 | 41,386 | |
| 24 | 94,338 | 0 | 8,868 | 0 | 8,868 | 39,316 | 0 | 39,316 | 46,154 | 0 | 8,868 | 0 | 39,316 | |
| 25 | 89,621 | 0 | 8,424 | 0 | 8,424 | 37,350 | 0 | 37,350 | 43,846 | 0 | 8,424 | 0 | 37,350 | |
| | | | | | | | | | IRR=15.772% | | | | | IRR= |

* Under present law, Alaska's ITC equals 18% of the federal ITC, or 1.8% of the qualified investment. Since the corporation has $750,000 of other Alaskan taxable income, the $2020 in ITC not used to shelter income from the project from tax can be used to reduce the tax on this other income. By the same token, the $100,000 federal ITC can all be used in one year to reduce the tax on the other $750,000 of taxable income.

** Under HB 866, Alaska's ITC would equal the federal ITC, or $100,000 in this example. The negative figure reflects the fact that a $100,000 Alaskan ITC would shelter not only all of the $170,000 taxable income from the project, but would reduce to zero the $66,540 tax on the other $750,000 of taxable Alaskan income, and still leave some $17,480 of ITC to spare. This $17,480 is carried over into the next year, where it reduces to zero the $10,340 tax liability generated by the project and reduces the taxes on the other $750,000 by $7,140 (reflected as a negative figure).

— FILE —

# STATE OF ALASKA

## DEPARTMENT OF REVENUE

OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, GOVERNOR

POUCH S
JUNEAU, ALASKA 99811
PHONE: (907) 465-2300

May 24, 1982

The Honorable Bill Ray
Chairman
Senate Transportation Committee
Room 103 - Capitol Building
Juneau, Alaska

Re: Senate CS for House Bill No. 866 (State Affairs)

Dear Senator Ray:

Senate CS for House Bill No. 866 (State Affairs), an Act establishing a special tax credit, was given an additional referral on May 17, 1982 to the Senate Transportation Committee.

For the consideration of the Senate Transportation Committee, I am enclosing a copy of a Fiscal Note prepared by Mr. Robert R. Kessel, Director, Audit Division, Department of Revenue concerning the proposed legislation.

Sincerely,

R. D. Stevenson
Special Assistant

Enclosure

cc: Joseph K. Donohue
Deputy Commissioner
Department of Revenue

Robert R. Kessel, Director
Audit Division
Department of Revenue

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution Number: SCSHB 866 (SA)
Title: Special investment tax credit
Requested by: Senate Transportation Committee Date: May 24, 1982

II. FISCAL DETAIL
Agency Affected: Department of Revenue
Program Category Affected: General Government
BRU, Program, or Subprogram(s) Affected: Audit Division
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | - | - | - | - | - | - |
| 200 TRAVEL | - | - | - | - | - | - |
| 300 CONTRACTUAL | - | - | - | - | - | - |
| 400 COMMODITIES | - | - | - | - | - | - |
| 500 EQUIPMENT | - | - | - | - | - | - |
| 600 LAND & STRUCTURES | - | - | - | - | - | - |
| 700 GRANTS,CLAIMS,ETC | - | - | - | - | - | - |
| 800 MISCELLANEOUS | - | - | - | - | - | - |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | 0 | 0 | 0 | 0 | 0 | 0 |
| FEDERAL FUNDS | - | - | - | - | - | - |
| OTHER (Specify Source) | - | - | - | - | - | - |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | - | - | - | - | - | - |
| PART TIME | - | - | - | - | - | - |
| TEMPORARY | - | - | - | - | - | - |

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

Although there would not be additional administrative expense incurred as a result of enactment of the proposed legislation, this CS would double the State investment tax credit (ITC) to 36% of the federal ITC (vs. 100% of the federal ITC under its original version). The extra large ITC is limited to mining only, instead of extending to farm and timber ventures also as it did before. It appears the limitation of $20,000,000 on qualifying investment under AS 43.20.036(b) would NOT apply to mining investments under this Bill -- in other words, the sky's the limit in terms of how much investment could give rise to this enlarged ITC. This CS provides for a repeal of its new ITC provisions on December 31, 1986.

IV. DATE: May 24, 1982 PREPARED BY: Robert R. Hessel
AGENCY: Audit Division
PHONE: 465-2320

Original: Legislative Finance
cc: Budget and Management
Prime Sponsor (First Legislator Named)
33-001 (Rev. 12/81)

# STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

**DEPARTMENT OF REVENUE**

STATE OFFICE BUILDING / POUCH SA - JUNEAU 99811

May 20, 1982

The Honorable Bill Ray, Chairman
Senate Transportation Committee
Pouch V
Juneau, AK 99811

Re: HB 866 and SCS HB 866 (SA) - Providing for an increase in the investment tax credit against the State corporate income tax

Dear Mr. Chairman:

The idea behind this legislation is ill-conceived and represents poor state policy. It is poor state policy because rich corporations stand to get far more benefit from it than poor ones. For example, I did a comparison for Senator Fischer's committee on the effect of the original version of HB 866 on the rate of return for a project standing on its own, versus that same project if it is owned by a affluent company (not even oil-company sized) having $750,000 a year of taxable Alaska income from other business activities. The improvement in the rate of return would be nearly three times greater for the big business than it would be for the little guy just starting out. For the large oil companies, the disproportion would be somewhat greater still.

The Bill is ill-conceived because the effect on investment rates of return as the result of increasing this investment tax credit (ITC) is too small to have any economic meaning, despite claims to the contrary by its supporters. A project will go forward or not go forward, because of other factors than the ITC. Even in the case of the rich corporation that I prepared for Senator Fischer, the improvement in the internal rate of return on the investment was less than one percentage point. The effect of assuming only a 10 percent higher operating margin over the life of the project was four and a quarter times greater. And, that was when the Bill still provided that the new state ITC would be 100% of the federal ITC. Under the State Affairs CS, the state ITC would be only 36% of the federal ITC, which would make the change in the rate of return vanishingly small.

