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Southeast Alaska Transportation Plan

Evaluation of Surface System Alternatives

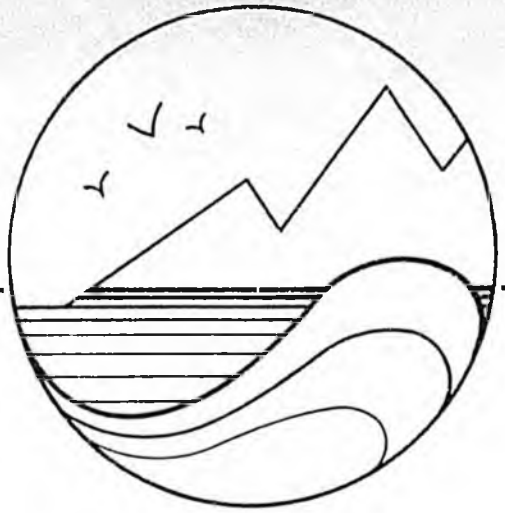
Prepared by

Acres International Corporation

for

Alaska Department of Transportation and Public Facilities

April 1986



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EVALUATION OF SURFACE SYSTEM ALTERNATIVES

1 - INTRODUCTION

1.1 - General

As part of developing an updated Transportation Plan for the Southeast Alaska Region, a detailed assessment was carried out with regard to the surface transportation systems which could be implemented in the Region in order to provide improved access to, from and within Southeast Alaska.

The key concept in this assessment was the idea that surface transportation in the Region must be viewed as an integrated 'system.' This 'system' concept implied that the provision of transportation services in specific areas was inextricably linked to a total regional network of services and that changes in one area would frequently impact on services elsewhere. Thus transportation services had to be assessed in a total regional context with a view to maximizing total benefits rather than optimizing services into particular subregions, or communities.

1.2 - Corridor Studies

Notwithstanding the preceding comments, there were certain subregions within Southeast Alaska where a range of surface transportation alternatives were available which were sufficiently similar in terms of regional impact that they could be prescreened in a more limited context, either on the simple basis of capital cost or on the basis of corridor impacts.

As a result, a number of subregional or 'corridor' studies were carried out as a preface to the regional systems evaluations with a view to narrowing down the number of options requiring assessment in the total systems context. Five 'corridors' were reviewed at this level: the Juneau Access (Taku/Lynn) corridor, the Ketchikan-Southern Terminus corridor, the Stikine corridor, the Sitka Access corridor, and the Prince of Wales Island Access

corridor. The surface transportation alternatives evaluated for each of these corridors and the findings and recommendations arising from the evaluations are described in a series of separate documents entitled

. "Evaluation of Corridor Alternatives - Juneau Access (Lynn/Taku Corridors)"

. "Evaluation of Corridor Alternatives - Ketchikan - Southern Terminus - Corridor"

. "Evaluation of Corridor Alternatives - Stikine Corridor"

. "Evaluation of Corridor Alternatives - Sitka Access"

. "Evaluation of Corridor Alternatives - Prince of Wales Island Access."

1.3 - Scope of Analysis

The Southeast Alaska Region was designated to include all Alaska territory south of Icy Bay (see Figure 1). All issues of surface access to, from and within this area were included in the scope of analysis.

Surface transportation was deemed to include both land-based and marine-based modes. Frequently these two modes acted as complements to one another (with roads providing access to ferry terminals) but in some cases a land-based route could serve as an alternative to marine services.

1.4 - Report Format

The remainder of this report is divided into five sections. Section 2 lays out the background to the review of system alternatives, describing the existing surface transportation system and outlining the assumptions with regard to future needs and opportunities, and Section 3 describes the process used to evaluate the alternative system options. Section 4 outlines

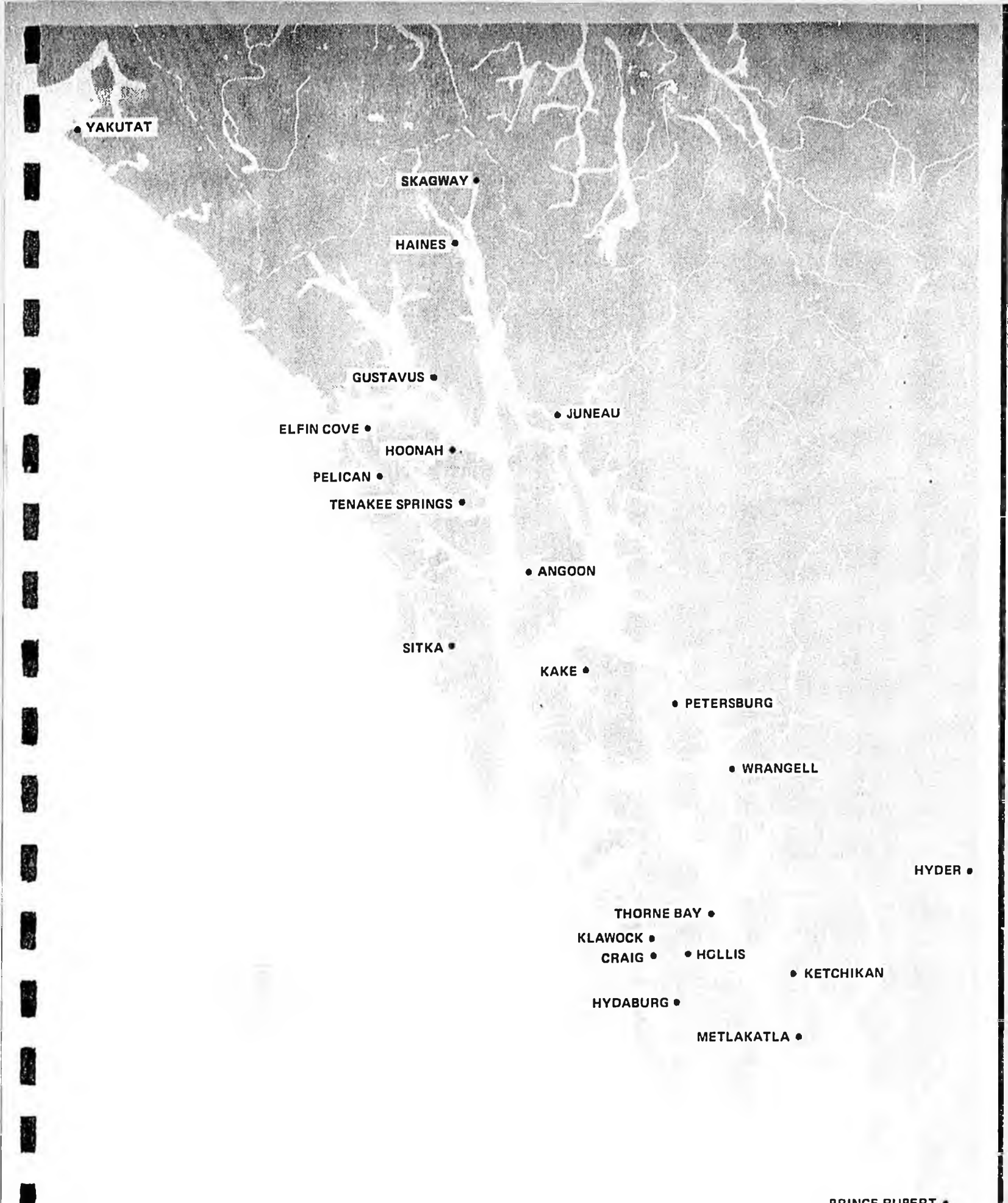

Figure 1

SOUTHEAST ALASKA REGION

the options which were considered as short-term system alternatives and presents the findings of the short-term evaluations, while Section 5 deals with long-term system options in the same manner. Section 6 presents a summary of findings as well as conclusions and recommendations based on the analysis. In addition, two appendixes are provided which describe, in greater detail, some of the evaluation concepts.

2 - REGIONAL PLANNING CONTEXT

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2.1 - General

In the years since the previous Transportation Plan was developed, a number of changes have occurred in the Southeast Alaska Region. Some of the changes have been generated internally but many have been generated by outside forces which have impacted on the needs and opportunities within the area.

The intervening years have seen a marked decline, for example, in the resource markets on which a substantial portion of the Alaskan economy is based. Falling oil prices have placed downward pressure on government revenues, while poor markets for forest products and minerals have led to curtailment or deferral of projects which were originally planned for the early 1980s. These factors have led to an increasing reliance on the tourist market, which has remained strong in spite of generally poor economic conditions.

Within the region, shifts in population and income have altered the demand pattern for transportation services. In addition, system changes made as a result of the 1980 Plan have provided new information regarding the interactions between demand and services and have highlighted new areas of service shortfalls.

These factors have combined to create a new context in terms of transportation demand within the Region. At the same time, some significant changes have occurred in the supply side of the equation as new transportation technologies and new types of services have evolved as practical options.

As a result, an initial step in the definition and assessment of system options was to reevaluate the transportation planning framework in terms of

- expected changes in the demand for service,

- the base or existing transportation system, and

- the technological changes which may be available for future integration into the transportation network of the Region.

2.2 - Population and Tourism Growth

The key factors contributing to changing demand for transportation services in Southeast Alaska are the growth in regional population and the growth in tourist traffic into the area. In a survey carried out in 1983, almost 40% of the Marine Highway users were Alaska residents. In addition, on the Marine Highway, almost 50% of the travelers (and over 70% of summer travelers) were tourists. These two markets clearly account for the major portion of surface transportation demand in the Region, and the future growth in these markets will play a key role in defining the need for transportation services.

In the past, population growth in the Southeast Alaska region has generally remained fairly stable and relatively strong. Since the late 1960s, the population of the Region has grown at a fairly consistent rate of 2.5% to 3.0% per year, somewhat lower than the State average of 3.5% but without the marked swings seen in statewide population figures. Similarly, employment opportunity in the Region has shown a fairly stable and strong growth rate, increasing at an average rate of 4.0% per year. (See Table 2.1.)

In the late seventies it was expected that, provided the State capital was not moved from Juneau, the long-term population growth rate could be maintained at around 2.8%, increasing to over 100 000 persons by the year 2000. More recent forecasts, however, have been more pessimistic (see Figure 2). In part because of the Region's dependence on State government employment and the expected need to reduce State spending, forecasts have generally predicted a decline in the long-term annual growth rate. A Delphi forecast prepared in 1983 projected regional population growth of less than 2.5% per year to 1990, declining to below 2% from 1990 to 2000 and less than 1.5% thereafter. The Alaska Institute for Social and Economic Research, using

TABLE 2.1

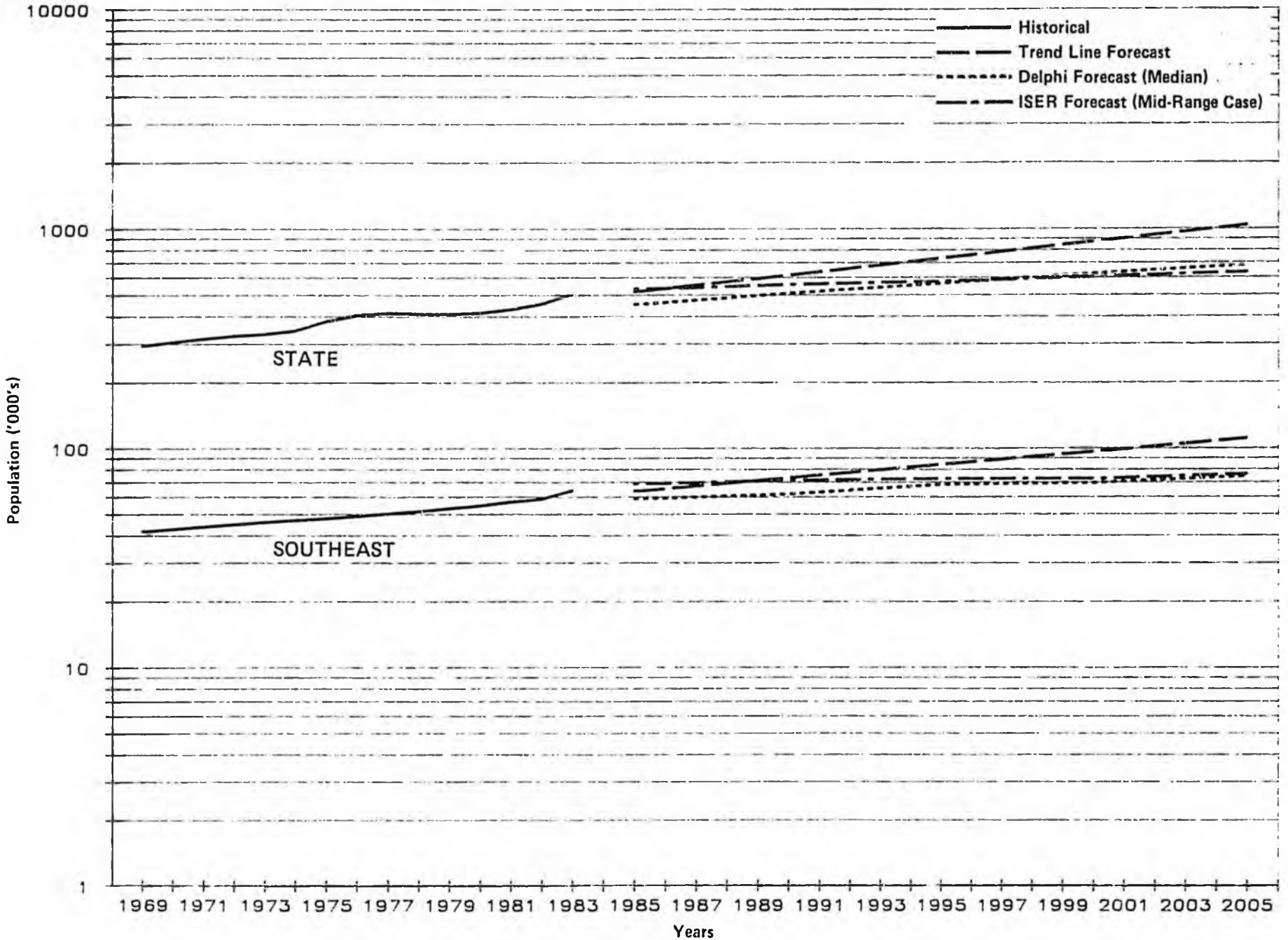
POPULATION AND EMPLOYMENT OPPORTUNITY - SOUTHEAST ALASKA

Population*	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Haines	1,400	1,400	1,400	1,500	1,500	1,500	1,500	1,600	1,600	1,700	1,700	1,700	1,800	1,900	1,800	1,800
Juneau	13,000	13,000	14,600	15,200	15,700	16,100	16,400	17,000	17,500	18,000	18,900	19,800	21,100	22,000	23,000	23,700
Ketchikan Gateway	10,200	10,200	10,200	10,300	10,500	10,700	10,900	11,200	11,400	11,600	11,800	12,000	12,200	12,400	12,600	12,700
Prince of Wales	3,400	3,700	4,000	4,000	4,100	4,200	4,300	4,100	4,100	4,100	4,200	4,300	4,400	4,400	4,600	4,700
Sitka	6,300	3,700	6,100	6,300	6,500	6,700	6,900	7,100	7,400	7,600	7,700	7,800	8,000	8,200	7,700	7,600
Skagway-Yakutat-Angoon	2,700	2,800	2,900	2,900	2,900	2,900	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,800	3,700
Wrangell-Petersburg	5,000	5,000	5,000	5,100	5,200	5,300	5,400	5,500	5,700	5,900	6,100	6,300	6,500	6,700	6,700	6,600
Total Southeast	42,000	43,100	44,200	45,300	46,400	47,400	48,300	49,500	50,800	52,100	53,700	55,300	57,500	59,200	60,200	60,800
Total Alaska	297,400	308,500	319,600	329,800	336,400	348,100	384,100	409,800	418,000	411,600	413,700	419,700	435,200	460,800	510,600	
Employment Opportunity																
Total Southeast	15,667	16,710	17,393	19,415	20,423	22,150	21,950	22,300	23,050	24,750	25,000	25,750	27,100	27,750	28,550	29,000
Total Alaska	86,565	92,467	97,584	104,243	109,851	128,179	161,689	171,714	161,071	166,900	166,600	171,600	186,500	200,400	212,900	217,800

*By Census Borough.

Source: Alaska Department of Labour.

Figure 2
ALASKA POPULATION FORECASTS



the detailed State Economic Model, has projected even lower growth rates for Southeast population ranging from a low of less than 0.5% per year in their pessimistic case, up to an average of less than 1% in their optimistic scenario.

In light of these forecasts and the generally weak long-term prospects for the Region, it was decided, for planning purposes, to project that regional population could maintain its long-term growth rate (2.0%) through to the end of the 1980s but that growth thereafter was likely to decline and stabilize at a rate of 1% per year. Regional population was forecast to increase from 60 800 in 1984 to 73 900 by 1990 and 85 800 by 2005.

The second key market for transportation services is tourist traffic. Relatively little data are available on the growth in this market, but indications are that visitor volumes have grown at an average annual rate of 4.5% in recent years. The long-term prospects for this market are strong as increasing proportions of the population find themselves with the leisure time and financial means to indulge their desire for travel.

It is too early to tell whether Alaska can sustain its share of this growing market, just as it is difficult to predict the portion of these visitors who will make use of State-operated transportation services (airports, roads and the Marine Highway). For planning purposes, however, it was assumed that tourist demand for transportation services into and within the Region would continue to grow at 4.5% per year to 1990 and would taper off to 2.5% per year growth thereafter.

2.3 - Existing Surface Transportation System

The surface transportation system currently in place in Southeast Alaska has also changed somewhat since the introduction of the 1980 Transportation Plan. The system has two key components - the marine service system and the road network.

2.3.1 - Marine System

The main factor in existing the marine transportation system is the Alaska Marine Highway. This operation provides surface links for passengers and vehicles both to, from and within the Southeast Region.

Seven vessels operate in the Southeast area. The four mainline vessels, Columbia, Matanuska, Malaspina and Taku, provide service between the southern road systems at Prince Rupert and Seattle and the northern road connections out of Haines and Skagway. They provide a link for the through movement of traffic as well as for passengers and vehicles moving to and from the Region and internally between a number of ports. All mainline vessels offer overnight accommodation for long-distance passengers.

During the peak season, one of these vessels, the Columbia, operates a weekly service between Seattle and Skagway. The other three vessels offer twice-weekly service out of Prince Rupert, making one three-day trip to Skagway via Clarence Straits and Stephens Passage, and one four-day trip when they travel via Chatham Strait and call at Sitka (see Figure 3). Vehicle capacities range from 90 (for the Taku) to 155 (for the Columbia) while passenger capacities range from 500 to 750.

The three remaining vessels, the Aurora, LeConte and Chilkat, provide mainly internal feeder services carrying passengers and vehicles between the smaller communities and the mainline ports. The smaller of these, the Chilkat, operates between Ketchikan and Metlakatla and occasionally to Prince of Wales Island. The Aurora and LeConte, with 40-vehicle, 250-passenger capacity, provide connections between Prince of Wales Island and the Prince Rupert-Ketchikan-Petersburg corridor, and between communities in the Juneau-Sitka-Petersburg triangle (including Hoonah, Pelican, Tenakee Springs, Angoon and Kake) (see Figure 4).

The Marine Highway also acts as an important link for freight movements, providing substantial capacity for truck movements into and within the Southeast Region. This service supplements the activities of various

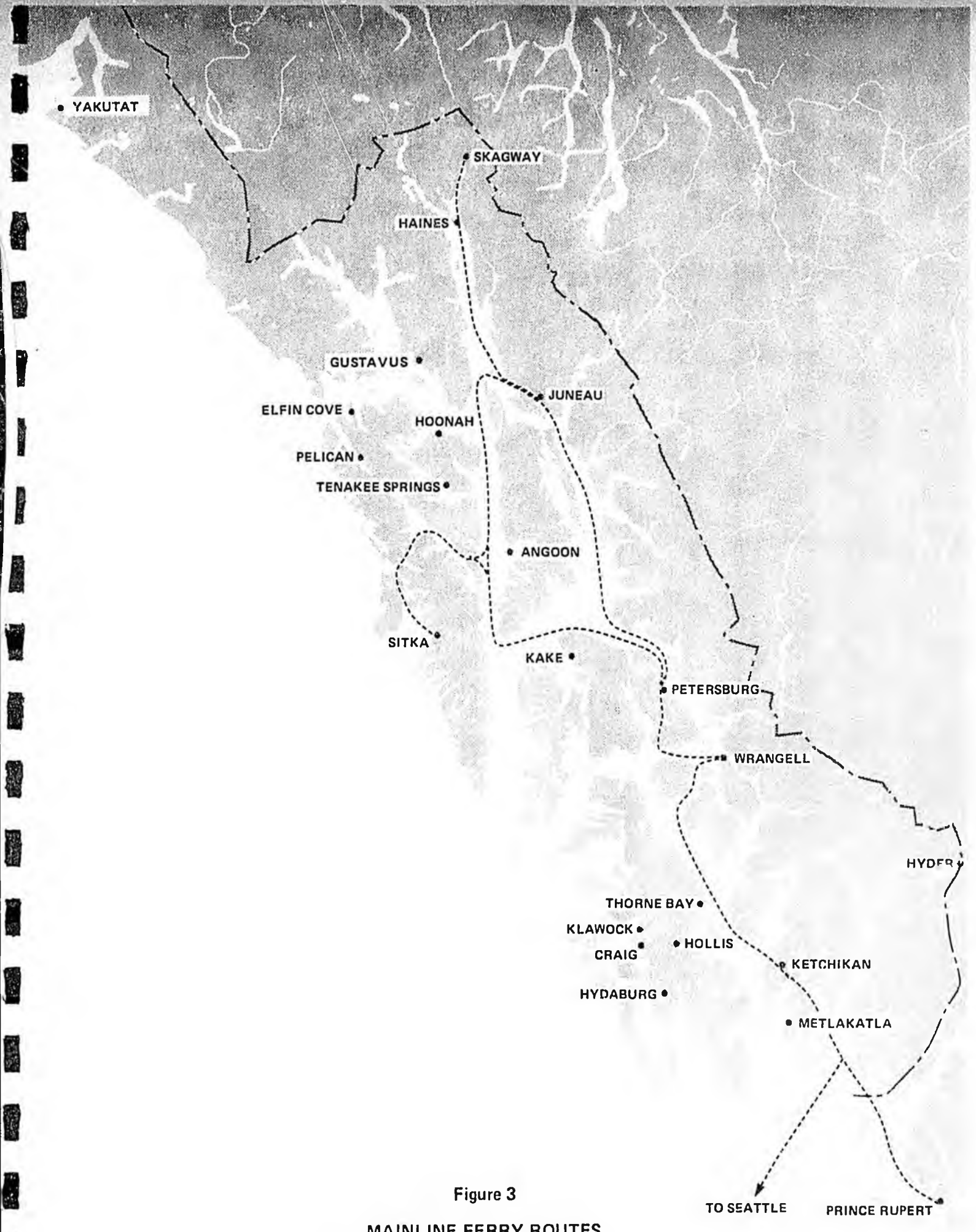


Figure 3

MAINLINE FERRY ROUTES

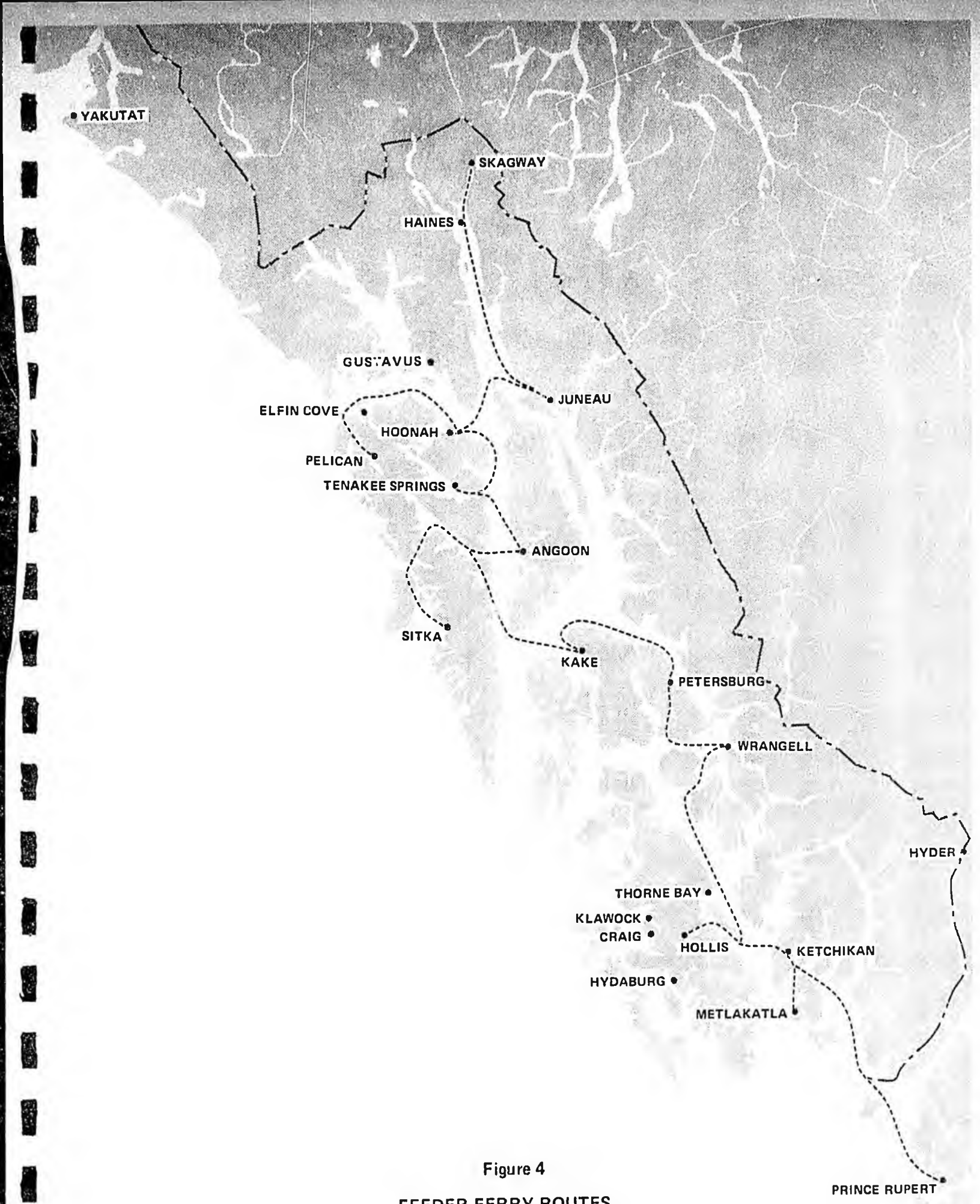


Figure 4

FEEDER FERRY ROUTES

tug-and-barge operators who carry the remaining freight, generally from Seattle, and distribute it to regional communities.

The Region has a range of port facilities to serve the Marine Highway and tug-and-barge operations. Seven communities have ferry terminals capable of handling the mainline vessels (Ketchikan, Wrangell, Petersburg, Sitka, Juneau, Haines and Skagway), while others can accommodate only the Aurora/LeConte class vessels (Hoonah, Tenakee Springs, Angoon, Pelican, Kake, and Hollis/Clark Bay). Two ports are also presently designed to handle the Chilkat (Hollis and Metlakatla) although renovations at Metlakatla will shortly be completed to accommodate the Aurora rather than the Chilkat. In addition, terminal facilities are planned at Hyder and Elfin Cove to allow ferry operations into those communities.

Terminal facilities for tug-and-barge operations vary widely among the communities from sophisticated container-handling terminals at Juneau to break-bulk, manual loading operations at smaller ports.

2.3.2 - Roads System

The roads system in Southeast Alaska is sharply constrained by the geography of the Region. Steep coastlines, multiple fjords and generally mountainous terrain make roads a costly option to construct and maintain. While there are some potential road corridors within the area, only a limited number have been developed (see Figure 5).

Access to the continental road system is provided at three points in the Region: Haines and Skagway in the north and Hyder in the south, but residents in other communities must use the Marine Highway to connect either with these roads or with the road system out of Prince Rupert.

Within the region, a substantial network of roads is operated and maintained to provide access between adjacent communities and links to nearby recreation areas. In addition, the US Forest Service has developed an extensive road network which, while not meeting State standards, provides some travel opportunity as well as a foundation for future road development.

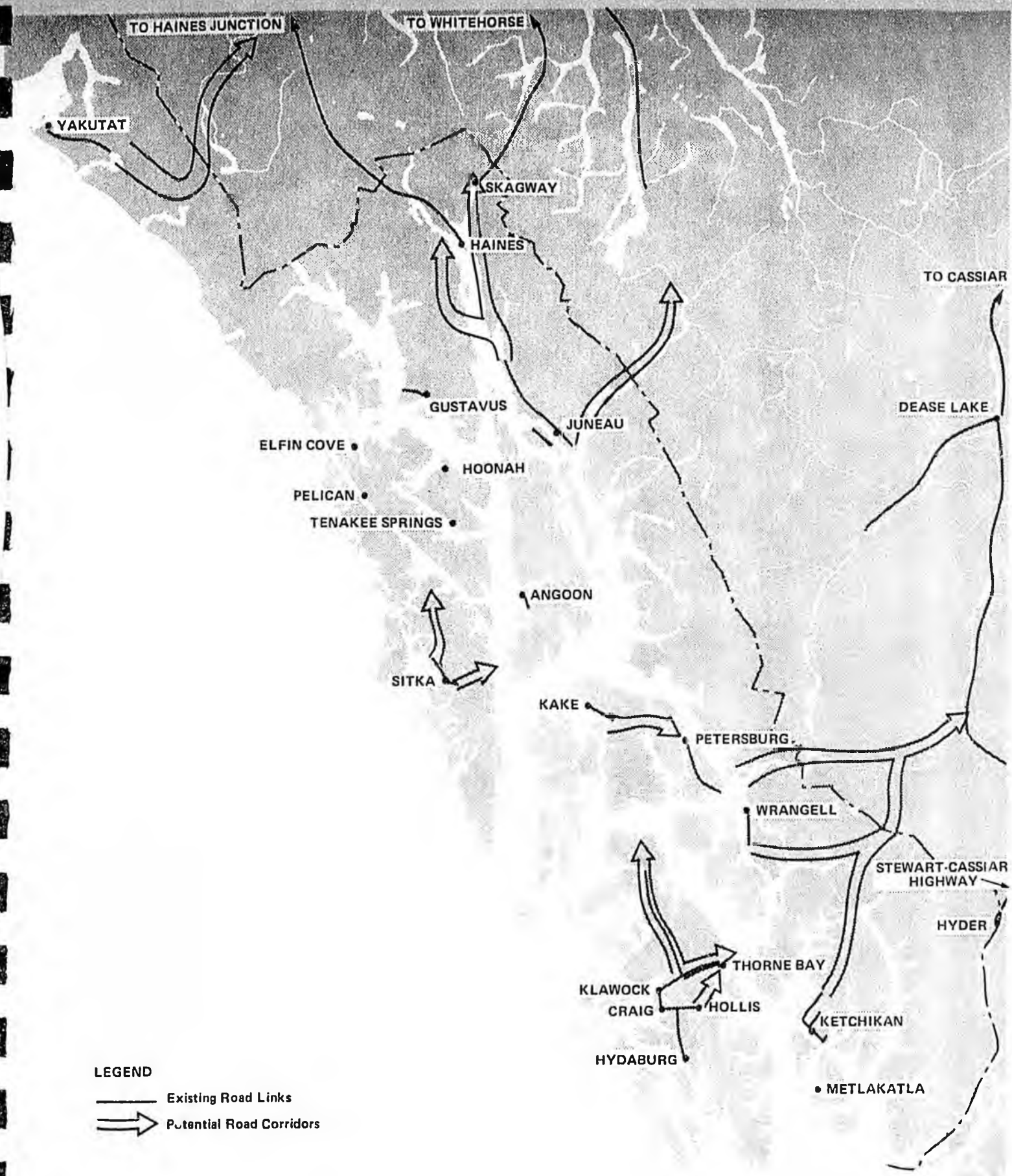


Figure 5

EXISTING ROAD SYSTEM AND ROAD CORRIDORS

In general, however, with the exception of Prince of Wales Island communities, links between major towns within the Region are provided by air and by ferry.

2.4 - Projected Developments in Technology

In terms of new opportunities for the provision of transportation services, the consultants reviewed current and likely future technological developments in marine and road transportation that might impact Southeast Alaska. The detailed review is contained in a separate report ("Technology Evaluation", Sept. 1985) but is summarized below.

2.4.1 - Marine Technology

There were two main areas of technology development in the marine environment that were expected to have impacts on Southeast Alaska transportation. The more immediate was the possible introduction of high-speed craft to provide rapid surface transport between communities.

Air-supported craft, foil-supported craft and conventional displacement planing craft were all reviewed (see Tables 2.2 and 2.3) and two representative types, shown in Figures 6 and 7, were selected as appropriate for use in Southeast Alaska. One type is a conventional catamaran vessel with a capability of moving a small number of vehicles and passengers at speeds up to 30 mi/h. The other is a much larger surface-effect ship (which also has a catamaran hull form) capable of speeds up to 46 mi/h.

Such high-speed craft should not however be looked on as total replacements for existing vessels. While they would enable better utilization of present vessels to be achieved during the summer and, if required, shoulder seasons, the performance of the smaller craft in the winter, except on sheltered routes, is unknown. The larger craft considered appropriate for Southeast Alaska has the capability to operate year-round but, like all high-performance vessels, has limitations relative to payload. For example, automobiles, campers, coaches, and lightly-loaded trucks and vans could be

TABLE 2.2

HIGH SPEED CRAFT
TYPES EVALUATED

		Passenger and Vehicle	Cost	Seakeeping	Comfort	Susceptibility to Strikes	Speed to Load	Comments
Air Supported	SRN4 MK2/3	yes	very high	moderate	fair	nil	fair	
	AP1-88	no	low	poor	good	nil	fair	
	Hovermarine	no	medium	poor-mod.	good	some	good	
	Bell Halter	yes	medium	mod.-good	fair	some	good	
Foil Supported	Jetfoil	no	high	mod.-good	excellent	high	poor	Production discontinued.
	Hydrofoil	no	medium	poor-mod.	fair	high	poor	
Displacement	Monohull	yes	high	moderate	fair	low	fair	
	Catamaran	yes	low-med.	mod.-good	fair-good	low-fair	fair	
	SWATH	yes	low-high	mod.-good	excellent	low-fair	good	Small Water Plane Area Twin Hull
Planing and other		no	low-med.	poor-mod.	poor-fair	low-fair	poor	

Types Excluded from Further Analysis - Reasons:

SRN4 Mk2/3 Excluded because of cost - approximately $40 to $50 million built in Britain, lack of licensing for US construction.

Monohull Excluded partly because of cost - $14 to $15 million built in Britain and high power requirements and thus fuel cost for its speed.

SWATH Excluded because of experimental nature and relatively high power requirements. Southeast Alaska waters are not rough enough sufficienty frequently to justify such a vessel.

TABLE 2.3

HIGH-SPEED CRAFT

	Craft Evaluated		
Type	30m Incat	13000 Westamarin	BH 350 B
Characteristics	Catamaran	Catamaran	S.E.S.
Passengers	90	340	180 or 280
Vehicles - automobiles - trucks	14	30	41 or 27
Length ft	98	130.25	160
Breadth ft	35.75	41.25	41
Draft ft	7.68	5.58	7.5
Payload	not known	not known	not known
Power (bhp)	4200	5500	13210
Maximum speed	28 kn	25 kn	50 kn
Speed SS3	25 kn(28mph)	22 kn (25mph)	40kn (46mph)
Price	$3.0 million	$5.0 million	$12.0 million
Built in USA	Yes	No	Yes
License for USA	Yes	Yes	

	Craft Excluded			
Type	Vosper High Speed	SWATH	Air Cushion Vehicles SRN4/MK2	SRN4/MK3
Characteristics	Ferry	(Seagull)		
Passengers	700	384	282	416
Vehicles - automobiles trucks	none	none	36	50
Length ft	204	117.8	130.2	185
Breadth ft	33.5	56.1	78	82
Draft ft	10.5	10.3	-n/a-	-n/a-
Payload (tons)	96	not known	78	114
Power (bhp)	12000	8100	13600	15200
Maximum speed	25 kn	25 kn	60 kn	65 kn
Speed SS3	24 kn	(24 kn)	32 kn	45 kn
Price	$14 to $15 million	$8 to $10 million	$40 million	$50 million
Built in USA	No	No	No	No
License for USA	Yes	Yes	No	No

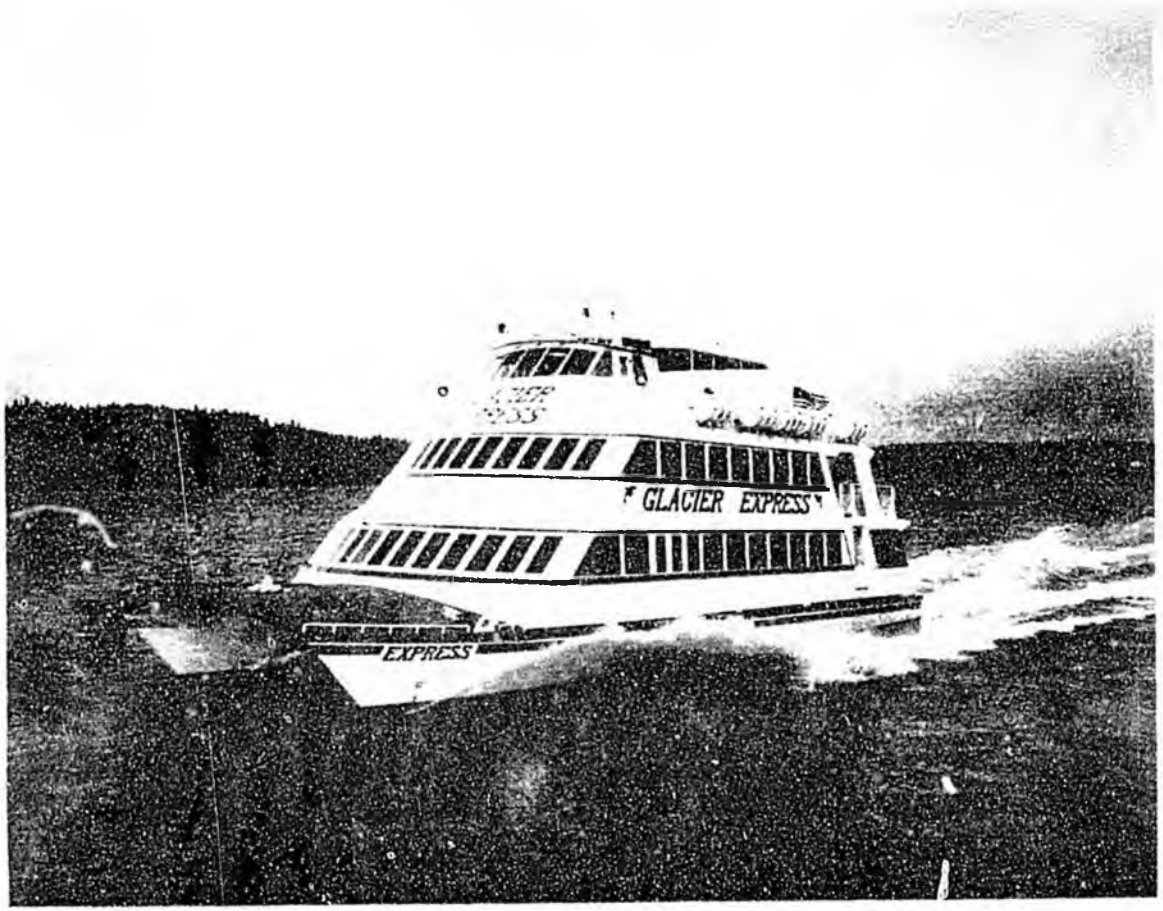


Figure 6

HIGH SPEED CATAMARAN

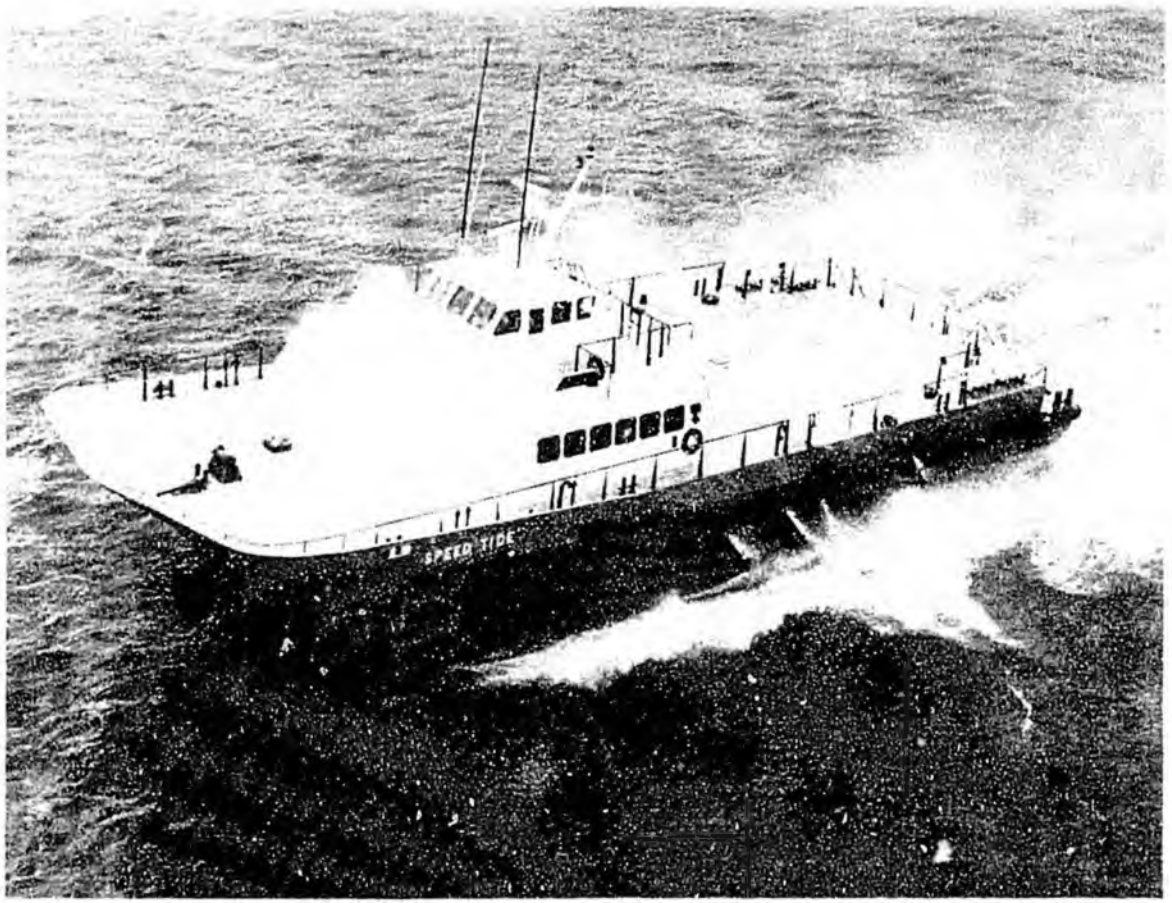


Figure 7

110-ft SES HIGH-SPEED CRAFT

carried on the small high-speed catamaran, but not heavy vans such as refrigerated trailers with a full load of frozen fish. The larger vessel by comparison could carry some heavy trailers, but the number would be limited by payload considerations.

The second area of technology development is related to improvements that could be incorporated in the existing AMH vessels to improve their performance and reduce operating costs. Examples of such developments include

- hull redesign
- improvements in propulsion and machinery
- course-keeping and routing techniques
- advanced machinery automation
- improvement in hull surfaces
- different grades of fuel, and
- adjustments to operating speed.

2.4.2 - Road Technology

No technological developments were foreseen in the road sector that would change the way in which freight was moved or in which tourists and residents would travel. It is expected that freight vehicles moving on the continental road system would increase in length, height, width and weight, making it more difficult for the existing ships to accommodate trucks and vans. In the future, certain road routes may be designated special log haul routes to support the timber industry. Overall, however, the freight business to Southeast Alaska, being a small specialized one, would likely not be impacted to any great extent by such changes for the foreseeable future.

2.5 - Alternative Marine Service Options

2.5.1 - Other Service Suppliers

The foreign flag liner operator has always been a part of the Alaskan cruise market. These operators brought in well over 100 000 tourists at the last count and are expected to continue to bring in a significant number of visitors. A new factor in the market place, however, is the foreign flag ferry operator working in competition with the Marine Highway for point to point travel. It is likely that such operators will increase their activity in the future from either Vancouver or Prince Rupert.

A further new development is that US flag operators are seriously considering building or converting vessels to serve the US cruise market and Alaska is identified by them as a prime destination. The vehicle carrying potential for such vessels is seen as an essential feature, with the result that there is a high probability the Marine Highway will see direct competition in Seattle before the mid-1990s.

Although this competition may skim off tourists from the Marine Highway and possibly reduce revenues, projected tourist departures from Seattle and Prince Rupert indicate that AMH vessels would still be operating close to capacity during the peak season. However, the presence of private operators may serve as an effective complement to Marine Highway services.