There are other reasons not to pass this Bill or some variation of it. First, mining already enjoys a three-year "holiday" from paying the mining license tax, from the time the mine starts operating. Second, the amount of qualified investment on which the ITC is computed was

increased last year 40-fold, from $500,000 to $20,000,000; increasing the percentage of that investment which may be deducted dollar for dollar against the income tax is too much of a good thing. Third, corporations last year were given a significant tax break, particularly the smaller ones, by the decrease in state income tax rates on the first $90,000 of taxable income (for example, the first $10,000 of taxable income is taxed now at only one percent, as opposed to 5.4 percent before last year's rate change). Fourth, by whittling away at the non-petroleum tax base of the State, we not only make the State finances more vulnerable to the vagaries of the world oil market, but we also tend to furnish factual support for the type of tax lawsuits which you may recall Dick Donaldson of SOHIO was threatening you and the Legislature with last year.

All in all, this Bill is nothing more than a give-away of State revenues with nothing for the State to show in return that it wouldn't have gotten anyway. Moreover, to the extent it conveys benefits, they are more advantageous to the rich corporations than the poor.

I am enclosing a copy of my letter to Senator Fischer, and I would welcome the opportunity to speak to you or your Committee further on this Bill if you so desire.

Thank you for your consideration.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Enclosure

- FILE -

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution Number: SCSHB 866 (SA)
Title: Special investment tax credit
Requested by: Senate Transportation Committee Date: May 24, 1982

II. FISCAL DETAIL
Agency Affected: Department of Revenue
Program Category Affected: General Government
BRU, Program, or Subprogram(s) Affected: Audit Division
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

| | FY 82 | FY 83 | FY 84 | FY 85 | FY 86 | FY 87 |
|---|---|---|---|---|---|---|
| 100 PERSONAL SERVICES | - | - | - | - | - | - |
| 200 TRAVEL | - | - | - | - | - | - |
| 300 CONTRACTUAL | - | - | - | - | - | - |
| 400 COMMODITIES | - | - | - | - | - | - |
| 500 EQUIPMENT | - | - | - | - | - | - |
| 600 LAND & STRUCTURES | - | - | - | - | - | - |
| 700 GRANTS,CLAIMS,ETC | - | - | - | - | - | - |
| 800 MISCELLANEOUS | - | - | - | - | - | - |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 |

FUNDING (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| GENERAL FUND | 0 | 0 | 0 | 0 | 0 | 0 |
| FEDERAL FUNDS | - | - | - | - | - | - |
| OTHER (Specify Source) | - | - | - | - | - | - |

POSITIONS

| | | | | | | |
|---|---|---|---|---|---|---|
| FULL TIME | - | - | - | - | - | - |
| PART TIME | - | - | - | - | - | - |
| TEMPORARY | - | - | - | - | - | - |

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

Although there would not be additional administrative expense incurred as a result of enactment of the proposed legislation, this CS would double the State investment tax credit (ITC) to 36% of the federal ITC (vs. 100% of the federal ITC under its original version). The extra large ITC is limited to mining only, instead of extending to farm and timber ventures also as it did before. It appears the limitation of $20,000,000 on qualifying investment under AS 43.20.036(b) would NOT apply to mining investments under this Bill -- in other words, the sky's the limit in terms of how much investment could give rise to this enlarged ITC. This CS provides for a repeal of its new ITC provisions on December 31, 1986.

IV. DATE: May 24, 1982
PREPARED BY: Robert R. Hessel
AGENCY: Audit Division
PHONE: 465-2320

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

33-001 (Rev. 12/81)

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF REVENUE

STATE OFFICE BUILDING / POUCH SA - JUNEAU 99811

May 20, 1982

The Honorable Bill Ray, Chairman
Senate Transportation Committee
Pouch M
Juneau, AK 99811

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I am enclosing a copy of my letter to Senator Fischer, and I would welcome the opportunity to speak to you or your Committee further on this Bill if you so desire.

Thank you for your consideration.

Sincerely,

Thomas K. Williams
Commissioner of Revenue

Enclosure

HJR

20

THE ALASKA RAILROAD ACT,

signed into law March 12, 1914,

(38 Stat. 305) states:

"The President of the United States is empowered, authorized, and directed to designate and cause to be located in the Territory of Alaska not to exceed in the aggregate one thousand miles, to be so located as to connect one or more of the open Pacific Ocean harbors on the southern coast of Alaska with the navigable waters in the interior of Alaska, and with a coal field or fields so as best to aid in the development of the agricultural and mineral or other resources of Alaska, and the settlement of the public lands therein...."

RAILROADS, TELEGRAPH, AND TELEPHONES

§ 301. Railroads; location, construction, and operation.—The President of the United States is empowered, authorized, and directed to adopt and use a name by which to designate the railroad or railroads and properties to be located, owned, acquired, or operated under the authority of sections 301 to 308 of this title; to employ such officers, agents, or agencies, in his discretion, as may be necessary to enable him to carry out the purposes of sections 301 to 308; to authorize and require such officers, agents, or agencies to perform any or all of the duties imposed upon him by the terms of sections 301 to 308; to detail and require any officer or officers in the Engineer Corps in the Army or Navy to perform service under sections 301 to 308; to fix the compensation of all officers, agents, or employees appointed or designated by him; to designate and cause to be located a route or routes for a line or lines of railroad in the Territory of Alaska not to exceed in the aggregate one thousand miles, to be so located as to connect one or more of the open Pacific Ocean harbors on the southern coast of Alaska with the navigable waters in the interior of Alaska, and with a coal field or fields so as best to aid in the development of the agricultural and mineral or other resources of Alaska, and the settlement of the public lands therein, and so as to provide transportation of coal for the Army and Navy, transportation of troops, arms, munitions of war, the mails, and for other governmental and public uses and for the transportation of passengers and property; to construct and build a railroad or railroads along such route or routes as he may so designate and locate, with the necessary branch lines, feeders, sidings, switches, and spurs; to purchase or otherwise acquire all real and personal property necessary to carry out the purposes of sections 301 to 308; to exercise the power of eminent domain in acquiring property for such use, which use is declared to be a public use, by condemnation in the courts of Alaska in accordance with the laws now or hereafter in force there; to acquire rights of way, terminal grounds, and all other rights; to purchase or otherwise acquire all necessary equipment for the construction and operation of such railroad or railroads; to build or otherwise acquire docks, wharves, terminal facilities, and all structures needed for the equipment and operation of such railroad or railroads; to fix, change, or modify rates for the transportation of passengers and property, which rates shall be equal and uniform, but no free transportation or passes shall be permitted except that the provisions of the interstate commerce laws relating to the transportation of employees and their families shall be in force as to the lines constructed under sections 301 to 308; to receive compensation for the transportation of passengers and property, and to perform generally all the usual duties of a common carrier by railroad; to make and establish rules and regulations for the control and operation of said railroad or railroads; in his discretion, to lease the said railroad or railroads, or any portion thereof, including telegraph and telephone lines, after completion under such terms as he may deem proper, but no lease shall be for a longer period than twenty years, or in the event of failure to lease, to operate the same until the further action of Congress. If said railroad or railroads, including telegraph and telephone lines, are leased under the authority given under sections 301 to 308, then and in that event they shall be operated under the jurisdiction and control of the provisions of the interstate commerce laws; to purchase, condemn, or otherwise acquire upon such terms as he may deem proper any other line or lines of railroad in Alaska which may be necessary to complete the construction of the line or lines of railroad designated or located by him. The price to be paid in case of purchase shall in no case exceed the actual physical value of the railroad; to make contracts or agreements with any railroad or steamship company or vessel owner for joint transportation of passengers or property over the road or roads herein provided for, and such railroad or steamship line or by such vessel, and to make such other contracts as may be necessary to carry out any of the purposes of sections 301 to 308; to utilize in carrying on the work herein provided for any and all machinery, equipment, instruments, material, and other property of any sort whatsoever used or acquired in connection

with the construction of the Panama Canal, so far and as rapidly as the same is no longer needed at Panama, and the successors to the Isthmian Canal Commission are authorized to deliver said property to such officers or persons as the President may designate, and to take credit therefor at such percentage of its original cost as the President may approve; but this amount shall not be charged against the fund provided for in said sections. (Mar. 12, 1914, c. 37, § 1, 38 Stat. 305.)

302. Telegraph and telephone lines.—The authority granted under section 301 of this title shall include the power to construct, maintain, and operate telegraph and telephone lines so far as they may be necessary or convenient in the construction and operation of the railroad or railroads as herein authorized and they shall perform generally all the usual duties of telegraph and telephone lines for hire. (Mar. 12, 1914, c. 37, § 1, 38 Stat. 305.)

303. Townsites.—The President is authorized to withdraw, locate, and dispose of, under such rules and regulations as he may prescribe, such area or areas of the public domain along the line or lines of such proposed railroad or railroads for townsite purposes as he may from time to time designate. (Mar. 12, 1914, c. 37, § 1, 38 Stat. 305.)

304. Terminals, stations and rights of way.—Terminal and station grounds and rights of way through the lands of the United States in the Territory of Alaska are granted for the construction of railroads, telegraph and telephone lines authorized by sections 301 to 308 of this title, and the President may, in such manner as he deems advisable, make reservation of such lands as are or may be useful for furnishing materials for construction and for stations, terminals, docks, and for such other purposes in connection with the construction and operation of such railroad lines as he may deem necessary and desirable. (Mar. 12, 1914, c. 37, § 1, 38 Stat. 305.)

305. Patents to contain reserve for right of way.—In all patents for lands taken up, entered, or located in Alaska after March 12, 1914, there shall be expressed that there is reserved to the United States a right of way for the construction of railroads, telegraph and telephone lines to the extent of one hundred feet on either side of the center line of any such road and twenty-five feet on either side of the center line of any such telegraph or telephone lines. (Mar. 12, 1914, c. 37, § 1, 38 Stat. 305.)

306. Disposition of proceeds of lease or sale of public lands.—All moneys derived from the lease, sale, or disposal of any of the public lands, including townsites, in Alaska, or the coal or mineral therein contained, or the timber thereon, and the earnings of said railroad or railroads, together with the earnings of the telegraph and telephone lines constructed under authority of sections 301 to 308 of this title, above maintenance charges and operating expenses, shall be paid into the Treasury of the United States as other miscellaneous receipts are paid, and a separate account thereof shall be kept and annually reported to Congress. (Mar. 12, 1914, c. 37, § 3, 38 Stat. 307.)

307. Authority of President.—It is the intent and purpose of Congress through the provisions of sections 301 to 308 of this title to authorize and empower the President of the United States, and he is fully authorized and empowered, through such officers, agents, or agencies as he may appoint or employ, to do all necessary acts and things in addition to those specially authorized in such sections to enable him to accomplish the purposes and objects of such sections. (Mar. 12, 1914, c. 37, § 1, 38 Stat. 305.)