2.5.2 - Acquisition of Foreign Flag Vessels

A second new service option for the Region would be for the Marine Highway to acquire and operate a foreign-built ferry. Should a new mainline vessel be necessary, a foreign flag vessel could provide the required increase in capacity at a cost well below that of a new US-built vessel.

The Marine Highway has had past experience of foreign flag vessels with the m/v 'Wickersham'. The experience was not altogether favorable because it was intended to use the vessel in the Seattle/Southeast Alaska trade which

required a waiver from the 'Jones Act'. Such waivers are only given for purposes of national defense, and thus the 'Wickersham' was not acceptable on an ongoing basis.

However, the possibility of the AMH using a foreign flag vessel entirely within the requirements of US maritime legislation is feasible. Such a vessel could operate from Vancouver or Prince Rupert and carry tourists or residents from port of embarkation to port of disembarkation. The only restriction would be that the ship could not carry passengers between ports in Southeast Alaska. Such a vessel operating out of Vancouver or Prince Rupert could materially increase AMH capacity and release existing vessels to operate on those routes that require a US flag ship (i.e., US to US links).

This is essentially the service that Sundance Cruises is providing between Vancouver and Skagway with the m/v 'Stardancer'. The fact that a private operator is willing to provide such a service argues well in its favor although the private operator can usually benefit from lower costs due to greater flexibility in crewing and their ability to use the vessel in other areas during the off-season.

Ideally, therefore, the preference would be to have this service provided by the private sector. However, if private operators fail to provide service for some reason and the AMH is obliged to provide for a higher level of traffic, AMH acquisition of a foreign flag vessel might be a more cost-effective option than acquisition of a new US built ferry.

3 - EVALUATION METHODOLOGY

3 - EVALUATION METHODOLOGY

3.1 - General

The assessment of surface system alternatives was based, in large measure, upon a process whereby a wide range of transportation options were defined for the region and were than evaluated in terms of

- compatibility with goals of the regional transportation system, and
- effectiveness in terms of the service provided relative to the level of costs incurred.

In defining the alternatives, recognition was given to the expressed concerns and desires of the communities and also to the perceived requirements, limitations and opportunities associated with growth, development and new technology. The options developed for evaluation encompassed not only capital improvements (acquisition of new vessels, road and facilities construction) but also changes to the operating systems with a view to improving either the service provided, the system capacity and/or the ongoing operating costs.

The assessment process was aimed at establishing which of the surface options were best able to fulfil the transportation goals of the region in a cost-effective manner, where the goals were defined as

- meet the transportation needs of Alaska residents
- support the regional economy through provision of transportation services, and
- maintain fiscal responsibility through judicious allocation of public funds.

Unfortunately, these goals are not always mutually compatible and, with the present economic environment, may not be collectively achievable.

It was therefore necessary to work towards a compromise which would provide a balance between these diverse goals. In order to assess the implications of various compromises, it was necessary to fully understand the impacts associated with varying degrees of focus on these service-related and cost-related goals.

Accordingly, a wide range of options were specified which covered not only variations in the types of changes made (from a technological and operational perspective) but also variations in terms of the intensity of spending effort in order to meet demand. The analysis of the impacts associated with this range of options provided indications of the trade-offs involved as emphasis was shifted between service-related and cost-related goals.

Each of the proposed system options was evaluated from a number of viewpoints. Insofar as possible, all evaluation measures were quantified in order to provide a basis for comparison among alternatives. Specifically, the options were evaluated in terms of

- financial impacts on the Alaska Marine Highway, the State government and the transportation user

- total user costs including both financial costs and costs associated with the options' success or failure in meeting demand, and

- service/cost effectiveness which compared total user impacts associated with various options (including both cost and service level) with the costs to the government associated with providing the service.

The following sections briefly outline the methodologies used first in defining and then in evaluating the surface system options. A more detailed description of the process and the underlying theories, particularly with regard to the evaluations, is included in the appendixes.

3.2 - Specification of System Alternatives

The specification of the alternatives to be evaluated in the assessment of surface transportation systems was a multi-step process which focused both on developing viable solutions to current and anticipated problems and on developing a sufficiently broad range of solutions to ensure first that no options were overlooked and secondly that a clear picture of the tradeoffs between competing options could be ascertained.

The specifications process involved

1. Definition of the Problem - This entailed a review of community comments and inputs, discussions with operators, and an assessment of projected demand and capacity on various links within the system.

2. Listing of Conceptual Solutions - General concepts aimed at meeting future needs were drawn from a number of sources including community and operator suggestions, previous planning studies (e.g. 1980 Transportation Plan, Governor's Task Force on the Marine Highway) and the consultants' and Technical Committee's ideas with regard to new concepts which might be applied.

3. Prescreening of Corridor Alternatives - As noted in the introductory chapter, in certain subregions a preevaluation process was carried out whereby a number of similar options were prescreened and only the most promising carried forward for further analysis. Five corridors were treated in this manner

   - The Juneau Access corridor in which 11 service options were examined and narrowed down to 2.

   - The Ketchikan-Southern Terminus corridor in which nine options were examined and four retained for further analysis.

   - The Stikine corridor in which a total of ten options were examined and three retained for further analysis.

- The Sitka Access corridor in which four options were examined and three were retained for system evaluation.

- The Prince of Wales Island Access corridor in which four options were evaluated (including variations within some of the service concepts) and all were retained for further system analysis.

For a detailed discussion of these corridor studies, the reader is referred to the series of reports on "Evaluation of Corridor Alternatives."

4. Detailed Definition of System Characteristics - This involved specifying, for each system to be evaluated, the detailed cost, revenue, traffic, and operating characteristics, and included

   - specifying peak and off-peak schedules for existing and proposed new vessels

   - developing preliminary specifications for new vessels and obtaining builder estimates for construction and operating costs

   - defining and costing new terminal facilities where applicable

   - projecting passenger and vehicle demand over each link in the system and generating user costs for vehicle operations and/or ferry fares on each route.

3.3 - Financial Evaluations

Each of the defined system alternatives was first evaluated in terms of financial impacts, including capital and operating costs for the AMH and the State government, revenues received from users, and user costs for both private and public transportation service.

Costs and revenues were calculated for each year of a 20-year planning period (1986-2005), and were then discounted to 1985 dollars to provide an equitable basis for comparison.

In order to deal with the vast number of calculations involved, a computer model was developed which computed, for each year

- the forecast demand on each link in the system
- the capacity of the system to meet the demand and, from this, the number of passengers and vehicles actually carried between various origins and destinations
- the fares and vehicle operating costs of the traffic served (the fares also represented the revenues of the Marine Highway System)
- the capital and operating costs of road links
- the capital and operating costs of terminal facilities
- the capital and operating costs of both new and existing vessels, with operating costs being linked to the vessels' specified schedules.

Total financial costs were then calculated from the viewpoint of

- the Marine Highway, including vessel capital and operating costs, port capital and operating costs, and ferry revenues
- the State government, including road capital and operating costs and Marine Highway deficits
- the passengers and vehicles served, including fares paid and vehicle operating costs.

It should be recognized that, because of the double counting of Marine Highway deficits (as a net cost to the AMH and as a cost to the State), the

financial impacts are not additive. Total system costs are represented by the sum of State and user costs. However, because of concerns regarding the deficit position of the Marine Highway, their financial impacts were calculated separately from total State government impacts.

3.4 - Evaluation of User Impacts

While the financial analysis provided an important measure of comparison among alternative surface systems, it was unable to fully reflect many of the differences among system options and hence, in some respects, provided a distorted picture of the merits of various alternatives.

One major difference among options which distorted the financial picture was the level of traffic served and the manner in which it was served. Many of the options involved meeting less than the full level of service demand. Others involved serving some traffic in a manner other than that demanded by the user (e.g. by requiring users to divert from one port of embarkation to another), while another group involved serving traffic over and above projected basic demand because service under the proposed option was sufficiently more attractive to induce new users into the system. Thus a comparison strictly on the basis of total financial costs did not provide a complete picture of the differences among alternative systems, particularly insofar as user costs were concerned.

A second difference which the financial evaluation failed to account for was the difference in the level of service provided. Level of service encompasses many factors: travel time, frequency of service, transfers, reliability, comfort, convenience, etc. Some of these factors do not lend themselves to quantification and can only be evaluated in a subjective manner. However, factors such as travel time, frequency of service and need for transfers can, at least in part, be quantified and compared among alternatives.

Because of the need to take these differences among options into account in the overall analysis, a supplemental assessment was carried out for each

option with regard to 'user impacts' which quantified the differing effects of the alternatives in terms of demand served and quality of service and which, insofar as possible, assigned values to the differences.

3.4.1 - Differences in Traffic Served

The main effect of differences in the amount of traffic served is the impact in terms of total user cost. The user costs derived from the financial analysis, when presented in 'total' form, do not reflect differences in total traffic. On the other hand, converting these user costs to a 'cost per user' or 'cost per passenger mile' would not account, for example, for the losses of unserved passengers or the inconvenience to diverted users.

Accordingly, to compare options on an equivalent basis, it was necessary to make adjustments to user costs in order to accurately reflect the differences in traffic volumes and in the manner in which these volumes are served.

Differences in the amount and nature of traffic served under the various options arose from three main sources.

1. Unmet Demand - traffic desiring service but unable to be handled by the proposed system.

2. Diverted Traffic - Traffic desiring service to or from one port but presumed to be willing to divert to an alternate port if capacity is available (this primarily relates to excess vehicle demand to and from Seattle which could divert to Prince Rupert).

3. Induced Traffic - Traffic over and above the projected basic level of demand which is drawn to use the system as a result of lower travel costs.

Each of these sources of traffic variation required a somewhat different treatment in order to adjust user costs to a comparable basis.

The user costs associated with those potential users whose demands could not be met by the system was estimated by determining the net losses which they would incur as a result of being unable to make the trip. These losses will vary considerably depending on the purpose of the trip and the actions which the unserved user takes as a result of being unable to make the trip. Losses could range from zero (for a user who decides, for example, to travel elsewhere and derives as much enjoyment for his money there) to much larger sums (for a user who may be forced to take first class accommodation on a cruise ship, but does not derive any benefit from the greater amenities).

In order to estimate an average value for the net losses associated with unmet demand, the concepts of demand and surplus were introduced into the analysis. This is explained in detail in Appendix B. Briefly, the method involved postulating the shape of the demand curve for Marine Highway service and calculating the average difference between the maximum that users would have been willing to pay and the amount they would actually have had to pay for the trip (i.e. their surplus as measured by the difference between the trip's value to them and its cost).

Average lost surplus for passenger and vehicle trips was then multiplied by the number of unserved users under each option and the totals discounted to net present value.

The costs associated with diverted traffic, where users are shifted to an alternate port, would be expected to include increases in travel cost and/or travel time as a result of the diversion. Since users would be expected to minimize their cost (or maximize their benefit), they would logically prefer that routing which offered them the highest advantage. Consequently, the persistently high demand for service out of Seattle would suggest that, to a large number of users, sailing out of Seattle was preferable to driving to Prince Rupert to catch the ferry.

In comparing the actual out-of-pocket costs associated with diversion, however, it was found that in most cases it was considerably less expensive to drive to an alternate port of embarkation rather than to take the ferry for the full distance. Even when the additional travel time for diverted

passengers was taken into account, it was found that users would have to assign an unacceptably high cost to travel time to offset the out-of-pocket savings.

The implication of these findings is that users demanding service out of Seattle rather than Prince Rupert assign some nonmonetary value to the Seattle trip which more than offsets its higher cost. This value could arise from an aversion to driving, from the amenities of the ferry service, or possibly from a preference for door-to-door service.

As a result, the user costs described in the financial analysis, which are based on out-of-pocket expenses for fares and vehicle operation, must understate, in many cases, the full costs associated with diverting passengers, and hence require upward adjustment. Theoretically, this adjustment should more than offset the out-of-pocket savings. However, in the absence of indications as to the amount of extra value assigned to the direct versus the diverted journey, it was decided to assume, conservatively, that diverted users would assign an equal total cost to each and would hence be indifferent among the alternatives. Diversions were therefore presumed to generate zero user impacts in the analysis of user benefits and costs and any out-of-pocket savings accruing to diverted passengers were removed from the analysis by upward adjustment of user costs to the levels incurred by nondiverted traffic.

User costs associated with induced traffic was the third category requiring adjustment. Generally, options which generated induced traffic yielded lower travel costs on a per-user basis (hence the inducement to greater travel). However, many of the induced passengers would not have traveled without the benefit of the lower cost and hence cannot be considered to enjoy the full saving associated with the new system. Accordingly, the travel costs of induced passengers were adjusted upwards by half the difference between the old cost and the new (i.e. cost savings to induced passengers were cut in half for purposes of calculating total savings).

3.4.2 - Differences in Travel Time

An attempt was also made to account for the differing impacts of system alternatives in terms of quality of services provided. While service quality encompasses a number of aspects, it was felt that the aspects which could be measured in a quantitative and an objective manner were those relating to service time, including travel time, waiting time related to service frequency, and waiting time associated with transfers.

In order to calculate the travel time associated with each system option, a computer program was developed which converted the proposed ferry schedule and road network into a matrix of total travel times between all points served in the region. The model calculated in-transit time (based on either vehicle speeds or the speed of the vessel being used), frequency related delays (based on one-quarter of the interval between vessel departures) and transfer times (based on an average 12-hour delay whenever a vessel-to-vessel transfer was required).

Separate travel-time matrices were calculated for each schedule, taking into account peak, shoulder and low-season schedule variations as well as changes over the years within a particular option. These travel time matrices were then multiplied by the number of passengers traveling between the various origins and destinations each year on a seasonal basis.

As with user costs, travel time impacts also required adjustment to reflect the differences among the various options in traffic served. These adjustments are explained in greater detail in the Appendix. Basically the adjustments were as follows:

- where unmet demand occurred, total travel time impacts (increases or savings) were reduced by the amount of impact which would have accrued to the unserved passengers had their demands been met;

- for diverted passengers, travel time impacts were assumed to be zero (i.e., both increases and decreases in travel time were ignored);

- for induced passengers, travel time impacts were reduced by one-half to reflect the marginal nature of this traffic.

3.5 - Service/Cost Effectiveness

The actual selection of preferred choices among the various surface system options was based on a measure which was called 'service/cost effectiveness.' This essentially involved measuring the total user impacts (both positive and negative) associated with changes in the system proposed, and comparing these with the impacts on government costs.

In order to calculate the impacts of changes, it was necessary to specify one option as a base case against which other options could be evaluated. In the short term, the base case was represented by continuation of the existing system and changes in user impacts and government costs arising from new short-term options were measured in comparison with the existing service. In the long-term, the base case was represented by the concepts of the June 1980 Plan which presumed that the existing ferry route structure would be maintained and that new mainline vessels would be added as demand required. Other long-term options were evaluated in terms of the benefits and costs they generated relative to the June 1980 Plan system.

Measurable user impacts fell into two categories

- increases or decreases in user cost as compared with the base case, and

- increases or decreases in user travel time.

For evaluation purposes, the adjusted user costs and travel times (as described in Sections 3.4.1 and 3.4.2) were used to calculate differences in impact.

Government cost impacts included

- increases or decreases in the deficit of the Marine Highway, and

- increases or decreases in the cost of road construction and operation (in actual fact only increases occurred in this category of costs since none of the options envisioned eliminating existing road links).

The evaluation of service/cost effectiveness was carried out in two stages. The first stage involved comparing user cost impacts (increases or savings) with government cost impacts (increases or decreases) to determine whether the monetary benefits to one group exceeded the monetary costs to the other. If both groups enjoyed benefits relative to the base case, the option was preferable to both parties. If both groups suffered higher costs, then the base case would be preferable to both. However, where one group enjoyed benefits and the other suffered cost increases, a comparison was necessary to assess whether the benefits achieved justified the costs incurred.

The second phase of the service/cost effectiveness evaluation involved incorporating travel time impacts into the analysis. These could have been included with user cost impacts simply by assigning an hourly value to travel time and adding the resultant total value of time costs or savings to the value of user cost impacts. The choice of an appropriate value for travel time is, however, a complex issue and any value selected would be open to criticism. Because of the problems associated with developing a defensible measure of time value, an 'imputed value' approach was taken in this analysis.

Under this approach, the total travel time impacts of each option relative to the base case were calculated in terms of hours. Next, the difference was calculated between the monetary impacts accruing to the user and those accruing to the government. This provided a measure of the value which total time impacts would have to have in order for the combined user cost and time impacts to exactly offset the impacts on government costs. The 'required time value' was then divided by the number of hours involved to generate a required hourly value of time (either minimum or maximum depending on whether users incurred travel time savings or travel time increases). These required hourly values of time could then be compared both between options and against subjective measures to determine the

relative rankings of the various alternatives and also the likelihood that total positive impacts (benefits) of a system would exceed total negative impacts (costs).

One caution should be noted in assessing the merits of various system options under the service/cost effectiveness method. Because of the calculation procedure, the method used focuses only on the differences between the options considered. As such it provides a measure of incremental benefits and costs associated with one system as compared with another. It does not presume, however, to measure the total benefits and costs associated with a transportation system per se. Those impacts which are common to all systems are eliminated, by subtraction, from the analysis. Thus, comparison among options should be assessed with caution. An option which generates, for example, a $2 million increase in benefits is not necessarily twice as good as one which generates a $1 million increase since the base benefits accruing to all systems may be $100 million and the more appropriate comparison would be between $102 million and $101 million.

4 - EVALUATION OF SHORT-TERM SURFACE SYSTEM ALTERNATIVES

4 - EVALUATION OF SHORT-TERM SURFACE SYSTEM ALTERNATIVES

4.1 - General

The objective of the analysis of system alternatives was to provide guidelines to changes which could be made in the transportation system over a 20-year period. There is, however, a division between changes that can be accomplished (and are required) in a short time period and changes that can be accomplished (and may be necessary) over a longer time frame. Major capacity additions, for example, in the form of constructing new roads or new mainline vessels may require several years to accomplish, while schedule changes or the introduction of 'off-the-shelf' vessels can be implemented in the near future. For this reason, two separate sets of surface system alternatives were defined with one set aimed at the short-term and the other at the long-term planning horizon. This section describes and evaluates the options considered as short-term solutions. Section 5 deals with the long-term alternatives.

4.2 - Short-Term System Alternatives

In all cases, the system options examined were aimed at meeting the transportation goals in terms of

- meeting the travel needs of Alaska residents
- supporting the regional economy by providing the required transportation services, and
- ensuring a judicious use of government funds.

Apart from this, however, short-term alternatives were defined to meet the following specific criteria

- they could be easily implemented (with a 1- to 3-year period)

- they would improve the system's ability to meet demand through the late-1980s/early-1990s, and

- they were sufficiently flexible that they would not preclude any longer-term options.

The following sections describe the seven options considered as short-term system alternatives.

4.2.1 - Option 1 - Continue Existing Service

This option served as a base case against which all short-term system alternatives were compared. It involved maintaining the existing (1985) routings and schedules for both mainline and feeder ferry service.

During the peak season the Columbia would operate on a weekly schedule out of Seattle while the Matanuska, Malaspina and Taku would operate twice weekly out of Prince Rupert. Each vessel would call at Sitka on a weekly basis. The Aurora and LeConte would continue to serve the feeder communities with Aurora focussing on the Prince Rupert-Ketchikan-Prince of Wales triangle and LeConte focusing on the Sitka-Juneau corridor. The Chilkat would continue to serve Metlakatla.

In terms of meeting demand, this option would result, over a 20-year time frame, in substantial unserved traffic, particularly to and from Seattle. In total, approximately 38% of the peak season passenger demand out of Seattle (260 000 passengers) could not be served and 10% (66 000 passengers) would have to be diverted to Prince Rupert. In addition, some 46 000 vehicle trips would be lost to the ferry system.

4.2.2 - Option 2 - Matanuska to Seattle

This option involved operating a second mainline vessel (probably the Matanuska) out of Seattle during the peak season. All other schedules and routings were unchanged from the base case.

The two-vessels-to-Seattle option provided a somewhat better picture in terms of ability to meet demand out of Seattle. Under this option, a total of 73 000 Seattle passengers (10% of peak demand) and 33 100 Seattle vehicles were unserved over 20 years. However, the loss of two trips per week out of Prince Rupert without any offsetting additional service there, resulted in a loss of 126 000 passengers (12.7% of peak Prince Rupert demand) and 57 400 vehicles out of Prince Rupert over 20 years. In addition, because of these capacity problems at Prince Rupert, no excess Seattle traffic could be diverted.

4.2.3 - Option 3 - Prince Rupert Summer Terminus

Under the third short-term option, all mainline vessels would operate twice weekly out of Prince Rupert during the peak season. Because of the increased capacity out of Prince Rupert, the Aurora was shifted to a Ketchikan base in order to provide additional service to feeder communities. Passengers desiring service to and from Seattle were assumed to transfer to Prince Rupert provided they were traveling with a vehicle. Seattle foot passengers, however, were assumed to be lost to the ferry system.

In total over 20 years this option resulted in the loss of 394 000 passengers out of Seattle (57% of the peak demand) as well as 20 700 vehicle trips. The balance of Seattle demand, a total of 296 400 passengers and 135 000 vehicles, were assumed to transfer to Prince Rupert. All demand to and from Prince Rupert was met by the system since Prince Rupert demand was given priority over Seattle transfers.

4.2.4 - Option 4 - Columbia Shuttle

Option 4 involved shuttling the Columbia between Seattle and Ketchikan during the summer peak, enabling her to make two round trips per week out of Seattle. The other three mainline vessels were presumed to continue their existing routes. However, to compensate for the loss of the Columbia's service north of Ketchikan, the Aurora and LeConte were drawn into quasi-mainline service with Aurora operating weekly out of Prince Rupert and LeConte twice-weekly out of Ketchikan.

Over the 20-year planning period, this option resulted in a loss of 43 200 Seattle passengers (6.3% of peak demand) and 18 500 vehicles. In addition, some 33 200 Prince Rupert passengers and 15 100 vehicles would be lost to the system. Transfers from Seattle to Prince Rupert would be minimal since, by the time capacity became critical at Seattle, it would also be reaching critical levels at Prince Rupert.

4.2.5 - Option 5 - Foreign Flag Vessel

This option required the Marine Highway to acquire and refurbish a foreign-built ferry and operate it out of Vancouver during the peak season. While the vessel could not carry traffic between points within the Southeast region, it could provide relief for capacity problems out of Seattle and thus free up space on the other mainline vessels. All other vessels were assumed to operate on their current schedules.

The addition of a foreign flag vessel enabled the system to meet all demand through to the mid-1990s after which some transfers from Seattle to Prince Rupert would be necessary, and some foot passengers out of Seattle would be lost. In total over 20 years, 10 400 Seattle passengers would be lost (1.5% of peak demand) and a further 22 500 would be transferred to Prince Rupert.

4.2.6 - Option 6 - High-Speed Catamarans

The sixth short-term option focused on using high-speed catamaran-type ferries to provide intra-regional ferry service during the peak season, and concentrating peak mainline service on the Seattle route.

In total, a fleet of four catamaran ferries was presumed, each with capacity to carry 14 vehicles and 90 passengers. These vessels would operate on a variety of both feeder and high-density routes in the region. The Columbia, Malaspina and Matanuska were all presumed to operate once a week out of Seattle while the Taku and LeConte would operate out of Prince Rupert. Aurora was assumed to operate on a combination mainline-feeder route out of Ketchikan providing additional mainline capacity as well as heavy-freight service into feeder communities.

In terms of total traffic served, this option resulted in the loss, over 20 years, of 21 000 peak Seattle passengers (3% of peak demand) and 9 500 Seattle vehicle trips. In addition, there would be a capacity shortfall out of Prince Rupert resulting in a total loss of 96 600 passengers (9.7% of peak demand) and 43 900 vehicle trips to and from the port.

4.2.7 - Option 7 - High-Speed SES Ferries

The final short-term option involved using larger high-speed ferries to provide peak intra-regional service and again concentrating mainline service on Seattle.

Under this scenario, it was presumed that two large (180-passenger, 40-vehicle) SES-type high-speed ferries would be acquired and operated on combined feeder-mainline routes throughout the region. The Columbia, Malaspina and Matanuska would operate out of Seattle while the Taku would continue her existing twice-weekly schedule out of Prince Rupert. In addition, the Aurora would operate on a mainline route out of Prince Rupert

while the LeConte would serve Prince Rupert, Ketchikan and Hollis on a daily round trip basis.

This option had essentially the same impact on Seattle traffic as Option 6; over 20 years a total of 20 800 passengers and 9 400 vehicle trips would be lost. The increased service level out of Prince Rupert, however, resulted in lower losses there. In total, 30 600 Prince Rupert passengers (3.1% of peak demand) and 13 900 vehicles would be lost to the system.

4.3 - Evaluation of Short-Term Options

4.3.1 - Financial Evaluation

As described in the methodology section (Section 3), each option was first evaluated with respect to financial impacts on the Marine Highway, the State government and the user. The results of this analysis (in terms of discounted 20-year total costs and revenues) are shown in Table 4.1.

The table does not provide a separate figure for cost to the State since, under the short-term options, the only changes in costs to the State would arise as a result of changes in the AMHS deficit. Thus net costs to the AMH and total State costs would be the same.

The table indicates that two of the system alternatives, Option 2 (Matanuska to Seattle) and Option 4 (Columbia shuttle), result in a lower financial cost to the State than would arise under continuation of the existing system. In addition, as noted earlier, both options would meet a higher portion of projected demand.

The remaining options all result in higher financial costs than in the base case. However, with the exception of Option 3 (Prince Rupert terminus), all provide service to a greater portion of total demand. As a result, the total costs per effective passenger mile are all (with the exception of Option 3) lower than in the Base Case-Existing System option.

TABLE 4.1

FINANCIAL IMPACTS - SHORT-TERM SYSTEM OPTIONS

(Net Present Value, Total over 20 years discounted at 5% - $ Millions)

System Option	Existing System	Matanuska to Seattle	Prince Rupert Terminus	Columbia Shuttle	Foreign Flag Vessel	High-Speed Catamarans	High-Speed SES Ferries
Cost to AMHS							
Vessel Capital	$241.3	$241.3	$241.3	$241.3	$253.3	$255.7	$270.1
Vessel Operating	671.2	671.2	671.2	673.8	740.5	703.8	711.3
Port Capital	-	-	0.4	3.9	-	-	-
Port Operating	28.2	28.2	28.2	28.2	28.2	28.2	28.2
Less Fare Revenue	(486.3)	(512.0)	(437.2)	(520.1)	(539.4)	(530.6)	(537.9)
Net Cost	454.4	428.7	503.9	427.1	482.6	457.1	471.7
Cost to User							
Ferry	$486.3	$512.0	$437.2	$520.1	$539.4	$530.6	$537.9
Veh. Operating Cost	5.4	-	21.8	0.3	2.0	-	-
Total	491.7	512.0	459.0	520.4	541.4	530.6	537.9
Total Cost	946.1	$940.7	$962.9	$947.5	$1024.0	$987.7	$1009.6
Effective passenger miles (millions)	2063.4	2211.9	1929.1	2268.3	2311.7	2273.4	2298.8
Total cost per effective passenger-mile (dollars)	$0.458	$0.425	$0.499	$0.417	$0.443	$0.434	$0.439

4.3.2 - Service Cost Effectiveness

As noted in the methodology section, however, the financial analysis does not reflect the full range of impacts associated with the various options. In the first place, the financial costs do not reflect the user costs associated either with unmet demand or with the need to divert from one port to another. In the second place, they fail to include the impacts of better service quality (particularly as regards travel time) under certain of the service options.

Accordingly, for each option, the user costs were adjusted to reflect the differences in the number of passengers and vehicles served. In addition, the total travel times under each option were calculated and adjusted to reflect differences in traffic levels.

Each system option was then compared to the base case (Option 1) in terms of total adjusted user costs and total costs to the State, and the differences calculated. The results of this analysis are shown in Table 4.2.

Strictly in terms of user versus government costs, three options appear to have clear cut advantages over the existing system: Option 2 (Matanuska to Seattle), Option 4 (Columbia shuttle) and Option 6 (high-speed catamarans). The first two (Options 2 and 4) offer cost savings to both users and the State and hence are preferable to the current system for both parties. The third option (Option 6) is more costly to the State (by $2.7 million) but offers user cost savings which more than offset the State's cost increase.

Of the other options, Option 5 (foreign flag vessel) and Option 7 (high-speed SES ferries) both offer user cost savings, but the increase in costs to the State more than offsets the users' monetary benefits. The remaining option (Option 3, Prince Rupert terminus), however, is less attractive than the existing system in terms of both user costs and government costs and hence appears to be undesirable to both from the cost perspective.

TABLE 4.2

SHORT- TERM SYSTEM OPTIONS -
IMPACTS ON USER AND GOVERNMENT COSTS

Option	Change[1] in User Cost[2] ($millions)	Change[1] in Government Cost[2] ($millions)	Comments
2 - Matanuska to Seattle	-1.4	-25.7	Both better off.
3 - YPR Summer Terminus	+2.0	+49.5	Both worse off.
4 - Columbia Shuttle	-4.3	-27.3	Both better off.
5 - Foreign Flag Vessel	-5.8	+28.2	User saves 21¢ per dollar of added government cost.
6 - High-Speed Catamarans	-3.8	+2.7	User saves $1.41 per dollar of added government cost.
7 - High-Speed S.E.S.	-5.0	+17.3	User saves 29¢ per dollar of added government cost.

[1] As compared with existing system (Option 1).

[2] NPV of 20-year total costs.

Apart from cost impacts, consideration must also be given to the travel time impacts under the various options. The total adjusted changes in travel time are given in the first column of Table 4.3. The figures indicate that, with the exception of Option 4 (Columbia shuttle) all options lead to net travel time savings as compared with the base case. The highest savings are generated under the two high-speed ferry options (Options 6 and 7) and the lowest under the Prince Rupert terminus case.

In order to assess the value of these time savings, an 'imputed value' approach was used (as described in Section 3). First the total 'required' time value was determined by calculating the algebraic difference between monetary costs and savings (from Table 4.2). This figure represented the total value which would have to be assigned to travel time differences in order for positive impacts (savings) to equal or exceed negative ones (cost increases). The resultant values are shown in column 2 of Table 4.3.

These required total values were then divided by the number of hours saved (or lost) in order to determine the minimum hourly value (or maximum in the case of travel time increases) which would have to be assigned to travel time in order to equalize benefits and costs.

The figures indicate that in two cases (Option 2, Matanuska to Seattle, and Option 6, high-speed catamarans) the value of travel time savings can be as low as zero. Since monetary savings exceed monetary cost increases, the savings in travel time represent an added bonus which serves to enhance the merits of the system.

Three other options can be ranked in order of relative merit based on required time values. These are, in order of preference: Option 7 (high-speed SES ferries) where benefits would exceed costs when the value of travel time exceeds $1.15 per hour; Option 5 (foreign flag vessel), where travel time value must exceed $6.35 per hour; and Option 3 (Prince Rupert terminus) where the hourly value of travel time savings must exceed $83.10 per hour (an unlikely prospect).

TABLE 4.3

SHORT-TERM SYSTEM OPTIONS - USER TRAVEL TIME IMPACTS AND REQUIRED VALUE OF TIME

Option	Change[1] in User Travel Time (million hours)	Required Total Time Value[2] ($millions)	Required Hourly Time Value ($/h)
Matanuska to Seattle	- 3.94	(27.1)	ø
Prince Rupert Terminus	- 0.62	51.5	>83.10
Columbia Shuttle	+ 3.33	(31.6)	< 9.45
Foreign Flag Vessel	- 3.52	22.4	> 6.35
High-Speed Catamaran Ferries	- 9.16	(1.1)	ø
High-Speed SES Ferries	-10.73	12.3	> 1.15

1 As compared with Option 1; existing system.
2 Brackets denote negative required value.

The remaining option, the Columbia shuttle, is more difficult to rank since it generates substantial increases in travel time which offset its monetary advantages. In this case, the hourly value of travel time must be less than $9.45 per hour. Otherwise the cost of travel time increases will offset the monetary savings.

4.3.3 - Summary

The evaluation of the service/cost effectiveness of short-term system options indicates that two alternatives (sending the Matanuska to Seattle and acquiring high-speed catamarans) offer clear advantages over the existing surface system. In both cases, the monetary savings exceed the monetary cost increases. In addition, both options yield significant savings in user travel time.

The remaining options, while potentially better than the existing system (with the exception of the Prince Rupert terminus), are less advantageous than the two preferred alternatives.

The major drawbacks of the two preferred system options would be

- the substantial traffic losses out of Prince Rupert in the case of the 'Matanuska to Seattle' option, and

- the increase in the AMH operating deficit as a result of purchasing four high-speed ferries under the 'high-speed catamaran' option.

These problems are not without solution, however. For example, by combining the two concepts, a compromise situation could be reached whereby two vessels would operate out of Seattle (rather than the three presumed in the high-speed catamaran option) and a smaller number of catamarans could be used to free up one of the feeder ferries (e.g. the Aurora) to operate more frequently out of Prince Rupert.

5 - EVALUATION OF LONG-TERM SYSTEM ALTERNATIVES

5 - EVALUATION OF LONG-TERM SYSTEM ALTERNATIVES

5.1 - General

The definition and assessment of long-term surface system alternatives involved a changed perspective from the short-term in terms of both the demands to be met and the range of options available to provide service. While traffic demand is expected to continue to increase in the future, it is possible, in the long term, to envision major changes in the transportation system through the acquisition of additional mainline vessels, the development of new road links, the purchase of high-capacity, high-speed ferries, and the phased introduction of more substantial schedule changes.

As in the short-term, however, the key concern was to establish a balance between the goals of serving resident demand, supporting the regional economic sectors, and allocating government funds in a judicious and beneficial manner. A range of long-term alternatives was therefore specified not only in terms of operating characteristics but in terms of the level of investment in new capacity in order to meet demand.

The issue of investing to meet demand was of particular concern since it was recognized that new investment in mainline vessel capacity would primarily serve peak season tourist demand out of Seattle. During the off-peak season these vessels would not be required. It was therefore decided to investigate a range of options in terms of investing to meet peak tourist demand in order to determine the savings and impacts associated with providing lower levels of capacity.

Two investment scenarios were therefore analyzed.

- Acquire sufficient vessels to meet peak season demand out of both Seattle and Prince Rupert

- Acquire new mainline vessels only when combined vehicle demand out of Seattle and Prince Rupert exceeds combined vessel capacity. This implies

acceptance of the idea that passengers with vehicles will be willing to transfer from Seattle to Prince Rupert if ferry capacity is available.

In addition, for sensitivity testing, selected scenarios were evaluated whereby no new mainline vessels were acquired and demand in excess of capacity was presumed to be lost.

5.2 - Long-Term System Alternatives

Alternatives for surface system operations were defined as a series of 'Focuses' where each focus involved emphasizing a particular concept in terms of regional service and evaluating its impact throughout the system in terms of cost and service effectiveness.

Five key 'focus' areas were developed and are described in the following sections. It should be noted at the outset that definition of these 'focus' areas was not meant to suggest that all service improvements should be focused in a single region. Rather, the intent was to determine the relative system-wide impacts associated with these various improvements and select those which offered the greatest benefits relative to their costs.

5.2.1 - Option 1 - Mainline Service Focus

This option represented the base case against which all long-term options were evaluated. Essentially it involved continuing the philosophy of the June 1980 Regional Transportation Plan whereby the existing mainline and feeder route structures were proposed and additional system capacity provided, as required, by the acquisition of new mainline vessels.

For costing and capacity purposes, a conceptual new mainline vessel was defined which would be used in all cases where additional mainline ferries were required. The conceptual vessel, termed the 'AMH Special', was envisioned as providing effective capacity for 200 vehicles and 750 passengers, at a cruising speed of 18 miles per hour. Total capital cost was estimated at $45 million, while crewing and fuel costs were based

on the costs incurred by the Colombia. Maintenance costs were based on the average costs for mainline vessels.

Under the mainline service focus option, three of these new vessels would be required over the 20-year planning period. While one is needed immediately on the Seattle route, it was estimated that such a vessel could not be brought into service before 1989. A second 'AMH Special' would be required on the Seattle route by 1993, and a third vessel would be required, this time out of Prince Rupert, by the early 2000s.

Once the first 'AMH Special' was brought into operation in 1989, this option would successfully meet all system demand throughout the planning period. Between 1986 and 1989, a total of 12 500 passengers would be lost due to capacity shortfalls out of Seattle.

5.2.2 - Lynn Canal Focus

These options emphasized changes within the Lynn Canal corridor, analyzing their impacts on both Lynn service and on service throughout the region. Two Lynn service options, representing the preferred Lynn corridor alternatives, were evaluated (see Figure 8).

- An east-side road from Juneau to Skagway with a shuttle ferry from Haines to the Katzehin River.

- Two high-speed SES shuttle ferries from Echo Cove to Haines and Skagway.

In both cases, northbound mainline ferry service was assumed to terminate at Juneau.

Investment

The Lynn road option involved extending the existing road from Echo Cove up the east side of the Lynn Canal to Skagway. A new ferry terminal would be built near the mouth of the Katzehin River and two shuttle ferries would operate between the new terminal and the existing terminal at Haines,

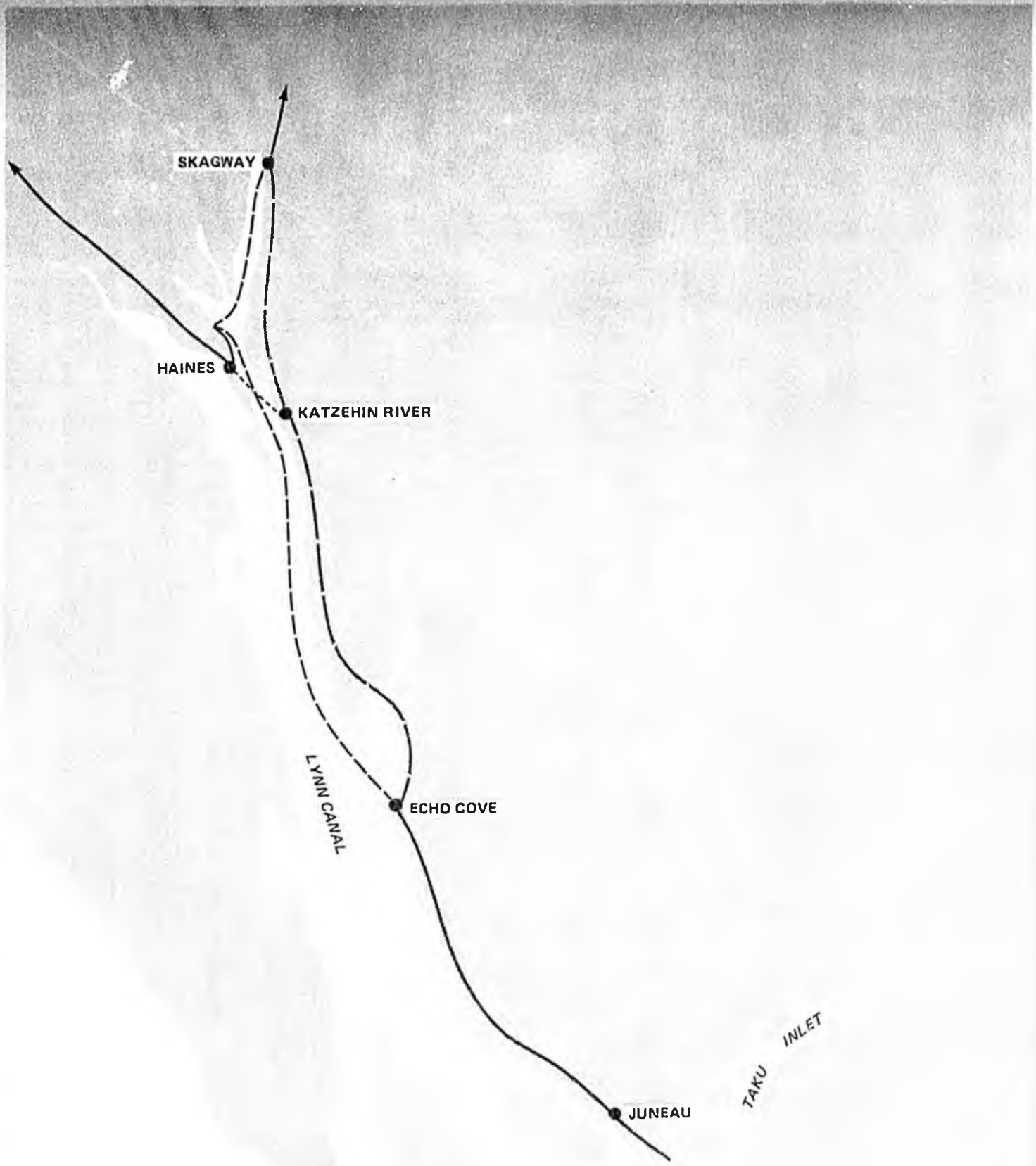


Figure 8

LYNN FOCUS ALTERNATIVES

providing a connection from Haines and the Haines Highway to the new road. Total capital investment for the road, terminal and shuttle ferries would be in the order of $274 million.

Under the high-speed shuttle option, the Marine Highway would acquire two SES-type, high-speed ferries to provide service between Echo Cove, Haines and Skagway. Each vessel was assumed to make three round trips per day during the summer season, calling at Haines on both the northbound and and southbound runs. For purposes of analysis, the high-speed ferries were assumed to operate during the summer season only. However, they could potentially operate on a reduced schedule during the off season if required. Total capital investment, including upgrading parts of the road to Echo Cove, constructing a new terminal there, and acquiring two high-speed ferries, was estimated at $31 million.

From the viewpoint of the system as a whole, two levels of investment were defined for each of these Lynn cases. In the 'meet demand' cases, new mainline vessels would be required in 1989 and in 1998, both operating on the Seattle route. In the 'reduced investment' cases, only one new mainline vessel would be added in 1998.

Ferry Schedules

In order to take advantage of the termination of mainline and feeder ferry service up the Lynn Canal revised schedules were defined for the existing and proposed new ferries. These are outlined in Figures 9 and 10. Under the 'meet demand' scenario, the proposed peak season Seattle service (Figure 9) would have both the Columbia and the second (1998) new ferry operating on an 'open jaw' route, running north from Seattle to Juneau, south to Prince Rupert, then back north to Juneau and south to Seattle. A trip from Seattle to Prince Rupert would require 4.5 days, so each vessel would return to Seattle every nine days. Two other vessels, the Matanuska and the first new mainline ferry would operate on a weekly round trip service from Seattle to Juneau, calling at Sitka in both directions.