308. Officers, agents, etc., to make annual report to President; transmission to Congress.—The officers, agents, or agencies placed in charge of the work by the President shall make to the President annually, and at such other periods as may be required by the President or by either House of Congress, full and complete reports of all their acts and doings and of all moneys received and expended in the construction of said work and in the operation of said work or works and in the performance of their duties in connection therewith. The annual reports provided for in this section shall be by the President transmitted to Congress. (Mar. 12, 1914, c. 37, § 4, 38 Stat. 307.)

Prepared by Rep Moss Office

ALASKA OVERVIEW: LEGISLATIVE HISTORY

The Alaska State Legislature enacted House Joint Resolution 27 in 1975, directing Governor Jay Hammond to convene an international conference to discuss possible railroad connection between Alaska and Canada. However, only through constant pressure by legislative leaders on the Governor's office did it finally occur. On April 8, 1976 (one year later), a meeting was held in municipal offices in Juneau, attended by members of state, federal and Canadian governmental agencies, and representatives of industry and rail companies from Alaska, Canada and the Western United States.

ALASKA OVERVIEW: LEGISLATIVE HISTORY

The Alaska State Legislature enacted House Joint Resolution 27 in 1975, directing Governor Jay Hammond to convene an international conference to discuss possible railroad connection between Alaska and Canada. However, only through constant pressure by legislative leaders on the Governor's office did it finally occur. On April 8, 1976 (one year later), a meeting was held in municipal offices in Juneau, attended by members of state, federal and Canadian governmental agencies, and representatives of industry and rail companies from Alaska, Canada and the Western United States.

It was learned that Alaska was far behind Canada in transportation planning, particularly for rail, and that an official commitment to perform such planning was essential. That commitment came in the form of a special legislative appropriation. To show good faith to both the Canadian and the U.S. Federal governments, resolutions were enacted that declared Alaska's support for the project. The Alaska State Legislature appropriated the sum of $50,000, to perform a review of the project's potentials. Further, it was agreed that there was great potential in the State, and that it appeared to be a most viable project. The major hurdle would be the assurance that continued efforts would be made to pursue the idea, and that a formal commitment be made by the State of Alaska. The majority of those in attendance were clearly in favor of further work on this project.

In 1977, the Alaska State Legislature appropriated $865 000 for the purpose of reconnaissance photography and studies, field surveys, mapping, engineering work and cost comparisons to delineate a utility corridor and railroad right-of-way for extension of the Alaska Railroad. Governor Jay Hammond line-item vetoed all but $150,000 of the money appropriated. The Department of Transportation was only able to perform minimal route reconnaissance in 1977.

At the opening of the next legislative session in January 1978, the members restored the full dollar amount of the original appropriation by overriding the veto. By this time, however, the most important factor controlling success of this project was time, since a great amount of work needed to be completed before June 30, 1979, at which time the funding was scheduled to expire.

In 1978, the Governor again line-item vetoed $265,000 out of this same appropriation, and the Alaska State Legislature immediately appropriated these same dollars to the Legislative Council, in order to complete the work as planned. Thus, the authority of the Governor to control these dollars was taken away. The assurance that the necessary work would be completed was accomplished.

In 1979, the Governor once more attempted to line-item veto the $265,000 from the budget, but this time was forced to replace the money because contracts were already committed on these dollars, and substantial legal liabilities would have been incurred by himself and his office. The Alaska State House and Senate issued a joint statement in 1979 giving full support to the rail extension project.

CHAP. 34.—An Act To repeal an Act regulating the construction of bridges across the Muskingum River in Ohio.

March 9, 1914.
[H. R. 11351.]
[Public, No. 66.]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Act of Congress entitled "An Act regulating the construction of bridges over the Muskingum River in Ohio," approved April second, eighteen hundred and eighty-eight, be, and the same is hereby, repealed.

Approved, March 9, 1914.

Muskingum River, Ohio.
Restrictions on bridges across, removed.
Vol. 25, p. 74, repealed.

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CHAP. 35.—An Act To authorize the construction, maintenance, and operation of a bridge across the Tombigbee River near Old Cotton Gin Port, in Monroe County, Mississippi.

March 9, 1914.
[H. R. 13365.]
[Public, No. 67.]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the board of supervisors of Monroe County, Mississippi, is hereby authorized to construct, maintain, and operate a bridge and approaches thereto across the Tombigbee River, at a point suitable to the interests of navigation, near Old Cotton Gin Port, in Monroe County, Mississippi, in accordance with the provisions of an Act entitled "An Act to regulate the construction of bridges over navigable waters," approved March twenty-third, nineteen hundred and six.

SEC. 2. That the right to alter, amend, or repeal this Act is hereby expressly reserved.

Approved, March 9, 1914.

Tombigbee River.
Monroe County, Miss., may bridge, at Old Cotton Gin Port.
Construction.
Vol. 34, p. 84.

Amendment.

---

CHAP. 36.—An Act To extend the time for constructing a bridge across the Mississippi River at the town site of Sartell, Minnesota.

March 11, 1914.
[H. R. 13545.]
[Public, No. 68.]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the time for commencing and completing the bridge authorized by the Act of Congress approved August twenty-fourth, nineteen hundred and twelve, to be built across the Mississippi River, at the town site of Sartell, Stearns County, Minnesota, is hereby extended to one year and three years, respectively, from date of approval hereof.

SEC. 2. That the right to alter, amend, or repeal this Act is hereby expressly reserved.

Approved, March 11, 1914.

Mississippi River.
Time extended for bridging, by Sartell, Minn.
Vol. 37, p. 494, amended.

Amendment.

---

CHAP. 37.—An Act To authorize the President of the United States to locate, construct, and operate railroads in the Territory of Alaska, and for other purposes.

March 12, 1914.
[S. 48.]
[Public, No. 69.]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the President of the United States is hereby empowered, authorized, and directed to adopt and use a name by which to designate the railroad or railroads and properties to be located, owned, acquired, or operated under the authority of this Act; to employ such officers, agents, or agencies, in his discretion, as may be necessary to enable him to carry out the purposes of this Act; to authorize and require such officers, agents, or agencies to perform any or all of the duties imposed upon him by the terms of this Act; to detail and require any officer or officers in the Engineer Corps in the Army or Navy to perform service under this Act; to fix the compensation of all officers, agents, or employees appointed or designated by him; to designate and cause to be located a route or routes for a line or lines of railroad in the Territory of Alaska not to exceed in the aggregate one thousand

Alaska.
President authorized to operate, etc., railroads in.

Location and purpose.

miles, to be so located as to connect one or more of the open Pacific Ocean harbors on the southern coast of Alaska with the navigable waters in the interior of Alaska, and with a coal field or fields so as best to aid in the development of the agricultural and mineral or other resources of Alaska, and the settlement of the public lands therein, and so as to provide transportation of coal for the Army and Navy, transportation of troops, arms, munitions of war, the mails, and for other governmental and public uses, and for the transportation of passengers and property; to construct and build a railroad or railroads along such route or routes as he may so designate and locate, with the necessary branch lines, feeders, sidings, switches, and spurs; to purchase or otherwise acquire all real and personal property necessary to carry out the purposes of this Act; to exercise the power of eminent domain in acquiring property for such use, which use is hereby declared to be a public use, by condemnation in the courts of Alaska in accordance with the laws now or hereafter in force there; to acquire rights of way, terminal grounds, and all other rights; to purchase or otherwise acquire all necessary equipment for the construction and operation of such railroad or railroads; to build or otherwise acquire docks, wharves, terminal facilities, and all structures needed for the equipment and operation of such railroad or railroads; to fix, change, or modify rates for the transportation of passengers and property, which rates shall be equal and uniform, but no free transportation or passes shall be permitted except that the provisions of the interstate commerce laws relating to the transportation of employees and their families shall be in force as to the lines constructed under this Act; to receive compensation for the transportation of passengers and property, and to perform generally all the usual duties of a common carrier by railroad; to make and establish rules and regulations for the control and operation of said railroad or railroads; in his discretion, to lease the said railroad or railroads, or any portion thereof, including telegraph and telephone lines, after completion under such terms as he may deem proper, but no lease shall be for a longer period than twenty years, or in the event of failure to lease, to operate the same until the further action of Congress: *Provided*, That if said railroad or railroads including telegraph and telephone lines, are leased under the authority herein given, then and in that event they shall be operated under the jurisdiction and control of the provisions of the interstate commerce laws; to purchase, condemn, or otherwise acquire upon such terms as he may deem proper any other line or lines of railroad in Alaska which may be necessary to complete the construction of the line or lines of railroad designated or located by him: *Provided*, That the price to be paid in case of purchase shall in no case exceed the actual physical value of the railroad; to make contracts or agreements with any railroad or steamship company or vessel owner for joint transportation of passengers or property over the road or roads herein provided for, and such railroad or steamship line or by such vessel, and to make such other contracts as may be necessary to carry out any of the purposes of this Act; to utilize in carrying on the work herein provided for any and all machinery, equipment, instruments, material, and other property of any sort whatsoever used or acquired in connection with the construction of the Panama Canal, so far and as rapidly as the same is no longer needed at Panama, and the Isthmian Canal Commission is hereby authorized to deliver said property to such officers or persons as the President may designate, and to take credit therefor at such percentage of its original cost as the President may approve, but this amount shall not be charged against the fund provided for in this Act.

Construction, etc.

Rights of way, terminals, etc.

Transportation rates, etc.

Common carrier duties.

Lease after completion.

Provisos.
Subject to interstate commerce laws if leased.

Purchase of existing lines.

Price.

Joint agreements with other carriers.

Use of Panama Canal machinery, etc., for construction.