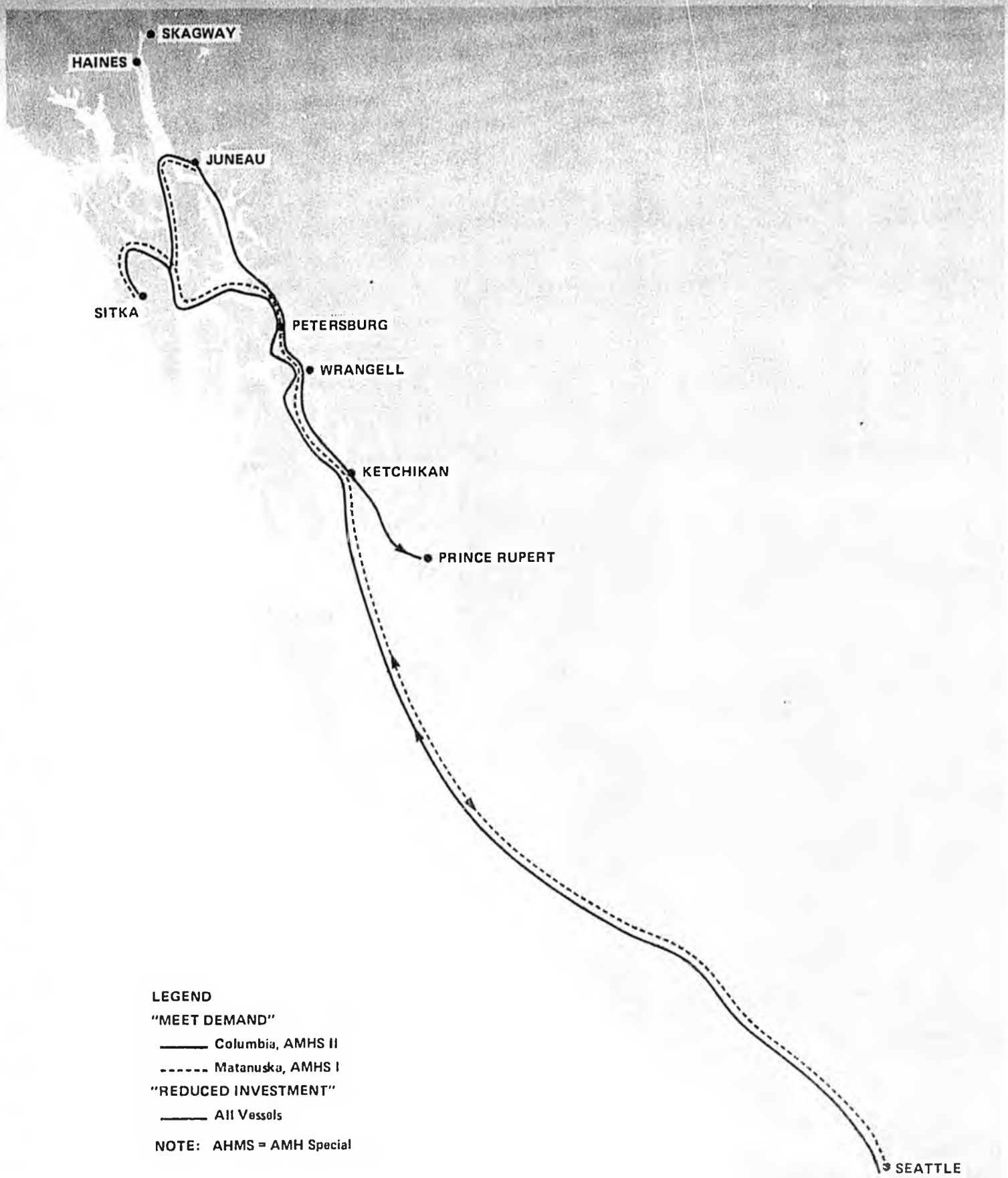


Figure 9

LYNN FOCUS OPTIONS
SEATTLE SERVICE

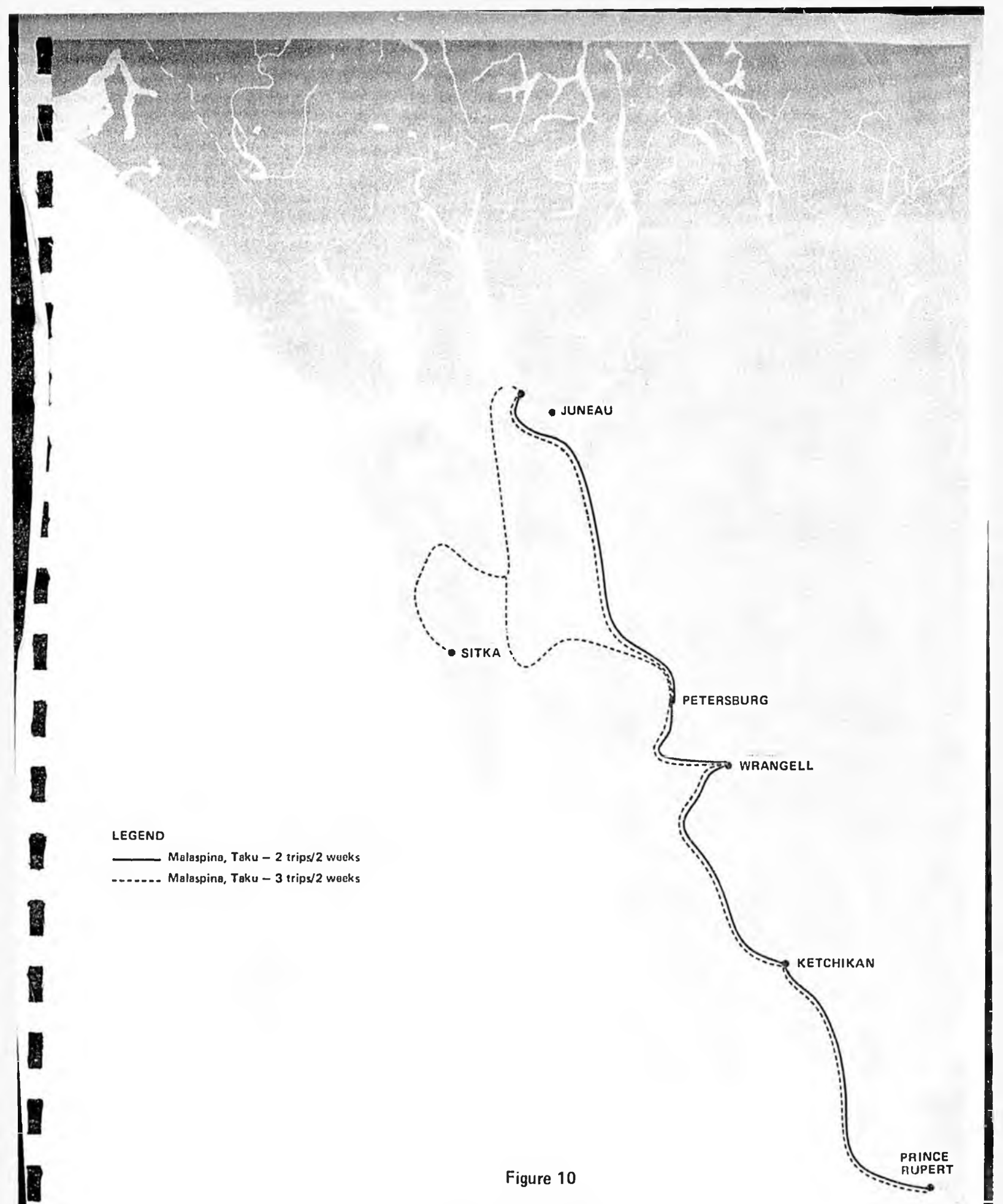


Figure 10

LYNN FOCUS OPTIONS
PRINCE RUPERT FERRY SERVICE

Under the 'reduced investment' scenario, where only one new mainline vessel was acquired, the Columbia, the Matanuska, and the new ferry would all operate on the 'open jaw' schedule.

Revised ferry routings out of Prince Rupert are shown in Figure 10. The Malaspina and Taku would operate on routes very similar to their existing schedules, calling at Sitka on alternate trips, but would not travel up the Lynn Canal. This allows a slight increase in the number of trips from two per week to five in a two-week period. These schedules would apply under both the 'meet demand' and 'reduced investment' scenarios.

In terms of feeder ferry service, a number of alternatives would be possible under the Lynn options. The added mainline service between Prince Rupert and Petersburg could free the Aurora to provide more links for Prince of Wales Island. Similarly, the termination of Lynn Canal service and the added mainline trips would allow the LeConte to focus on linking northern feeder communities to a greater number of destinations.

Traffic Impacts

Under the 'meet demand' scenarios, the Lynn options would provide service to all traffic throughout the system after 1989 (when the first new mainline vessel was acquired). Under the 'reduced investment' scenarios, the Lynn road option would result in total losses of 31 100 passengers and 1 000 vehicles out of Seattle over 20 years, primarily between 1986 and 1989 (4.5% of peak demand) and the diversion of 85 600 passengers (12.4% of peak demand) and 38 900 vehicles from Seattle to Prince Rupert.

The 'reduced investment' Lynn high-speed shuttle option would result in the loss of 13 000 passengers out of Seattle (2% of peak demand) and the diversion of 82 200 passengers (11.9% of peak demand) and 37 400 vehicles from Seattle to Prince Rupert.

Within the Lynn corridor itself, both Lynn options were assumed to generate a measure of induced traffic (i.e. passengers and vehicles which would not have made the trip under the existing system but which were persuaded by

lower costs and/or better service to travel in the corridor). Different inducement factors were used for the road and the shuttle options. Under the road option it was assumed that the lower cost and improved travel time would generate an average of 100 000 additional vehicle movements per year. The shuttle option, with a lower service level and higher cost was assumed to generate on average an additional 25 000 vehicle trips per year. With summer operation only, induced traffic was estimated at one-half the annual figure or an average of 12 500 vehicle trips.

5.2.3 - Sitka Focus

The Sitka options focused on long-term changes in the way in which the Sitka community was incorporated into the surface system. Three service options were assessed.

- Construct a road from Sitka to Baranof and operate mainline and feeder service out of Warm Springs Bay.
- Construct a road from Sitka to Rodman Bay and provide mainline and feeder ferry services out of a Rodman Bay terminal.
- Provide high-speed SES ferry service on the Sitka-Juneau and Sitka-Petersburg links. Terminate mainline service into Sitka.

A map highlighting these options is shown in Figure 11.

Investment

The Baranof road option would involve the construction of a new road from Sitka to Warm Springs Bay. In total, 26 miles of new road, including a tunnel and substantial avalanche protection, would be required and a new mainline/feeder ferry terminal would have to be constructed. Total capital cost to implement this option was estimated at $181.5 million.

The Rodman Bay road option would involve a 46 mile extension of the existing northbound road and construction of a new mainline/feeder ferry terminal on

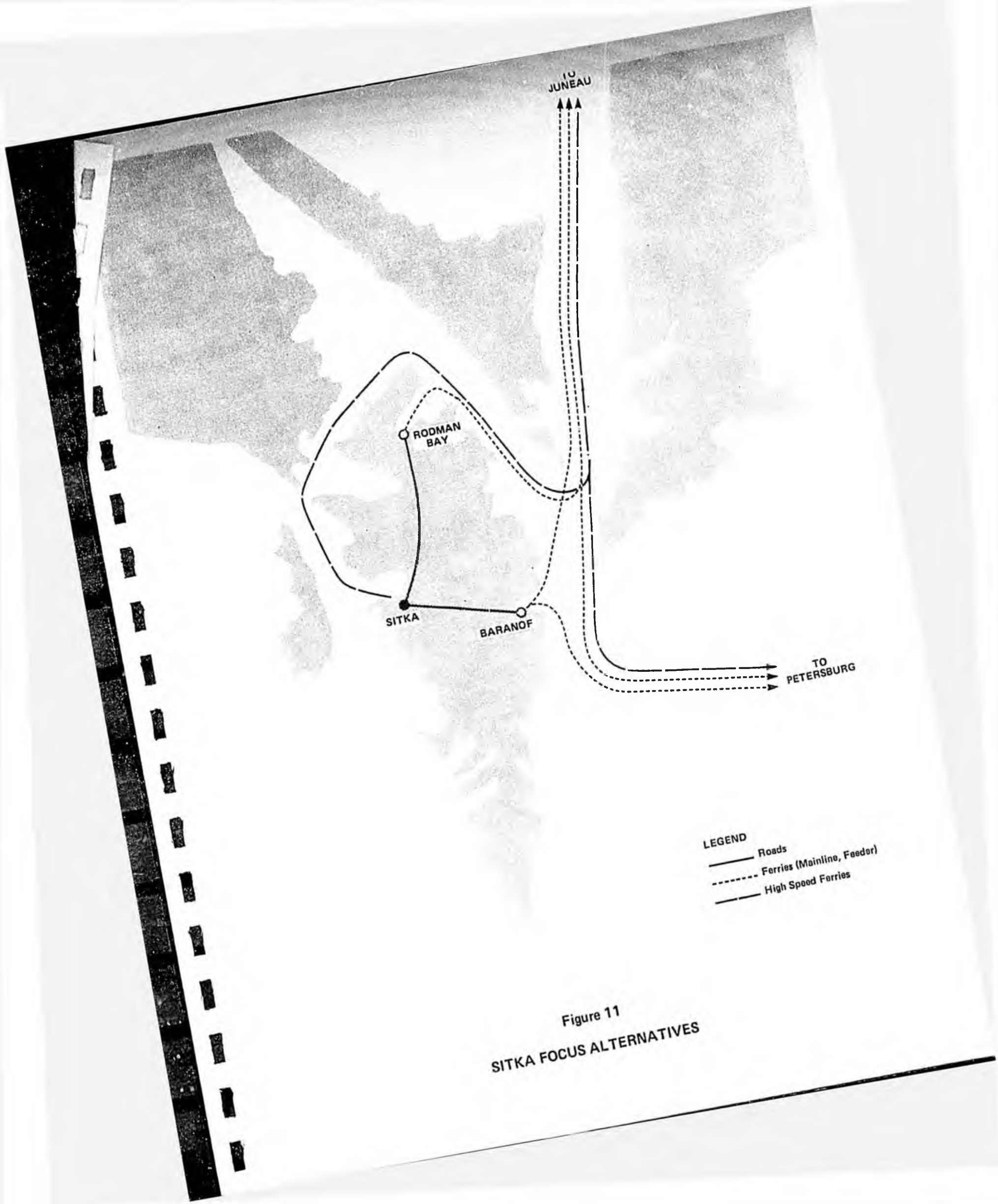


Figure 11

SITKA FOCUS ALTERNATIVES

Rodman Bay. Although the road distance is substantially greater than under the Baranof option (the new terminal would be approximately 54 miles from Sitka), the terrain is less severe and total capital cost for the road and terminal was estimated at $160 million.

The third Sitka option would involve the use of two large SES-type high-speed ferries to link Sitka to Juneau, Petersburg, and the feeder communities in between. One vessel would make a daily round trip from Sitka to Juneau calling at Angoon in both directions and at Tenakee Springs and Hoonah on either the outbound or return leg. The second vessel would make a daily round trip from Sitka to Petersburg, calling at Kake in both directions. For analytical purposes, these vessels were assumed to operate during the peak season only, with normal mainline and feeder services being resumed in the off-peak. However, as with the Lynn high-speed option, these vessels could potentially operate over a longer season on a reduced schedule if required. Total new capital investement in this option would be $24 million - $12 million per vessel.

The required mainline capacity additions under each of these Sitka options were essentially the same. Under the 'meet demand' scenarios, all options were found to require new mainline vessels in 1989 and in 1998. Under the 'reduced investment' scenarios, each option presumed a new mainline vessel in 1998 only.

Ferry Schedules

Ferry schedules under the Baranof and Rodman Bay road options were adjusted to take advantage of the time saving arising from the reduced sailing distance and elimination of the tide delays in Sergius Narrows. The proposed mainline routes are shown in Figures 12 and 13.

Figure 12 shows the Seattle ferry service under the two Sitka road options. Under the 'meet demand' scenarios, two vessels, the Columbia and the second new ferry, would operate on an 'open jaw' route from Seattle north via Baranof/Rodman Bay to Skagway, then south to Prince Rupert. At Prince Rupert they would turn back north to Skagway, then south via Baranof/Rodman

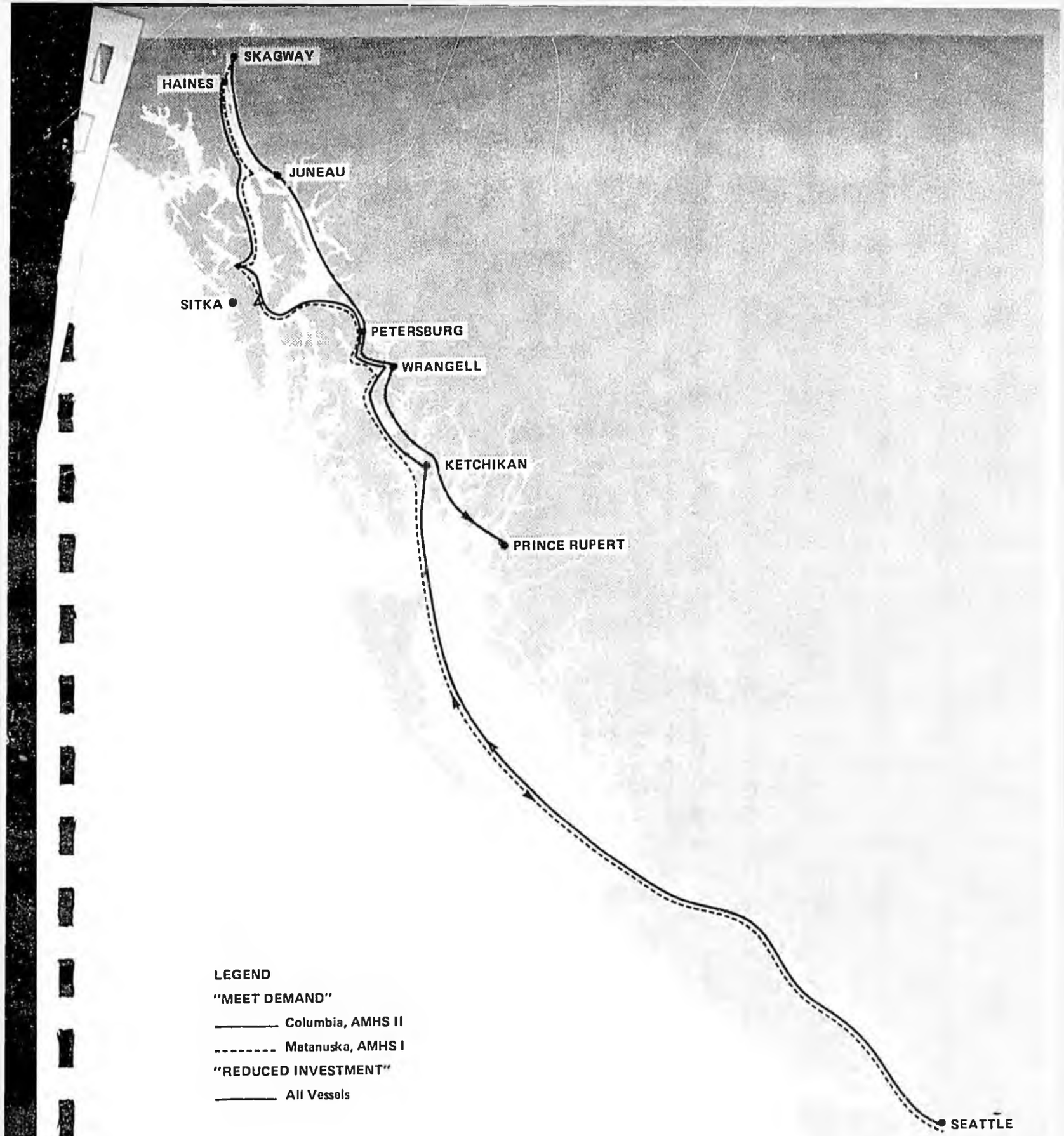


Figure 12

SITKA ROAD OPTIONS
SEATTLE FERRY SERVICE

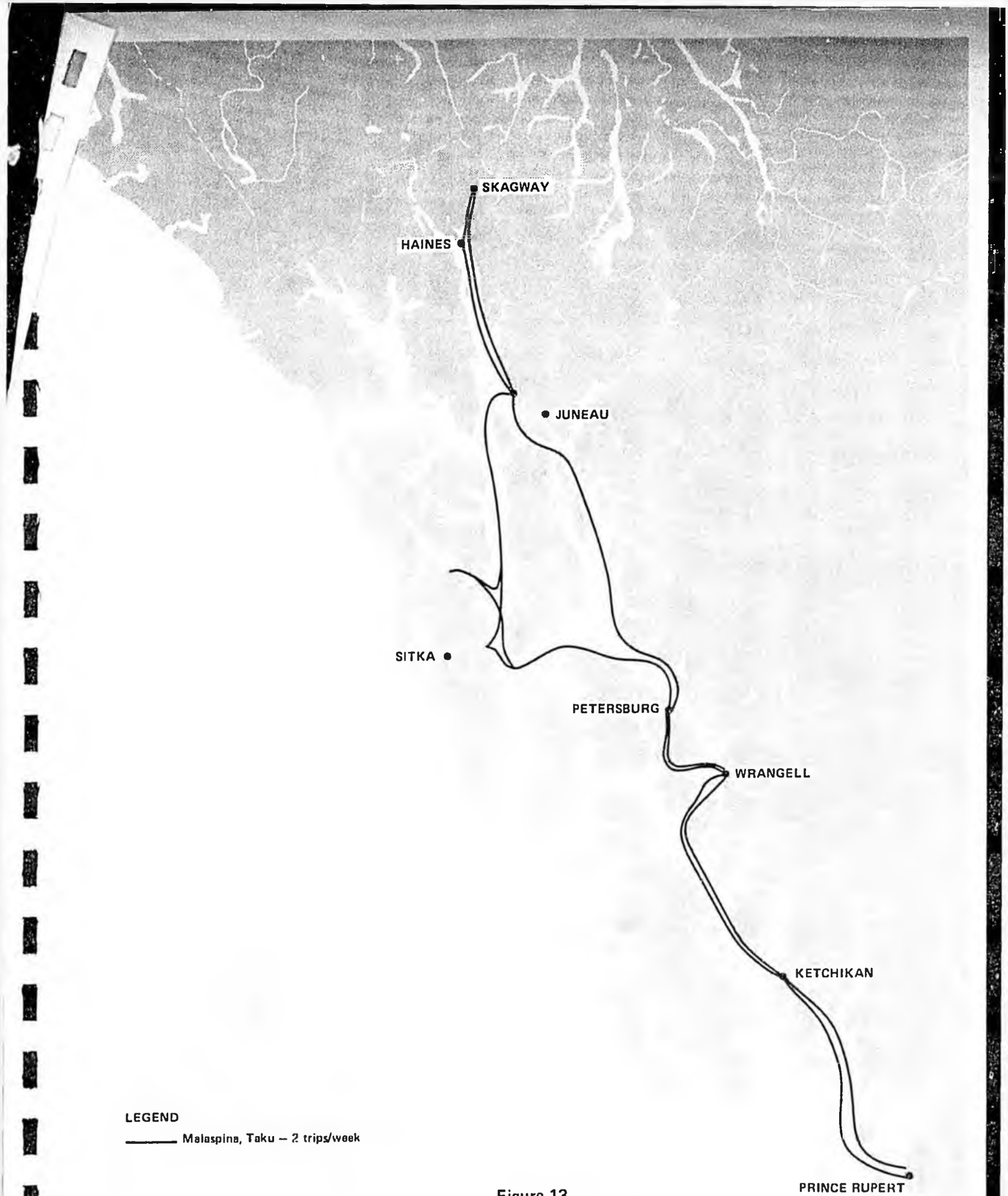


Figure 13

SITKA ROAD OPTIONS
PRINCE RUPERT FERRY SERVICE

Bay to Seattle. Each trip from Seattle to Prince Rupert would take 4.5 days so each vessel would return to Seattle every nine days. Two other vessels, the Matanuska and the first new ferry would operate a weekly round trip service from Seattle to Skagway, calling at Baranof/Rodman Bay in both directions.

Under the 'reduced investment' scenarios, Seattle service would involve three vessels, the Columbia, the Matanusaka, and the new ferry, operating on the 'open jaw' route between Seattle and Prince Rupert.

The proposed Prince Rupert service is shown in Figure 13. Under the road options, the Malaspina and Taku would operate twice weekly on a route basically similar to their current 'Sitka' run. However, instead of making only one trip per week via Sitka, they would call at Baranof/Rodman Bay on both round trips.

The road options would also allow greater utilization of the LeConte. The time saved by eliminating three weekly trips into Sitka harbor could be used to provide additional trips into the feeder communities of Kake, Angoon, Hoonah, Tenakee Springs and Pelican.

The Sitka shuttle option involved somewhat different ferry schedules for the mainline and feeder services. Since Sitka would be served, under this option, by high-speed ferries to Juneau and Petersburg, the mainline ferries were able to sail directly between Juneau and Petersburg without traveling west of Admiralty Island.

The proposed mainline routes out of Seattle and Prince Rupert are shown in Figures 14 and 15 respectively. The Seattle service, under the 'meet demand' scenario, would involve operating the Columbia, the Matanuska and the second new mainline ferry on an 'open jaw' route between Seattle, Skagway and Prince Rupert. The first new ferry would operate a weekly round trip service between Seattle and Skagway.

Under the reduced investment scenario, all three vessels would operate on an 'open jaw' route out of Seattle. These routes and schedules offer essentially the same Seattle service as under the road options.

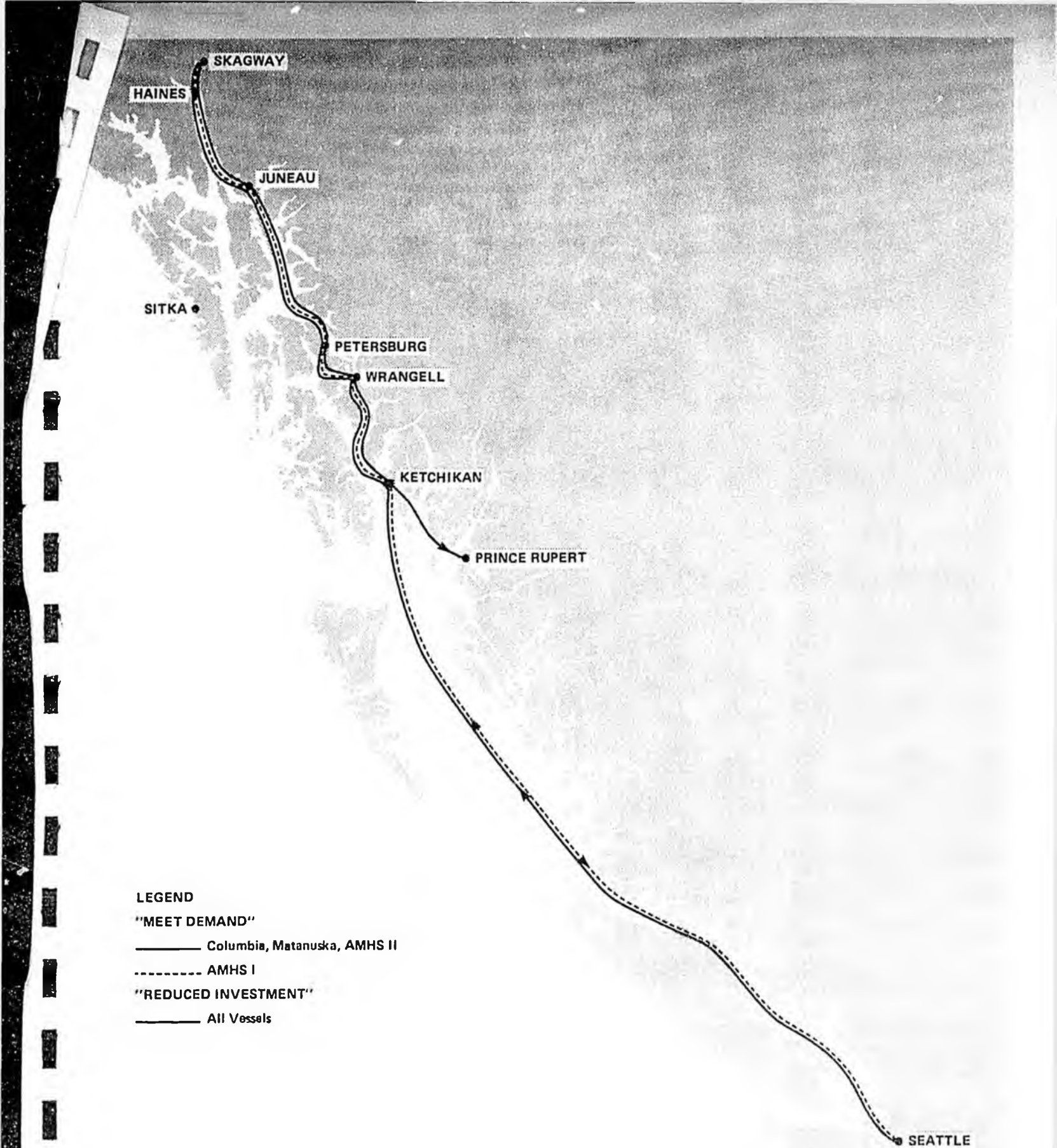


Figure 14

SITKA SHUTTLE OPTION
SEATTLE FERRY SERVICE

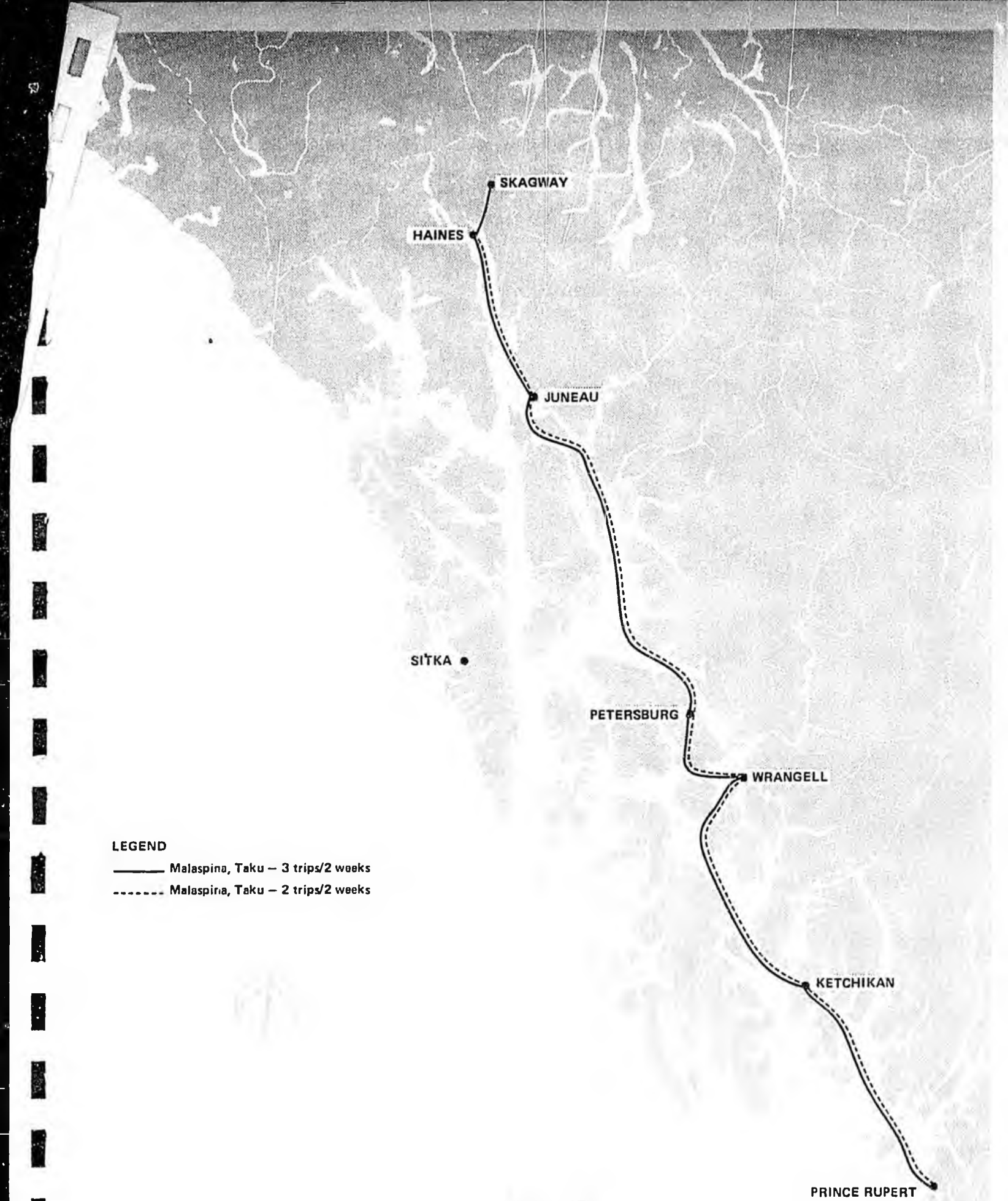


Figure 15

SITKA SHUTTLE OPTION
PRINCE RUPERT FERRY SERVICE

Prince Rupert service under the Sitka shuttle option would be somewhat better than under the road options, however. Rather than two round trips per week out of Prince Rupert, the Malaspina and Taku could each make five round trips over a two-week period. On three of these voyages they would travel as far as Skagway. On the remaining two, however, they would have to turn at Haines. Skagway would, however, be served on all voyages by the Seattle vessels.

Proposed changes in feeder service under the Sitka shuttle option were minor. The LeConte would continue to serve Pelican but on a more frequent basis. In addition, she would continue to provide service in the Juneau-Sitka-Petersburg region for movement of heavy freight and oversized vehicles.

Traffic Impacts

The traffic impacts of the Sitka options were roughly the same under the 'meet demand' scenarios. Apart from some losses during the early years until a new mainline vessel could be brought into service, all options met system demand throughout the planning period. The shuttle option involved somewhat lower losses, however, since it could be implemented earlier than the road options and could therefore provide additional Seattle and Prince Rupert service at an earlier date.

Under the 'reduced investment' scenarios, where no new vessels were added until 1998, the shuttle option resulted in lower losses than did the two road alternatives. The Baranof and Rodman Bay options resulted in losses of 83 800 Seattle passengers (12.1% of peak demand) and 24 900 Seattle vehicles over 20 years, and a small portion of Prince Rupert demand (6 900 passengers and 3 200 vehicles) could also not be served. In addition, 33 000 Seattle passengers and 15 000 vehicles would be diverted to Prince Rupert.

The reduced investment shuttle option resulted in the loss of 13 000 Seattle passengers (1.9% of peak demand) over 20 years. Diversions would be higher than in the road options, however, with 71 700 Seattle passengers obliged to transfer to Prince Rupert.

The Sitka high-speed ferry option was also expected to attract a small amount of induced traffic, largely from the air service. While the high-speed service would be significantly better than the existing ferry service, it would not, however, provide a service comparable to the daily jet flights to and from Juneau and Ketchikan. Accordingly, the high-speed ferry was estimated to attract approximately 5% of the projected peak internal jet passengers or an average of approximately 1 375 passengers per year.

5.2.4 - Prince of Wales Island Focus

The Prince of Wales Island focus concentrated on the local and system-wide impacts of changes in the service to and from Prince of Wales Island. Four separate options were evaluated. (See Figure 16.)

- Relocate the Clark Bay terminal to Tolstoi Bay, and provide mainline and partial feeder service through the new terminal. Connect Tolstoi Bay to the Island communities by extending the road from Thorne Bay or from Hollis.

- Develop a new terminal at Red Bay on the north end of the Island, connected by road to the existing Klawock-Thorne Bay highway. Provide ferry service from Red Bay to Blind Slough and Wrangell, and from Hollis to Ketchikan.

- Acquire a high-speed catamaran-type ferry to provide twice-daily service between Hollis and Ketchikan. Move the Aurora to other routes.

- Acquire a high-speed catamaran-type ferry to provide service in the Hollis-Ketchikan-Clarence Straits region. Supplement Hollis-Ketchikan service with alternate-day service by the Aurora.

Investment

The Tolstoi Bay terminal option would require construction upgrading of approximately 17 miles of road to connect Thorne Bay to the new site. In

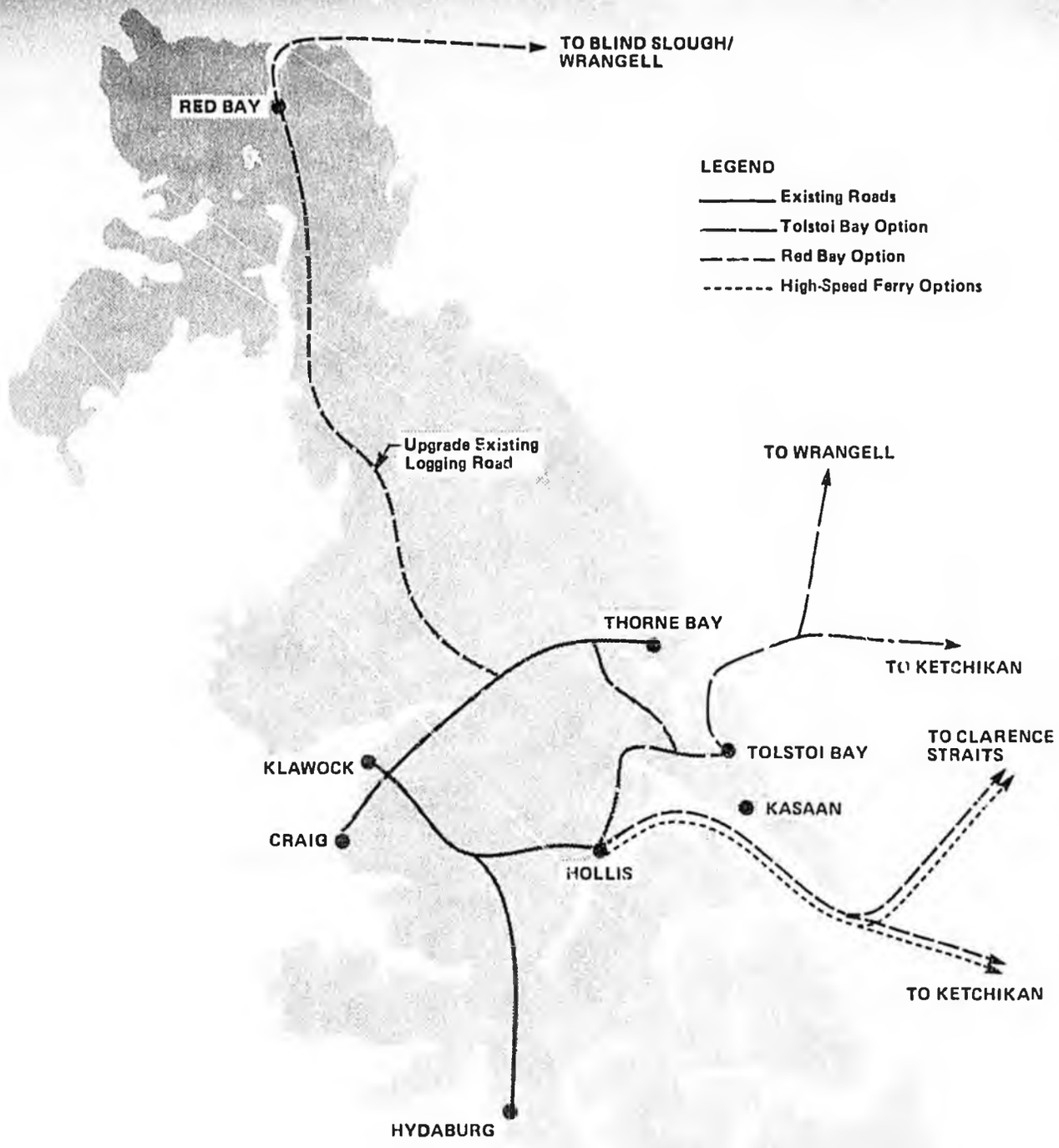


Figure 16

PRINCE OF WALES FOCUS OPTIONS

addition, a new mainline/feeder ferry terminal would have to be constructed. Estimated capital cost for this option was $18.3 million. The alternative of connecting to Tolstoi Bay through Hollis would involve 16 miles of new road construction. Estimated capital cost (including terminal development) would be $26.8 million.

The Red Bay terminal option would require the upgrading and extension of an existing forest service road. The total distance from Red Bay to the junction with the Klawock-Thorne Bay road would be approximately 53 miles. In addition, new shuttle terminals would be required at Blind Slough (on the southern shore of Mitkof Island) and at Red Bay, and a small (15-vehicle) shuttle ferry would have to be acquired. Total estimated capital cost for the road, terminals and ferry was estimated at $71 million.

The two high-speed ferry options would each involve purchase of a single high-speed catamaran-type vessel at a cost of approximately $3 million. Some port modifications might also be necessary, but the extent of these would depend on the locations being served and on the level of sophistication desired.

Investment in the existing ferry system under the 'meet demand' scenarios was the same for all four Prince of Wales options; specifically, new mainline ferries were added to the system in 1989 and 1993. This corresponded closely to the additions required in the 'mainline service' option. However, the Prince of Wales options did eliminate the need for additional capacity out of Prince Rupert at the turn of the century.

Under the 'reduced investment' scenarios, a single new vessel was required by the system in 1993 under all Prince of Wales options.

Ferry Schedules

Modifications to the existing mainline and feeder ferry schedules under the Prince of Wales focus were most significant under the Tolstoi Bay terminal options. For the mainline vessels travelling out of Seattle, (the Columbia and the new mainline ferries), the revised schedule would involve calling at

Tolstoi Bay on both the northbound and southbound legs of their weekly voyages. The mainline vessels sailing out of Prince Rupert (the Matanuska, Taku and Malaspina) would call at Tolstoi Bay on their weekly trip via Sitka. On their direct Prince Rupert-Skagway voyage, however, they would bypass Tolstoi Bay. In order to supplement service out of Prince Rupert and in the Clarence Straits region, the Aurora was assumed to make 2-day round trips from Prince Rupert to Petersburg, calling at Tolstoi Bay in both directions.

The Red Bay option involved no change to existing mainline ferry service. Feeder service was provided by the shuttle ferry which would make a daily round trip between Red Bay, Blind Slough and Wrangell, and by the Aurora which would operate on a 2-day round-trip schedule calling at Prince Rupert, Ketchikan, Hollis, Wrangell and Blind Slough.

The high-speed shuttle and high-speed loop service options also involved no change in the mainline ferry service. Under the high-speed shuttle option, the catamaran could make two round trips per day between Hollis and Ketchikan. Alternatively, on some days (e.g. mid-week or Sundays) it could make one round trip to Hollis (and possibly Kasaan) plus two round trips between Ketchikan and Metlakatla. The Aurora could then be used to serve the Prince Rupert-Clarence Straits corridor as far north as Kake on a 2-day round-trip basis.

The Prince of Wales loop option would be similar to the shuttle option except that there would be more focus on multi-community high speed routes and less focus on direct Hollis-Ketchikan links. The Aurora would then supplement service between Hollis and Ketchikan, operating on a 2-day round trip route to Prince Rupert, Ketchikan, Hollis and Wrangell.

Traffic Impacts

Traffic impacts of the various Prince of Wales options were similar to other 'focus' options under the 'meet demand' scenarios. Once a new mainline vessel was brought into service in 1989, all demand would be met throughout the planning period.

Under the 'reduced investment' scenarios, the Tolstoi Bay and Red Bay options would both result in the loss of 46 100 passenger trips and 5 400 vehicle trips out of Seattle (6.7% of peak passenger demand) over the 20-year planning period. An additional 41 900 passengers (6.1% of peak demand) and 19 000 vehicles would be diverted from Seattle to Prince Rupert.

Under the two high-speed ferry options, losses out of Seattle would amount to 22 700 passengers and 5 600 vehicles over the study period (3.3% of peak passenger demand). In addition, 23 600 passengers and 10 700 vehicles would be diverted from Seattle to Prince Rupert.

5.2.5 - Stikine Focus

The final group of long-term system options emphasized development of a mid-region road access to supplement mainline ferry service. The two preferred options from the corridor studies were evaluated in the systems context, and a third option--constructing a road from Ketchikan to the Canadian border with a connecting link to Wrangell-- was also included.

The three Stikine options therefore involved the following (see Figure 17).

- Construct a road from Wrangell to the Canadian border. Provide shuttle ferry service between Wrangell and Petersburg via Blind Slough.

- Construct a road from Petersburg to the Canadian border. Provide shuttle ferry service between Wrangell and Petersburg via Blind Slough.

- Construct a road from Ketchikan to the Canadian border with a connecting link to Wrangell. Operate ferry services south of Ketchikan/Hollis and north of Wrangell.

Investment

The Wrangell road/shuttle option involved extending the existing road south past Pat's Creek, across Wrangell Island, crossing to the mainland at the

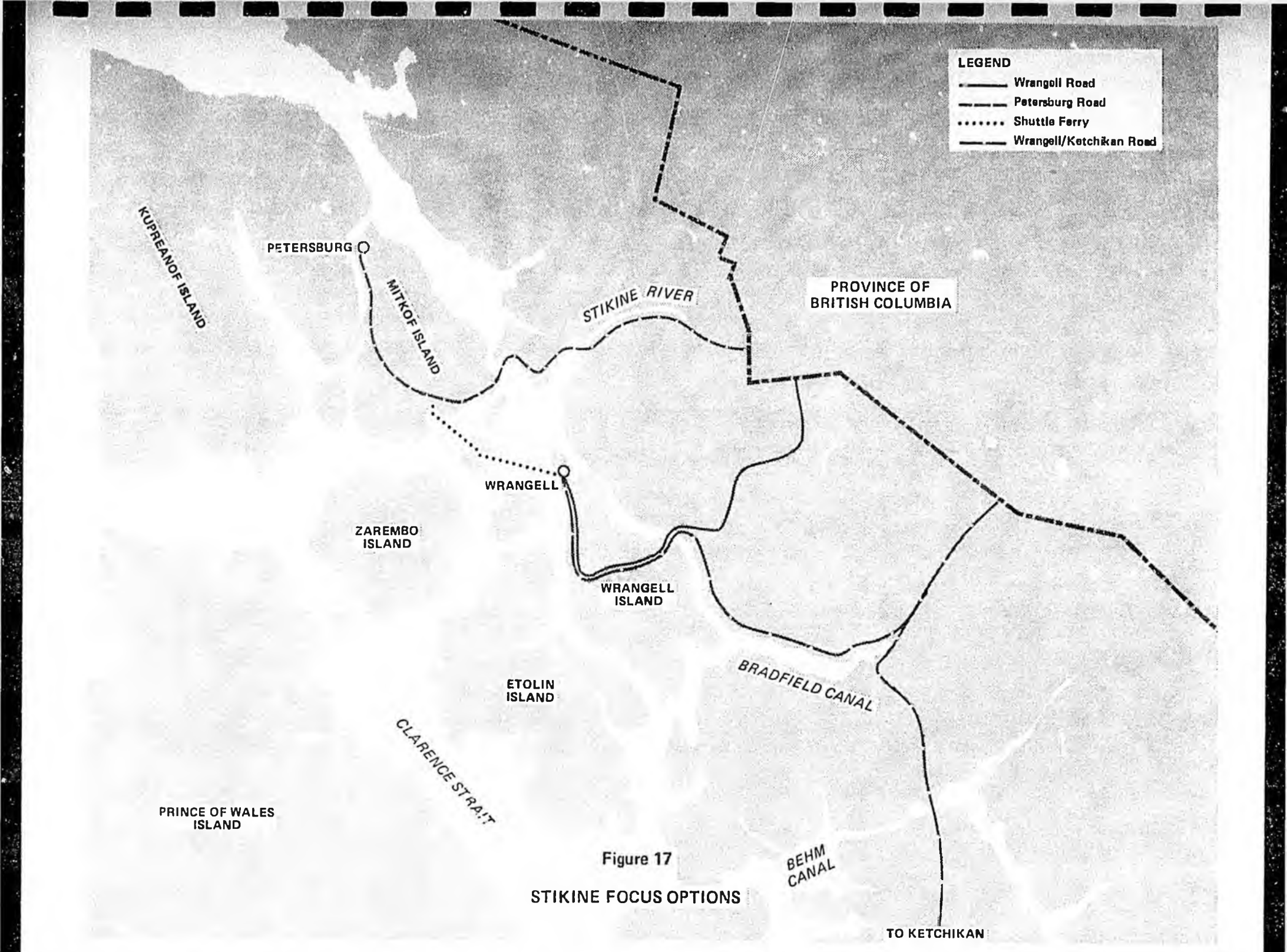


Figure 17

STIKINE FOCUS OPTIONS

Narrows, and following Aaron's Creek and the West Fork to the border. A total of 49 miles of new road would be required at an estimated cost of $157 million. In addition, a new ferry terminal would be built at Blind Slough, and a small shuttle ferry purchased which would be used to link Petersburg to Wrangell and the new highway. Capital cost for these items, together with some upgrading of the Mitkof highway, would add a further $6.5 million to the capital cost.

The Petersburg road option involved extending the existing Mitkof Highway across Dry Strait and along the south bank of the Stikine River (crossing over at Limb Island) to the Canadian border. As with the Wrangell option, a shutt'e ferry service would be provided so that both communities could be linked to the highway. This option would involve construction of 34 miles of new road at an estimated capital cost of $120 million. The shuttle ferry and terminal would add a further 6.5 million to the cost.

The Wrangell-Ketchikan road option would involve a significantly more substantia' road-building effort. The link out of Ketchikan would align northeasterly to Carroll Inlet, then follow the general alignment of Carroll Creek up to the north end of Revillagigedo Island. A shuttle ferry would be used to cross the Behm Canal just east of Bell Island after which the road would follow the Eagle River to Bradfield Canal and the North Fork of the Bradfield River and Craig River to the border. The Wrangell link would follow the alignment of the proposed Wrangell/Stikine road to Aaron's Creek, then turn south to follow the Blake Channel and Bradfield Canal, linking up with the Ketchikan Road at the mouth of the North Fork-Bradfield River.

Total construction would involve 176 miles of new road plus two shuttle-ferry docks at the Behm Canal for a total capital cost of $374 million. The shuttle ferry would add approximately $1 million to this total.

The need for mainline ferry capacity additions under the Stikine alternatives was approached in a somewhat different manner than under the other 'focus' options. While the 'meet demand' scenarios for other options involved providing ferry capacity to meet demand at both Seattle and Prince

Rupert, in the case of the Stikine road options the presumption was that the road would be used as an alternative to additional mainline capacity. Accordingly, under the Stikine options, 'meet demand' implied providing sufficient ferry capacity to carry traffic entering the system at Prince Rupert and/or at Wrangell-Petersburg. Thus, this scenario related more closely to the other options' 'reduced investment' scenarios where passengers with vehicles were obliged to transfer from one port to another in order to obtain ferry service.

Under this criterion, the Wrangell and Petersburg road options required the addition of one vessel operating out of Seattle in 1993 and a second vessel operating out of Prince Rupert in 1997. In this way, they were able to serve all vehicle traffic into the southeast region and at the same time keep the losses of Seattle foot passengers at a reasonable level.

Ferry Schedules

Apart from the added vessels, the existing ferry route structure was maintained throughout the planning period for the Wrangell and Petersburg road options.

The Wrangell-Ketchikan road option involved more drastic modifications to the ferry route structures. Since the policy of the transportation system is not to run ferry service in parallel with regional roads, it was presumed that ferry service would be eliminated between Wrangell and Ketchikan. Thus, through traffic from points south of Ketchikan to points north of Wrangell would have to travel either via road and then ferry or alternatively by ferry-road-ferry if they do not have direct access to the road system.

The proposed ferry service involved operating the Columbia on a twice-weekly shuttle service between Seattle and Ketchikan. The Aurora would provide daily round-trip service between Prince Rupert, Ketchikan and Hollis. All traffic between Seattle and Ketchikan/ Hollis and between Prince Rupert and Ketchikan/Hollis would be accommodated by one of these vessels.

Traffic from the southern termini and Ketchikan/Hollis to Wrangell and points north would use the road system (the Stewart-Cassiar Highway and/or the new Ketchikan road) to get to Wrangell. Ferry service out of Wrangell would be provided by the Malaspina, Taku and Matanuska. The Matanuska would provide twice-weekly service between Wrangell and Skagway calling at Sitka in both directions. The Malaspina and Taku would each provide two day round-trip service from Wrangell to Petersburg, Juneau, Haines and Skagway. The LeConte would continue on her existing routes. These scheduling changes are summarized in Figure 18.

Traffic Impacts

The traffic impacts of the Wrangell and Petersburg road options would involve the loss, over 20 years, of a total of 55 300 Seattle foot passengers (8% of peak season demand) and just under 1 000 vehicles. Total diversion of Seattle traffic to either Prince Rupert or the Stikine would amount to 71 800 passengers and 32 600 vehicles. This includes a total of 16 400 passengers and 7 500 vehicles travelling from Seattle to either Wrangell or Petersburg.

The traffic impacts of the Wrangell/Ketchikan road are more difficult to quantify. Theoretically, this system would fail to meet the needs of foot passengers travelling between the southern termini and points north of Ketchikan since some sort of vehicle would be required to get from Ketchikan to Wrangell. Similarly, foot-passenger traffic between Hollis/ Ketchikan and points north could be lost unless the passengers have a vehicle available to them at either Ketchikan or Wrangell. In addition, existing vehicle traffic from Seattle, Prince Rupert and Ketchikan to Wrangell, while served by the road system, would be lost to the ferry service. In total, as many as 700 000 passengers could be lost to the ferry system over the 20-year period, of which 526 000 would represent unserved demand.

Whether or not this is a fair assessment of impacts is questionable however. To evaluate a system which represents a fundamental departure from the existing type of service on the same basis as options which essentially conform to the existing pattern of demand can lead to misleading results.

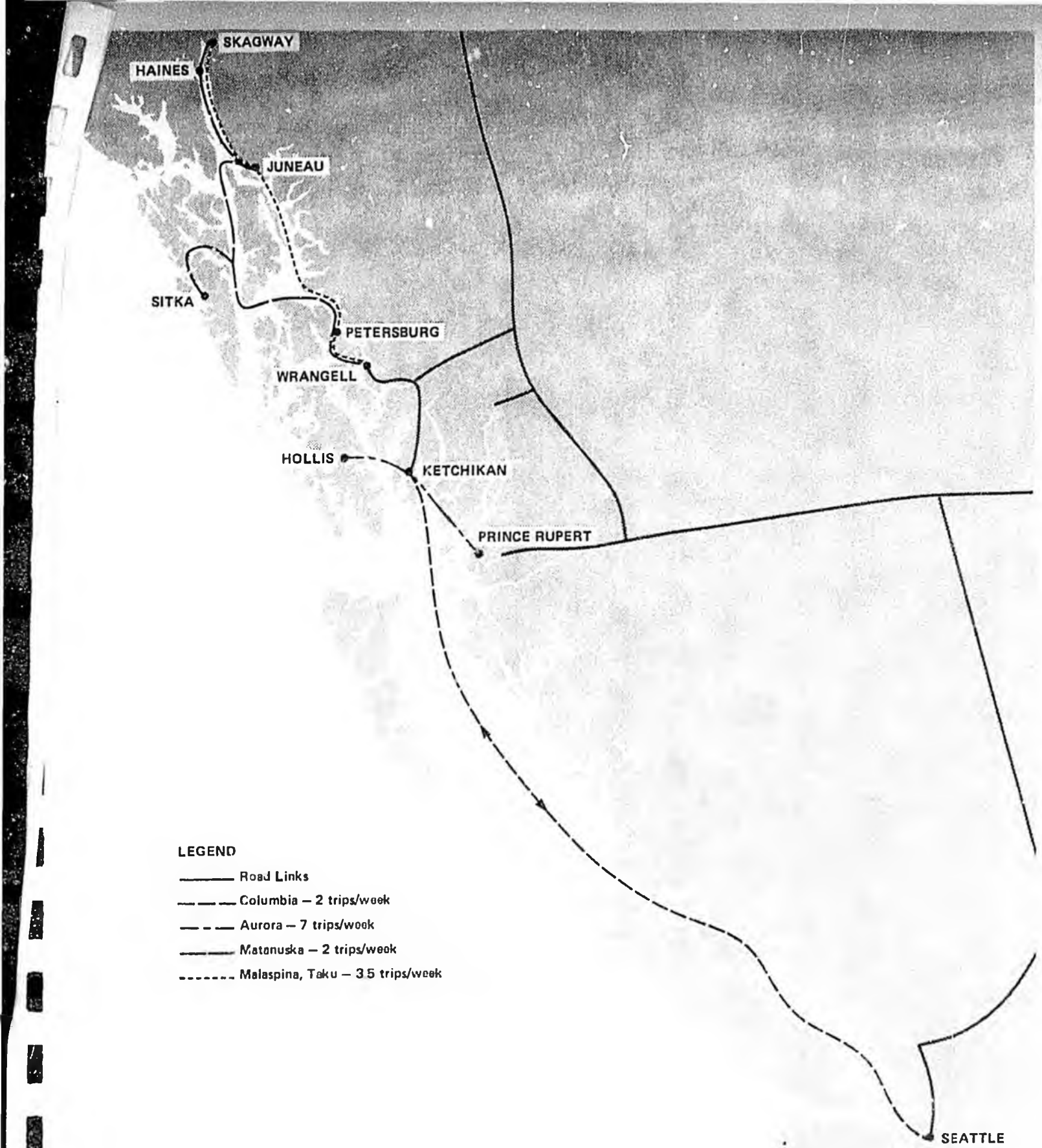


Figure 18

WRANGELL/KETCHIKAN ROAD
FERRY SERVICE

While the Wrangell/Ketchikan road option would seriously disrupt foot-passenger traffic to and from the region it could also, potentially, generate substantial new traffic into the area by drawing in through traffic from the Stewart-Cassiar and Alcan Highways.

5.3 - Evaluation of Long-Term System Options

5.3.1 - Financial Evaluation

Each of the long-term system options was first evaluated with respect to financial impacts on the Marine Highway, the state government, and the transportation user. The results of this analysis are summarized in Table 5.1 for the 'meet demand' scenarios and in Table 5.2 for the 'reduced investment' cases.

Looking first at the 'meet demand' scenarios (Table 5.1), it is apparent that one of the least costly options from the viewpoint of the state is the June 1980 Plan. All Lynn, Sitka and Stikine options and the Prince of Wales-Red Bay alternative represent a higher state cost yet serve essentially the same, or, in the case of the Stikine, a lower level of demand. However, there are three options which involve a lower overall cost to the state, all in the Prince of Wales region: the Tolstoi Bay terminal and the two high-speed ferry options.

Turning to the 'reduced investment' scenario (Table 5.2), however, leads to somewhat different results. If a slippage is allowed in terms of meeting demand as requested out of the southern terminus ports, the state can realize substantial savings over the June 1980 Plan under a number of service options. Once again, three of the Prince of Wales options appear most attractive. However, the Sitka shuttle and Lynn shuttle options also begin to look attractive.

TABLE 5.1

LONG TERM SYSTEM OPTIONS - "MEET DEMAND" SCENARIOS

FINANCIAL IMPACTS

NET PRESENT VALUE - 20 YEAR TOTAL - DISCOUNTED AT 5%
($ Million)

	June 1980 Plan ($)	Lynn Road ($)	Lynn Shuttle ($)	Sitka Baranof ($)	Sitka Rodman ($)	Sitka Shuttle ($)	Prince of Wales Tolstoi Bay Terminal ($)	Prince of Wales Rod Bay Terminal ($)	Prince of Wales Hi-Speed Shuttle ($)	Prince of Wales Hi-Speed Loop Route ($)	Stikine Wrangell Road/Shuttle ($)	Stikine Petersburg Road/Shuttle ($)	Stikine Wrangell/ Ketchikan Road ($)
Cost to AMHS													
Ship Capital	321.6	302.3	327.4	299.2	299.2	327.4	312.5	312.5	316.1	316.1	282.9	282.9	241.3
Ship Operating	773.9	747.6	787.0	716.6	720.4	785.5	753.2	762.3	770.4	771.0	724.5	724.5	667.9
Port Capital	-	3.6	2.2	3.0	3.0	-	2.6	3.9	-	-	2.0	2.0	-
Port Operating	28.2	29.9	33.5	28.2	28.2	28.2	28.2	29.0	28.2	28.2	29.0	29.0	28.2
Less fare revenue	(539.8)	(503.0)	(538.9)	(536.3)	(536.3)	(540.7)	(539.0)	(538.5)	(544.3)	(544.3)	(518.6)	(518.6)	(443.6)
Net cost to AMHS	$583.9	$580.4	$611.2	$510.7	$514.5	$600.4	$557.5	$569.2	$570.4	$571.0	$519.8	$519.8	$493.8
Cost to User													
Fares	539.8	503.0	538.9	536.3	536.3	540.7	539.0	538.5	544.3	544.3	518.6	518.6	443.6
Vehicle Operating Cost	1.5	20.4	4.9	2.7	3.9	1.0	1.7	1.6	0.4	0.4	7.1	7.1	28.2
Total Cost to User	$541.3	$523.4	$543.8	$539.0	$540.2	$541.7	$540.7	$540.1	$544.7	$544.7	$525.7	$525.7	$471.8
Cost to State													
AMH Deficit	583.9	580.4	611.2	510.7	514.5	600.4	557.5	569.2	570.4	571.0	519.8	519.8	493.8
Road Capital	-	176.7	1.6	121.5	107.1	-	14.6	42.2	-	-	106.4	80.3	251.7
Road Operating	-	15.8	6.4	10.5	5.0	-	1.9	6.8	-	-	14.3	7.1	32.6
Total Cost to State	$583.9	$772.9	$619.2	$642.7	$626.6	$600.4	$574.0	$618.2	$570.4	$571.0	$640.5	$607.2	$778.1
PAX not served ('000)	12.5	12.5	7.8	12.5	12.5	7.8	12.5	12.5	0	0	55.3	55.3	525.9

TABLE 5.2

LONG TERM SYSTEM OPTIONS - "REDUCED INVESTMENT" SCENARIOS

FINANCIAL IMPACTS

NET PRESENT VALUE - 20 YEAR TOTAL - DISCOUNTED AT 5%
($ Million)

	June 1980 Plan ($)	Lynn Road ($)	Lynn Shuttle ($)	Sitka Baranof ($)	Sitka Rodman ($)	Sitka Shuttle ($)	Prince of Wales Tolstoi Bay Terminal ($)	Prince of Wales Red Bay Terminal ($)	Prince of Wales Hi-Speed Shuttle ($)	Prince of Wales Hi-Speed Loop Route ($)
Cost to AMH										
Ship Capital	321.6	260.1	281.4	256.9	256.9	281.4	270.3	270.3	273.9	273.9
Ship Operating	773.9	699.2	725.6	659.2	663.8	726.5	699.2	708.1	716.2	716.8
Port Capital	-	3.6	2.2	3.0	3.0	-	2.6	3.9	-	-
Port Operating	28.2	29.9	33.5	28.2	28.2	28.2	28.2	29.0	28.2	28.2
Less fare revenue	(539.8)	(482.6)	(519.8)	(509.6)	(509.6)	(524.5)	(524.8)	(524.2)	(533.7)	(533.7)
Net cost to AMHS	$583.9	$510.2	$522.9	$437.7	$442.3	$511.6	$475.5	$487.1	$484.6	$485.2
Cost to Users										
Fares	539.8	482.6	519.8	509.6	509.6	524.5	524.8	524.2	533.7	533.7
Vehicle Operating Cost	1.5	25.5	10.2	4.2	5.4	5.7	3.7	3.6	1.6	1.6
Total Cost to User	$541.3	$508.1	$530.0	$513.8	$515.0	$530.2	$528.5	$527.8	$535.3	$535.3
Cost to State										
AMH Deficit	583.9	510.2	522.9	437.7	442.3	511.6	475.5	487.1	484.6	485.2
Road Capital	-	176.7	1.6	121.5	107.1	-	14.6	42.2	-	-
Road Operating	-	15.8	6.4	10.5	5.0	-	1.9	6.8	-	-
Total	$583.9	$702.7	$530.9	$569.7	$554.4	$511.6	$492.0	$536.1	$484.6	$485.2
PAX not served ('000)	12.5	31.1	13.0	90.7	90.7	13.0	46.1	46.1	22.7	22.7

5.3.2 - Service Cost Effectiveness

As noted in the methodology section, however, the financial analysis does not provide an assessment of the full impacts of the different levels of traffic served, nor does it provide a measure of the quality of service being offered under the different system options.

Accordingly, a supplemental analysis was carried out whereby user costs were adjusted to take into account the different degrees of service being provided, and a travel time assessment was developed to provide a measure of service quality.

The adjusted differences between each option and the base case (June 1980 Plan) were then calculated in terms of user costs and user costs plus travel time. The values of these 'impacts' were then compared with the increases or decreases in government cost under each option relative to the base case.

The comparative monetary impacts of the various long-term options are given in Table 5.3 for the 'meet demand' scenarios and in Table 5.4 for the 'reduced investment' scenarios.

The figures in Table 5.3 indicate that, based on quantifiable monetary impacts, three of the Prince of Wales options (Tolstoi Bay terminal and the two high-speed craft options) are more attractive than the June 1980 Plan from both the user and government perspectives. The two Lynn options, the Sitka shuttle and the three Stikine options provide some monetary savings to users, but these savings are less than the corresponding increases in government costs. The remaining three options are less attractive to both users and the state from the monetary viewpoint (although service advantages may serve to offset some of these costs).

Turning to Table 5.4 which presents the analysis of 'reduced investment' scenarios, it is apparent that, by allowing a slackening of the efforts to meet demand at the southern termini, the government can realize substantial savings at very little monetary cost to the user. In the 'reduced

TABLE 5.3

LONG-TERM SYSTEM OPTIONS -
'MEET DEMAND' SCENARIOS
ANALYSIS OF MONETARY IMPACTS

Option	Change in User Costs[1)2)] ($millions)	Change in Government Costs[1)2)] ($millions)	Comments
LYNN			
- Road	-73.6	+189.0	Users save $0.39 per dollar of added state cost
- Shuttle	- 9.1	+ 35.3	Users save $0.26 per dollar of added state cost
SITKA			
- Baranof	+ 1.2	+ 58.8	Less attractive to both users and state
- Rodman	+ 2.4	+ 42.7	Less attractive to both users and state
- Shuttle	- 0.1	+ 16.5	Users save $0.01 per dollar of added state cost
PRINCE OF WALES			
- Tolstoi Bay	+ 0.2	- 9.9	Government saves $49.50 per dollar of adder user cost
- Red Bay	+ 0.1	+ 34.3	Less attractive to both users and state
- Shuttle	- 0.4	- 13.5	More attractive to both users and state
- Loop	- 0.4	- 12.9	More attractive to both users and state
STIKINE			
- Wrangell Road	- 3.5	+ 56.6	Users save $0.06 per dollar of added state cost - does not meet demand
- Petersburg Road	- 3.1	+ 23.3	Users save $0.13 per dollar of added state cost - does not meet demand
- Wrangell/ Ketchikan Road	-18.6[3)]	+194.2	Users save $0.10 per dollar of added state cost - does not meet demand

1) As compared with 'Mainline Service Option - June 1980 Plan'.
2) Net present value - 20-year total.
3) Assuming existing pattern of demand.

TABLE 5.4

LONG-TERM SYSTEM OPTIONS -
'REDUCED INVESTMENT' SCENARIOS
ANALYSIS OF MONETARY IMPACTS

Option	Change in User Costs[1)2)] ($millions)	Change in Government Costs[1)2)] ($millions)	Comments
LYNN			
- Road	-73.1	+118.8	Users save $0.62 per dollar of added government costs
- Shuttle	- 9.1	- 53.0	More attractive to both users and state
SITKA			
- Baranof	+ 3.6	- 14.2	Government saves $3.9 per dollar of added user cost
- Rodman	+ 4.8	- 29.5	Government saves $6.15 per dollar of added user cost
- Shuttle	-	- 72.3	Government saves, users indifferent between options
PRINCE OF WALES			
- Tolstoi Bay	+ 1.1	- 91.9	Government saves $83.55 per dollar of added user cost
- Red Bay	+ 1.0	- 47.8	Government saves $47.80 per dollar of added user cost
- Shuttle	+ 0.2	- 99.3	Government saves $496.50 per dollar of added user cost
- Loop	+ 0.2	- 98.7	Government saves $493.50 per dollar of added user cost

1) As compared with 'Mainline Service Option - June 1980 Plan'.
2) Net present value - 20-year total.

investment' scenarios, all options except the Lynn road offer government cost savings which more than exceed increases in user costs. In one instance, the Lynn shuttle, both government and users are better off financially than under the June 1980 Plan, while in a second instance, the Sitka shuttle case, user costs are the same as under the June 1980 Plan, but government costs are substantially lower. It would therefore appear that, in terms of monetary impacts on users and the State, it is possible to achieve substantial savings by meeting combined southern termini demand rather than by attempting to serve all of the demand generated at Seattle.

(It should be reiterated, however, that this hypothesis does not apply in the extreme case where all of the Seattle demand is served out of Prince Rupert. As indicated in the short-term 'Prince Rupert Terminus' option the Marine Highway is better off providing some service to Seattle in view of the higher revenue-earning capability of vessels on the Seattle route.)

The final step in the analysis was to integrate savings or increases in travel time into the comparison of user and government impacts. These changes in user travel time relative to the 'June 1980 Plan' option are shown, for the 'meet demand' scenarios, in the first column of Table 5.5. (Total travel time impacts were not calculated for the Wrangell-Ketchikan Road option since it was felt that the probable future pattern of demand would change in response to the significant service changes and that comparison, based on existing demand patterns, would be misleading.)

The table indicates that, on a system-wide basis, several of the system options generate travel time savings over and above those realized under the 'June 1980 Plan' option. The most significant savings arise under the two Lynn options, and in the Sitka shuttle case. Lesser travel time savings accrue under the four Prince of Wales service options, while the two Sitka road options and the Stikine corridor cases lead to overall increases in total system travel time.

The flow of these travel time impacts, however, is not uniform among the options. An assessment was carried out with regard to the distribution of time savings among the various system users which calculated the portion of

TABLE 5.5

LONG-TERM SYSTEM OPTIONS - 'MEET DEMAND' SCENARIOS
USER TRAVEL TIME IMPACTS AND REQUIRED VALUE OF TIME

Option	Change in Travel Time[1] (million hours)	Required Total Time Value[2] ($millions)	Required Hourly Time Value ($/h)
LYNN			
- Road	-15.3	115.4	> 7.54
- Shuttle	- 5.8	26.2	> 4.52
SITKA			
- Baranof	+ 0.2	60.0	negative
- Rodman	+ 0.6	45.1	negative
- Shuttle	- 4.0	16.4	> 4.10
PRINCE OF WALES			
- Tolstoi Bay	- 0.9	(9.7)	ø
- Red Bay	- 0.6	34.4	>57.33
- Shuttle	- 2.4	(13.9)	ø
- Loop	- 0.7	(13.3)	ø
STIKINE			
- Wrangell Road	+ 1.9	53.1	negative
- Petersburg Road	+ 1.9	20.2	negative

1) Relative to 'June 1980 Plan' option.
2) Net total of user and government cost increases - brackets denote net cost savings.

total time savings (or increases) accruing to peak season traffic out of the southern termini versus the portion accruing to peak season internal traffic and to shoulder and low-season users.

The findings indicated a wide variance among options in the distribution of travel time impacts. In the Lynn road case, 79% of the travel time savings were 'internal'; i.e. accrued to peak internal traffic and to shoulder and low-season users, while 21% accrued at the southern termini. In the Lynn shuttle case, however, only 21% of the savings were realized internally; the balance accrued to traffic out of Seattle and Prince Rupert.

In the Sitka cases, the Baranof road option led to an increase in total system travel time of 0.2 million hours; however, 'internal users' realized net savings of 0.2 million hours while traffic out of the southern termini incurred losses of 0.4 million hours. In the Rodman Bay case, total system impacts represented an increase of 0.6 million hours in travel time, of which 33% (or a 0.2 million hour increase) accrued to internal users. In the Sitka shuttle case, however, 85% of travel time savings accrued internally.

In the Prince of Wales cases, the two new terminal options (Tolstoi Bay and Red Bay) resulted in relatively small system-wide travel savings. Approximately 90% of these savings accrued internally. In the high-speed shuttle option, approximately one-third of the benefits accrued internally (which, in terms of hours, is roughly equivalent to the internal time savings accruing under the new terminal options). In the high-speed loop option, however, virtually all of the 0.7 million hours saved accrued to traffic to and from the southern termini.

Finally, in the case of the two Stikine options, it was found that although system-wide time impacts represented an increase in total travel time of 1.9 million hours, this consisted of an increase of 2.5 million hours to peak traffic out of the southern termini, and a saving of 0.6 million hours to peak internal and shoulder and low season users.

Table 5.5 also shows the required value which would have to be assigned to travel time impacts (both in total and on an hourly basis) in order to offset the net monetary impacts of the system options. As described earlier, this represents an 'imputed value' approach to determining travel time value and provides a basis for subjective judgement as to whether total marginal benefits are likely to outweigh marginal costs.

The results of the travel time analysis suggest that under the 'meet demand' scenarios, three Prince of Wales options present definite advantages to both system users and the state government as compared with the June 1980 Plan. These are the Tolstoi Bay terminal and the two high-speed ferry options. In addition to providing net monetary savings (as described in Table 5.3), these options also generate savings in total system travel time over the planning period. Hence, no positive value needs to be assigned to the travel time savings in order for marginal benefits to offset marginal costs.

(If one were to assign a negative value to travel time savings, then these scenarios could theoretically appear less attractive. A negative time value would imply, however, that travellers found time savings to be a disadvantage and were deterred from using the system as a result of the improved travel times. While this may be arguable in a general sense, that is with reference, for example, to a tourist's preference for a leisurely trip, it was felt that within the range of time savings being considered for the system it was more likely that users would assign either zero value or some positive value to travel time savirgs.)

On the premise that travel time savings have some positive value, three other options also show potential advantages over the June 1980 Plan: the Sitka shuttle, the Lynn shuttle, and the Lynn road. Under the two shuttle cases, users would have to assign a value in excess of $4.10 and $4.52 per hour respectively to the travel time savings in order to equalize system benefits with costs while under the Lynn road option, users would have to assign a value above $7.54 per hour to travel time.

In the remaining options, it is unlikely that the total benefits relative to the base case would outweigh the total costs. Travel time savings under the Red Bay option would only offset the monetary cost increases when the value of travel time savings exceeded $57.33 per hour. In the other options (the Sitka road cases and the Stikine corridor options), both travel time and monetary cost would increase on a system-wide basis, and time savings would have to have a negative value in order to offset cost increases.

Table 5.6 presents the same type of analysis for the 'reduced investment' scenarios. As expected, in view of the smaller number of mainline vessels and hence lower service frequency, the travel time savings are less than under the 'meet demand' scenarios. Only two options, the Lynn road and the Sitka shuttle, show system-wide travel times which are lower than under the June 1980 Plan 'meet demand' scenario. The remaining options all lead to varying levels of increase in total user travel time.

In most cases, however, these travel time increases are offset by net savings in monetary costs (as described in Table 5.4). Only the Lynn road option leads to higher net monetary costs than in the base case.

Comparison of the travel time impacts and the monetary costs (required total time value) in Table 5.6 indicates that one option, the Sitka shuttle, shows definite advantages over the June 1980 Plan. This option yields a slight (0.7 million hours) decrease in total system travel time and provides a substantial net monetary saving relative to the base case. In addition, the Lynn shuttle and Prince of Wales shuttle also appear likely to be viable. In these cases, substantial cost savings are offset by small increases in travel time. These travel time increases would not outweigh the monetary benefits, however, as long as the value of these time increases is assumed to be less than $310.50 per hour (for the Lynn shuttle), or less than $247.75 per hour for the Prince of Wales shuttle case.

The remaining options, though still potentially viable, are less attractive than the above three cases since all result in either higher travel time increases and/or lower monetary savings. Among these options, the three remaining Prince of Wales cases are most likely to prove beneficial,

TABLE 5.6

LONG-TERM SYSTEM OPTIONS -
'REDUCED INVESTMENT' SCENARIOS
USER TRAVEL TIME IMPACTS
AND REQUIRED VALUE OF TIME

Option	Change in Travel Time[1] (million hours)	Required Total Time Value[2] ($millions)	Required Hourly Time Value ($/h)
LYNN			
- Road	-10.2	45.7	< 4.48
- Shuttle	+ 0.2	(62.1)	<310.50
SITKA			
- Baranof	+ 3.1	(10.6)	< 3.42
- Rodman	+ 3.5	(24.7)	< 7.06
- Shuttle	- 0.7	(72.3)	Ø
PRINCE OF WALES			
- Tolstoi Bay	+ 2.7	(90.8)	< 33.63
- Red Bay	+ 1.3	(46.8)	< 36.00
- Shuttle	+ 0.4	(99.1)	<247.75
- Loop	+ 2.0	(98.5)	< 49.25

1) Relative to 'June 1980 Plan' option.
2) Net total of user and government cost increases - brackets denote net cost savings.

requiring only that travel time be valued at less than $30 to $50 per hour in order for cost savings to outweigh travel time increases. The Sitka road options are less attractive since they involve both greater increases in travel time and lower savings in monetary costs. Travel time value must be less than $7.06 per hour in the Rodman Bay case and less than $3.42 per hour in the Baranof option.

The remaining option, the Lynn road, is more difficult to rank against the other options because it involves travel time savings (as opposed to increases) offset by monetary costs. In this instance, the road option would prove viable as long as the value of travel time savings exceeded $4.48 per hour.

5.3.3 - Summary

The assessment of long-term surface system options indicates a number of pertinent points. These may be highlighted as follows.

- If the system goal is to meet all projected demand for surface transportation, substantial investment will be required in new facilities, and increased costs will be incurred by the Marine Highway and by the state.

- The least costly methods (in monetary terms) of meeting this demand can be achieved by making changes in service to Prince of Wales Island (either by building a new terminal at Tolstoi Bay at a total Regional System cost of $574 million or by introducing high-speed ferry service out of Hollis at a cost of approximately $571 million). These options are followed (in order of increasing cost) by the base case June 1980 Plan option ($584 million), the Sitka shuttle option ($600 million), the Red Bay terminal ($618 million) and the Lynn shuttle ($619 million). The Petersburg road option, although costing only $607 million, does not really rank with the preceding cases as it does not meet Seattle demand to the same extent.

- If a lower capacity to meet demand can be accepted within the system (specifically by treating combined Seattle and Prince Rupert vehicle demand as a single unit and requiring that both ports be at capacity before new vessels are acquired), the Marine Highway and state can achieve significant cost savings. Total state costs under these 'reduced investment' scenarios range from $485 million for cases involving high-speed ferry service to Hollis to $570 million for the Sitka-Baranof road option. Only the Lynn road, at $703 million, remains more costly than the 'June 1980 Plan - meet demand' scenario.

- In terms of service-cost effectiveness, where each new system option is compared with the June 1980 Plan in terms of user cost, travel time and cost to the government, several 'meet demand' options appear to be potentially more attractive than the June 1980 Plan, primarily as a result of improved service quality which offsets the increased costs (or, in the Prince of Wales cases, enhances the cost savings). In declining order of preference, these would be Prince of Wales high-speed ferries, Tolstoi Bay terminal, Sitka shuttle, Lynn shuttle, and Lynn road.

- Service-cost effectiveness evaluations for the 'reduced investment' scenarios indicate even more significant advantages from several of the options relative to the June 1980 Plan case since the negative impacts of these scenarios (in terms of costs of unmet demand and increases in travel time) are sufficiently small that they are unlikely to outweigh the significant government cost savings. Rankings of the 'reduced investment' options were somewhat different than the 'meet demand' cases, with the Sitka shuttle achieving the highest ranking followed by the Lynn shuttle, the Prince of Wales shuttle, and the other Prince of Wales system options.

6 - CONCLUSIONS

6 - CONCLUSIONS

6.1 - Summary of Findings

One of the main objectives of the definition and assessment of surface system alternatives was to provide a quantitative basis for selecting from among a number of technical and operational alternatives those options which offered the greatest improvement in 'service' relative to cost. A second objective, however, was to provide information with regard to the trade-offs associated with the conflicting pressures to maximize service and to keep costs at a reasonable level.

With these considerations in mind, the more significant findings from the analysis may be summarized as follows.

Short-Term

- Of the options available to improve system capacity and service in the near future, the most attractive overall involve maximizing use of existing vessels. At existing fare levels, the Marine Highway cannot generate sufficient revenues to offset the capital cost of new mainline vessels. Therefore, options involving new vessel acquisition generally result in higher system deficits.

- Increasing service to Seattle improves the financial picture from the viewpoint of the AMHS and, to a point, offers a better matching of capacity and demand. Marine Highway ratios of revenue to operating cost are highest on the Seattle route due to the high load factors, the relatively high fare levels, and the berth revenue.

- Too heavy a focus on Seattle service, however, leads to lower service levels within Southeast Alaska and potentially to capacity problems on some links in the system (in particular Ketchikan-Petersburg and Juneau-Haines).

- The most attractive of the options considered involves operating both the Matanuska and Columbia out of Seattle during the peak season. However, this leads to vehicle capacity problems in the Prince Rupert to Petersburg corridor.

  These problems could be mitigated by operating the Aurora between Prince Rupert and Petersburg where she would run full-time at near-capacity load factors.

- Moving the Aurora creates a gap in terms of service to Hollis and, under current plans, in service to Hyder and Metlakatla. This problem could be alleviated by purchasing one or two small high-speed catamarans to serve the Hollis-Ketchikan-Metlakatla routes.

Long-Term

- In the long-term, a wider variety of options are open in terms of improving capacity and service.

- The most costly long-term options are those which attempt to meet projected demand since all involve substantial investment in roads and/or new mainline ferries.

- Substantial savings can be generated by accepting a reduction in the service of demand out of Seattle, particularly with regard to vehicle traffic which could, presumably, transfer to Prince Rupert.

- If full demand is to be met, the most attractive options involve changes in service to Prince of Wales Island either by building a terminal at Tolstoi Bay or by instituting high-speed ferry service to Hollis. While this option still requires two new mainline vessels over the 20-year planning period, it allows deferral of a third mainline vessel by freeing the Aurora to operate more frequently in the Prince Rupert-Petersburg corridor.

- If a reduced level of service is accepted in terms of meeting Seattle demand, the government can obtain substantial cost savings under certain options without creating undue impacts on users either in terms of unmet demand or service quality. The most attractive option under these 'reduced investment' scenarios is to terminate mainline service to Sitka and provide high-speed ferry service as a substitute. Next in attractiveness is to substitute a high-speed ferry for mainline service up the Lynn Canal. These two options are followed in attractiveness by the 'reduced investment' versions of the Prince of Wales options relating to Tolstoi Bay and to high-speed ferries.

6.2 - Conclusions

The preceeding summary highlights two issues from the viewpoint of establishing a Regional Transportation Plan. First, there are technical and operational options available in both the short and long term which represent more service-cost effective solutions than the existing system and the June 1980 Mainline Service system respectively.

Secondly, in terms of balancing between service-related (meet demand) and cost-related goals, an attempt to meet all future demand (i.e., fully satisfy the service related goals) results in substantial penalties in terms of keeping government expenditures under control. However, a relatively small compromise in terms of meeting demand, particularly out of the southern termini, results in substantial cost savings to the government without causing major penalties in terms of user service levels.

With these factors in mind, the following proposals are put forward as a plan of action for the provision of surface transportation services. It will be noted that the proposed systems represent a hybrid of several systems alternatives, drawing, where possible, on the best aspects of the preferred systems and using aspects of other systems to offset perceived problems.

Short-Term

- Additional service should be provided to Seattle. This improves the Marine Highway's financial position and directs more capacity towards the higher demand routes.

- To make up for the lost services of a mainline vessel within the region, the Aurora should be drawn into a truncated mainline service out of Prince Rupert.

- The Aurora's current routes in the Prince of Wales-Clarence Straits region should be served by two new high-speed catamaran-type vessels. These involve a minimum capital cost (in the range of $3 million each) and could provide a higher service level on these routes.

Long-Term

- The best results in terms of 'focus' options arise under the 'reduced investment' scenarios, in particular those which involve using two high-speed craft to serve either Sitka or the Lynn Canal and those which involve changes in Prince of Wales service.

- The Prince of Wales high-speed service proposed in the short-term therefore appears to have long-term viability and should be maintained.

- Some of the scheduling and service benefits of high-speed service to Sitka and the Lynn could be retained if only a single high-speed ferry were assigned to each in combination with a reduced level of mainline service. This is particularly true in the Sitka case where a Sitka-Petersburg high-speed service would not attract sufficient traffic to be viable on its own merits.

- It is therefore recommended that two large SES-type high-speed ferries be acquired, one to provide daily round trip service between Sitka and Juneau, calling at Angoon, Hoonah and Tenakee Springs, and the second to

provide twice-daily round trip service from Juneau to Haines and Skagway.

- The open jaw routes which were proposed out of Seattle under the Sitka and Lynn Focus options could be split between two mainline vessels with the Matanuska serving Sitka but not the Lynn and the Columbia serving the Lynn but not Sitka.

- The LeConte could provide increased service in the Sitka-Petersburg corridor and into Pelican as well as supplemental and heavy-freight service into the Juneau-Sitka corridor.

- The remaining vessels could provide increased service between Prince Rupert and Skagway to increase the system's total vehicle-carrying capacity as well as service frequency in the mainline corridor.

- Under this option, the decision on acquiring a new mainline ferry could be deferred until the mid to late 1990s. This reduces the Marine Highway's cash flow requirements and also reduces the risks that a new vessel will be underutilized if demand does not materialize or if private operators achieve substantial market penetration.

APPENDIX A

EVALUATION METHODOLOGY

APPENDIX A

EVALUATION METHODOLOGY

A1 - GENERAL

The general method used to assess corridor alternatives consisted of five main steps

- Forecast expected travel demand in the corridor over the next 20 years;
- Define a range of possible methods of meeting this demand, and the equipment and/or infrastructure necessary to serve the traffic under each method;
- Determine the associated capital and operating costs and revenues;
- Calculate the financial impacts of each alternative from the viewpoint of the operator, the government and the user;
- Calculate the service/cost effectiveness of each alternative and select the preferred option(s).

Each of these steps is described in greater detail in the following sections.

A2 - TRAVEL DEMAND

The forecasting of travel demand both within the Southeast Region as a whole and within particular corridors of the Region involved first analyzing the

existing patterns of traffic for both surface (marine, road) and air modes and identifying the factors which would cause this traffic to grow and change in the future.

Since the data regarding existing travel patterns was limited, this analysis was kept at a relatively simple level. Three factors were identified as the key issues impacting future travel demand. These were: regional population growth, growth in tourism, and changes in transportation service. The first two factors were deemed to cause general growth within the existing patterns of travel demand (or growth in 'base traffic') while the third was deemed to either increase or decrease the 'base traffic' demand within particular corridors.

To forecast 'base traffic' demand (i.e., demand in the absence of service changes) existing travel was separated, on the basis of survey data, into tourist and nontourist traffic. This separation was done on a seasonal basis (in order to reflect the higher summer peaking in tourist travel) for both marine highway and air services. Tourist and nontourist components of existing traffic were then forecast, the former on the basis of expected growth in tourism travel to Alaska and the latter on the basis of expected population growth in the Southeast Region.

The growth rates assumed for tourism travel and for regional population were based on historic growth rates, tempered by concerns that with declining revenues and potential declines in government spending, these growth rates could not be maintained over the long-term. Consequently, tourism was assumed to grow at 4.5% annually to 1990 and at 2.5% annually thereafter. Regional population was assumed to grow at 2.8% per year to 1990, tapering off to 1% thereafter.

Over and above these population and tourism based growth rates, there was a special additional growth applied to air traffic, amounting to 1.4% per year. This additional growth reflected the long-term increase in the propensity of travelers to use the air mode--an increase which has generated growth in air traffic above and beyond that which can be explained by population and tourism growth alone.

The origin-destination patterns of this future 'base traffic' demand were assumed to follow the existing pattern of movements to, from and within the region. Therefore a growth in marine highway tourist demand, for example, would cause a corresponding percentage growth in traffic on all marine highway tourist-serving routes.

Once this 'base traffic' load had been calculated for the system and for the various corridors, adjustments were made to corridor demand to reflect the different service levels associated with corridor alternatives. These adjustments included diversion of traffic to a different port, loss of traffic, transfer between modes, and increases in traffic due to improved access depending on the service scenario. The particular adjustments associated with each corridor option are outlined in detail as part of the description of alternatives (Section A3).

A3 - DEFINITION AND DESCRIPTION OF CORRIDOR ALTERNATIVES

Having established the potential traffic demand within a corridor, the existing surface transportation service was reviewed and alternative road and marine options proposed which would increase capacity and or reduce operations costs. These alternative options were drawn from community suggestions, proposals put forward by the Department of Transportation, and new proposals put forward by the consultant.

An effort was made to develop a wide variety of corridor options in order to provide a range of costs and impacts for comparison purposes. Both capital (new roads, new ferries) and operational (new schedules) options were included when appropriate. In all cases the alternatives included a base-case 'no change' option against which new options could be assessed.

Once the corridor options had been defined, a detailed operating and investment schedule was laid out for each alternative specifying the traffic

to be served, the way in which it would be served, the timing of new road and new vessel requirements, and the operating schedules and procedures within the corridor. Traffic and operating procedures were both specified on a seasonal basis.

A4 - DEVELOPMENT OF COST DATA

Capital Costs - Roads

Capital costs for new road links were based on the Department of Transportation's per-mile costs of construction over various types of terr· n. Routes were specified through detailed analysis of relief maps, through discussion with DOT/PF engineers and, where possible, through inspectior of the area. Road links were then broken down into segments based on the severity of terrain and degree of construction difficulty, and the appropriate per-mile costs were applied.

Special structures such as bridges, tunnels, snowsheds, etc, were costed independently and included in total cost where required.

Capital Costs - Marine

Capital costs for marine facilities and equipment included costs of new terminal facilities, capital costs associated with the existing ships, and capital costs associated with new shuttle ferries, mainline ferries and high-speed craft. In the first two cases capital costs were based on Marine Highway data regarding terminal construction costs and expected replacement value of the existing fleet. In the case of new vessels, typical current construction costs for the type of vessel required were developed through discussions with shipyards, brokers, and manufacturers.

Operating Costs - Road

Operating costs for the road links included regular maintenance and winter snow removal. They were based on the actual costs per mile incurred by the DOT/PF.

Operating Costs - Marine

The operating costs for existing vessels and terminal facilities were based on the actual experience of the Marine Highway. Vessel costs were segregated into annual costs (major maintenance, overheads) seasonal costs (crew, stores and supplies) and daily costs (primarily fuel).

Operating costs for new vessels were based on Marine Highway experience in the case of mainline ferries, and on discussions with builders and other operators in the case of shuttle ferries and high-speed craft.

User Costs

Costs to users fall into three main categories: fares on existing ferries, fares on new ferries or new ferry routes, and vehicle operating costs on road links.

Fares on the existing ferry system were based on the current summer and winter rates for the Marine Highway. For new routes on existing vessels, fares were assumed to be the same per-mile as on current routes.

For new types of equipment (shuttle ferries, high-speed craft) it was initially assumed that fares would be set on the same basis as current ferry charges; that is, that fares would have to cover at least half of the total operating costs (excluding capital) of the new vessels. However, later analysis indicated that new vessels serving as a substitute for existing vessels generated sufficient savings elsewhere in the system that their fares could be maintained at existing fare levels and still lead to an overall improvement in the system operating cost recovery.

Accordingly current fare levels were used for traffic on these new vessels.

Vehicle operating costs on road links were based on the variable portion of average per-mile operating costs for mid-size automobiles. This was felt to be a fair representation of the mix of vehicles likely to be using the road. In actual fact, owners of vans and campers would pay more while owners of small cars would pay less.

In cases where corridor options required vehicles to divert from one port to another, vehicle operating costs were increased to include overnight accommodation if the diversion involved more than 12 hours driving time.

A5 - FINANCIAL ANALYSIS

The traffic, operating and cost data bases described above were then drawn together into a year-by-year financial analysis of each corridor alternative. Capital costs for roads, vessels and terminal facilities were assigned to the years in which they would be incurred. Road operating costs were based on miles of road in service, while marine operating costs were derived from the proposed Marine Highway schedules under each option.