A PRELIMINARY STUDY

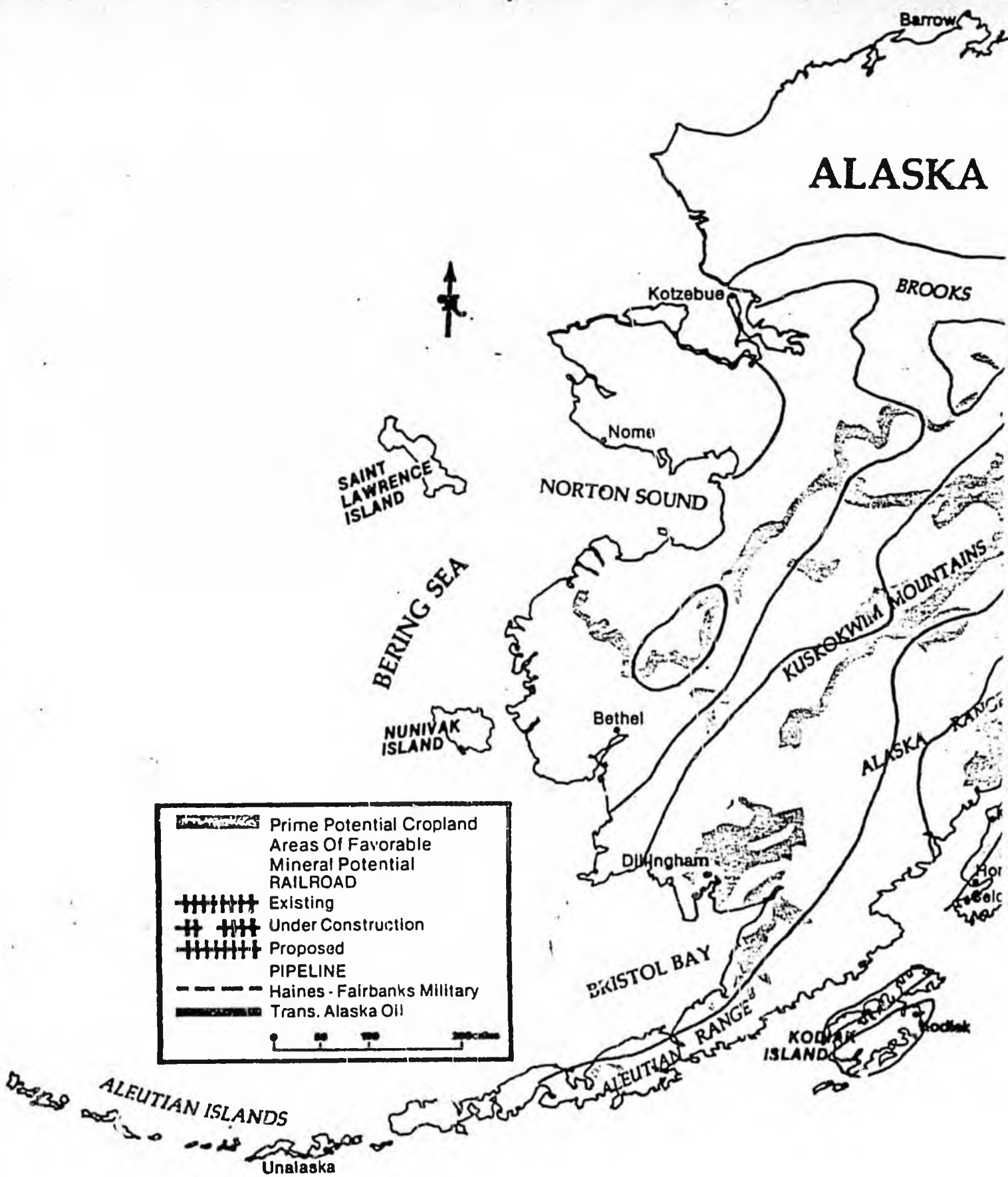
# ALASKA-CANADA TRANSCONTINENTAL RAIL CONNECTION TO CONTIGUOUS UNITED STATES



STATE OF ALASKA
DEPARTMENT OF
COMMERCE
&
ECONOMIC DEVELOPMENT

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ALASKA
Barrow
Kotzebue
BROOKS
Nome
SAINT LAWRENCE ISLAND
NORTON SOUND
BERING SEA
KUSKOKWIM MOUNTAINS
NUNIVAK ISLAND
Bethel
ALASKA
Dillingham
BRISTOL BAY
ALEUTIAN RANGE
KODIAK ISLAND
Kodiak
ALEUTIAN ISLANDS
Unalaska
Prime Potential Cropland
Areas Of Favorable
Mineral Potential
RAILROAD
Existing
Under Construction
Proposed
PIPELINE
Haines - Fairbanks Military
Trans. Alaska Oil


Barrow
BEAUFORT SEA
LASKA
BROOKS RANGE
CANADA
UNITED STATES
CANADA
YUKON
ALASKA
MOUNTAINS
Fairbanks
Big Delta
Dawson
RANGE
Glennallen
Palmer
Anchorage
Valdez
Kenai
Cordova
Homer
Seward
Seldovia
Carmacks
Ross River
Whitehorse
Watson Lake
Skagway
Haines
Yakutat
GULF OF ALASKA
COAST MOUNTAINS
Dease Lake
Juneau
Petersburg
Wrangell
Prince Rupert

## I. THE ROUTE

The British Columbia Railroad is scheduled to complete a 400 mile northern extension of their track in 1978, from near Prince George to Dease Lake - about 120 air miles east-northeast of Juneau and 100 miles southwest of Watson Lake located on the Yukon border. A potential route to Alaska through the Yukon would be first, an extension from Dease Lake to Watson Lake, then following first the Laird and then the Pelly Rivers to a point below Ross River where it turns East on the Magundy and Little Salmon River drainages to the community of Carmacks on the Yukon, then down the Yukon and a short distance up the White River until it reaches the West Fork of the Ladue River from which it crosses the Alaska border east of Tetlin Junction. It is assumed that the railroad will generally parallel the Alaska Highway from Tetlin into Fairbanks. This route is considered to be "relatively easy" terrain for rail construction, down river valleys and with no major mountain passes to be crossed. This route describes 297 miles of track in Alaska, 568 miles in the Yukon, and about 100 miles remaining to be constructed in B.C. after the Dease Lake extension is completed. If current proposals before the White Pass and Yukon and Alaska Railroads are brought to completion some 250 miles along the route would be placed under construction. The Alaska and part of the Yukon sections were first identified by the Army Corps of Engineers during the construction of the Alaska Highway. The Bureau of Land Management, in their November 1974 report entitled "Multimodal Transportation and Utility Corridor System in Alaska," describes the rail route as Option #27. The land area for the entire route in Alaska may be selected through the eminent domain authority of the Alaska Railroad.

## II. THE TYPE OF RAILROAD

The following cost estimates are for a general purpose standard gauge railroad with a good bed structure. The type of track bed should be of such a quality as to be readily upgradeable to unit train capability (unit trains are point-to-point, single bulk commodity, uniform car load trains that are usually not altered between origin and destination. Unit trains haul heavy tonnage and are particularly hard on track and equipment). Currently however, it is the State's policy to promote the processing of raw ores and crude oil within Alaska's boundaries. Most immediate demand for unit trains in Alaska will probably be placed for coal shipments along the existing track of the Alaska Railroad.