User costs for each year were determined by first calculating the number of vehicles using the road links (either as a result of being diverted to another port and/or as a result of a new road link being available), and multiplying this number by the cost per vehicle over the relevant distance. A revised ferry demand matrix was then calculated (taking into account diverted and/or lost ferry traffic) and multiplied by the fares matrix to determine total fares paid to the Marine Highway.

The annual financial flows were then discounted at an interest rate of 5% to determine the net present value of capital, operating and user costs under each scenario.

A6 - EVALUATION OF SERVICE/COST EFFECTIVENESS

The financial evaluations provided an indication of the total costs to operators and users associated with the various corridor alternatives. They did not, however, reflect the differences among alternatives in terms of ability to serve demand and the quality of service provided.

In order to account for these differences, each corridor alternative was compared with the corridor 'base case' (which represented continuation of existing service) with respect to the number of passengers and vehicles served, the cost per user served, and the average travel time (including delays related to frequency of service). Appropriate values were assigned to the 'service' differences between the alternatives and the base case to represent the incremental benefit (cost) to the user. These user benefits (or costs) were then compared with the incremental cost (or cost saving) to the government to form a basis for evaluating service/cost effectiveness.

The approach to assigning values to 'service' differences varied somewhat between corridors due to the different focuses of the corridor alternatives. In the Lynn corridor, for example, the focus was on improving service through new modes and on generating traffic over and above existing demand. Measures were therefore required for the value of time and cost savings to existing and to new traffic. In the Ketchikan corridor, the focus was on the existing ferry system and on trying to adjust schedules so as to meet a higher portion of current demand in a cost-effective manner, and measures were primarily required for the costs of not meeting traffic needs or of meeting needs by diverting traffic to other ports.

In general, the following principles were used in assigning values to service differences.

- Cost savings to existing traffic - include the full dollar value of saving.

- Cost savings to new traffic - include half of the difference between the fare (or travel cost) under the new option and the fare applicable under the base case (this presumes that traffic attracted as a result of less expensive service assigns a lower value to the trip).

- Cost of failing to meeting demand - include the average surplus which the user would have enjoyed if space had been available. Surplus was calculated by postulating the shape of the demand curve for service and calculating the average difference between the maximum which users would have been willing to pay for the trip and the fares which would normally have been charged. (This is discussed in greater detail in Appendix B.)

- Costs to diverted traffic - assume that users diverted to another port attribute a cost to the diversion equivalent to any out-of-pocket savings associated with using the new port. Thus users moved from one port to another were assumed to incur neither benefits nor costs. This assumption was necessary because the total trip cost from Seattle was lower via road to Prince Rupert than via direct ferry, yet demand continues to be strong out of Seattle. There is, therefore, some nonmonetary advantage to the direct ferry trip which offsets cost savings associated with diverting to Prince Rupert. This nonmonetary advantage could best be accounted for by assuming that diverted passengers assigned equal cost to trips out of either port.

- Time savings to existing traffic - include the full number of hours saved in total travel time (sailing time, port time and delays related to schedule frequency).

- Time savings to new traffic - include one half of the difference between total travel time under the new option and total travel time under the base case.

The user cost impacts (whether positive or negative) were calculated for each corridor option relative to the corridor base case. Total savings (or increases in user costs were then compared with the total additional cost (or saving) to the government associated with the new service.

If an option showed both lower user costs and lower government costs than the corridor base case, it was clearly preferable to both parties. If it showed higher costs to both users and the state, it would not be attractive to either party. If one group's costs increased while the other group's cost declined, then the preferred options were deemed to be those which yielded the highest user benefits (or lowest user costs) per dollar of government expenditure (or government cost saving).

Where time savings were a major factor in the benefits, an imputed value of time saved was calculated by comparing the number of hours saved with the net cost of providing the saving. This provided a measure of the value which must be assigned to time savings in order for project benefits to equal costs. The options which required the lowest hourly values to be assigned to time savings were chosen as the preferred options. (Additional discussion of the calculation of time savings is provided in Appendix B.)

APPENDIX B

EVALUATION OF USER IMPACTS – CORRIDOR AND SYSTEM ALTERNATIVES

APPENDIX B

EVALUATION OF USER IMPACTS - CORRIDOR AND SYSTEM ALTERNATIVES

B1 - COSTS OF UNMET DEMAND

In analyzing both short-run and long-run system options we are faced with a situation where the predicted level of demand for ferry service is not being met to the same degree in the various cases.

To assess the impact of system options on users and potential users in terms of the costs and/or benefits they incur under the various alternatives, it was therefore necessary to find some means of assigning a value to these differences in ability to meet demand. The method used was to derive an economic measure of the costs incurred by users (where users are defined as the total numbers requesting ferry service) as a result of changes in the ferry system. To assess these impacts, users were divided into three categories for the purpose of calculating costs: those served as requested, those served by diversion to alternate ports, and those not served under the particular option.

Those passengers who are served under all systems are indifferent between the options. Because the fare structure remains constant, they incur neither costs nor savings as a result of system changes and hence do not figure in the analysis.

Those passengers who are served by diversion to another port (normally from Seattle to Prince Rupert) are in a somewhat different category. If their costs were higher out of Prince Rupert they would be said to incur a cost as a result of the diversion--presumably a disbenefit of the system which forced them to divert. In actual fact, however, it was found that their out-of-pocket costs were lower as a result of the diversion--that in fact

incurs as a result of having to accept alternative transport. A third possibility would be that the user would decide not to make the trip in which case the cost he incurs is the loss of utility which he associated with the ferry trip.

Determining which definition of opportunity cost is most applicable to the unserved marine highway demand is a difficult task, and generalizations must be applied. Our choice for this study was to calculate opportunity cost based on the third concept; i.e. that the trip would not be made and the loss was therefore equivalent to the utility the user would have enjoyed had he been able to get on the ferry. A major factor in selecting this concept, particularly as opposed to the 'cost of alternatives' method, was the absence of a clearly comparable alternative means of transport. The alternatives available (cruise ship, air, road) differ from the marine highway service in so many nonquantifiable aspects that an assessment of cost differences would entail substantial subjective judgments which could be difficult to establish and to defend.

The calculation of opportunity cost based on lost utility required an estimation of the value which potential users would assign to the trip. A base approximation of this utility is the price they would have been willing to pay--in this case the marine highway fare for passenger and vehicle trips. Accordingly, the opportunity cost associated with unserved traffic consists in part of the fares they would have paid had they been able to get on the ferry. Offsetting this opportunity cost, however, is the fact that the potential user can retain the monies he would otherwise have spent. (In our analytical process the loss associated with unpaid fares is borne by the marine highway.)

The fare level, however, represents only a part of the customer's lost utility. Assuming an elastic demand for ferry services (i.e. a sloping demand curve) some of the traffic demand would have been willing to pay more for the trip than the price set by the marine highway. In other words, they would assign a utility to the trip which exceeds the fare they would have to pay. This 'surplus' utility is also lost when a potential user cannot be served.

To calculate this surplus, it is necessary to know the shape of the demand curve, or the relationship between the price of the service and the number of users willing to purchase it. Since no data was available on this subject, we adopted a conservative hypothesis that demand for marine highway services would fall to zero at the point where the price was equal to the cheapest cruise package over the same route. The average surplus per user is, therefore, one half the difference between the cruise price and the marine highway fare.

The lost surplus was calculated by multiplying average surplus by the number of unserved passengers under each system option, to give the net opportunity cost of unsatisified demand. (Annual figures were discounted to net present value so that they could be compared with AMH costs on a consistent basis.)

The above calculations account for the surplus associated with foregone passenger trips, but do not cover the surplus associated with vehicles which cannot be accommodated in the system. In order to estimate this lost vehicle-related surplus, it was assumed that the demand curve for vehicle trips has the same slope as that of passenger trips--in other words, that a proportionate increase in the price of each would lead to a proportionate decrease in demand. This assumption was used to calculate the average surplus associated with vehicle trips and hence the lost surplus as a result of unmet vehicle demand.

In summary, user costs under the various system alternatives were calculated only for those potential users who could not be accommodated by the system. Users who were either served as requested or served via diversion were assumed to incur neither benefits nor disbenefits from a cost viewpoint.

The cost assigned to the unsatisfied demand was calculated on the basis of net foregone utility which was in turn approximated by the total additional surplus utility which would have been enjoyed had demand been met by the system.

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B2 - TRAVEL TIME DIFFERENCES

A second aspect of user impacts which had to be dealt with in the evaluation of alternatives was the level of service provided. The major significant differences among alternatives in terms of service quality related to travel time and frequency of service out of various ports.

In order to measure these differences we developed a travel time model which converted ferry schedules into a travel time matrix for all O/D combinations in the system. The model calculated the sum of sailing time (based on a weighted average speed for ships operating on the route), port time, and waiting times. Waiting times were related to frequency of service over a given link and transfer requirements

The frequency-related delay time was set at one-quarter of the average interval between ship calls, while the delay associated with transferring from one vessel to another was set at 12 hours (with the exception of the Columbia shuttle where passengers transferring at Ketchikan were assumed to be delayed an average of 36 hours due to shortage of capacity on vessels out of Prince Rupert).

Because of differences in traffic levels, it was not possible to merely compute the differences in total travel time among the system options. We therefore segregated travel times for those routes where traffic levels varied and calculated the average time per passenger on those routes and within the balance of the system. Peak, shoulder and low travel times were computed separately.

The average travel times under each alternative were compared with the base case times to determine time saved or lost per passenger served as a result of the new system.

To calculate total travel time impacts of a scenario, transferred passengers were eliminated since they are presumed to be indifferent to the combined time and cost effects of transferring. The remaining passengers carried

over the various routes were multiplied by the appropriate travel time changes to give gross time impacts (provided these passengers constituted part of the base demand for the system and did not represent induced traffic), while the passengers whose demand was not met by the system were multiplied by the change in travel time and the result deducted from gross impacts. This latter adjustment reflected the impact of the changed service level on the overall attractiveness of the voyage which the potential user could not take.

Finally, where new passenger traffic was induced on a particular link because of system changes (e.g. as in the long-run Lynn alternatives), the total time savings accruing to the induced passengers were divided in half on the principle that savings to marginal users represented a lower benefit than those accruing to 'base demand' users.

The annual streams of net time impacts were discounted to present value at a 5% rate in order that they would be comparable with discounted cost figures.

BELLINGHAM AS SOUTHERN TERMINUS

OF

THE ALASKA MARINE HIGHWAY

The city of Bellingham, the Port of Bellingham and the Whatcom County Chamber of Commerce are very enthusiastic in their attempt to establish Bellingham as the southern terminus of the Alaska Marine Highway (AMH). To this end, the Port of Bellingham has allotted $2 million of its calendar year 1988 budget for terminal infrastructure construction. City staff has produced two videos supporting the move which have already been shown publicly in both Alaska and Washington, and civic and community leaders continue to be in contact with Alaskan transportation, business and government leaders.

When the current lease, held by the Port of Seattle, expires in September of 1989, Bellingham intends to submit a bid for the contract. During interim, Rep. Bette Cato and staff visited Bellingham and spoke with interested parties from the city, port and community of Bellingham regarding the feasibility of such a move. As a result of that trip, the following report was prepared.

1. Location of Terminal

Bellingham is proposing that one of two sites near its downtown area be chosen as the future site of the southern terminus of the Alaska Marine Highway. Both sites are located in Whatcom International Shipping Terminal which is adjacent to the present Port of Bellingham administration building. Some of the appropriate infrastructure already exists. Other infrastructure such as a terminal facility built to state of Alaska specifications, would have to be added. There is ample space available at either of these locations for parking, storage, loading and off-loading, and maneuvering of freight and vehicles. The Port of Bellingham is a deep water port that would require no dredging. Port security includes the city of Bellingham police, and Port of Bellingham and Georgia Pacific pulp mill securities.

The Seattle terminus is located near the heart of downtown Seattle which can be a very congested area. The space available for parking, storage, loading and off-loading, and maneuvering of freight and vehicles is quite limited.

2. Terminal Access

Northwest travelers currently access the Alaska ferry terminal in Seattle either by taxi from Sea-Tac International Airport, or they drive their own vehicles to the terminal because they plan to take them north. Cab fare for the trip from the airport to the Seattle ferry ranges between $15.00 and $24.00, and traveling time is 30 - 60 minutes. Travelers planning to bring their own vehicles onto the ferry face limited parking opportunities and a lack of nearby RV (recreational vehicle) facilities.

If the terminus were to be located in Bellingham, travelers flying into Sea-Tac airport would be able to catch any one of 30 twenty-minute flights per day to Bellingham International Airport at a cost of $19 or $44. They would then take a 15 minute cab or bus ride from the Bellingham airport to the Bellingham ferry terminus. Or, travelers flying into Sea-Tac airport could take a commercial bus from the airport to the downtown Seattle bus terminal and then transfer to a another bus headed for Bellingham. Greyhound has three connections to Bellingham daily. One way fare is $12.45.

Travelers planning to take their vehicles with them onto the ferry would drive to Bellingham. Bellingham is located 86 miles north of Seattle and 54 miles south of Vancouver, B.C. It is accessed by Interstate 5, and the proposed terminal is a five minute turn off of the interstate. Because Bellingham has had more of an opportunity to plan for its development, access to the city is much less congested than in the Seattle area. City traffic is minimal, and parking opportunities near the proposed site are abundant. Nearby RV facilities already exist, and on site RV facilities have been included in the development plan.

For travelers concluding their trip at the southern terminus,
the procedure would be reversed.

3. Cost Comparison.

Bellingham is located 80 nautical miles north of Seattle. This translates into a savings of roughly 4-6 hours of traveling time in one direction. As Puget Sound becomes more congested, the time savings may become even greater. Less distance traveled means less fuel consumed, and at an average of 21 gallons of fuel burned per nautical mile, over 3,000 gallons of fuel per trip could be saved if the terminal was located in Bellingham. Less distance traveled would also mean less wear and tear on equipment.

Salary savings would be realized only if the shorter distance to Bellingham resulted in the ship's completing its

overall trip in less time, and only if labor contracts could be negotiated to include a shorter work week. No salary savings would be realized if the overall trip took the same amount of time because the crew is paid the same regardless of whether the ship is in port or on the water. Since Juneau and Ketchikan are the only points at which crew can begin and end their work weeks, they would still be considered to be at work when the ship was docked in Bellingham.

The state of Alaska currently pays the Port of Seattle $6.00 for every passenger up to 40,000 passengers that either gets on or off the ferry per year in Seattle. This agreement results in a maximum amount payable per year to the Port of Seattle of $240,000. In FY'87, 34,374 passengers were billed to the state by the Port of Seattle at a cost to the state of $206,244.

Rather than bid a fixed fee per passenger up to a maximum cap, the Port of Bellingham is planning to propose a sliding fee scale which would be tied into meeting certain goals of passenger and freight. In other words, the more passengers and freight that moved through Bellingham, the higher the fee received by Bellingham, but because there would be no cap on the number of passengers for which Bellingham would be paid, the incentive would be there for Bellingham to draw as many passengers as possible. Since there would be no cap, the incentive for Bellingham to draw additional passengers could ultimately result in additional revenue for the state of Alaska. As it currently stands, there is no incentive for the Port of Seattle to service more than 40,000 passengers.

At this point, it is not clear whether or not there would be a cost savings in freight if the terminus were to be located in Bellingham. Although freight could be transported to and from Seattle in less time on Interstate 5 than it could be transported by ferry, the time savings may be overridden by the increased transportation costs of trucking freight to a central consolidation area which is done in order to consolidate ferry freight with other freight in the area for the purpose of long distance transporting. For instance, Lynden Transport, Incorporated, a major shipper to Alaska via the Alaska Marine Highway System, currently transports its freight from the Seattle ferry terminal to Kent, a suburb of Seattle, where it is then consolidated with other LTI freight. Since the distance from Bellingham to Kent is greater than the distance from Seattle to Kent, it may at first appear there would be no cost savings associated with the move and, in fact, it may appear that the shipping costs would be higher because of the additional trucking costs. However, there are many variables inherent in this issue including but not limited to whatever offer is made to shippers by the Port of Bellingham should Bellingham be successful in its bid for the southern terminus. It is also

not clear if the AMH would lower its shipping rates in response to the fact that the trip to and from Bellingham is shorter. However, Lynden Transport, Inc., in a letter sent to the Commissioner Hickey of the Alaska Dept. of Transportation and Public Facilities, has stated that it would support any move by the ferry that would improve services and reduce costs to its customers in southeastern Alaska.

4. Special Attractions

Seattle and Bellingham both have much to offer the Northwest traveler.

Bellingham is a growing community of 50,000 people located on the Inside Passage. Bellingham Bay is to the west and the beautiful Northern Cascade Mountains are to the east. Major industry in the area includes agriculture, commercial fishing, forestry, manufacturing and recreation. It is home of the famous "From Ski to Sea in 60 Minutes" race, as well as sport fishing, scuba diving, beach combing, sailing, camping and hiking. It is home of Western Washington University. Temperatures range from 30 - 74 degrees Fahrenheit with an average of 49 degrees, and rainfall averages 34 inches. A world trade center and a regional shopping center are currently in the process of being built.

In addition to its many tourist attractions, Whatcom County is host to four foreign trade zones. Because of the special tax exemptions afforded these areas, much new business has been attracted to the area. The trade zones should provide a positive position within the international market place for Whatcom County. Bellingham is an important regional and transportation hub <u>without</u> the congestion of Puget Sound.

Seattle is also an attractive destination for northwest travelers. Its many well-known attributes include Pike Place Market, the Seattle Aquarium, numerous fine restaurants, the theater, the Kingdome, the University of Washington and other respected universities and colleges, excellent sailing opportunities, etc.

The point is, both locations have much to offer the traveler interested in extending his or her vacation beyond the ferry ride. The difference is, the Port of Bellingham plans to market these attractions to potential passengers should it become the southern terminus of the ferry system.

5. Market Development

Whatcom County already hosts more visitors from outside the state than any other county in Washington. Using the theme "The Last Great Marine Adventure" and expanding the services

available to passengers, civic leaders plan to draw even more visitors to their county by actively recruiting passengers to the Alaska Marine Highway. Plans are to target Canada as well as the United States. Ideas for expanding and improving service to AMH passengers via the Port of Bellingham include allowing passengers to book on shore reservations by computer while still on board the ferry, using computers to suggest trips and map routes for passengers to use once they hit the shore, and the convenient, on shore availability of tax exempt cards for residents of the state of Alaska.

6. Summary

Intent language inserted in Alaska's FY'88 operating budget stated: "It is the legislature's intent that the Department [of Transportation and Public Facilities] study the potential cost savings of using Bellingham as the southern terminus of the Alaska Marine Highway System. The study should examine fuel savings, more efficient use of vessels, labor savings, lease savings, and the relative quality of passenger facilities which might be offered in Bellingham as compared to Seattle. The study should be submitted to the legislature no later than December 1, 1987."

The Department of Transportation and Public Facilities is currently in the process of compiling its interim study. While cost saving factors have yet to be determined, locating the southern terminus of the Alaska ferry system in Bellingham will give the Alaska Marine Highway a much more visible profile. Because it would be one of the biggest fishes in a little pond, the city and Port of Bellingham and the Whatcom County Chamber of Commerce are willing to develop the terminus to the fullest marketing extent possible. Their cooperation is impressive. They are eager to work with the state of Alaska in order to further their goals. They are willing to address whatever questions and concerns may arise regarding the relocation and they are determined to make their dream a reality. They want to work with the state of Alaska in order to expand recreational opportunities, especially for the RV traveler. The community of Bellingham would like to develop a partnership with the state of Alaska that extends beyond the Alaska Marine Highway.

Bellingham Assessment Presentation

- Assumptions
- Fuel savings at Bellingham
- Labor savings
- Lease savings & relative quality of passenger facilities offered by BEL vs. SEA
- Conclusions

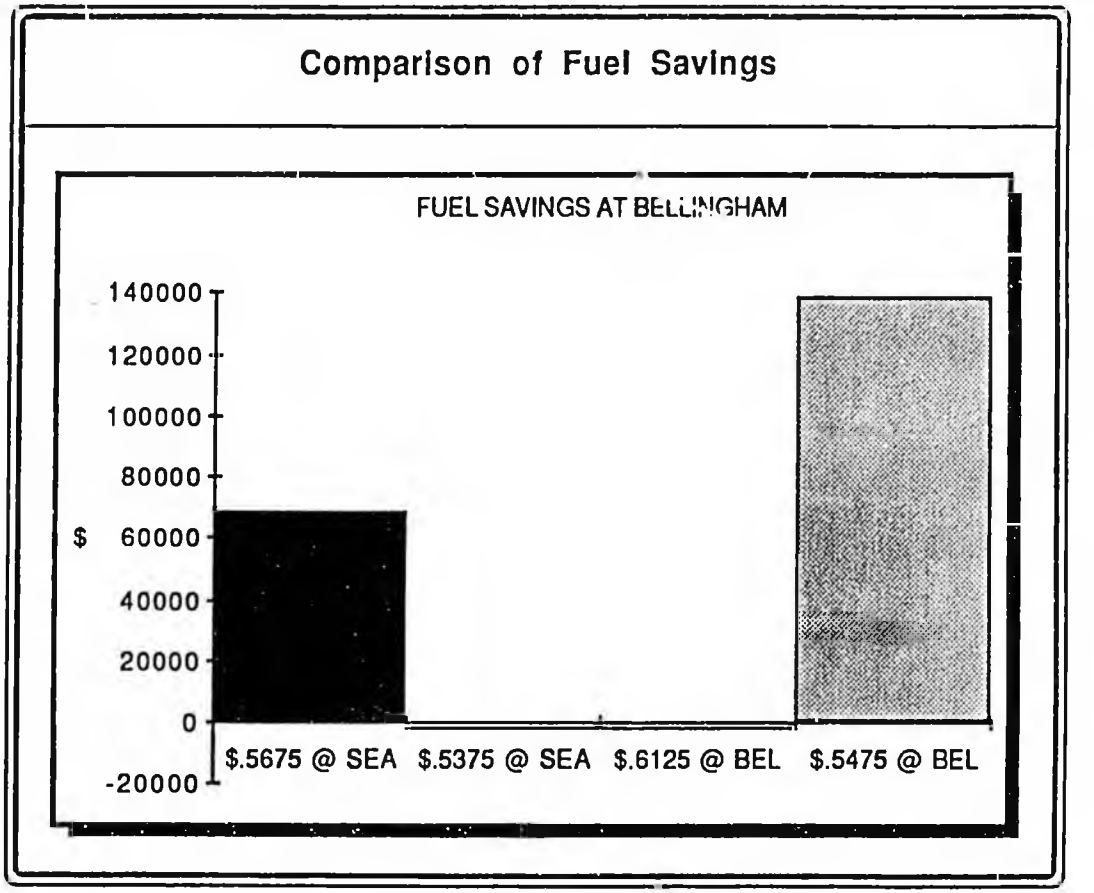
Assumptions

- No change in traffic level
- No change in tariffs
- Present labor agreements
- Quality of facilities at Bellingham and Seattle are equivalent
- Continuing public mandate for Puget Sound Service

Fuel savings at Bellingham

- Historically, fuel price has been higher at Bellingham than Seattle
- Analysis shows that potential fuel savings are approximately $68,000 per year
  - 2.4% of annual system fuel consumption
  - 1.6% of annual system fuel expense
- The most important factor in AMHS fuel expense is price rather than steaming time.
- Comparison of Fuel Savings
- If time savings at Bellingham are used for additional service there is no fuel saving

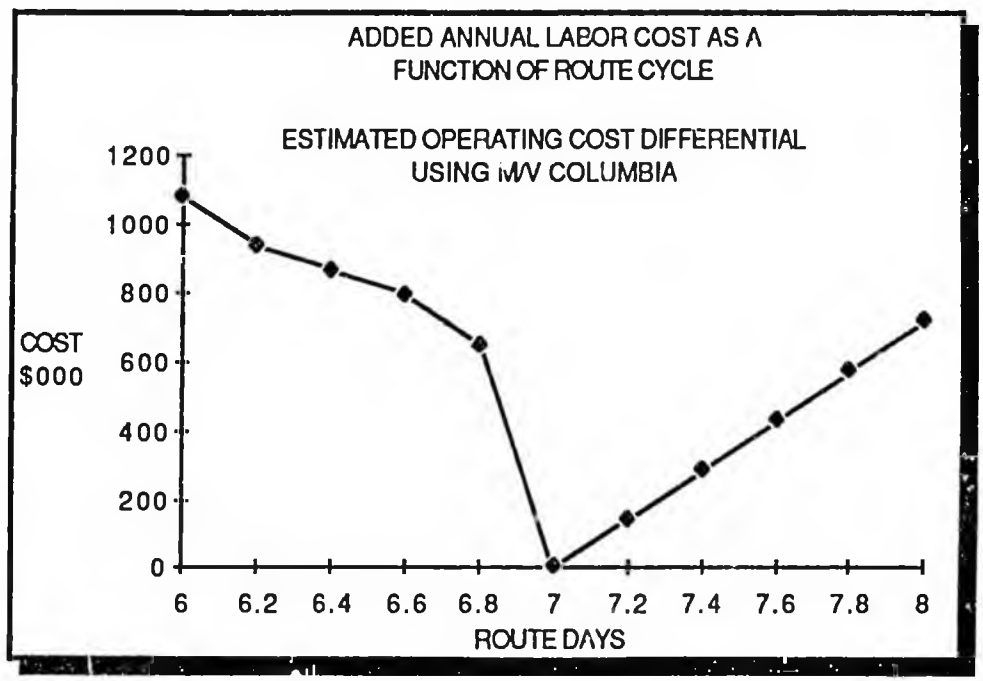
Comparison of Fuel Savings



Labor savings

- No significant labor savings available under present AMHS labor agreements
  - Present agreements are based on a 7 day route cycle
  - Variation from the 7 day cycle triggers premium pay provisions of the agreements
    - Minimum guarantee
    - Overtime
    - Late arrival
    - Early Callback
  - Impact on Labor cost of non-7-day route cycles

Impact on Labor cost of non-7-day route cycles



Lease savings & relative quality of passenger facilities offered by BEL vs. SEA

- Advantages to Bellingham
  - Shorter trip distance
    - Potential travel time savings
    - Potential fuel savings
    - Potential additional service capability
    - Minimizes risk of premium pay on existing schedules
    - Permits increased time at Alaskan ports
  - Bellingham has allocated $2,000,000 to terminal site improvements
  - Dockside fueling permissible
  - Aggressive port marketing effort
- Disadvantages to Bellingham
  - Lower stewards revenue
  - No existing terminal at Bellingham
  - Use conflicts at Bellingham
    - Dockface use

Lease savings & relative quality of passenger facilities offered by BEL vs. SEA (cont'd)

- Parking & staging area use
- Warehousing space would have to be acquired
- All operational requirements would have to be established
- Additional travel required to reach Seattle area
- Initial pilotage costs
- Cost of re-establishing goodwill at new location
- Cost and timeliness of supplies delivered to new location
- Relocation expense
- Employee impacts

- Other issues related to Bellingham not yet resolved
  - Fueling time and cost
  - Longshoring cost
  - Bellingham head taxes
  - Bellingham facility lease costs
  - Impacts to commercial users

Lease savings & relative quality of passenger facilities offered by BEL vs. SEA (cont'd)

- Impacts to "walk-on" traffic
- Advantages to Seattle
  - Presently functional facility
  - Immediate access to Seattle area
  - Established location with "good will" developed
- Disadvantages to Seattle
  - Structural deficiencies (some being corrected)
  - Aging facility is becoming less attractive
  - Terminal location is in a congested traffic area
  - Parking & staging area expansion limited
  - No dockside fueling capability
- Other issues related to Seattle not yet resolved
  - Head taxes under a new lease
  - Facility lease costs under a new lease

Conclusions

- Both Seattle and Bellingham appear to be acceptable southern terminus locations
- Methods of resolving outstanding issues:
  - Requests for proposals
  - Direct negotiations
- Public input will be solicited through the AMHS Advisory Board
- Key factors in the port selection decision:
  - The quality and cost of the facilities to be provided
  - Users preferences
  - Reasonable resolution of issues relating to commercial users and "walk-ons"
  - Decision to be made by late summer or early fall 1988

THE FOLLOWING PAGES WERE TREATED AS
A UNIT IN THE ORIGINAL FILE.

OVERVIEW OF HOUSE BILL 62

The purpose of the Act is to establish an authority for the operation, management, planning and construction of facilities for the Marine Highway System with a legal existence independent of and separate from the state government.

The authority consists of a seven member board appointed by the Governor. The Authority is a public corporation of the state and is an instrumentality of the state D.O.T. BUT has a legal existence independent of and separate from the state.

The directors serve at the pleasure of the Governor for four year terms. The directors receive no compensation but are entitled to travel and per diem expenses authorized by law for state boards and commissions.

The Authority shall employ an executive director who is responsible for selecting and employing additional staff as necessary.

The Authority may adopt and enforce by-laws and regulations for the conduct of its business and for the use of its services and facilities.

It is assumed the Authority would utilize the State Accounting System where possible.

The following assumptions are made:

1. The Alaska Marine Highway Authority's time and attendance, personnel and accounting systems would interface the existing State systems and be compatible.

2. There would be an annual appropriation for full operating costs of the authority each year that would be made up of expected revenue, i.e. program receipts and a general fund subsidy to cover the remainder.

3. The authority would continue to use:

   a. State owned office buildings
   b. The State Mail System
   c. The state equipment fleet
   d. The statewide purchasing contracts
   e. Share communications lines
   f. Insurance, bonding, etc. as now supplied
   g. Legal service from the Attorney General's office

4. The Directors of the Authority would meet an average of three days per month or thirty six days per year.

5. Administrative support would be provided to the Board of Directors from their existing staff

Introduced: 1/22/87
Referred: Transportation
and Finance

IN THE HOUSE BY CATO

HOUSE BILL NO. 62

IN THE LEGISLATURE OF THE STATE OF ALASKA

FIFTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to ferries and ferry terminals and establishing the Alaska Marine Highway Authority."

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

* Section 1. PURPOSE. The purpose of this Act is to establish an authority for the operation, management, planning, and construction of facilities for the marine highway system with a legal existence independent of and separate from the state government. The authority shall be the exclusive state agency directly associated with the operation, management, planning, and construction of facilities for the marine highway system.

* Sec. 2. AS 19 is amended by adding a new chapter to read:

CHAPTER 70. ALASKA MARINE HIGHWAY AUTHORITY.

ARTICLE 1. CREATION AND ORGANIZATION.

Sec. 19.70.010. ALASKA MARINE HIGHWAY AUTHORITY. The Alaska Marine Highway Authority is established. The authority is a public corporation of the state. The corporation is an instrumentality of the state in the Department of Transportation and Public Facilities but has a legal existence independent of and separate from the state and has continuing succession until its existence is terminated by law.

Sec. 19.70.020. DIRECTORS. (a) The authority consists of seven directors appointed by the governor as follows: a representative of commercial carriers, a representative of the maritime industry, a representative of the tourism industry, and four members of the public representing regions served by the marine highway as follows: (1) one

THE ALASKA MARINE HIGHWAY SYSTEM

It is generally acknowledged that changes are required in the Alaska Marine Highway System.

In order to make these changes we need to identify what the areas of concern are:

ARE THEY:

1. Revenue shortfalls - Are revenues generated adequate?
   Does AMHS continue to hold it's share of the market?
   Are management decisions dramatically affecting the revneue picture?
   What can be done to increase revenues OR decrease expenses?

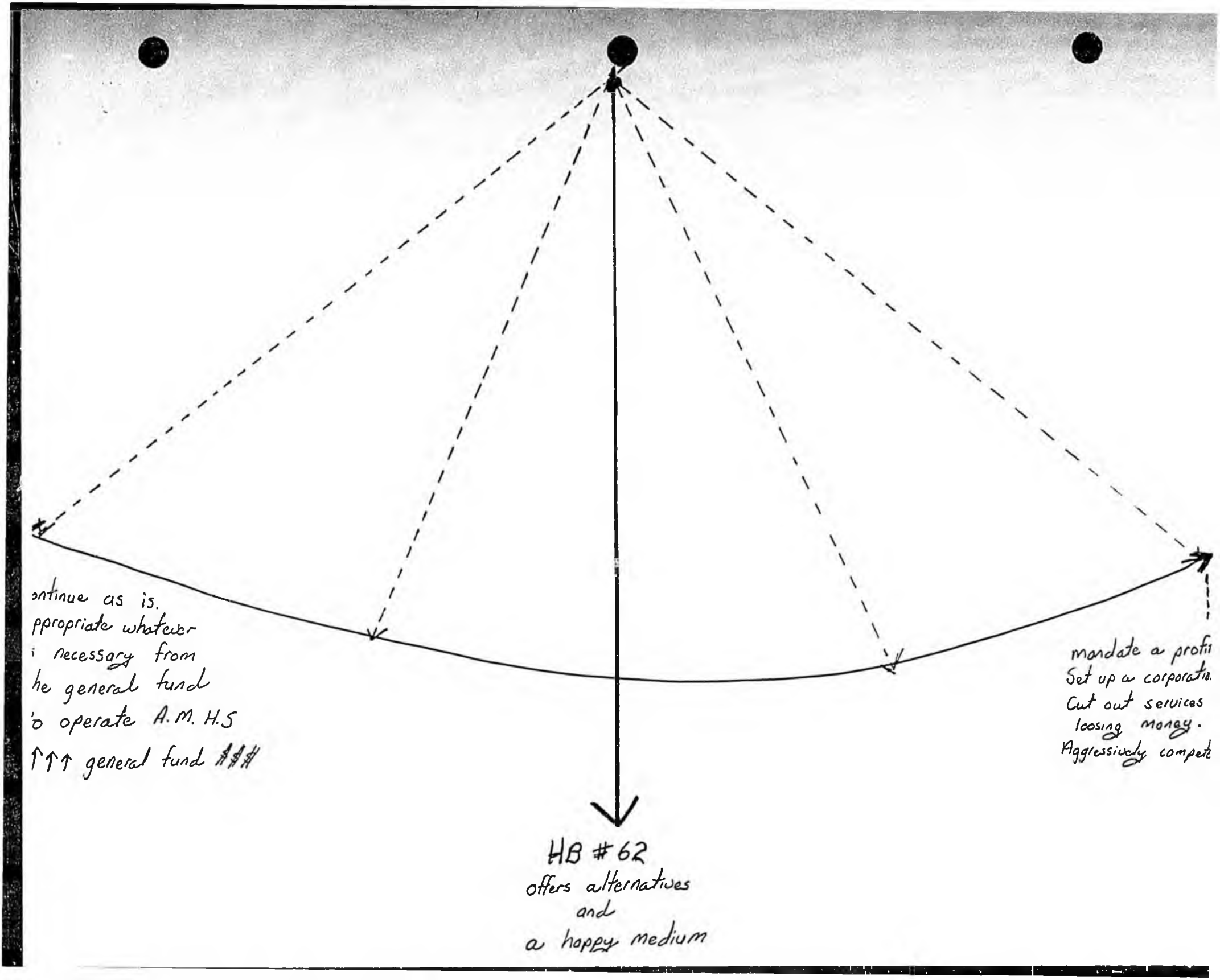
2. Services? a. Proposed cuts in services
   b. lack of adequate services to accommodate in-state transportation needs

3. Scheduling - Is the scheduling of ferries convenient and adequate to meet the needs of the residents of the communities it serves?

4. Marketing - Is the Marine Highway being marketed properly?

5. Personnel - Is the department top heavy/bottom heavy?
   When cuts to AMHS budget are made, are these cuts absorbed in personnel and in services?

6. Management - Are management decisions for AMHS made after extensive consideration of the alternatives?
   Is adequate time spent working toward improving AMHS?
   Does management have representation from the various aspects of the industry to enable well researched decisions to be made?
   What could help improve and expand the decision making process?
   Should decisions for AMHS be made by by DOT management?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ppropriate whatever
i necessary from
he general fund
'o operate A.M.H.S
↑↑↑ general fund ###
mandate a profit
Set up a corporation
Cut out services
loosing money.
Aggressively compete
HB #62
offers alternatives
and
a happy medium

SUMMER SCHEDULING - AMHS

Vessels servicing the North and Southbound runs

Malaspina - Monday and Thursday services from Prince Rupert to Skagway via Ketchikan, Wrangell Petersbury, Juneau, Haines

Taku - Sunday and Tuesday services from Prince Rupert to Skagway vai Ketchikan, Wrangell Petersbury, Juneau, Haines

Matanuska - Tuesday service Seattle to Skagway via Ketchikan, Wrangell, Petersbury, Juneau Haines

Columbia - Friday service from Seattle to Skagway via Ketchikan, Wrangell, Petersburg, Juneau Haines

****

Le Conte - Monday service leaves Petersburg to Skagway via Kake, Sitka, Angoon, Tenekee, Hoonah, Juneau, Haines

Thursday service Pelican to Haines via Hoonah and Juneau

Aurora - Monday, Tuesday, Thursday, Saturday and Sunday services from Ketchikan to Hollis

Friday service from Hyder to Hollis via Ketchikan

Tustumena - Provides continual service between Seward, Kodiak, Seldovia, Homer and Port Lions. Provides summer service between Valdez and Cordova

Bartlett - Sails on a daily basis to provide services between the ports of Valdez, Whittier and Cordova in summer.

The new FY 88 budget for AMHS proposes the following cuts:

a. Reduce Malaspina service by four months

b. Reduce Taku service by six months

c. Columbia lay up planned for 6 months

d. Scheduled service lay up of all vessels

This will mean only the Matanuska will operate year round on this north and southbound run. As a result of these reductions in service and layups 164 crew members will be impacted

****

Service to Prince of Wales Island and Southeast communities

a. Reduce the Aurora service by four months resulting in a single feeder vessel service in Southeast for eight months of the year versus the current four month period.
The Le Conte would be the single feeder vessel.
The Chilkat would increase service by four months to supplement service between Ketchikan and Prince of Wales Island.

****

Service to Southwest system

a. Reduce the Bartlett service by six months. The Tustumena will provide service for the entire Southwest system. Services between Cordova and Valdez in winter would not be available for 2 months because the Bartlett would be in lay up and the Tustumena would be in for servincing

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OVERVIEW OF ALASKA MARINE HIGHWAY SYSTEM

Under the direction and supervision of House Transportation Chairman, Representative Bette Cato, House Transportation Committee staff, Rhonda Cargill and Wendy Chamberlain attended the Alaska Marine Highway Advisory Board Meeting. A meeting was also held with Deputy Commissioner Joe Camp who provided a great deal of information to the Chairman. This is an overview of those meetings. Due to the Chairman's strong interest in the Marine Highway System this report also includes information on areas researched, and answers to questions asked by the Chairman.

On Friday August 12th, 1985 the Alaska Marine Highway Authority Advisory Board had its' first meeting with Alaska Marine Highway. Approximately 2 years ago the Governor appointed members to a Marine Highway Task Force. The Task force work ended after completion of the Task Force Report which included 139 recommendations.

The Southeast Conference Board of Directors, comprised of southeast district representatives, southeast legislators, and southeast community mayors wrote to the Governor and the Department of Transportation requesting the task force be continued as an active board and be expanded to include representation from each marine highway "user" community. This would insure ongoing communication between the State administration and the people of Alaska serviced by the ferry system.

Although the task force was disbanded, Commissioner Knapp felt that the Southeast Conference provided a mechanism for input and recommendations from many of the southeast communities, and hence the Southeast Conference appointed representatives from each of the communities to serve on the Alaska Marine Highway Advisory Board.

The Advisory Board plans to meet with Marine Highway on a quarterly basis. As this was the first meeting an overview of Marine Highway was given by Commissioner Knapp and Deputy Commissioner Camp.

As this overview of Marine Highway is being done in August, 1985 it may be necessary to update this report to reflect any unanticipated changes made by Marine Highway during the next few months. Information gathered from monitoring and oversight of AMHS by the Chairman and staff will also be updated.

ALASKA MARINE HIGHWAY REPORT

Personnel

Commissioner of DOT - Richard Knapp
Deputy Commissioner - Joe Camp

There are 725 persons with Marine Highway who work afloat.
155 persons work ashore
During the past summer there were 850 vessel employees required to fill 331 jobs per week on all vessels. Considering two crews that totals 662 permanent jobs with 188 relief persons to fill in. Despite this there were times when there were not enough personnel to dispatch to cover all positions on vessels. Sick leave and vacation leave taken by employees accounted for a large portion of the personnel shortage.

Most of the personnel for Marine Highway are under union agreement. New contracts were recently agreed upon, these contracts are in effect until 1988.

Over 90% of unlicensed personnel are Alaskan residents
Over 50% of the masters, mates and pilots are Alaskan residents
Under 50% of the engineers are Alaskan residents

64% of the Marine Highway's total operating budget is for personnel services costs and benefits for employees.

During the past several months various "letters to the editor" have appeared in local newspapers drawing attention to the high salaries earned by Marine Highway management. The figures presented by Deputy Commissioner Joe Camp and those outlined in the Alaska Marine Highway budget indicate the following:
21% of ashore Marine Highway personnel earn over $40,000/year
32% of afloat Marine Highway personnel earn over $40,000/year

Alaska Marine Highway has recently reached an acceptable agreement with the Marine Engineers Beneficial Association on the local hire of engineers, therefore the percentage of Alaska hire of engineers should increase.

Vessel Information

The Alaska Marine Highway currently has nine vessels in operation. These include:

M/V Chilkat - the original ship of the Alaska Marine Highway She was acquired in 1959 and services the Southeast Panhandle.

M/V Malaspina - built in 1963, renovated in 1972 she services Northbound and Southbound areas

M/V Matanuska - built in 1963, renovated in 1978 she services Northbound and Southbound areas

M/V Tak - built in 1963, renovated in 1981, services northbound and southbound ports.

M/V Tustumena - built in 1964, renovated in 1969, services Seldovia, Homer, Port Lions and Kodiak.

M/V Bartlett - launched in 1968 she services Cordova, Valdez and Whittier.

M/V Columbia - She is the largest of Alaska's ferries and was launched in 1973.

M/V LeConte - Launched in 1973 servicing the Northern Panhandle.

Plans for the future for vessels

As the M/V Chilkat is the oldest vessel, the Marine Highway plans to retire the M/V Chilkat in the summer of 1986. She will stay in reserve for emergencies.

There is currently a masterplan being developed for the Alaska Marine Highway a draft of which should be available for the next legislative session. This plan will include a report on fast ferries.
Hopefully these fast ferries will provide a comfortable, cost effective and efficient alternative for various southeast communities.
The Marine Highway plans to request funds for the purchase of fast ferries in their FY 87 budget. (Federal and State)
Preliminary estimates show the cost of the fast ferry to be between 2-3 million dollars.
Further information on these ferries will be available when the masterplan is completed.

The Tustamena requires major passenger refurbishing. A recent survey showed a lot of life left in the hull of the Tustamena and therefore the Alaska Marine Highways plans to request refurbishing funds for the Tustamena in the FY 1988 budget. (Fed. & State)

Currently, each vessel is laid up for repairs annually. These routine repairs and maintanence can usually be completed in 30 days. Alaska Marine Highway has received a great deal of publicity over the recent laying up of the Colombia. It is anticipated that the Colombia will be in dead ship lay up in Seattle until at least March 1, 1986. The maintanence work on the Colombia is being done in Seattle, this in itself has created a great deal of controversy, particularly among Marine Highway employees.

The decision to place the Colombia in dead ship lay up was made because of revenue shortfalls. It costs approximately $90,000 more per run to sail the Colombia as compared to the other vessels that complete the same run. The maintenance contract was awarded to a Seattle firm because it was considerably less expensive and because no facilities are currently available in Alaska to allow for ships to be laid up for a long period of time. It is anticipated that next year the Ketchikan facility will be completed and ship lay up will then be done in Ketchikan, however, at the present time the additional cost of laying a ship up in the state of Alaska makes this unfeasible.
The plan for bringing the Colombia out of lay up and the expenses and considerations for the lay up are explained fully in the budget section.

Marine Highway would also like to increase the number of ocean going vessels they have available. Currently only the Tustamena is able to make runs to the Aleutian chain or any other "ocean" areas.

Future plans for terminals and facilities

Alaska Marine Highway recently reached an agreement with Canada on the use of the Prince Rupert facility. In the near future a 5 year lease will be signed for the facility with options to renew every five years for the next 20 years.

In June this year Marine Highway began providing services to the community of Hyder. This community will be serviced once a week by the Marine Highway. There are no plans to move the terminal from Prince Rupert to Hyder at this time, however, monies will be requested in the FY 87 budget to build a facility in Hyder. If approved this terminal may be considered for use in conjuction with the Prince Rupert terminal for north and southbound services. As Federal funds can only be used for capital projects such as purchasing and refurbishing of vessels, rebuilding and reparing facilities etc. it is likely that the much of the funding required to build the facility in Hyder will be requested from the Federal Government.

The $38 million Ketchikan vessel maintainence facility is underway and is scheduled for completion in December, 1986. The maintenance work is currently being done in Seattle, therefore this should be a definite asset to the community of Ketchikan and the State.

Funds have been allocated for construction of shore facilities at Kodiak, Homer, Seldovia and Whittier. Much of this funding is received from the Federal Government. For Example:

Kodiak	(Federal)	$2,790,000
	(State)	210,000

This facility will be an important step towards increasing the quality and efficiency of the service provided by the M/V Tustumena and/or the Tustumena replacement vessel.