## III. THE COST

Any estimate of costs at this point are ballpark figures. Cost also has several facets. One is dollar construction costs which, as of this date, are estimated to average $1.2 million per mile by the railroads closest to the project. Total cost relates also to numbers of miles remaining to be constructed at the time the decision is made to make the through connection.

Officials of the White Pass and Alaska Railroads have agreed that the incremental increase in maintenance and operational structure supporting their railroads now, would be relatively less for the new mileage than for a less isolated railroad in the "lower 48" operating more miles of track and having contract shop facilities available to it nearby.

Another facet is that some costs such as social, environmental, etc., cannot be measured by dollars. They need to be evaluated, weighed, and placed in their proper perspective. It is clear that costs relate to time, and the longer construction is delayed, the higher the cost.

Who will pay? New rail construction clearly generates its costs at the front end. The larger the number of groups sharing the costs, the lower the cost will be to each.

One who asserts the expense will be to high by the time the railroad is built should remember revenue and demand also rises. In short, all the people who will benefit from the railroad, will in some way pay for the railroad.

## IV. THE ECONOMIC, SOCIAL, AND POLITICAL CONSIDERATIONS

This area is beyond the scope of this study. However, it is reasonable to assume that the benefits in the form of new jobs and businesses, lower costs for consumer and durable goods, increased revenue for government et al, might far exceed the cost for a through rail connection. The governments and people of Alaska, Canada and the Northern states of the "lower 48" would be receiving most of these benefits. Only a well funded, comprehensive study of the total impact resulting from a rail connection could measure the total effect, and therefore, the viability of the proposal and the route.

## V. ENVIRONMENTAL CONSIDERATIONS

The measurement of this impact is not within the funding of this study, but most certainly should be weighed with the other factors in a cost-benefit analysis. Initial reaction is described in the "Other Opinions" section later in this report.

## VI. THE REVENUE

Those benefiting from the Railroad include the public, the operator of the railroad, the users of the railroad, and the local, state, provincial and federal governments. When the first tons of cargo move across a portion of the new track the operator will draw some salary and costs out of the rates charged to the shipper for hauling. A substantial volume will have to move, however, before what is collected in rates will pay for the original construction costs of the railroad-though this may happen (see the section on "Full Potential").

## VII. THE RATE

In order for a transcontinental railroad to be effective, it must be competitive with existing modes of transportation. Competitiveness for the railroad also suggests the ability to provide tighter schedules and less handling of goods. A shipment could be placed on a rail car in the Midwest and not touched again until it reaches Fairbanks or Anchorage. Additional benefits include less chance for damage, delay, misrouting, and fewer transshipments.

Someone else has been receiving revenue before that first ton of cargo moved, however, perhaps millions of dollars. This revenue is in the form of income, property and business taxes paid to all levels of government during construction. This revenue will decline as the railroad nears completion unless the operator can put the railroad into operation. When operation begins, three revenues or benefits will flow - the revenue termed "public good and convenience," the rate revenue - particularly when it is reinvested, and the governmental tax revenue on all the primary and secondary economic activities.

The total of 1) public good, 2) charges and 3) taxes, versus the original construction and operational costs is what needs to be measured when asking whether the railroad will pay for itself and should be the subject of future study. It is clear the governments will initially have to participate in the construction because the railroad operator himself has not as yet had access to any revenue.

When a potential shipper is asked how much he might ship on a through rail route to the Midwest, his logical reply is: "How much will you charge me?" The answer is, there is presently no way of telling. This department has prevailed upon the railroads to construct a purely hypothetical rate under which they might be able to operate at today's costs. The Alaska Railroad prepared the first draft and the British Columbia and White Pass and Yukon Railroads are still in the process of evaluating this rate structure. It is understood that railroads only in very special circumstances could compete with an all water shipment. However, the question is could the railroads compete today once trans-shipments to interior points in Alaska and the mid-continent regions are required. When one approaches total tonnages in the modest range of three to four million tons a year, the hypothetical rates answer this question in the affirmative. This is however, only one measure of revenue generated by a railroad (see section on "Revenue"). Cost recovery in this tonnage range can be significant however as seen in the accompanying table.

The Alaska Railroad's estimates do not include profit margins, however, the profit increment is estimated to be 15 percent or less (profitability can also be achieved through operating procedures).

It is common practice that these rates vary among commodities, and that the estimated rate represents an average rate. Understandably these rates are negotiable to individual shippers based on volume and distance. Since a rate structure is already in effect to Prince George, negotiations would produce transcontinental through rates and other through rates to Northern Canada and Alaska destinations, which are usually lower.

Estimated Rate Structure - Prince George to Fairbanks
Capital and Operating Recovery

| Tonnage | Canadian Segment | Alaska Segment | Rate/ton | Rate/cwt |
|---|---|---|---|---|
| 1,000,000 | $112.26 | $61.36 | $173.62 | $8.68 |
| 2,000,000 | 64.91 | 38.62 | 103.53 | 5.18 |
| 3,000,000 | 49.93 | 31.25 | 81.08 | 4.05 |
| 4,000,000 | 42.95 | 27.77 | 70.72 | 3.54 |
| 5,000,000 | 39.53 | 25.89 | 65.42 | 3.27 |
| 6,000,000 | 38.00 | 24.86 | 62.86 | 3.14 |

Operating Expense Recovery Only

| Tonnage | Canadian Segment | Alaska Segment | Rate/ton | Rate/cwt |
|---|---|---|---|---|
| 1,000,000 | $37.33 | $23.18 | $60.51 | $3.03 |
| 2,000,000 | 27.45 | 19.53 | 46.98 | 2.35 |
| 3,000,000 | 24.85 | 18.53 | 43.38 | 2.17 |
| 4,000,000 | 24.22 | 18.23 | 42.45 | 2.12 |
| 5,000,000 | 24.54 | 18.25 | 42.79 | 2.14 |
| 6,000,000 | 25.51 | 18.50 | 44.01 | 2.20 |

## VIII. THE VOLUME

There are two types of volume that are of interest in this study; current and future volume. The most readily accessible current volume statistics were those compiled by the Alaska Railroad. Future volume had to be identified through research and contacts with various potential shippers.