Homer	(Federal)	$3,255,000
	(State)	245,000

This project is being coordinated with the City of Homer's revised Port Development/Small Boat Harbor project.

Seldovia Ferry Terminal	(Federal)	$3,255,000
	(State)	245,000

Additional site reconnaissance and preliminary engineering is being done on this project to enable shuttle ferry service for Homer/Seldovia.

Whittier Ferry Terminal (Federal) $2,180,000
(State) 140,000

Funds were allocated for this project in FY 86. Due to the poor condition of the current structure immediate reconstruction will be necessary.

Current Marine Highway Preliminary Engineering Projects.

Valdez Ferry Terminal - $50,000
After the preliminary engineering is done funds for construction of this project will be requested in future years budgets

Seward Ferry Terminal _ $75,000
This facility is in very poor condition. Alaska Marine Highway made an emergency appropriation of $150,000 in August, 1985 to assist with repair of pilings and bumpers at this terminal. After the preliminary engineering and location study is completed Alaska Marine Highway plans to request capital construction funds for this project.

Plans are in progress to build new immigration offices and ticketing offices in the Prince Rupert facility.

A new terminal in Metlakatla should be completed in May of 1986. Metlakatla will then be serviced by the Aurora via Prince of Wales Island, this will allow the Chilkat to retire.

Terminal work is now being done at both the Wrangell and Petersburg facilities

MARINE HIGHWAY FY 86 BUDGET

FY 86 Budget for Marine Highway

The next section reviewed is the budget. Under the direction of the Chairman, this section was monitored and reviewed continually. This information is being presented now because much of the decision making and questions asked regarding such matters as ferry scheduling, areas serviced, fares and overall operations are made based on their overall impact on the budget.

In FY 86 the total budget for Alaska Marine Highway is $68 million This is a $3 million or 4% increase over FY 85.

The total budget breaks down as follows:
$32 million state funds
$36 million project revenue

In FY 86 the Legislature changed slightly the way in which funds are appropriated for Alaska Marine Highway. Previously, all revenues from Marine Highway went into the general funds and an amount was appropriated from the Legislature for operation and maintenance of Alaska Marine Highway.

In FY 86 Alaska Marine Highway requested a $68 million dollar budget. The Legislature approved this amount and appropriated $32 million from the general fund. The remaining $36 million is to come from revenue generated by Alaska Marine Highway. If they do not generate this amount, they will have to make cuts to balance their budget. This allowed Alaska Marine Highway to receive Legislative approval for the budget amount requested, and yet provides management with the challenge of making decisions that will directly affect their revenues and in turn their overall operating budget.

Although it is early in the fiscal year, information provided to the Chairman indicate that the $36 million in projected revenues for the year may have been somewhat optomistic.
The projected revenues were approximately a $3 million increase over FY 85. It is realistic to expect that Marine Highway will increase revenues slightly over FY 85. Taking this into consideration Marine Highway anticipate that the "magic number" for "additional" revenues that they will need to generate to be approximately $1.8 million.

With overall revenue figures available as of September, 1985 it has become apparent that Marine Highway management will have to make operating cuts if they are to balance their budget for FY86. To date preliminary estimates show that cuts up to $1.8 million will have to be made by management. In an attempt to meet this shortfall, Marine Highway has implemented the following cost saving measures:

1. Lay up the M/V Colombia in Seattle until at least March 1, 1986. As stated earlier, each year the vessels go into lay up for approxminately 30 days for rountine maintanence. Because the Colombia is the most expensivr vessel run on the Seattle run, and, the winter operating costs exceed the revenues generated management decided to lay her up.
A contract for the maintanence and repairs to the Colombia was awarded to a Seattle based firm. When consideration was given in an attempt to lay up the Colombia in Ketchikan the additional cost made this unfeasible.
The cost comparison done by Marine Highway was as follows:

Contract work in Seattle	$143,000
Contract work in Ketchikan	$528,000

Several factors account for the higher costs to lay up the vessel in Ketchikan.

a. Cost to steam the ship would be very expensive, as the Ketchikan facility is not completed there is not adequate power available to steam the ship.
600 amps is required
280 amps power available from ship

b. Cost for 122 days of crew salary for 10 crew members. This was estimated to amount to approximately $297,000.

c. Garbage collection would have to be arranged
d. Sewer disposal (estimated to be $13,000)
e. Telephone

It is hoped that the Colombia will be brought out of lay up and crewed March 1st, however, Marine Highway management may find it necessary to leave the Colombia in lay up status until April. This decision will be made late December when the revenue picture becomes clearer.

2. Discussions between Representative Cato and Marine Highway management in early December provided no other definite information on proposed cuts or changes in service to balance the budget. Areas management stated may need to be considered included assessing the toll free lines and evaluating the cost of maintaining this service. Marine Highway management state that the cost of providing these toll free lines is very expensive, particularly the intrastate lines. Therefore careful consideration may need to be given to the actual benefit verses the cost of this service in the upcoming months.

WHY THE SHORTFALL IN REVENUE PROJECTIONS?

Alaska Marine Highway is concerned about the shortfall in revenue projection for FY 86. After many discussions, meetings and evaluation of information available, management feel the following areas contribute to this shortfall:

1. Airline fares

With the recent ultra super saver fare reduction by both Alaska and Western airlines many people are using air as a means of transportation because with the current price structure it is considerably faster and less expensive to fly. A decline in reservations is also being voiced by a number of local hotels who state that reservations are down as much as 30% under previous years. Inexpensive fares to Europe and other overseas countries are considered to be one reason for this as people are taking advantage of these low fares to travel overseas.

2. Cruiseship lines more competitive.

M/V Stardancer, owned by an overseas company loads in Vancouver and sails on a 3 day trip to Haines with a 4 day return trip. The Stardance makes stops in Juneau, Misty Fjords and Tracy Arm. This vessel has the capacity to carry approximately 300 vehicles. The fares for this trip are lower than fares charged by Alaska Marine Highway.

Example:

Standard Automobile shipping cost	
Seattle to Haines on Alaska Marine Highway	$500.00
Vancouver to Haines on M/V Stardancer	$250.00
25 to 26 foot motor home	
Seattle to Haines on Alaska Marine Highway	$1,000.00
Vancouver to Haines on M/V Stardancer	$350.00

Cabins

Cabin prices on the M/V Stardancer vary depending on the luxury of the cabin, however, a person may travel on the Stardancer in an inside cabin, with his/her meals inculded for the same price as a standard cabin on Alaska Marine Highway excluding meals.

2. Passenger load down

Although reservations for this summer were as projected, the actual revenue generated as a result of this travel is down. Alaska Marine Highway management feel that while numbers are up, the actual distance that individual passengers travelled is down and hence revenues are down.
The Seattle run is the most profitable run.
From information available it appears that the number of persons travelling on this run is down AND, the number of large vehicles transported on this run is also down.
In summary, this summer the Alaska Marine Highway system transported a greater number of passengers and vehicles, however, passengers travelled shorter distances. Also, while there was an increase in the number of vehicles transported by Alaska Marine Highway, the number of oversized vehicles travelling was down considerably.

Both long distance travel and large vehicle transportation are two areas that are very profitable for Marine Highway.

Representative Cato was assured the problem of "no shows" would be overcome this year as new regulations (attached), requiring advance payment of tickets and penalties for cancellation went into effect October 1st, 1985. Previously, persons who made reservations could pick up and pay for their ticket on the day of sailing. This, although very convenient for the traveller made the problem of "no shows" very frustrating and expensive.
The threatened strike by the masters, mates and pilots also had an effect as people either cancelled their reservations or used alternative means of travel.

WHAT ARE THE SOLUTIONS?

Proposed solutions to these concerns are currently being discussed. As several of these solutions go hand in hand with proposed changes in ferry scheduling and services this section will be outlined next along with the proposed changes.

Ferry Scheduling

Along with being one of the most difficult tasks for Alaska Marine Highway, scheduling is also one of the areas that many of the complaints arise over.

In order for persons to be able to plan for their vacations, ferry schedules are printed months in advance.
The decisions on next summers schedule were made September 1st 1985. This schedule has already been sent to the printers.
Once schedules are printed the department
is locked in as far as the number of vessels servicing an area, the number of runs being made per week and the pricing structure for fares, therefore long range decisions have to be made as accurately as possible well in advance.

Possible Solutions

In discussions with Representative Cato, Deputy Commissioner Joe Camp outlined the many alternatives that have been explored.

1. Agressively compete with the cruise lines.

2. Increase services on the most heavily booked runs to try and increase revenues.

3. Increase services on the most profitable runs. The revenue and direct expenses graphs included in the appendices provides a clear breakdown on each runs revenue verses direct expenses.

4. Cut services

5. Evaluate all the runs and have fares structured to attempt to make each run, where possible, cover expenses. (See attached graph in appendices)

6. Look at alternatives - fast ferries - as a more cost effective method of travel to areas within the state.

It is the intent of DOT and Alaska Marine Highway to continue all areas currently serviced. Runs made within Alaska to the smaller rural communities are not profitable, and, in many cases these runs only return revenues to cover approximately 20-30% of the expenses. Both Commissioner Knapp and the Chairman feel that services must be continued to these areas, they are remote parts of Alaska that have very few alternatives available. One of the main reasons Alaska Marine Highway was put into service was to provide a means of transportation within Alaska.

Several of the above alternatives are being considered at this time.

1. Increase services.
   The most heavily booked runs are the north and southbound runs from Seattle and Prince Rupert to Haines and Skagway. A great difference is apparent when the profitability of these two runs is compared:

Current service and revenues

Seattle to Skagway - 1 trip per week
1000 passengers (total) 165 vehicles
200 state rooms

Revenue for this run $325,000.00

Prince Rupert to Skagway - 2 trips per week
1400 passengers 330 vehicles
400 state rooms

Revenue from this run $218,000.00

The above breakdown shows that by carrying fewer people and fewer vehicles per week the Seattle run returns $107,000 more than the Prince Rupert run.

Consideration has been given to raising the fares on the Prince Rupert run to make the same profit as the Seattle run, however this would mean a 60% increase in fares. Marine Highway has therefore increased the fares on the Seattle run 4% and increased fares on the Prince Rupert run 8%.

In an attempt to take advantage of the more profitable Seattle run, Marine Highway has decided to make an additional weekly run from Seattle during the summer instead of Prince Rupert. This change is reflected in the new ferry schedules.

The graphs that follow and also those included in the appendices given an actual breakdown of each run and show revenues generated verses expenses incurred.

Other areas discussed or review

The reservations section of the Marine Highway is an area that is very busy. While on tour of the facility with Mr. Camp the telephones were ringing constantly. This is another area that many people complain about, -- not being able to reach the Marine Highway for reservations.

There are currently 9 lines available to Marine Highway:
These calls are answered in priority from Group 1 to 3.
Group 1 - 2 toll free lines for use within Alaska
Group 2 - 3 lines available for local callers
Group 3 - 4 toll free numbers for out of state use.

As you will see from the attached summary, 5163 calls were made to Marine Highway on August 5th, 1985. Of this 1389 calls were answered from the 2 toll free in state lines compared to 2400 from the 4 toll free out of state lines. This possibly explains the difficulty getting through to Marine Highway within Alaska.
The department is considering deleting one of the toll free out of state lines and possibly adding another toll free in state line for use by Alaskans. This addition may not be possible if revenues for the year continue to be down from those projected.
The cost of maintaining a toll free in state line is considerably more expenses because of in state telephone rates.

Although the 4 toll free out of state lines are constantly in use the time taken with each of the out of state calls is much longer than the local and in state calls. This is due to the fact that many people call from other states to make inquiries on everything from scheduling to the weather and are usually unfamiliar with the area and request a description on each port of call, which in turn ties up the staff and the lines for a considerable length of time. Therefore, deletion of one or more of the out of state toll free lines would be both cost saving and time saving.

Other office procedures

One of the biggest obstacles facing the Marine Highway should be overcome in this fiscal year. At the present time much of the hardware needed to make the computer system truly effective is not on line. Therefore in order to compare revenues from ticket sales month to month each ticket has to be individually punched into the

computer before a monthly figure is available. Currently the information available in from sales 2 to 3 months previous. The necessary hardware has been purchased and is currently being installed. This will provide accurate, up to date information on revenues generated for the previous months. This will help with management decisions such as fare structures etc.

All time sheets for all marine highway onshore an offshore personnel are computed by hand. Requests for funds for computers will be in the FY 87 budgets.

In summary, Alaska Marine Highway system has several short time priorities:

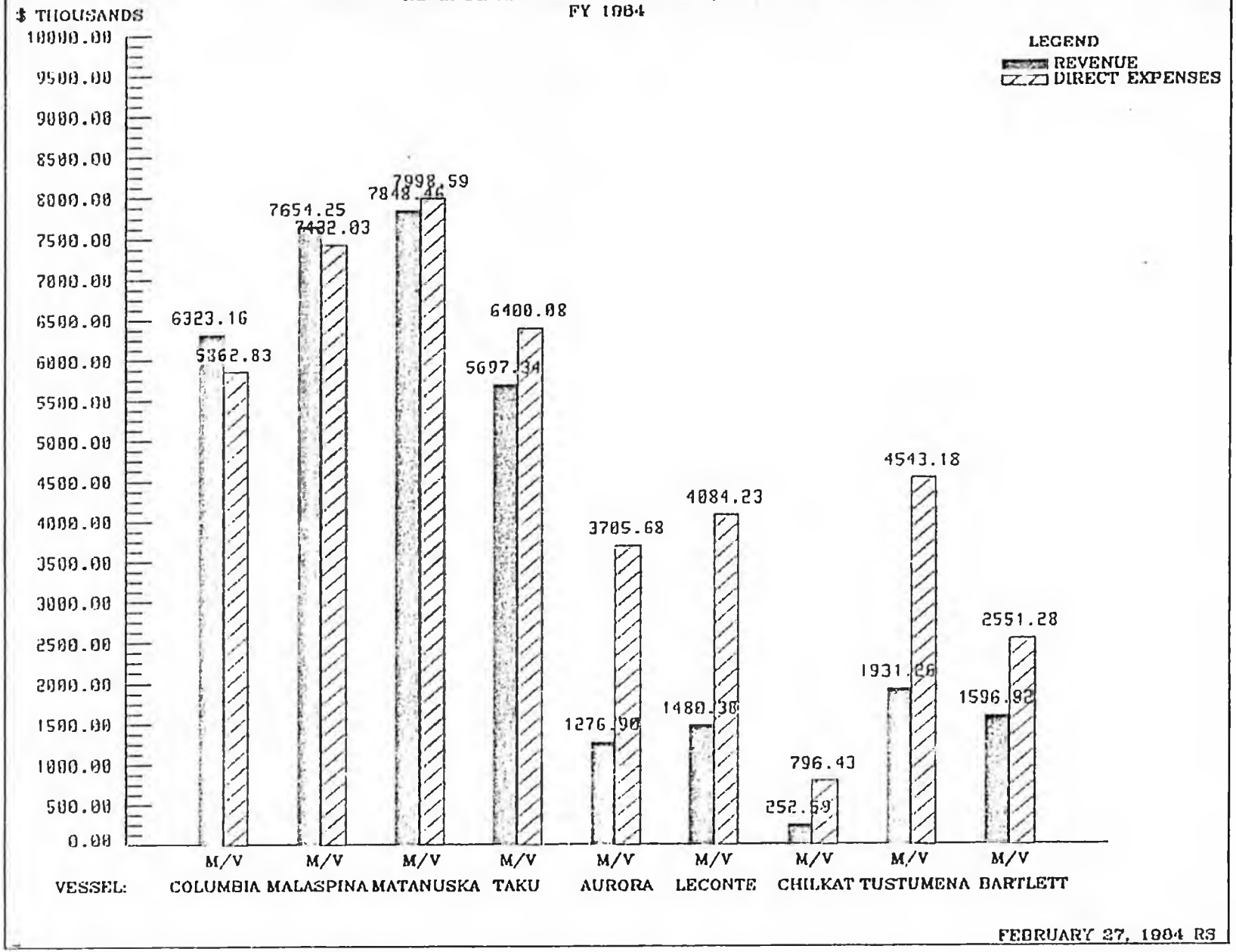
a. To make the necessary adjustments or cuts to balance the FY 86 operating budget. It is hoped that any adjustments or necessary cuts will have the least amount of impact on services or personnel.
b. To assess and implement methods to attain projected revenues. To work toward overcoming any obstacles and agressively compete in the transportation business.
c. To automate the offices to provide the most current and accurate information on passengers travelled, revenues generated and expenses incurred and therefore allow management to react more agressively to industry demands and swings, and to implement any changes that may be necessary for them to meet or exceed their projections.

The Long term plans for Marine Highway include looking into the fast ferries as an alternative. Constructing, upgrading and rebuilding facilities and vessels and providing more cost effective, efficient services both onshore and offshore.

Rhonda Cargill
Wendy Chamberlain
House Transportation Committee

ALASKA MARINE HIGHWAY SYSTEM

REVENUE AND DIRECT EXPENSES, BY VESSEL
FY 1984

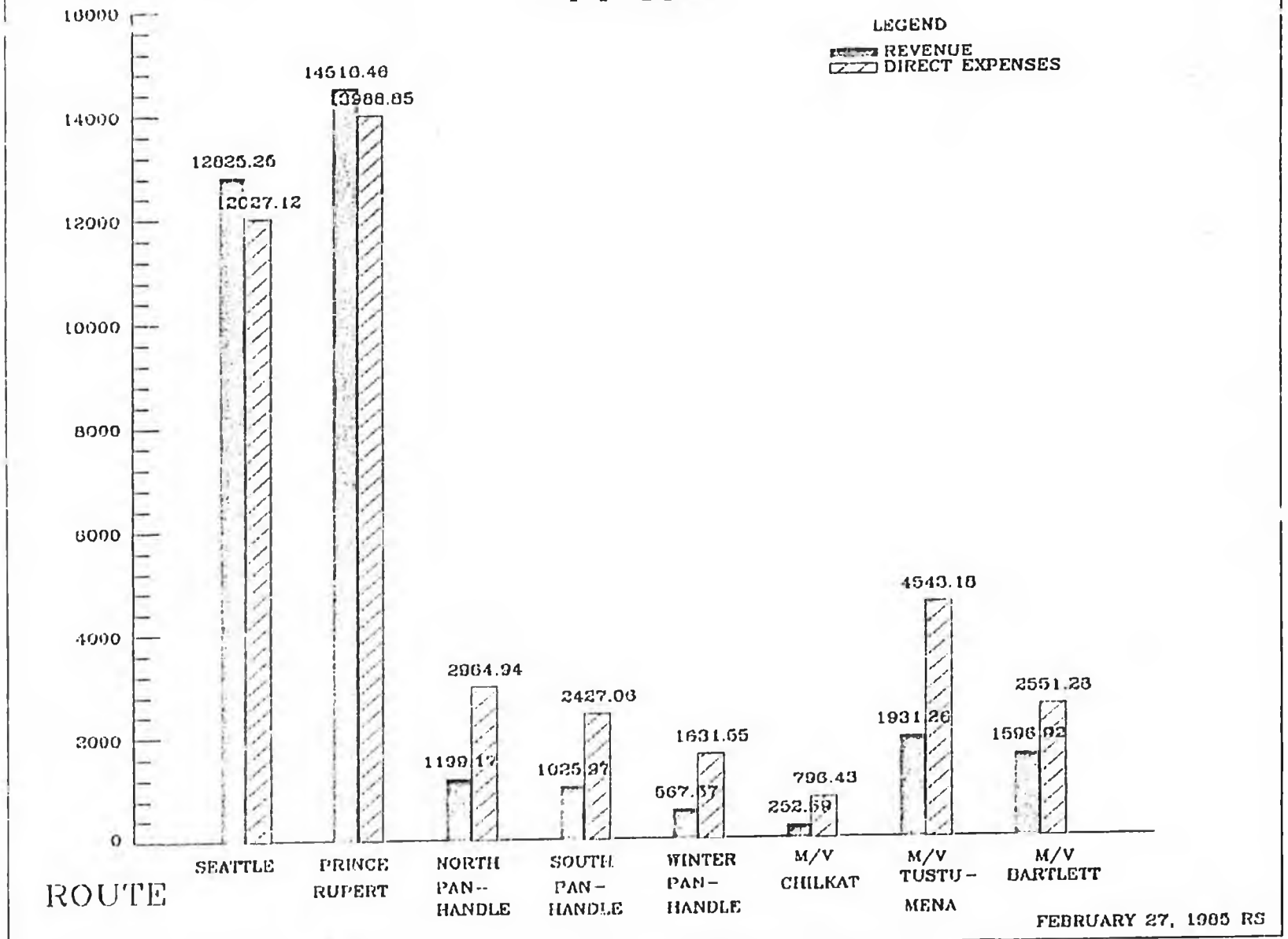


FEBRUARY 27, 1984 RS

ALASKA MARINE HIGHWAY SYSTEM

REVENUE AND DIRECT EXPENSES BY ROUTE

FY 1984



AUTO WEEKLY

7/29 - 8/05

SYSTEM ACTIVITY

AGENT GROUP : 1 Total Time : 168:00
Period Covered : Jul/29/85 Mon 4:00 AM to Aug/05/85 Mon 4:00 AM

	INCOMING CALLS							
	Answered Before Tape	Answered After Tape	Handled	Abandoned	Offered	Over-flowed	Night Service	OUTGOING CALLS
Mon-29	448	498	946	51	997	0	27	11
Tue-30	313	454	767	48	815	0	35	4
Wed-31	418	363	781	42	823	0	32	12
Thu-01	210	630	840	129	969	0	82	17
Fri-02	277	486	763	104	867	0	38	9
Sat-03	75	273	348	84	432	0	23	2
Sun-04	116	123	239	21	260	0	40	12
Mon-05	0	0	0	0	0	0	3	0
TOTALS	1857	2827	4684	479	5163	0	280	67

SERVICE LEVELS
Number of Calls Handled within XX Seconds

0	5	10	20	30	60	90	180	OVER
1	1074	565	407	195	479	393	749	721
.0%	22.9%	14.1%	8.6%	4.1%	10.2%	8.3%	15.9%	15.3%

AUTO WEEKLY

AGENT ACTIVITY

AGENT GROUP : 1 Total Time : 168:00

Period Covered : Jul/29/85 Mon 4:00 AM to Aug/05/85 Mon 4:00 AM

	TOTAL CALLS				AVERAGE DURATION Min:sec			
AGENT	Incoming	Outgoing	Internal	Transfer	Incoming	Outgoing	Internal	Wrap
41	208	0	8	0	2:48	0:00	0:07	0:53
42	379	8	1	1	2:50	2:07	0:20	2:40
43	49	18	1	0	1:51	1:57	0:00	7:55
44	505	2	3	2	3:13	0:40	0:00	4:35
45	464	20	5	3	1:45	1:18	0:00	0:40
46	415	0	6	3	4:06	0:00	0:06	1:35
47	137	2	0	0	1:29	0:20	0:00	5:00
48	284	0	4	3	2:54	0:00	0:05	2:27
50	0	0	0	0	0:00	0:00	0:00	0:00
51	195	1	1	1	3:40	1:40	0:00	3:38
52	715	13	1	1	2:54	2:55	0:00	4:16
53	744	1	7	5	2:15	6:40	0:05	0:46
54	605	2	8	1	2:24	1:30	0:07	1:42
60	0	0	0	0	0:00	0:00	0:00	0:00
61	0	0	0	0	0:00	0:00	0:00	0:00
62	0	0	0	0	0:00	0:00	0:00	0:00
71	0	0	0	0	0:00	0:00	0:00	0:00
TOTAL CALL	4700	67	45	20				

ALLOCATION OF TIME

Hr:min

AGENT	Signed In Duration	Incoming	Outgoing	Internal	Wrap-Up	Available	Unavailable
41	53:57	9:45	0:00	0:01	0:03	4:15	39:52
		18.0%	.0%	.0%	.0%	7.8%	73.9%
42	33:29	18:00	0:17	0:00	5:32	4:42	4:57
		53.7%	.8%	.0%	16.5%	14.0%	14.8%
43	11:42	1:31	0:35	0:00	0:32	1:57	7:08
		12.9%	5.0%	.0%	4.5%	16.6%	60.9%
44	42:13	27:05	0:01	0:00	2:13	6:13	6:40
		64.1%	.0%	.0%	5.2%	14.7%	15.8%
45	42:49	13:32	0:26	0:00	0:01	10:26	18:26
		31.6%	1.0%	.0%	.0%	24.3%	43.0%
46	42:47	28:25	0:00	0:01	0:32	5:01	8:53
		66.4%	.0%	.0%	1.2%	11.7%	20.6%
47	5:56	3:25	0:01	0:00	1:05	1:26	0:00
		57.6%	.1%	.0%	18.2%	24.0%	.0%
48	27:48	13:47	0:00	0:00	4:43	6:38	2:42
		49.5%	.0%	.0%	16.9%	23.8%	9.7%
50	0:00	0:00	0:00	0:00	0:00	0:00	0:00
		.0%	.0%	.0%	.0%	.0%	.0%
51	17:38	11:57	0:02	0:00	2:18	2:15	1:05
		67.8%	.1%	.0%	13.0%	12.7%	6.1%
52	55:42	34:38	0:38	0:00	7:46	12:24	0:16
		62.1%	1.1%	.0%	13.9%	22.2%	.4%
53	42:08	27:57	0:07	0:01	0:26	7:34	6:05

54	40:36	25:55	0:03	0:01	3:00	8:30	3:05
		63.8%	.1%	.0%	7.4%	20.9%	7.5%
60	0:00	0:00	0:00	0:00	0:00	0:00	0:00
		.0%	.0%	.0%	.0%	.0%	.0%
61	0:00	0:00	0:00	0:00	0:00	0:00	0:00
		.0%	.0%	.0%	.0%	.0%	.0%
	0:00	0:00	0:00	0:00	0:00	0:00	0:00
		.0%	.0%	.0%	.0%	.0%	.0%
71	0:00	0:00	0:00	0:00	0:00	0:00	0:00
		.0%	.0%	.0%	.0%	.0%	.0%
GROUP TOTAL	416:45	215:58	2:10	0:04	28:10	71:20	99:07
		51.8%	.5%	.0%	6.7%	17.1%	23.7%

JUL 15 1985

NOTICE OF PROPOSED CHANGES IN THE
REGULATIONS OF DEPARTMENT OF TRANSPORTATION AND
PUBLIC FACILITIES

Notice is given that the Department of Transportation and Public Facilities, under authority vested by AS 44.42.030, proposes to adopt regulations in Title 17 of the Alaska Administrative Code, dealing with Alaska Marine Highway tickets, to implement AS 44.42.020 as follows:

(1) 17 AAC 70.220(a) and (b) are proposed to be amended to incorporate the provisions of 17 AAC 70.221, and

(2) 17 AAC 70.221 is proposed to be adopted to establish procedures for refunds on Alaska Marine Highway tickets with the amount refunded, reduced depending upon when in relation to sailing the cancellation of the reservations occurs, the time of the year the space is reserved, and the particular route.

Notice is also given that any person interested may present written statements or arguments relevant to the proposed action by writing to Deputy Commissioner, Alaska Marine Highway System, Pouch R, Juneau, Alaska 99811, so that they are received no later than August 9, 1985.

This action is not expected to require an increased appropriation.

Copies of the proposed regulations may be obtained by writing to:

Merv Griggs
Alaska Marine Highway System
Pouch R
Juneau, Alaska 99811

The Department of Transportation and Public Facilities, upon its own motion or at the instance of any interested person, may, after the deadline stated above, adopt proposals within the scope of this notice without further notice or may decide to take no action on them.

DATE: _____

_____
Joe D. Camp
Deputy Commissioner
Alaska Marine Highway System
Department of Transportation
and Public Facilities

17 AAC 70.220(a) and (b) are amended as follows:

17 AAC 70.220. REFUND OF FARES, RATES OR CHARGES. (a) Passage tickets for passengers or vehicle deck space when presented by the legal owner, within one year of valid date, may be redeemed, subject to the provisions of 17 AAC 70.221, under the following conditions:

(1) unused passage tickets when travel was not performed or when transportation was not provided will be refunded at full value upon application;

(2) changes in destination, number of persons ticketed, size of vehicle or other details that result in the transportation provided being of lesser value than the purchase price of the passage ticket, must be adjusted on the basis of the true published value of the transportation provided; the adjusted difference will be refunded upon application;

(3) lost tickets may be refunded upon application and certification of loss.

(b) Tickets issued for stateroom or berth accommodations, when presented by the legal owner, may be redeemed, subject to the provisions 17 AAC 70.221, under to the following conditions:

(1) if canceled prior to sailing full refund may be made upon application,

(2) when travel distance is shorter than originally ticketed, or when all berths originally ticketed are not used, no adjustment in charges for the berth or stateroom service will be allowed. (Eff. 7/8/72, Reg 42; am / / , Reg.)

17 AAC 70.221. REFUND OF TICKET AMOUNTS. (a) Amounts refunded on tickets shall be reduced from the full ticket price for routes specified in this section as follows:

(1) if cancelled thirty days prior to sailing, 100 percent is refunded;

(2) if cancelled more than twenty days, but less than thirty days before sailing, 80 percent is refunded;

(3) if cancelled more than ten, but less than twenty days before sailing, 60 percent is refunded;

(4) if cancelled less than ten days before sailing 40 percent is refunded; and

(5) if the vessel sails without cancellation of the tickets, nothing is refunded;

(b) The provisions of this section apply to the following routes:

(1) all tickets for sailings using Seattle as a point of origin or as a destination;

(2) all tickets for sailings northbound from Prince Rupert during June and July of each year;

(3) all tickets for sailings southbound to Prince Rupert from July 15 through September 15 of each year;

(4) all tickets for any sailing between Whittier and Valdez; and

(5) all tickets for individual sailings specified in the Alaska Marine Highways' schedule. Schedules are issued for the periods October 1 through April 30 and May 1 through September of 30 each year. Copies of the schedules may be obtained from The Alaska Marine Highway System, Pouch R, Juneau, Alaska 99811. (Eff. / / / , Reg.)

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DEPUTY COMMISSIONER--ALASKA MARINE HIGHWAY SYSTEM

POUCH R
JUNEAU, ALASKA 99811
(TELEX 45-312)
PHONE (907) 465-3950

November 4, 1985

All Employees
Alaska Marine Highway System

I am writing this letter to all employees in response to a letter (copy attached) published on Thursday, October 31 in the Juneau Empire. That letter got my attention for three reasons:

1) It contained persistent false rumors and accusations;

2) it was allegedly signed by a dedicated employee who had recently died; and

3) it mentioned one event that occurred after his death.

On Friday morning, November 1, while pondering how Mr. Clark could have written a letter about something that occurred after his death, I received a call from Mr. Carl Sampson, Managing Editor of the Empire. He had just received a call from Mr. Clark's daughter who had informed him that Mr. Clark could not have written or had anything to do with that letter since Mr. Clark had been gravely ill in a Portland hospital for some time before his death. The Friday Empire carried an editorial (copy attached) that states the Editor's position much better than I can.

Even though some individual or group of individuals has taken advantage of Mr. Clark and his family and possibly the letter to the editor should be ignored, I believe I owe it to all of you to answer with facts the false charges that letter implied. My comments respond paragraph by paragraph to the letter to the editor.

Our labor costs are high. Over 53.5 percent of our total operating budget is in personal services costs and benefits for our vessel employees. Shore employee personal services and benefits are less than 9.5 percent of our total operating budget. No other major vessel operator faces those types of labor costs to my knowledge and experience. Most of the wages are hard earned and well deserved, but management must ensure that we do not pay for services not needed.

Office personnel have not tripled. In fact, there have been a total of only 15 personnel added to the authorized Alaska Marine Highway System (AMHS) personnel count since July 1980 and seven of these were approved this year and are Capital funded positions to manage construction projects for Marine Facilities Engineering. It may seem to the unknowning as if many positions have been added to headquarters staff since AMHS has consolidated under one Deputy Commissioner. With the exception of the 15 new personnel, all other positions have long been employed in Department of Transportation and Public Facilities (DOT&PF), doing AMHS work. Many were simply located elsewhere where they reported to different supervisors but they were performing AMHS tasks. The DOT&PF reorganization in 1983/84 simply located them centrally in the same organization which, incidentally has made us more responsive and efficient. There are 7 persons or 4.7 percent in the shore staff of AMHS earning $60,000 or more. There are 69 or over 8.1% of all vessel personnel earning that much or more. In addition, there are 205 or 24% of all vessel personnel earning between $40,000 and $60,000. Ashore there are 24 or 16.3% earning those wages. Shoreside supervisors and managers are not eligible for overtime even though many extra hours of work are required. The shore staff to vessel employee ratio of AMHS compares very favorably with the Washington State Ferries. Washington State Ferries have one person ashore for every four afloat while AMHS has one person ashore for every 5.8 persons afloat.

In the winter our administrative staff must still order the supplies, account for revenues and expenses, pay the bills, dispatch personnel, handle payroll, prepare budgets, manage capital construction projects and make reservations. There is no slack period ashore as there is on the routes.

We are implementing a limited number of training programs for our shoreside staff just as we are for our vessel personnel. Both programs will increase as our budget will allow. Non-performers, both afloat and ashore are being appropriately dealt with within the bounds of union contracts.

Management philosophy is not intended to be antagonistic toward vessel personnel. When I was at sea I made a vow that if ever I was in a management position ashore, I would ensure that the shore staff always remembered that their only reason for being was to support the ships. We are dedicated to making AMHS a more efficient organization that better serves the needs of all Alaskans. We are antagonistic to any personnel who seem only to think of how they can get more for doing less or those who fail to remember that our sole reason for operating is to serve the public.

M/V COLUMBIA will be in a dead ship lay up status until at least March 1. Todd Shipyard will also complete the industrial overhaul during that period. To lay COLUMBIA up in Ketchikan this year would have cost AMHS a minimum of $528,000 in auditable costs. The Todd Shipyard contract is for $143,000, or a savings of $385,000. That savings equates to two extra weeks sailing for a mainline vessel, providing service to the public.

Shoreside employees travel on passes only when they are on official business, therefore reservations for cabins are in order and meals are included in lieu of per diem. Occasionally, I take my vehicle when I travel on official business on the ferry. It is a cost savings measure as I then do not need to rent a car at destination and I only do this if there is adequate space available. Shoreside personnel do not receive passes for vacation travel. Shoreside employees' family members never receive passes for passage or meals. Mr. Black's daughter was, traveling on a purchased ticket, erroneously not charged for an evening meal on M/V COLUMBIA this summer. Mr. Black brought it to the attention of the Port Steward and thought it was resolved before he left the ship. After debarking, he discovered the meal had not been paid for and he paid the bill the next COLUMBIA trip through Juneau.

I firmly believe that we have the finest system and that we have more dedicated, hard working employees than any organization of comparable size anywhere in the world. We must all work together to improve our system so that it can function to its fullest to provide service to the public. To the majority of you who work so hard for our system, I say thanks, keep up the good work and help us realize the real potential this system has.

Sincerely,

Joe D. Camp
Deputy Commissioner

Enclosures

Mr. Black and I were recruited from outside the state. We both had extensive experience in managing and working with civilian crewed vessels. Many successful businesses recruit ex-military personnel for their proven track record as cost effective managers. We both hope to remain in Alaska for a long time. Incidentally, we have given all vessel employees who collect COLA but who are "P. O. Box Alaska residents" the opportunity to correct past errors without penalty. Those who we now identify as having filed false claims in order to collect COLA will be dealt with to the limits of the law including termination and collection actions to recover COLA paid non-residents. Only the cheaters should be bothered by this. Alaska residents and those honest outsiders who don't collect COLA should be happy to see it happen.

Some marketing surveys have been conducted for specific purposes. Where appropriate and where funding is available the recommendations are implemented.

I made the statement that I thought airline super saver fares were the principle cause of falling revenue this year. There are many other factors involved and we are taking whatever action we can to counter those losses. One will be to sail two vessels out of Seattle next summer. Our service to Hyder was the result of legislation that required it. DOT&PF argued against it in all committee hearings because of the anticipated losses. The $47,000 loss was for the entire summer, not each week. We will again serve Hyder/Stewart next summer, but since we will be carrying vehicles we should not have a loss.

Last summer we had over 850 vessel employees to fill 331 jobs per week on all vessels. Considering two crews that totals 662 permanent jobs with 188 relief personnel to fill in. In spite of that number of extra personnel we sometimes did not have enough personnel to dispatch to cover all positions on all vessels. We did not sail below Coast Guard certificate. AMHS is the only seasonal business I know of that has allowed almost unlimited leave during the peak season. Too liberal a leave policy and a higher than usual "not fit" situation during a portion of this summer left us short. With the funding shortages we have, hiring additional personnel was not the answer, but better managing the personnel we have may be. We are seriously considering limiting all personnel to no more than one work week leave and then only for a limited number on leave each week between May 15 and September 15 next year. I dislike having to limit leave but we are in a seasonal business whether we like it or not.

JUNEAU EMPIRE - October 31, 1985

Letters

Ferries need help from top down

Dear Sirs,

This letter is a response to the growing antipathy being created in the Alaska Marine Highway Systems (A.M.H.S.) between shipboard personnel and the management in the Juneau office. Management seems oblivious to its contribution to waste in state government and prefers to put the blame on "high" labor costs. Examples of mismanagement are rife, but we will explore only a few in this document.

Office personnel and mid-level managers have about tripled in the past five year, with officer's wages averaging $60,000 a year. One might compare ferry management (in terms of the ratio of office to line workers) with private shipping companies or the Washington State Ferries. They operate with a fraction of the personnel and have bigger budgets, more ships, and larger payrolls.

Each winter half the ships are laid up in the shipyard for maintenance, but there is never a reduction in force in office personnel. Actual ships and compliment crews are static, while office workers multiply exponentially.

There is no policy of continuing (or even initial) management training. Poor personnel are never removed, just shifted to a different title – usually a position of more responsibility.

Management philosophy is antagonistic to shipboard workers and is heavily infiltrated by ex-military personnel. Since when is the military a good place to recruit people to be cost effective?

Top management has been imported from outside the State of Alaska, even though Governor Sheffield in a recent press interview still gives lip service to local hire on state financed projects.

There have been approximately 11 marketing surveys done for the state in as many years (at what cost?) that have NEVER been utilized. Evidently no one in Juneau knows how to analyze and implement the data gathered by the firms contracted for the surveys.

A D.O.T. official in a recent public statement blamed loss of ferry revenue on super saver air fares, but said the A.M.H.S. is taking steps to save money at the operational level. So far this has translated into less sailors and stewards to work shipboard during peak summer months, and inaugurating weekly trips to Hyder, Alaska, at $17,000 per trip.

Lay up on "dead ships" (those vessels with no maintenance being done and no workers aboard) are being tied up to sit in ports outside of Alaska. These docking fees could just as easily go to Alaskan cities with docking facilities.

Ethical standards for any operation, be it public service, the private sector or the military, are set by the leadership and filter down to subordinates. At the A.M.H.S. we are given the examples of "do as I say, not as I do." Memorandums are issued denying employees traveling on passes from (1) reserving staterooms or (2) having free meals aboard the ship, yet an official's daughter travels with her father while he is ostensibly on official business, all meals provided to them at state expense. On a recent "special" voyage to Sitka, officials traveling on passes reserved their stateroom accommodations, even after their own memos (dated two weeks previously) state quite clearly there would be no exceptions to the pass-reservation rule.

The old adage "Physician, heal thyself" might be well applied to a bloated, inefficient bureaucracy whose typical response to declining state revenues and calls for a more cost effective program is to blame the workers who set no policy, have little or no control of day-to-day operations and who struggle to interpret variable and often capricious office politics.

Please sign us,
Frustrated Public Servants
Larry Clark
P.O. Box 3515
Juneau, 99803

JUNEAU EMPIRE - November 1, 1985

An apology for an abuse of a privilege

A newspaper has many jobs: to inform, to entertain and to provide a forum for the expression of opinions. Each of those functions is important, because together they provide a well-rounded view of the world around us. If one of those functions had to be chosen as most important, the free expression of opinion would probably be it. That's because in a democracy, the free expression of opinion is not reserved for the few, it is a privilege enjoyed by all.

Most of the time, people express their opinions in a responsible manner. Once in a great while, however, that privilege is abused. It doesn't happen when an individual speaks deeply held beliefs, and it doesn't happen when an honest error in fact is stated.

It happens when an individual, or group of individuals, purposely seeks to deceive.

By all indications, that's what happened in a letter to the editor published in Thursday's Empire. In it, someone apparently forged another person's signature. While that is bad enough, the person whose name had been forged had passed away nine days after the letter was dated. The family says he had been severely ill in Oregon and there is no way he could have written the letter or had anything to do with it.

Maybe the person who forged that letter has a just cause. Or maybe he thought he was being real smart by taking another man's name. But no matter how you look at it, nothing can justify this sort of flagrant and willful abuse of a privilege. Whoever did it not only destroyed his credibility and perpetrated the most irresponsible of deceptions, he needlessly hurt the man's family, friends and former co-workers.

What can justify that sort of action? Nothing. What can make up for the hurt? Nothing.

We offer our apologies to the members of Larry Clark's family and the many other people who we hurt by publishing that letter, and you can bet we will make every effort to make sure this never happens again.

If the person responsible for this deception had any courage or sense of right, he or she would also apologize to the family and to the public.

DIVISION OF ADMINISTRATIVE SUPPORT
ALASKA MARINE HIGHWAY SYSTEM

Martin J. Nusbaum, Director

- With its staff of 51 the Division of Administrative Support was able to meet its objective of providing the necessary supply, personnel and finance functions for the Alaska Marine Highway System by meeting the following objectives.
- Payroll and dispatching errors decreased by 25%.
- Decrease in crew travel pay due to dispatch errors by 28%.
- Decrease in time on recording crew seniority points by 28%.
- Decreased processing time whereby vendor payments were accomplished under thirty days from time of invoice to payment.
- Further progress is anticipated in FY 86 in that objectives toward improving systems with the help of computers is expected to be made in the following areas:
- Prompt and accurate rating and response to marine employee applicants as to hiring qualifications and compliance with affirmative action.
- Improve warehouse and inventory control procedures. Reduce error rate to 2%.
- Establishment of cost centers including management and accounting requirements to identify profit/loss for services performed.

sent to Dave
10-31-85 / 15

ALASKA MARINE HIGHWAY SYSTEM
DIVISION OF MARKETING AND SERVICES

Josephine Emery, Director

- A major change took place within the Division of Marketing and Services in FY 85 when reservations' functions were centralized in Juneau. A staff of 65 includes reservations positions which were shifted from both the Seattle and Anchorage offices, which had previously shared the reservations load, to the Juneau office. Toll free lines, two Alaskan and four out-of-state were installed along with appropriate electronic call distribution, monitoring and reporting. This has proven effective with the number of unanswered telephone calls being reducted significantly.

- Most of the objectives of the Division were reached as the response to telephone and letter inquiries improved as planned and the number of vehicles transported increased from 94,000 to 99,000 as projected. However, two objectives were not reached. Passenger traffic did not reach projected levels as ridership actually declined one percent compared to the projected rise of three percent.

- With passenger traffic declining, revenue also fell short of projections by nearly six percent at $32.6 million.

ALASKA MARINE HIGHWAY SYSTEM
DIVISION OF MARINE FACILITIES ENGINEERING

Harold Moeser, Director

- With the FY 85 funding level Marine Facilities Engineering was able to meet its objectives in the development and obligation of $10,700,000 in capital construction. Projects included the rehabilitation of the M/V MATANUSKA and Petersburg Ferry Terminal ($7,500,000), and new or major improvements at Tenakee, Hoonah and Ketchikan ($3,200,000).

- The staff total of 20 includes a Naval Architect and five registered professional engineers. Beginning in FY 85 a full time Shore Maintenance Manager function was established to schedule and contract for shore maintenance as needed.

- The legislature authorized 7 additional positions for FY 86 which will allow this Division to target for an FY 86 capital construction output of $26,000,000. The primary emphasis will be in completing the Ketchikan Ship Repair Yard ($18,000.000), improvements to vessels M/V COLUMBIA (Bow Thruster), M/V BARTLETT and M/V MATANUSKA ($2,600,000), and new or improved terminal facilities at Wrangell, Metlakatla and Seward ($5,200,000). Maintenance of all Alaska Marine Highway Terminals is ongoing and estimated to be $200,000 per year.

ALASKA MARINE HIGHWAY SYSTEM
DIVISION OF MARINE OPERATIONS

Eugene H. Black, Director

Objectives of FY 85

- Full utilization of our capital assets, our ships, and shore facilities.
- Provide additional service the private sector could not offer. This deals with new Alaskan ports and frequency of service.
- Increase ship operating days and passenger boardings.
- Reduce overhaul costs

  a. Increasing productivity per labor hour
  b. Improved scheduling
  c. Shorter layup period

- Improve passenger service by upgrading facilities and expanding passenger food service options.
- Re-engine the M/V MATANUSKA.
- Upgrade safety equipment to state of the art on all Alaska Marine Highway System vessels.

The number of employees under Alaska Marine Highway System supervision

- Nine shoreside management positions to supervise 725 vessel positions.

Accomplishments

- The ships were better utilized with an increase in ships operating days.
- Service to Alaskan communities was expanded by scheduled trips to Hyder, Alaska. Service across the Gulf of Alaska was expanded and studies are being done to analyze this area.
- Overhaul costs were reduced by several changes in management practice.

a. Executed second year of a five (5) year service contract with main engine manufacturer for the maintenance of the main engines on the M/V COLUMBIA with an estimated annual cost savings of 500,000 dollars, which has resulted in improved operational reliability of the M/V COLUMBIA.

b. Better scheduling of layup personnel resulted in more productivity with smaller crew levels.

c. Less days were spent in layup status resulting in more use of Alaska Marine Highway System vessels.

° Extensive upgrading of Alaska Marine Highway System vessels occurred in FY 85. The major ones that affected Passenger Services are:

a. Reinstituted year-round table service for dinner meal on board Seattle run ships.

b. Installed Amtrak style recliners on M/V's LeCONTE, AURORA and COLUMBIA.

c. Installed toddler play area on M/V's TAKU and MALASPINA.

d. Major carpet upgrading on M/V's MALASPINA, LeCONTE and TAKU.

e. Remodel of Cocktail Lounge and Dining Room on the M/V MALASPINA.

f. Installed public showers on the M/V AURORA and M/V LeCONTE.

° The M/V MATANUSKA was re-engined. The life cycle cost savings justified this project. The fuel consumption comparisons are very favorable after the first four months of operations.

° Several safety related changes were made to bring Alaska Marine Highway System up to the state of the art.

a. Upgraded all radar systems in the fleet with state of the art capability.

b. Installed new extended skeg on the M/V COLUMBIA to improve her handling characteristics.

c. Conducted firefighting and CPR training programs for employees in Deck, Engine and Stewards Departments.

d. Continued upgrading the plumbing, electrical and ventilation systems aboard the ships.

e. Increased emphasis on the upgrading of all navigational equipment.

- The change in direction from FY 84 to FY 85 was more a consolidation than a change. More efficient use of Alaska Marine Highway System Facilities, better scheduling of work and personnel, and expanded frequency of service.

- FY 86 is a year where due to budgetary restraints, major cost cutting measures are being put in place. It is our intention to not retreat in regard to increasing our passenger boardings comparison. We are planning to accomplish more but with less. The proposed changes are:

a. By better scheduling, the M/V COLUMBIA will be layed up during the least profitable period. Even with the layup, passenger boardings should show a reasonable increase. The savings from this measure will result in a cost savings of approximately $431,952.16 due to her being in cold ship status void of crew.

b. The average time the ships will remain in maintenance/overhaul status will be cut, allowing additional time on the run to offset the M/V COLUMBIA layup.

c. Size of overhaul crew levels will be cut by 11%. Due to improved procedures and scheduling, the work will be completed in less days.

d. The food service during overhaul period will be replaced with meal per diem, which will result in a cost savings of $241,915.46.

e. There will be a change to two mainline ships calling on Seattle during the summer season, which will result in savings from less expensive supply costs and should increase revenues due to more passenger miles being logged.

ALASKA MARINE HIGHWAY SYSTEM

WEEKS OF SHIPS OPERATIONS - By Calendar Year

	1981	1982	1983	1984	1985	PLANNED 1986
Four Mainline Vessels - Southeast	128.9	135.4	133.8	150.7	146.0	155.6
Two Feeder Vessels - Southeast	82.4	84.5	81.2	83.5	87.2	90.2
M/V CHILKAT - Southeast	44.9	48.5	47.3	47.3	46.9	47.6
Feeder Vessels including M/V CHILKAT	127.3	133.0	128.5	130.8	134.1	137.8
Total Southeast System	256.2	268.4	262.3	281.5	280.1	293.4
M/V TUSTUMENA	43.4	45.0	43.8	43.0	43.9	43.8
M/V BARTLETT	52.2	44.5	44.6	44.8	44.5	44.8
Total Southwest System	95.6	89.5	88.4	87.8	88.4	88.6
Total AMHS	351.8	357.9	350.7	369.3	368.5	382.0

ALASKA MARINE HIGHWAY SYSTEM

WEEKS OF SHIPS OPERATIONS - By Fiscal Year

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87 BASE	FY 87 REQUESTED
Four Mainline Vessels - Southeast	120.4	141.9	132.0	145.2	142.0	155.8	153.1	160.1
Two Feeder Vessels - Southeast	87.0	85.9	79.7	86.0	86.2	90.8	90.9	90.9
M/V CHILKAT - Southeast	45.2	48.2	47.5	47.3	47.0	47.5	30.8*	30.8*
Feeder Vessels including M/V CHILKAT	132.2	134.1	127.2	133.3	133.2	138.3	121.7*	121.7*
Total Southeast System	252.6	276.0	259.2	278.5	275.2	294.1	274.8*	281.8*
M/V TUSTUMENA	43.7	44.7	44.0	43.0	44.0	43.7	43.6	43.6
M/V BARTLETT	42.2	44.2	44.8	44.8	44.6	44.7	43.3	43.3
Total Southwest System	85.9	88.9	88.8	87.8	88.6	88.4	86.9	86.9
Total AMHS	338.5	364.9	348.0	366.3	363.8	382.5	361.7*	368.7*

*The M/V CHILKAT is removed from service February 1, 1987.

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

POUCH Z
JUNEAU, ALASKA 99811
PHONE: (907) 465-3900

OFFICE OF THE COMMISSIONER

February 28, 1985

Ms. Sally Smith
President
Southeast Conference
P. O. Box 29
Douglas, AK 99824

Dear President Smith:

This is in response to your recent letters to Deputy Commissioner Joe Camp and me regarding reactivation and expansion of the Marine Highway Task Force. The Task Force was appointed by Governor Sheffield, and its work ended with completion of the Task Force Report. I do not believe it would be beneficial to reactivate and expand the Task Force at this time.

I can, however, see some benefits from having an advisory group to work with the Alaska Marine Highway System. I believe such a mechanism currently exists within the Southeast Conference. I would like to suggest that your Transportation Committee or some other group from your organization assume such a role. I can see the need for regular meetings and suggest for your consideration, quarterly meetings to be scheduled by the Advisory Group at their convenience with the concurrence of the Deputy Commissioner of the Alaska Marine Highway.

Sincerely,

R. J. Knapp
Commissioner

cc: Joe Camp, Deputy Commissioner
Alaska Marine Highway System

...laskans"

SOUTHEAST CONFERENCE

P.O. Box 29 • Douglas, Ak. 99824

(907) 586-6846

February 5, 1985

The Honorable Bill Sheffield
Governor
State of Alaska
Pouch A
Juneau, AK 99811

Dear Governor Sheffield:

The Southeast Conference board of directors, comprised of Southeast district representatives, Southeast legislators, and Southeast community mayors, has reviewed the Marine Highway Task Force report to the State and is following the implementation of those recommendations we support.

The Southeast Conference board requests the Marine Highway Task Force be continued as an active board and be expanded to include a representative from each marine highway "user" community. This would ensure ongoing communication between the State administration and the people of Alaska serviced by the ferry system.

We shall appreciate your comments regarding this request which the board believes will achieve a balanced direction for the future of the marine highway system.

Respectfully,

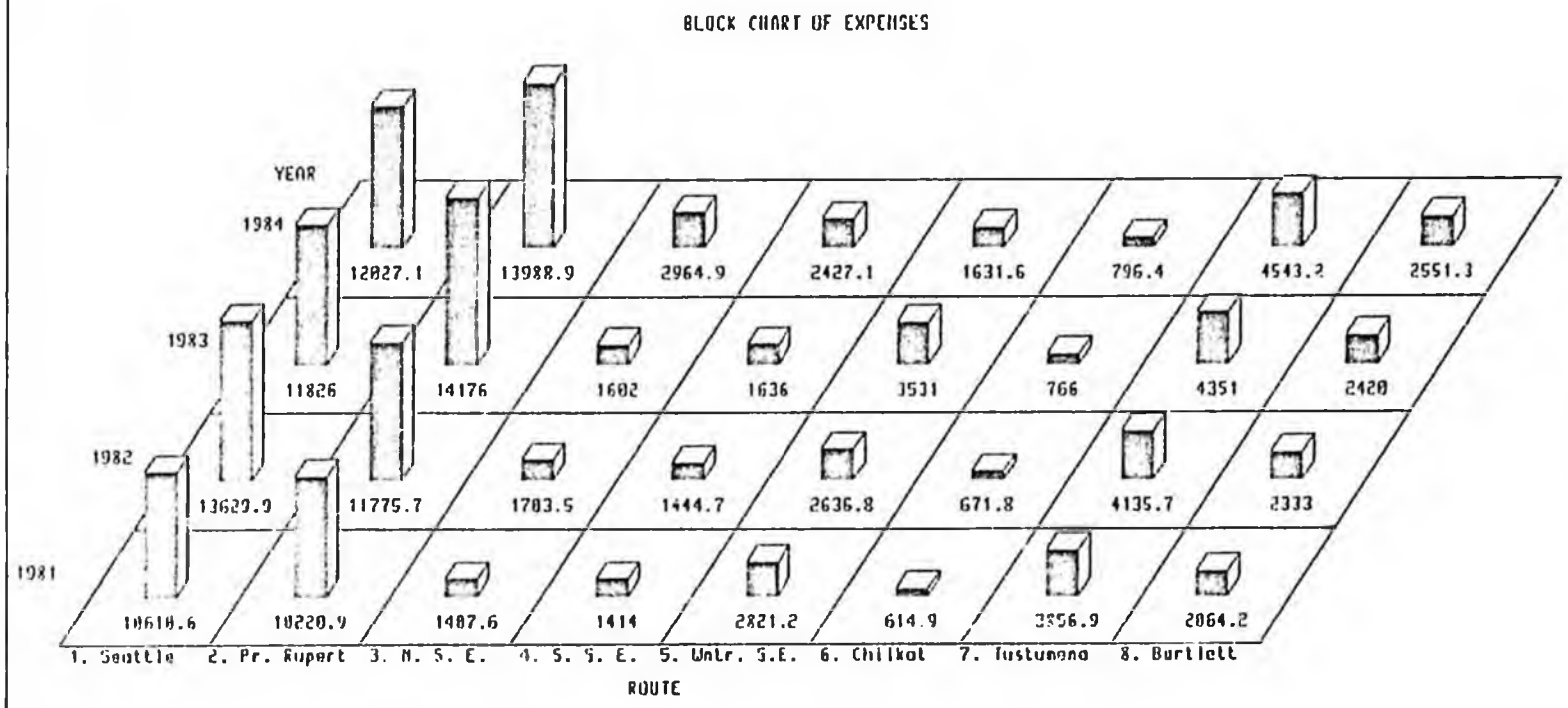
Sally Smith

Sally Smith
President

ALASKA MARINE HIGHWAY SYSTEM

Direct Expenses by Route and Fiscal Year, 1981–1984

$ Thousands

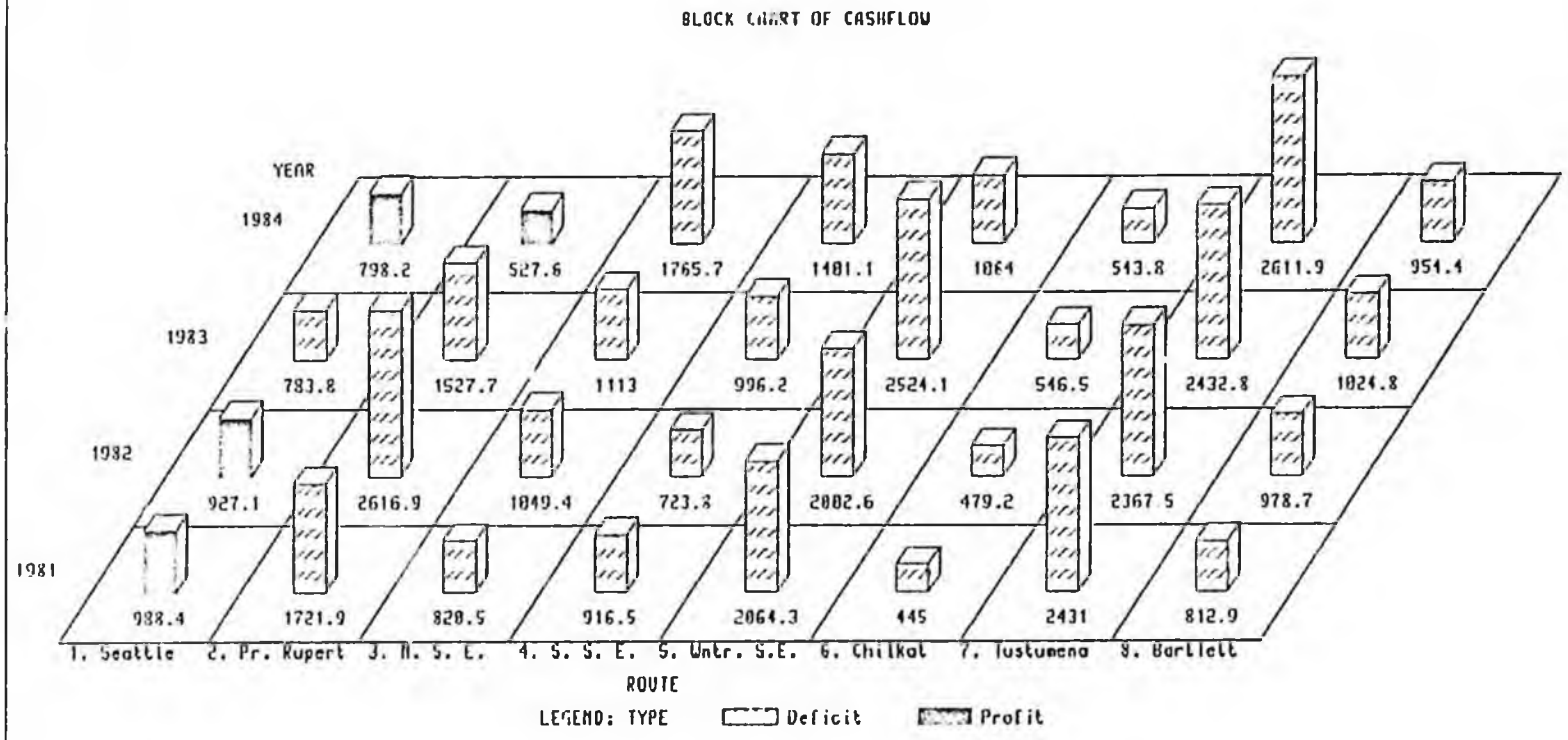


Compiled February 27, 1985

ALASKA MARINE HIGHWAY SYSTEM

Profit or Deficit by Route and Fiscal Year, 1981–1984

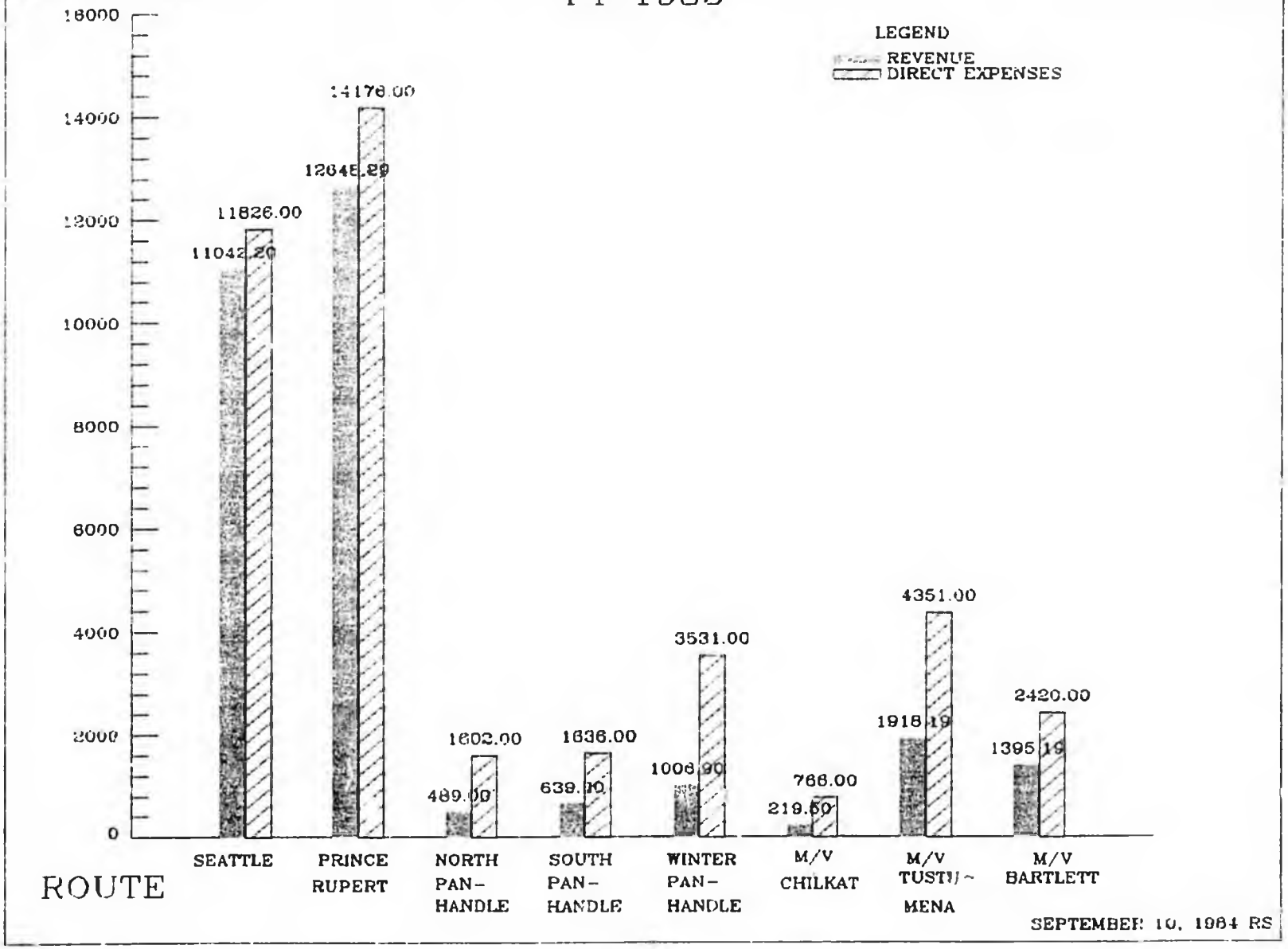
$ Thousands



Compiled February 27, 1985

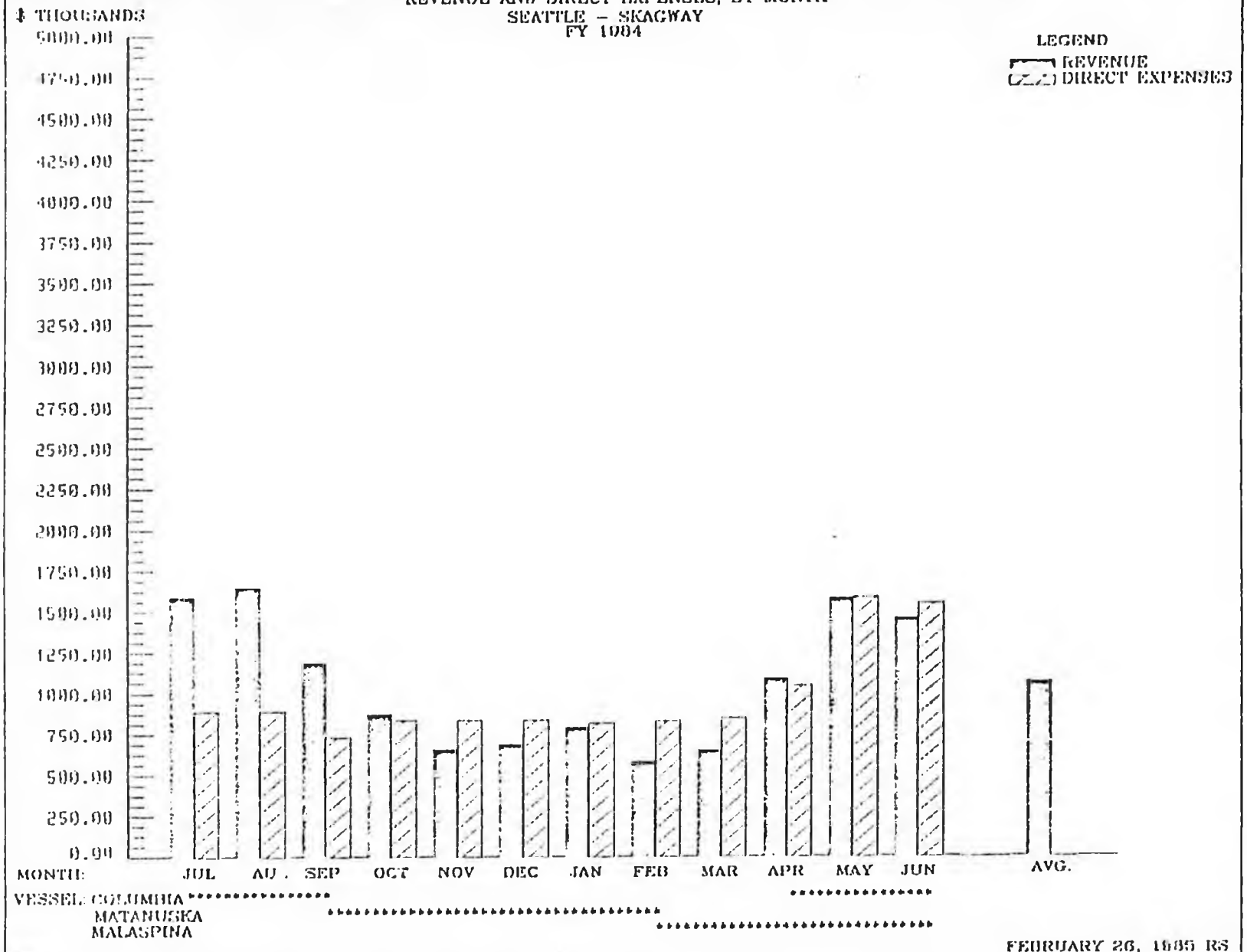
ALASKA MARINE HIGHWAY SYSTEM

REVENUE AND DIRECT EXPENSES BY ROUTE
FY 1983



ALASKA MARINE HIGHWAY SYSTEM

REVENUE AND DIRECT EXPENSES, BY MONTH
SEATTLE - SKAGWAY
FY 1984

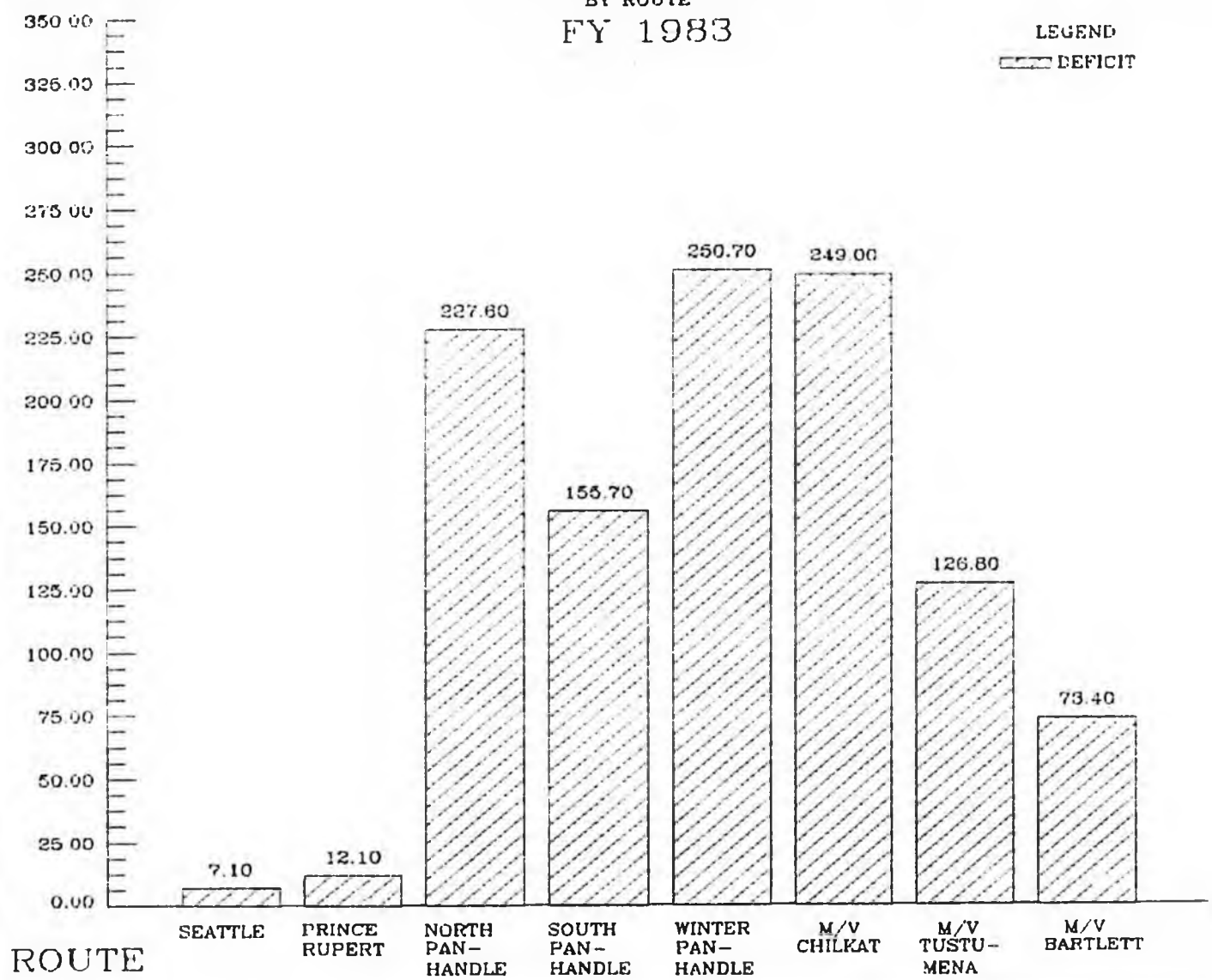


FEBRUARY 26, 1985 RS

ALASKA MARINE HIGHWAY SYSTEM

PROFIT OR DEFICIT
AS A PERCENT OF REVENUE
BY ROUTE

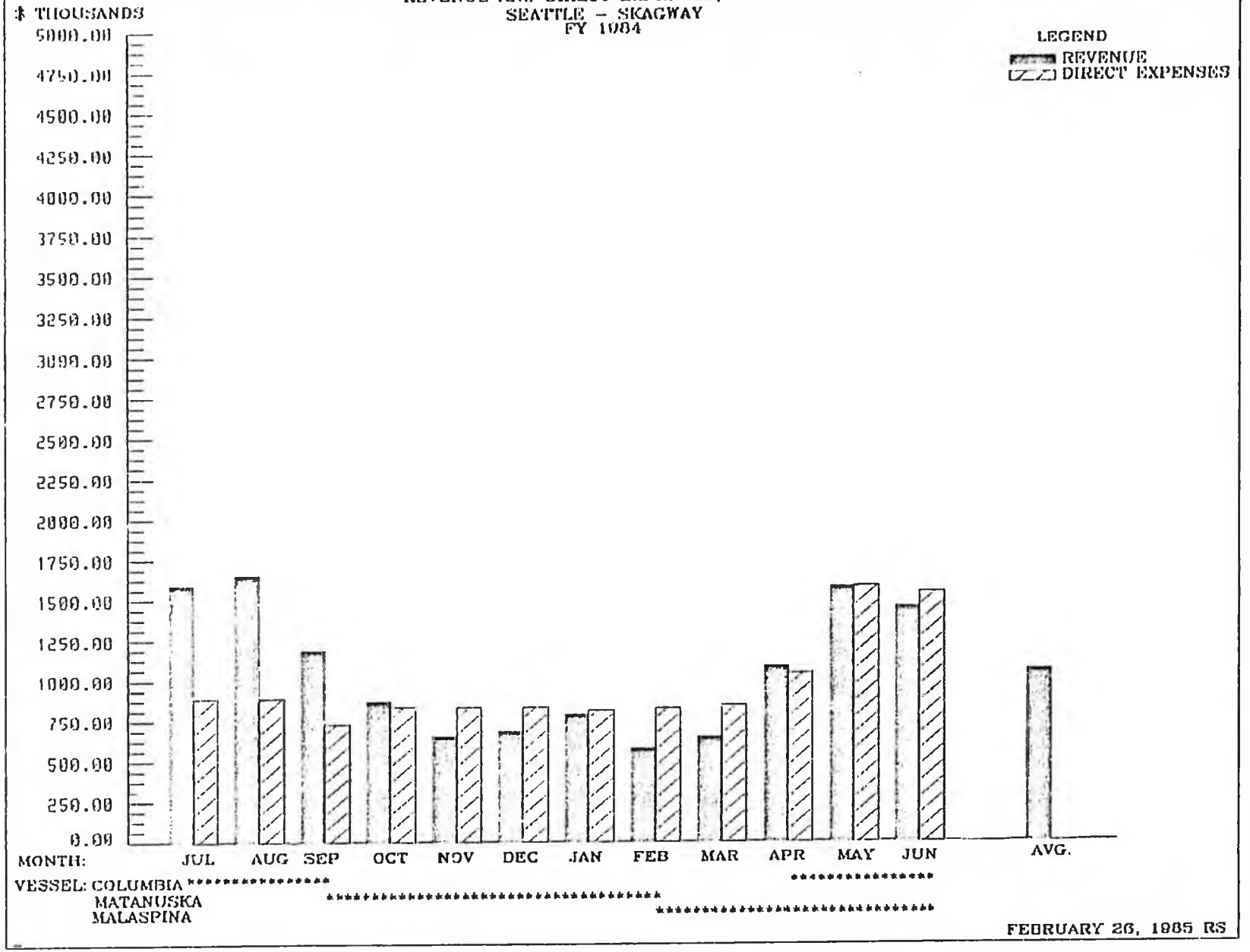
FY 1983



SEPTEMBER 10, 1984 RS

ALASKA MARINE HIGHWAY SYSTEM

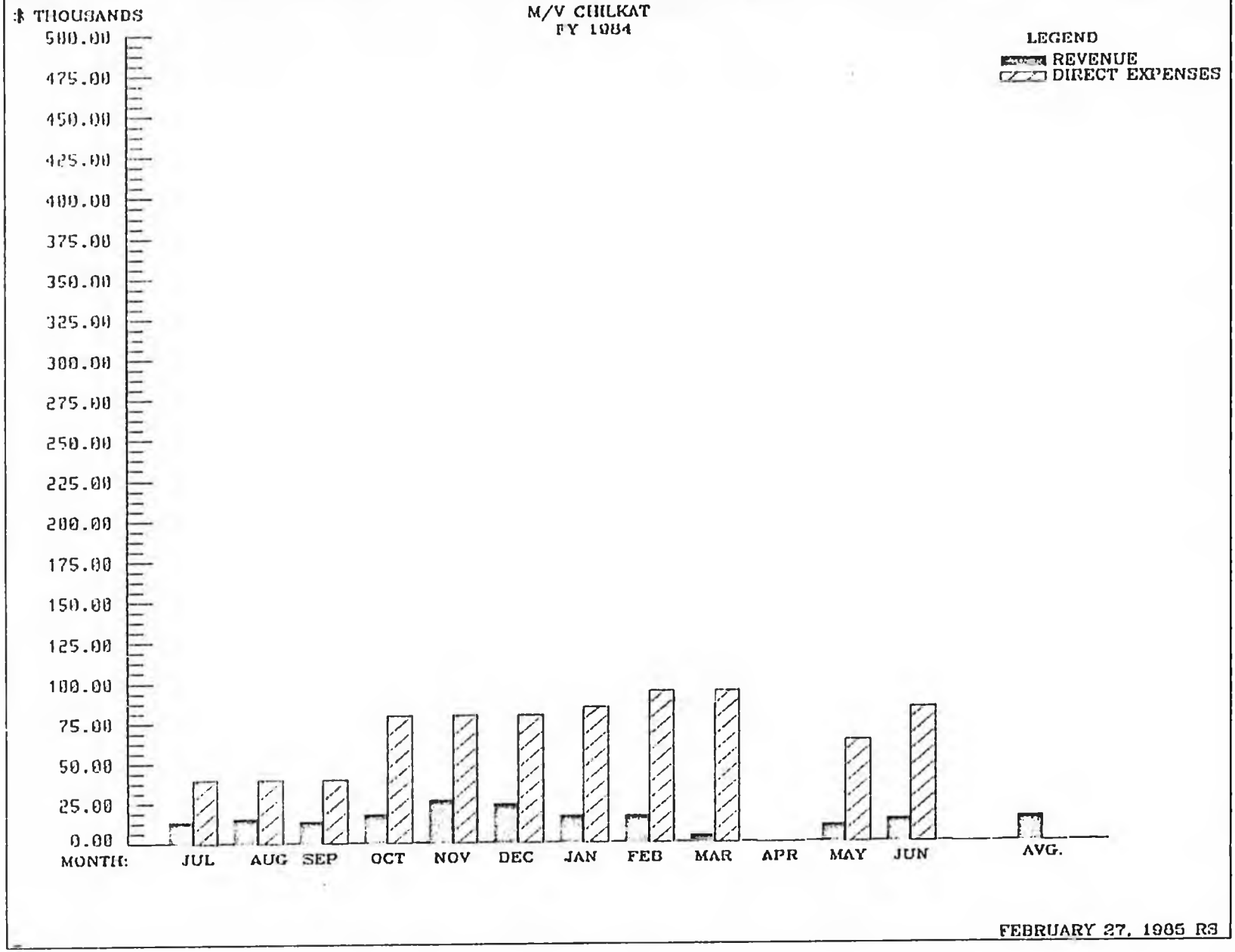
REVENUE AND DIRECT EXPENSES, BY MONTH
SEATTLE – SKAGWAY
FY 1984



FEBRUARY 26, 1985 RS

ALASKA MARINE HIGHWAY SYSTEM

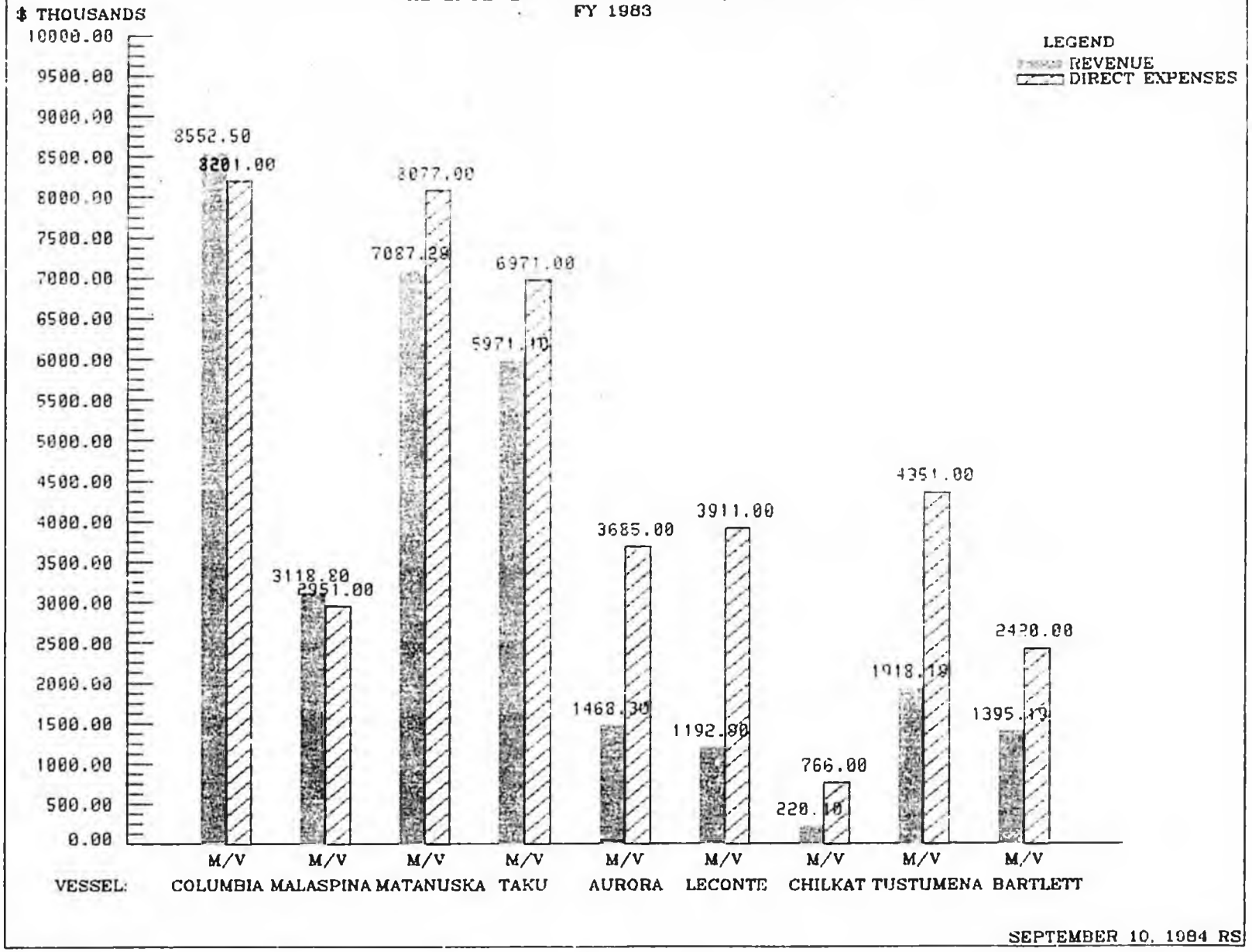
REVENUE AND DIRECT EXPENSES
M/V CHILKAT
FY 1984



FEBRUARY 27, 1985 R3

ALASKA MARINE HIGHWAY SYSTEM

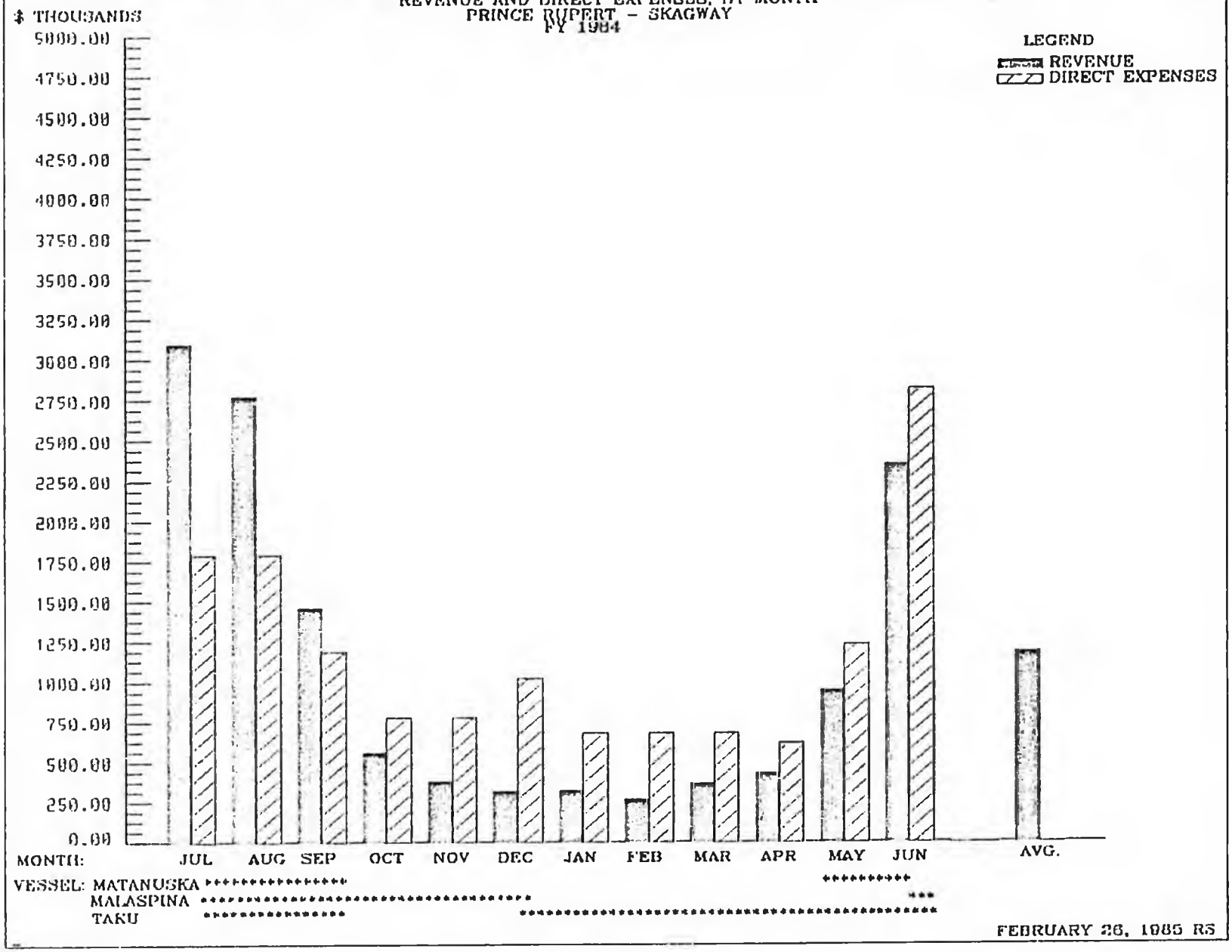
REVENUE AND DIRECT EXPENSES, BY VESSEL
FY 1983