In estimating future volume, it was neccesary to make three basic assumptions:

1. That traffic originating from inland points east of the Rocky Mountains would probably move along an all land rail route to Alaska, given competitive service.

2. That the present Alaska traffic, excluding pipeline traffic will continue to grow on the average of 7 percent a year.

3. That 1985 would be the earliest normal completion date for the construction of a through rail route between Alaska and the Midwest.

Only a general idea of what commodities are moving and the point of origin and destination appeared necessary for purposes of this study. The large Alaska highway tonnage carried is mostly pipeline oriented to date and it is assumed that most of the commodities carried by air will continue to move in that manner. Consequently, waterborne tonnage into Alaska was the only tonnage gathered in detail for this report.

## 1975 Tonnage

Data gathered from the Alaska Railroad, reveals that 24 percent of their freight originated east of the Rocky Mountains in 1975. That is probably conservative since billing figures were used and Seattle offices are often billed for freight destined for Alaska, regardless of origin.

The Alaska Railroad handled 9,516 car loads of interline traffic in 1975 of which 2,284 car loads or 91,360 tons could be identified by billings as originating east of the Rocky Mountains.

An additional 51,600 tons arrived at Seward by water. Applying the 24 percent factor developed from the Railroad statistics, an estimated 12,384 tons of cargo received at Seward had origins east of the Rockies. The Port of Anchorage received 2,222,169 tons in 1975. Of this total 1,368,192 tons were petroleum products. Of the remaining 853,977 tons, mostly from Sea-Land, it might be assumed that 24 percent, or an estimated 204,954 tons, originated east of the Rockies. Combining the tonnage volume from the Railroad, Seward, and Anchorage, approximately 308,698 tons had origins east of the Rockies. This volume, projected at a 7 percent annual increase, reaches 607,255 tons in 1985, for a good base tonnage.

## 1976 Tonnage

These figures are incomplete and are displayed as a matter of interest.

The general cargo continues a modest increase over 1975. Column A is interline freight received and Column B is freight tendered to the Railroad by Sea-Land and TOTE for movement to Fairbanks.

Alaska Railroad

| Tons of Freight | A | B | Total |
|---|---|---|---|
| FY 1976 | 395,670 | 110,609 | 506,279 |
| July - November 1976 | 122,705 | 51,586 | 174,291 |

The Port of Anchorage in 1976 processed the tonnages displayed in the following table. The total general cargo handled was 1,072,149 tons. Some of this cargo is transshipped by the Alaska Railroad to Fairbanks and is included in the Railroad's statistics.

Port of Anchorage
Waterborne Commerce by Commodity, 1976
(in tons)

| Commodity | Local | | Domestic | | Foreign | |
|---|---|---|---|---|---|---|
| | Inbound | Outbound | Inbound | Outbound | Inbound | Outbound |
| Freight, N.O.S. | 2.0 | 7.0 | 4,927.3 | 11.6 | 1,199.2 | |
| Cement, Drilling Mud, etc. | | | 40,329.1 | | 31.4 | |
| Iron or Steel Articles | | 52.0 | 120.1 | | 7,248.7 | |
| Lumber | | | 266.4 | | | |
| Plastic Material Insulation | | | 1,273.0 | | | |
| Petroleum, Bulk | | | 1,300,521.6 | 7,623.7 | 386,854.2 | |
| Petroleum, N.O.S. | | 1,395.0 | | | | |
| Scrap, Iron or Steel | | | | | | |
| Vans, Flats, Containers | | | 884,211.5 | 94,398.7 | | |
| Vehicles | | | 22,779.7 | 11,192.9 | 2,703.9 | |
| Totals | 2.0 | 1,454.0 | 2,254,428.7 | 113,226.9 | 398.037.4 | |

The White Pass and Yukon Railroad is projecting 100,000 tons outbound from the Yukon Territory ultimately destined to interior Canadian points in 1981. Yukon tonnage is chiefly mineral concentrates and may or may not grow at 7 percent annually to 1985. However, these figures are biased downward since tonnages in the opposite direction have not been considered. Therefore, it would seem very conservative to estimate that a million tons would flow across the route by 1985, given competitive service and no new development.

A million tons means about a train a day to the Alaska Railroad. If you exclude fuel related tonnages, like petroleum and coal, the Alaska Railroad presently hauls less than one million tons of general cargo a year. This is also true of the White Pass and Yukon Railroad. The new route would probably increase the tonnage of both railroads and it certainly would offer a good base for the through route.

In attempting to identify the future volume of such a rail route, potential shippers were contacted (see the following letter). The letter was sent to 131 firms in the United and Canada. To date, a 39 percent response has been received, which is a good response. This is not to be considered a poll. It is simply an admittedly incomplete sampling of opinions. The reader can gather the tenor of the comments from these potential customers of a rail route. The letter did not ask for nor guarantee confidentiality, however, it was decided to publish the excerpts separate from the authors in order that any presumed confidences would not be violated. Those eight individuals identified with their statements have been done so with their permission.

These letters suggest the railroad itself may trigger the development of some of the mines mentioned. Certainly the respondents seem to overwhelmingly agree that a through railroad would be a plus factor for the economy and a boon to mineral development. It is interesting to note that some companies have stated that they have not even bothered to explore in areas lacking transportation. Of additional importance is the fact that most of the respondents hold high executive positions within their company structure. Read each comment entirely to judge for yourself the support for this route. Some significant potential is suggested.