SEPTEMBER 10, 1984 RS

ALASKA MARINE HIGHWAY SYSTEM

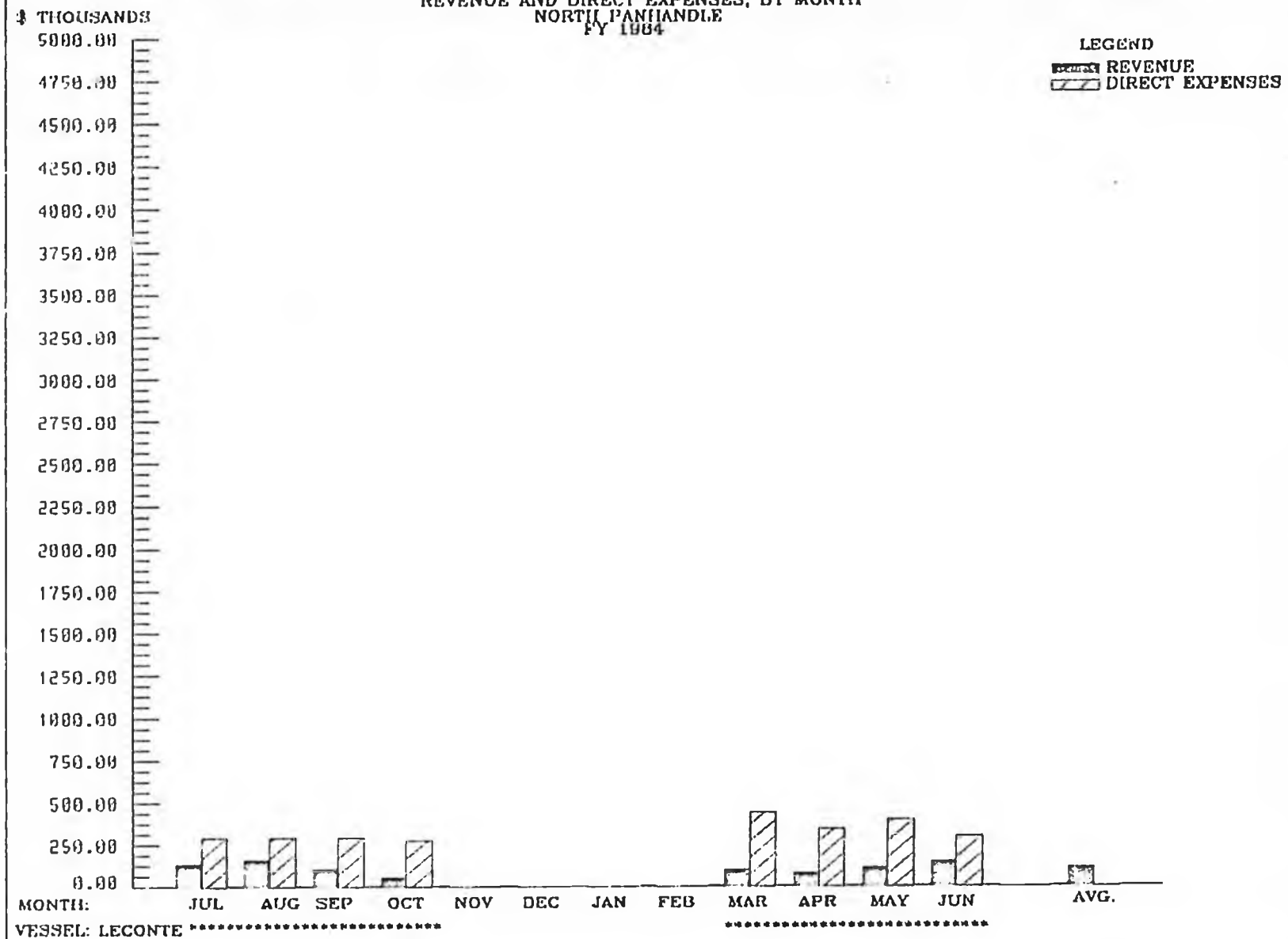
REVENUE AND DIRECT EXPENSES, BY MONTH
PRINCE RUPERT - SKAGWAY
FY 1984



FEBRUARY 26, 1985 RS

ALASKA MARINE HIGHWAY SYSTEM

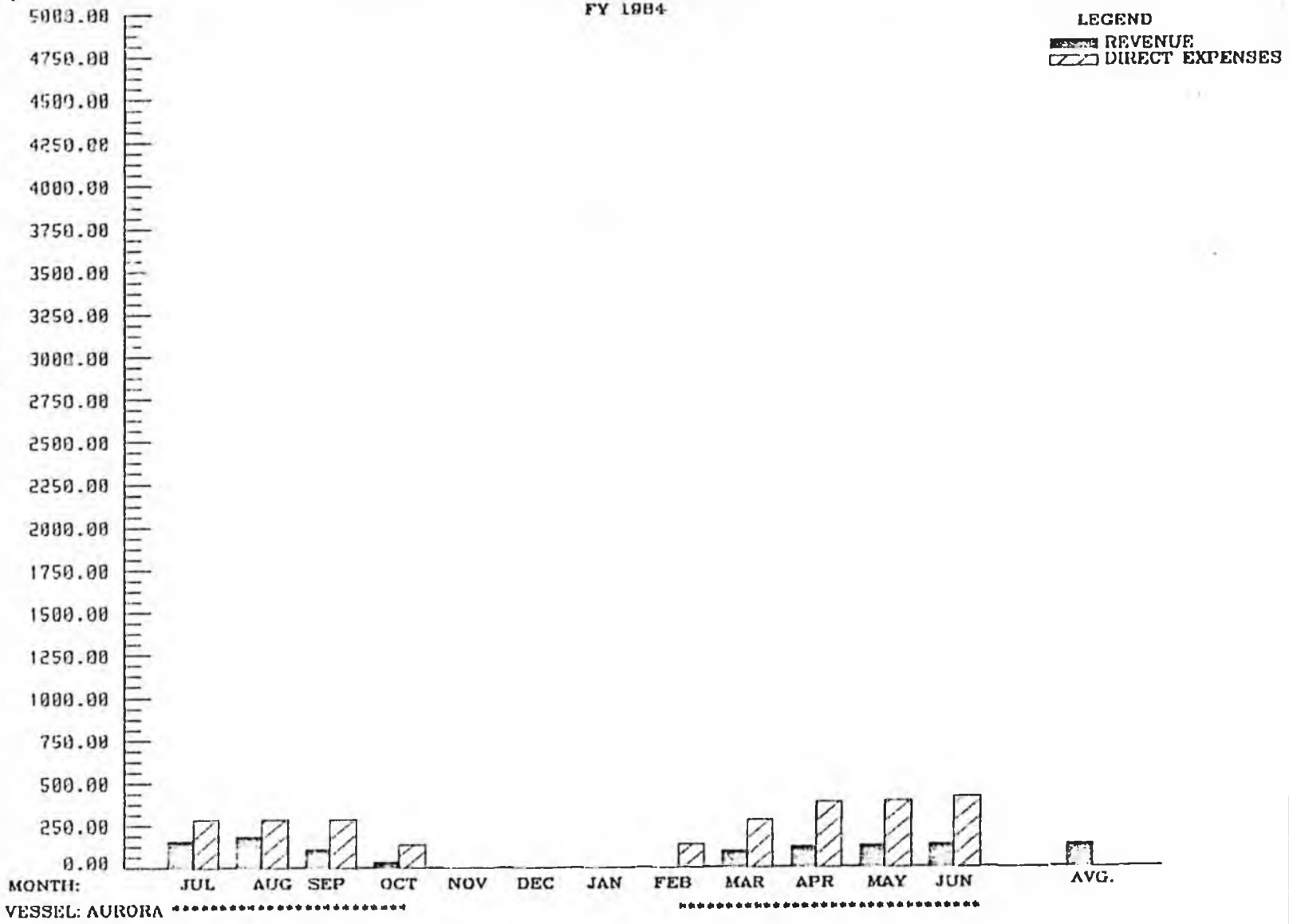
REVENUE AND DIRECT EXPENSES, BY MONTH
NORTH PANHANDLE
FY 1984



FEBRUARY 26, 1985 RS

ALASKA MARINE HIGHWAY SYSTEM

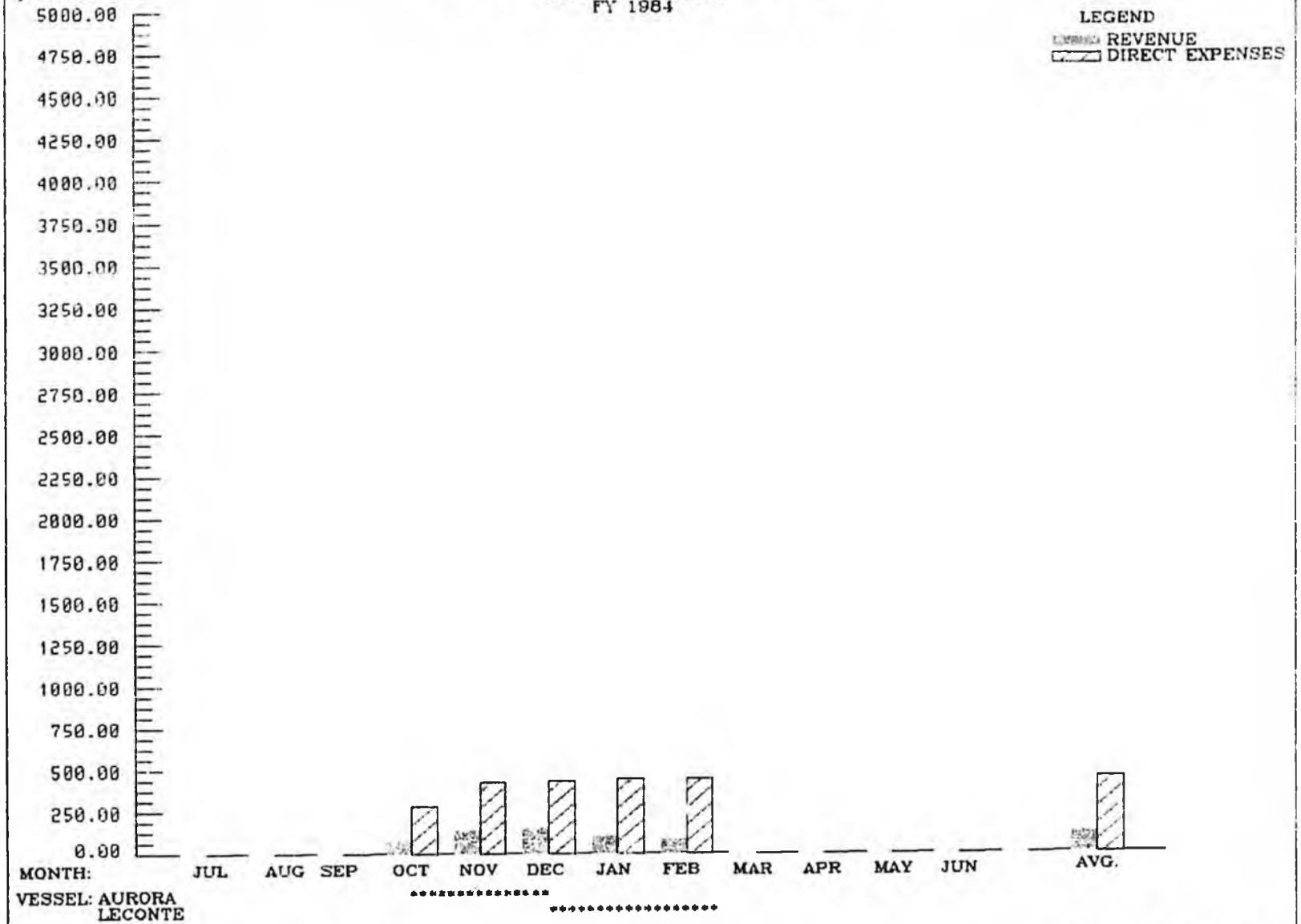
REVENUE AND DIRECT EXPENSES, BY MONTH
SOUTH PANHANDLE
FY 1984



FEBRUARY 26, 1985 RS

ALASKA MARINE HIGHWAY SYSTEM

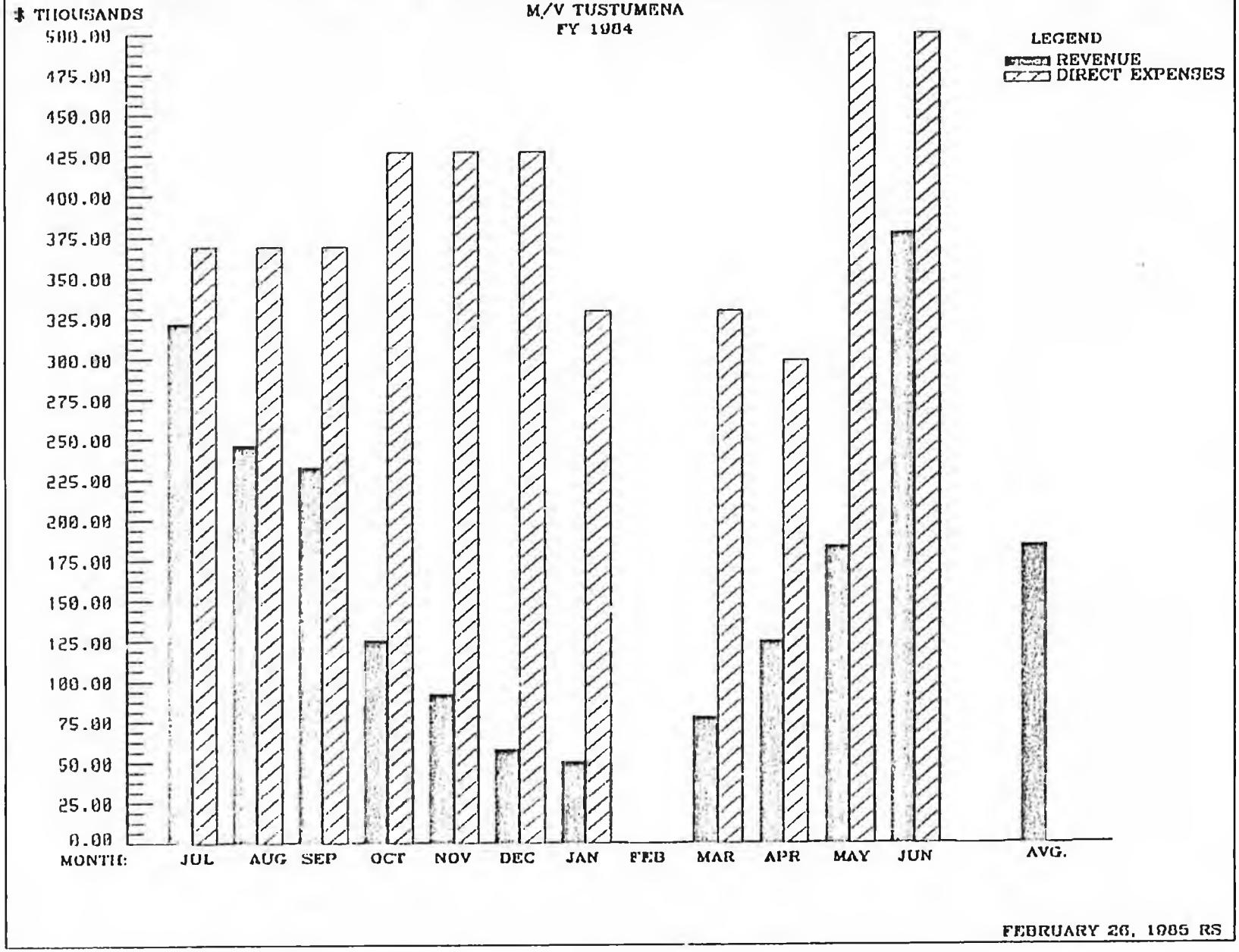
REVENUE AND DIRECT EXPENSES, BY MONTH
WINTER PANHANDLE
FY 1984



SEPTEMBER 10, 1984 RS

ALASKA MARINE HIGHWAY SYSTEM

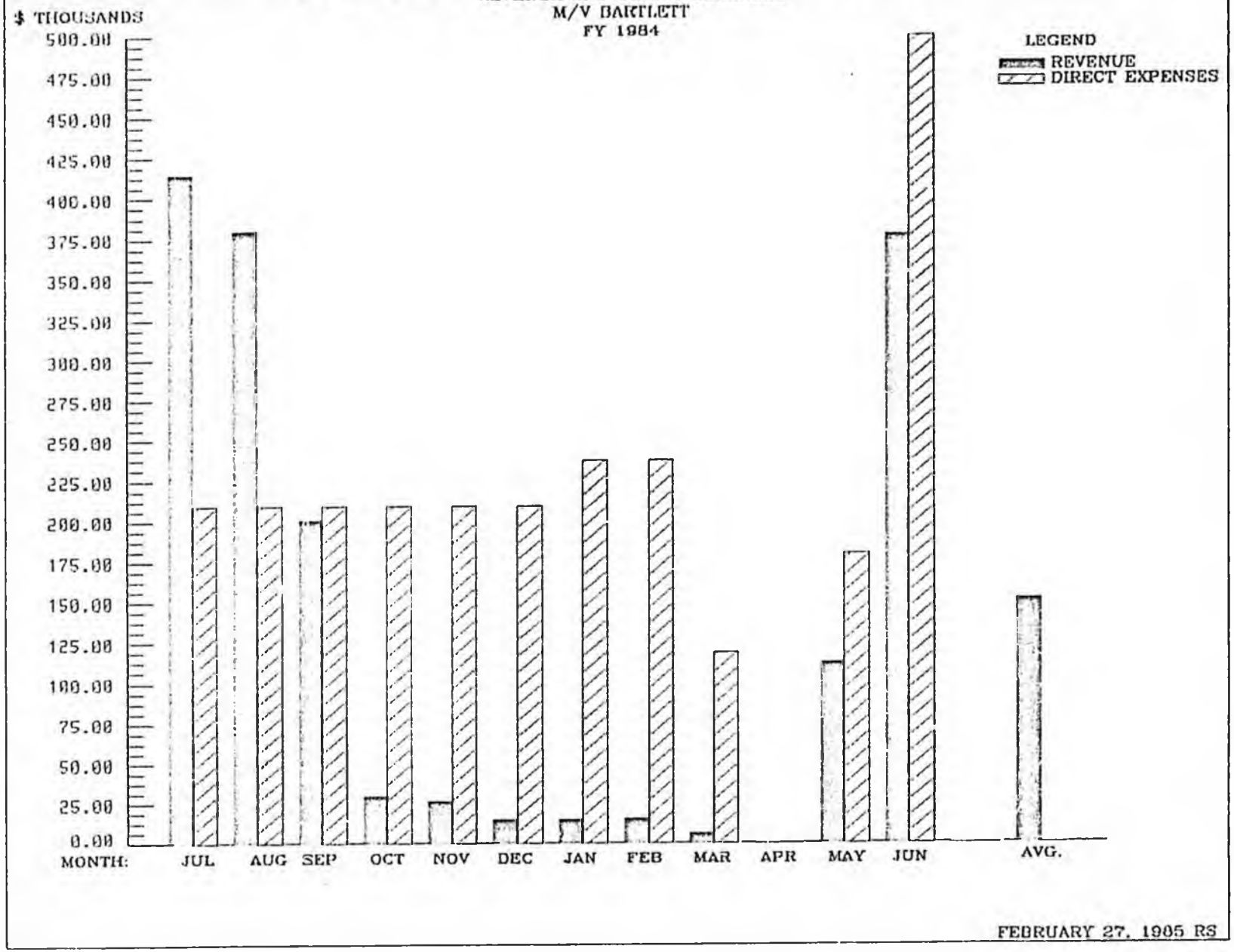
REVENUE AND DIRECT EXPENSES
M/V TUSTUMENA
FY 1984



FEBRUARY 26, 1985 RS

ALASKA MARINE HIGHWAY SYSTEM

REVENUE AND DIRECT EXPENSES
M/V BARTLETT
FY 1984



FEBRUARY 27, 1985 RS

AUTO WEEKLY

LINE UTILIZATION

Total Lines : 9 Total Time : 168:00
Period Covered : Jul/29/85 Mon 4:00 AM to Aug/05/85 Mon 4:00 AM

* - Not connected

	LINE	NUMBER OF CALLS					TIME IN USE Hr:Min			
		In	Out	Aban-doned	Night Service	Total	In	Out	Total	Total Use
ALASKA 800										
GROUP 1 :										
	5	698	0	93	49	840	62:30	0:00	62:28	37.1%
	6	448	0	100	1	549	43:10	0:00	43:11	25.7%
TOTALS		1146	0	193	50	1389	105:41	0:00	105:40	31.4%
GROUP 2 :										
SUPPORT LOCAL	7	755	33	15	121	924	66:04	1:07	67:13	40.0%
	8	449	23	9	1	475	44:06	0:51	44:56	26.7%
	9	305	11	5	1	322	32:21	0:06	32:25	19.3%
TOTALS		1502	67	29	123	1721	142:30	2:04	144:35	28.6%
GROUP 3 :										
OUTSIDE 800	1	834	0	72	94	1000	70:47	0:00	70:47	42.1%
	2	553	0	82	12	647	54:37	0:00	54:38	32.5%
	3	383	0	57	1	441	42:12	0:00	42:11	25.1%
	4	266	0	46	0	312	31:57	0:00	31:57	19.0%
TOTALS		2036	0	257	107	2400	199:33	0:00	199:34	29.6%

	In	Out	Aban-doned	Night Service	Total
SYSTEM TOTALS	4684	67	479	280	5510

	AVERAGE CALL DURATION Min:Sec		LINES ALL BUSY			
	Inbound	Outbound	Total Hr:Min	Average Min:Sec	Longest Min:Sec	Percent of Total Time
GROUP 1 :	5:00	0:00	26:57	1:57	9:50	6.0%
GROUP 2 :	5:20	1:40	14:46	1:31	15:39	8.7%
GROUP 3 :	5:20	0:00	14:49	1:08	7:58	8.8%

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

P.O. Box Y, State Capitol
Juneau, Alaska 99811-3100
Mail Stop 3100
(907) 465-3991

September 29, 1986

MEMORANDUM

TO: Representative Bette Cato

FROM: Mary Jennings
Legislative Analyst

RE: Ferry Stystems in Washington State and British Columbia
Research Request 87-025

You requested general information regarding the ferry systems in Washington State and British Columbia. Information on fares, traffic, employee unions and financial structure is provided below.

Washington State Ferry System

The Washington State Ferry (WSF) system began operation in 1951. The system was purchased from individuals who had been operating ferries on the Puget Sound since the turn of the century. The state purchased 16 ferries, 20 terminals and miscellaneous supplies for $4.95 million. Today, the Marine Division of the Washington State Department of Transportation controls assets valued at over $308 million and operates 22 vessels which carry seven million vehicles and 17 million passengers each year.

All of the ferries are capable of carrying cars as well as passengers. The largest vessels in the system are two 440-foot "jumbo" ferries, each with a capacity of 206 autos and 2,000 passengers. The smallest ferry (150 feet) is capable of carrying 40 autos and 200 passengers. The total car-carrying capacity of all the ferries is 2,412. The ferries are not equipped with sleeping facilities, although food service is available on the majority of the vessels.

The system operates nine routes serving 20 terminal locations throughout Puget Sound. Routes are devoted to both commuting and recreational travel. The shortest route is 1.5 nautical miles (15 minutes) in the Tacoma urban area, and the longest route is 38 nautical miles (3-1/2 hours) in the San Juan Islands. Recreational travel accounts for 32 percent of all ferry trips. Seventy percent of all passengers are recreational travelers.

Fares. Fares range from $0.95 (passenger) and $3.40 (car and driver) for a 15-minute route to $5.50 (passenger) and $23.65 (car and driver) for a 3-1/2-hour route. Table 1 presents a history of cross sound auto and driver fares and passenger fares and the consumer price index during the last sixteen years. The table indicates that fares have increased at a pace comparable to the Seattle area consumer price index. The WSF does not utilize reservations, except for cars on the Anacortes, Washington-Sidney, B.C. route during the summer months only. The WSF does not accept credit cards for payment of fare.

Traffic. Table 2 shows that systemwide traffic grew steadily during the 1970s but declined in the early 1980s, when Washington experienced a severe economic downturn. Since 1982, total traffic volume has been gradually returning to the 1979 peak. Traffic has already exceeded previous highs on many routes. The system makes an average of 323 daily trips, carrying 47,000 passengers and 19,000 vehicles. The smallest route has 534 average daily passengers and 200 vehicles; the largest has 8,554 average daily passengers and 4,325 vehicles. The summer months are the busiest time: traffic drops by 57 percent during the winter.

During the past six years, WSF has acquired six new vessels. Due to reduced traffic and these new vessels, the system has been able to avoid increasing service hours. Total system vehicle traffic is projected to grow at an average annual rate of 0.4 percent during the next six years. Traffic on some routes is expected to decline, while other routes are expected to expand substantially. To accomodate the growth, the system plans to purchase four passenger-only vessels. These ferries will be utilized on runs that currently experience traffic overloads during certain service periods.

Employees. The WSF employs approximately 950 year-round employees, with 250 employees added during the summer months. All employees are unionized. The three unions representing WSF employees are: Captains, Mates, and Pilots Union; Inland Boatmen's Union; and Marine Engineers Beneficiaries Association.

Financial Structure. Fare revenues have covered approximately 70 percent of operating expenditures and 40 percent of operating and capital expenditures during the last three fiscal years. In addition to fares, the WSF system acquires revenue from taxes and a toll bridge. Table 3 is a flow chart depicting how the revenues from fares, car registration fees, gas and vehicle taxes, bond sales, and federal funds are channeled into different accounts to cover operating and maintenance, ferry improvement, construction, and debt service expenses. Table 4 is a history of operating expenses and revenue sources of the WSF since 1967. Table 5 presents anticipated revenues and expenditures in the 1985-1987 biennium.

The British Columbia Ferry Corporation

The British Columbia Ferry (BCF) Corporation was created in 1960 by the provincial government. The system began after two private ferry companies operating in B.C. went on strike. During 1961, with purchase of the assets of one of the striking companies, the corporation operated two ships over one route and employed approximately 225 people. In 1985, the BCF was consolidated with the coastal fleet of the Provincial Division of the Ministry of Transportation and gained 14 vessels and ten routes. Today BCF operates 39 vessels over 25 routes and employs approximately 2,700 people. The system is a Crown Corporation, which means it is publicaly owned and pays no provincial or federal income taxes.

Of the 39 ships operated by the system, 38 have car carrying capabilities. The largest vessels are five 457-foot "jumbo" ferries that can each carry 360 vehicles and 1,500 passengers. The smallest vessel is a 38-foot passenger-only ferry with a capacity of 40 people. Two vessels have sleeping facilities and approximately half offer food service.

The shortest route in the system is two nautical miles (18 minutes) and the longest is 274 nautical miles (15 hours). The busiest route is between Vancouver and Victoria--the provincial capital. All of the routes are day routes except for one, which becomes an overnight trip during the winter season. The corporation serves urban commuters, recreational travelers, and a great number of business travelers between the mainland and the capital. Summer is the busiest season; during the winter, traffic drops by approximately 50 percent.

Fares. Fares for the most heavily used route between Vancouver and Victoria are $19 for a car and driver and $4 for a passenger. Today's fares represent about a 200 percent increase for vehicles and a 100 percent increase for passengers over fares charged when the corporation began operation in 1960. Reservations are utilized for vehicles and passengers on one route and for vehicles on only two routes. Credit cards are accepted only on the routes which utilize reservations.

Traffic. Until 1982, the BCF had experienced a steady growth in traffic. Since that time, volume has decreased slightly each year. The system expects 1986 to set all time traffic records due the increase in tourism at the World's Exposition in Vancouver. According to the corporation, traffic is handled efficiently by the current vessels and there are no plans for fleet expansion.

Employees. Of the 2,700 employees, all are unionized except for the ship's captains. The British Columbia Ferry and Marine Workers Union represents the workers.

Financial Structure. The BCF operates each year on a $40 million (Canadian) subsidy from the provincial government. Due to the large increase in traffic from Expo, the corporation hopes to show a profit this year.

* * * *

I hope you find this information useful. I am expecting detailed traffic and financial reports from the British Columbia Ferry Corporation and will contact you when I receive them. Please contact our office if you have any questions.

MJ

Attachments

TABLE 1

Washington State Department of Transportation
Marine Division
Washington State Ferries

CROSS SOUND FARES: 1969 -- 1985

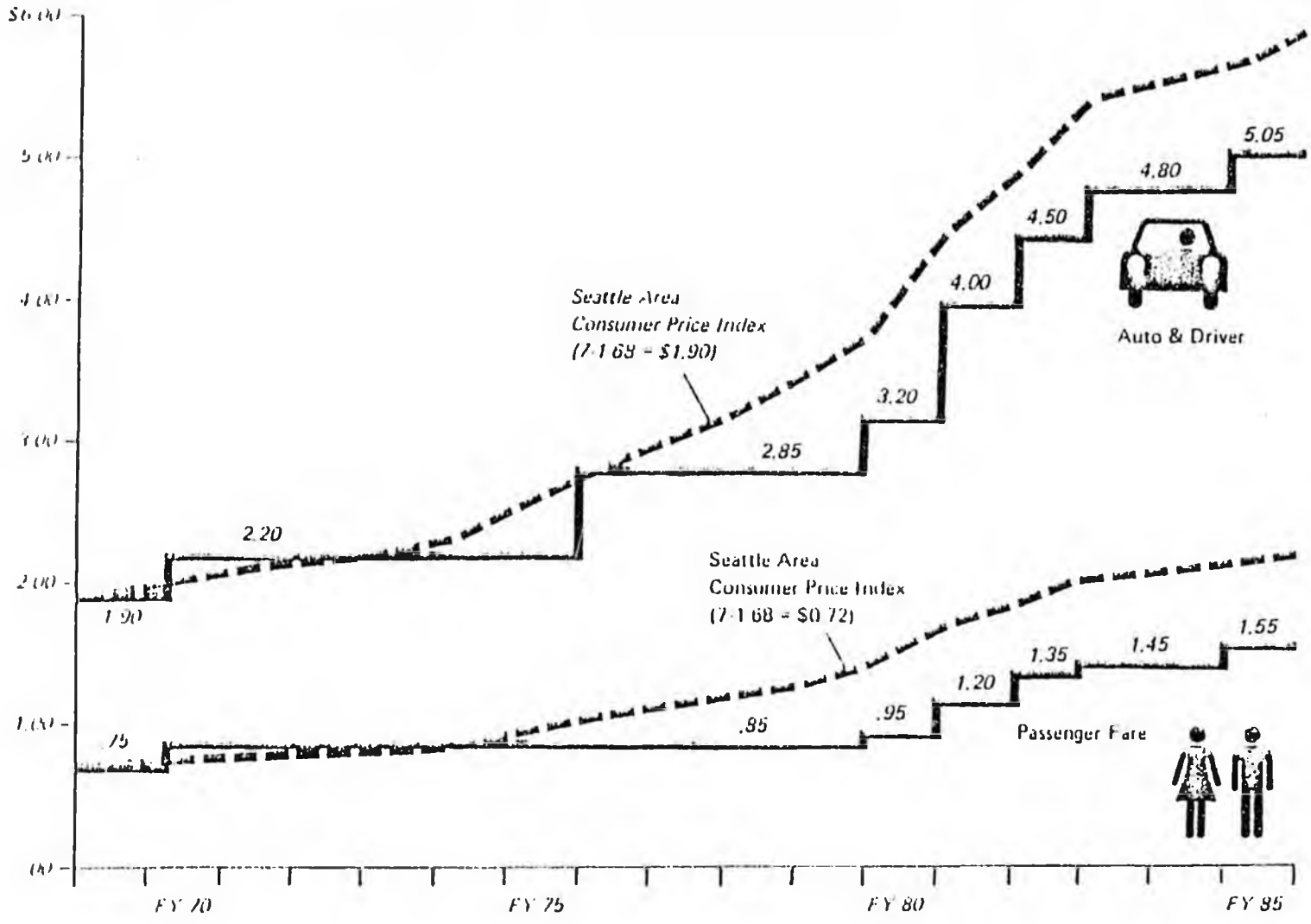


TABLE 2

Washington State Department of Transportation
Marine Division
Washington State Ferries

TOTAL TRAFFIC (Passengers and Vehicles)

(Annualized by 12 Month Moving Totals)

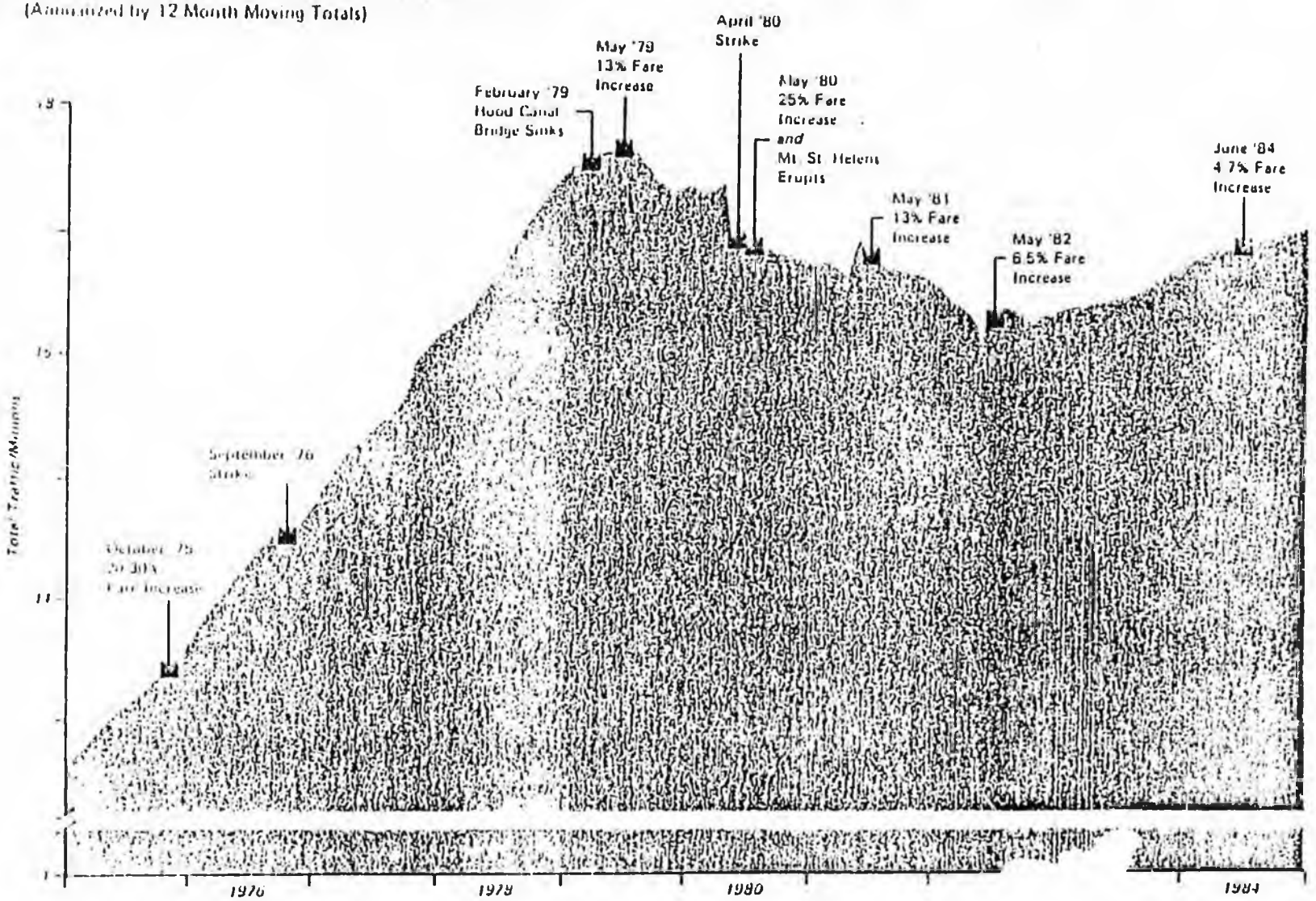
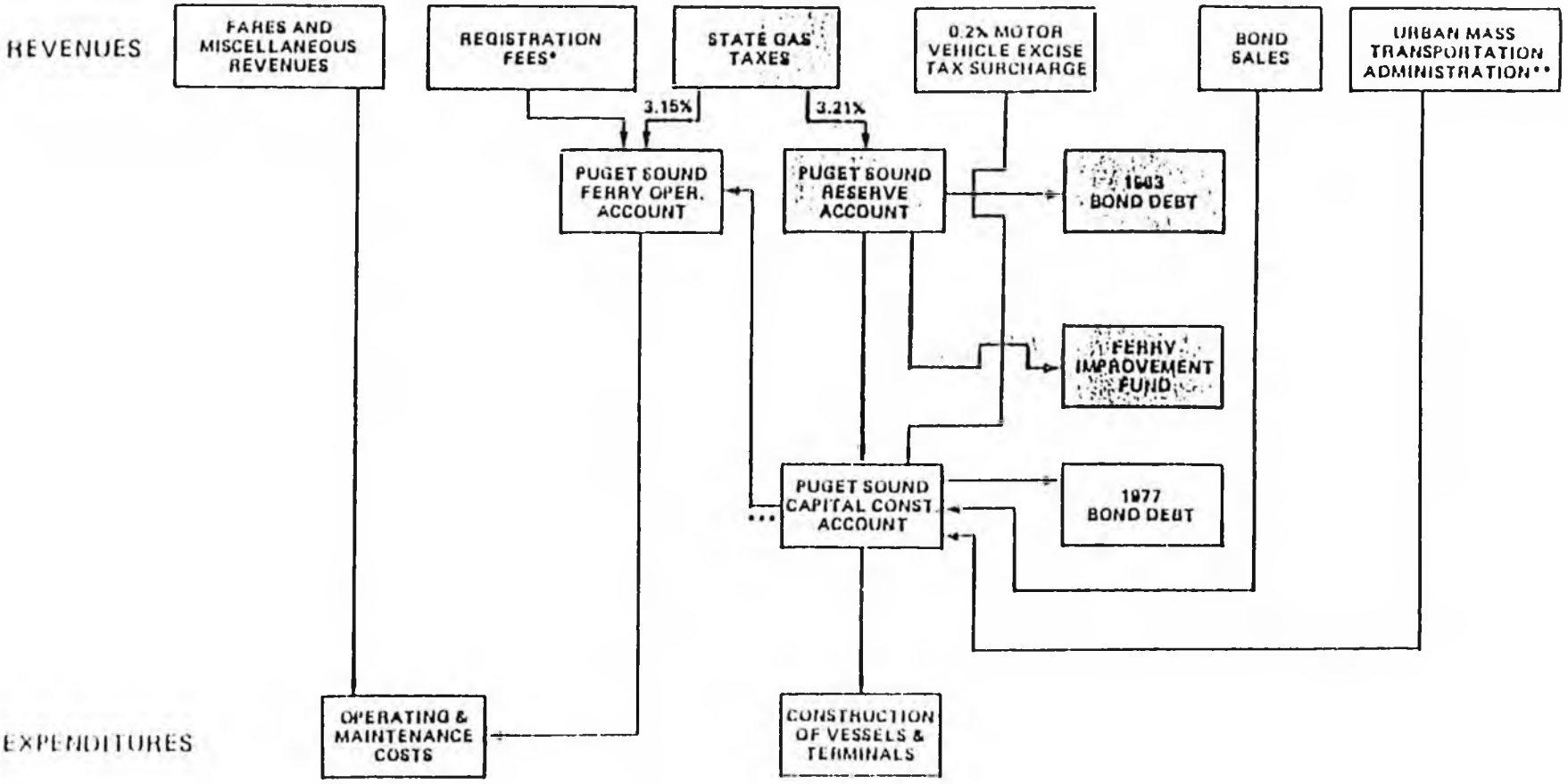


TABLE 3

Washington State Department of Transportation
Marine Division

WASHINGTON STATE MARINE TRANSPORTATION FINANCING



* 27 1/4 of $7.40 of new car and $3.40 of old car registration fee

** UMTA is part of the U.S. Department of Transportation.

*** Receipts from Bond Sales and UMTA cannot be transferred as tax support for operations.

Washington State Department of Transportation
Marine Division
Washington State Ferries

TABLE 4

OPERATING EXPENSES AND REVENUE SOURCES

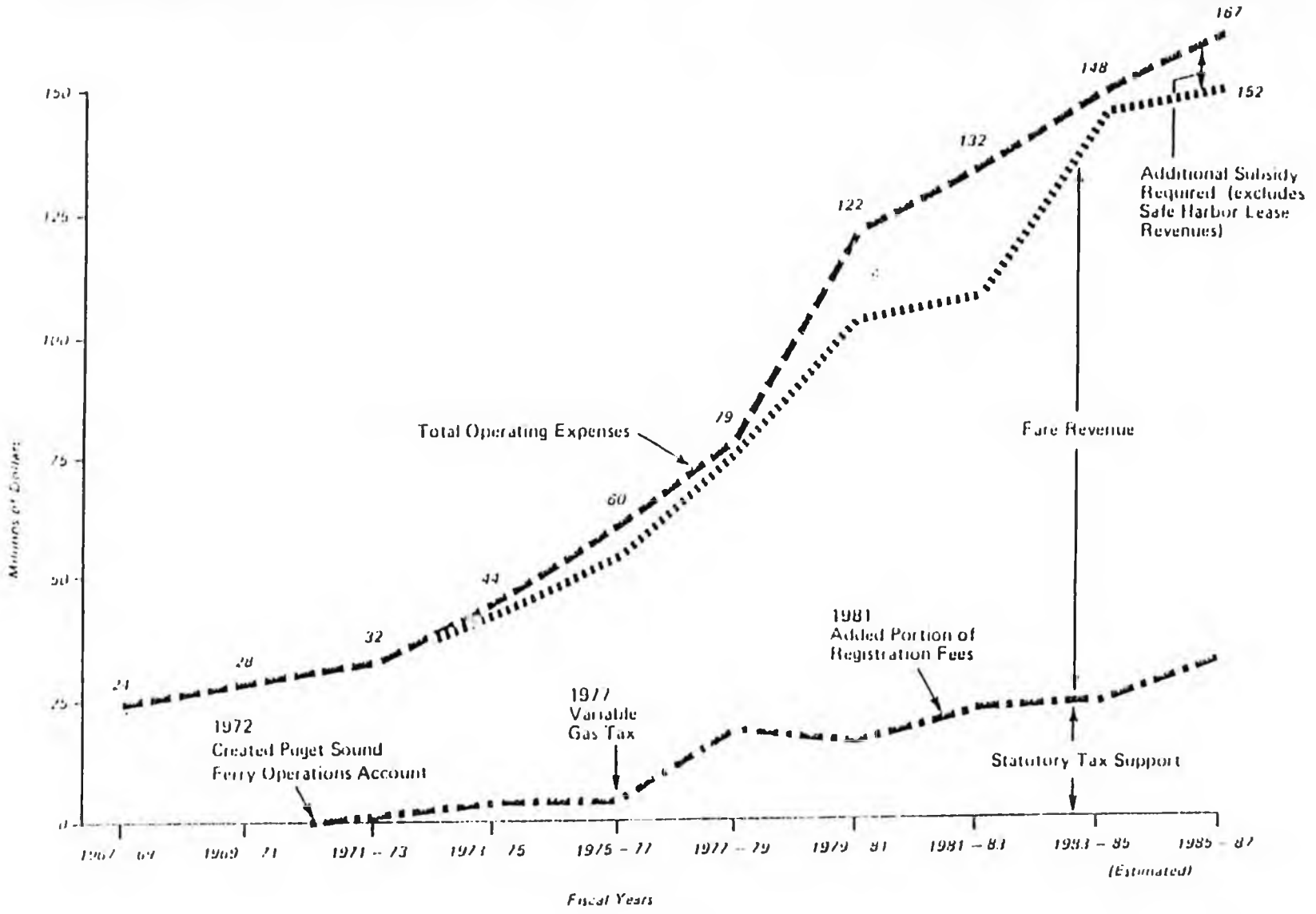
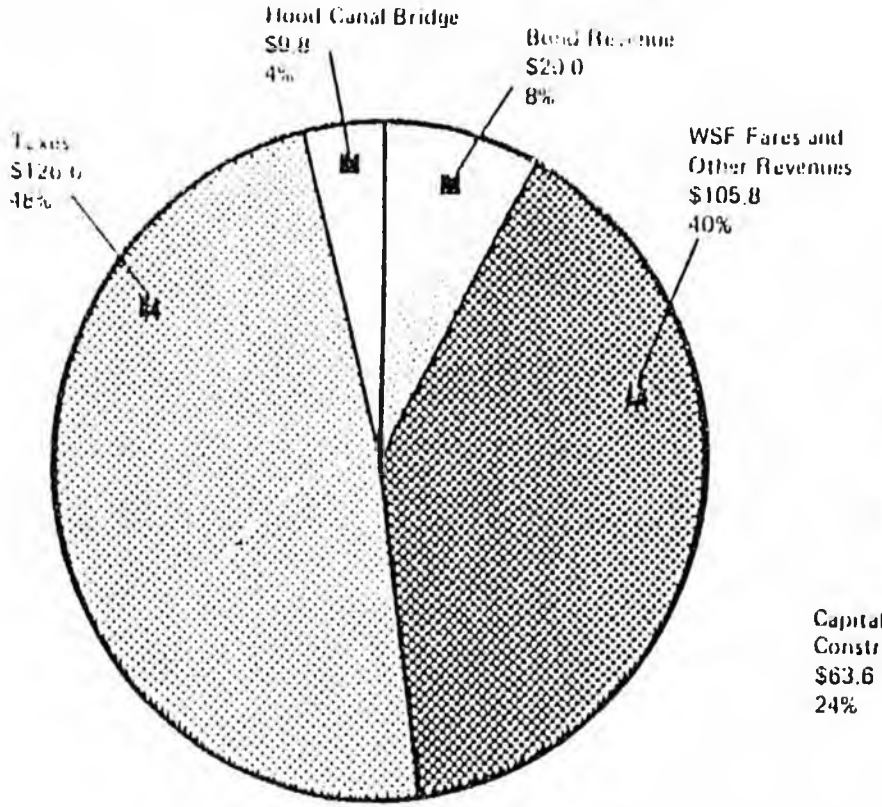
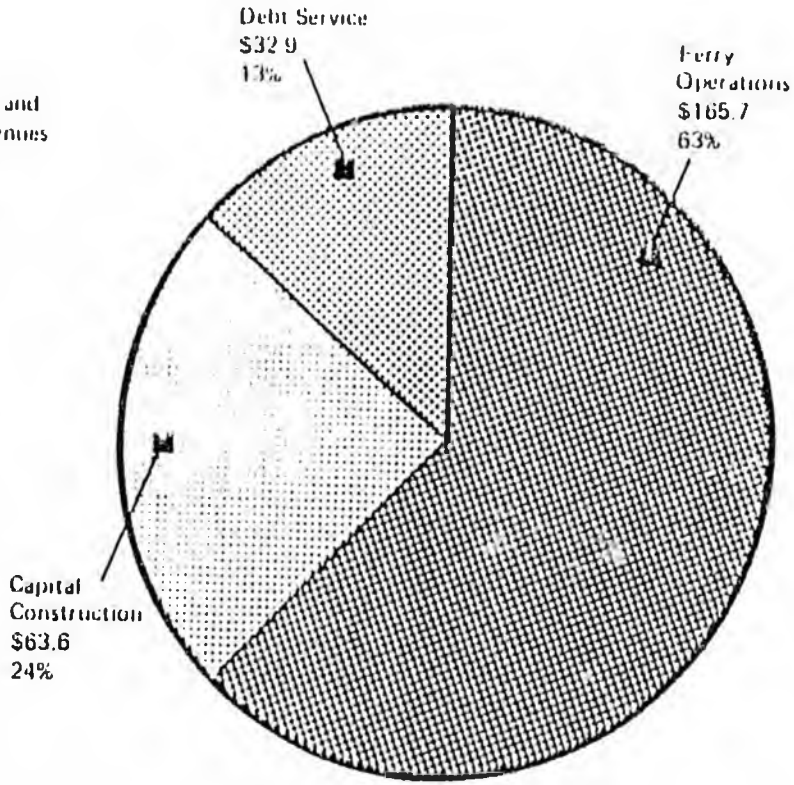


TABLE 5

1985 – 1987 ANTICIPATED REVENUES AND EXPENDITURES



REVENUES



EXPENDITURES

ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

P.O. Box Y, State Capitol
Juneau, Alaska 99811-3100
Mail Stop 3100
(907) 465-3991

November 3, 1986

MEMORANDUM

TO: Representative Bette Cato

ATTN: Rhonda Thompson

FROM: Mary Jennings MJ
Legislative Analyst

RE: Washington and British Columbia Ferry System
Research Request 87.025 (Additional Information)

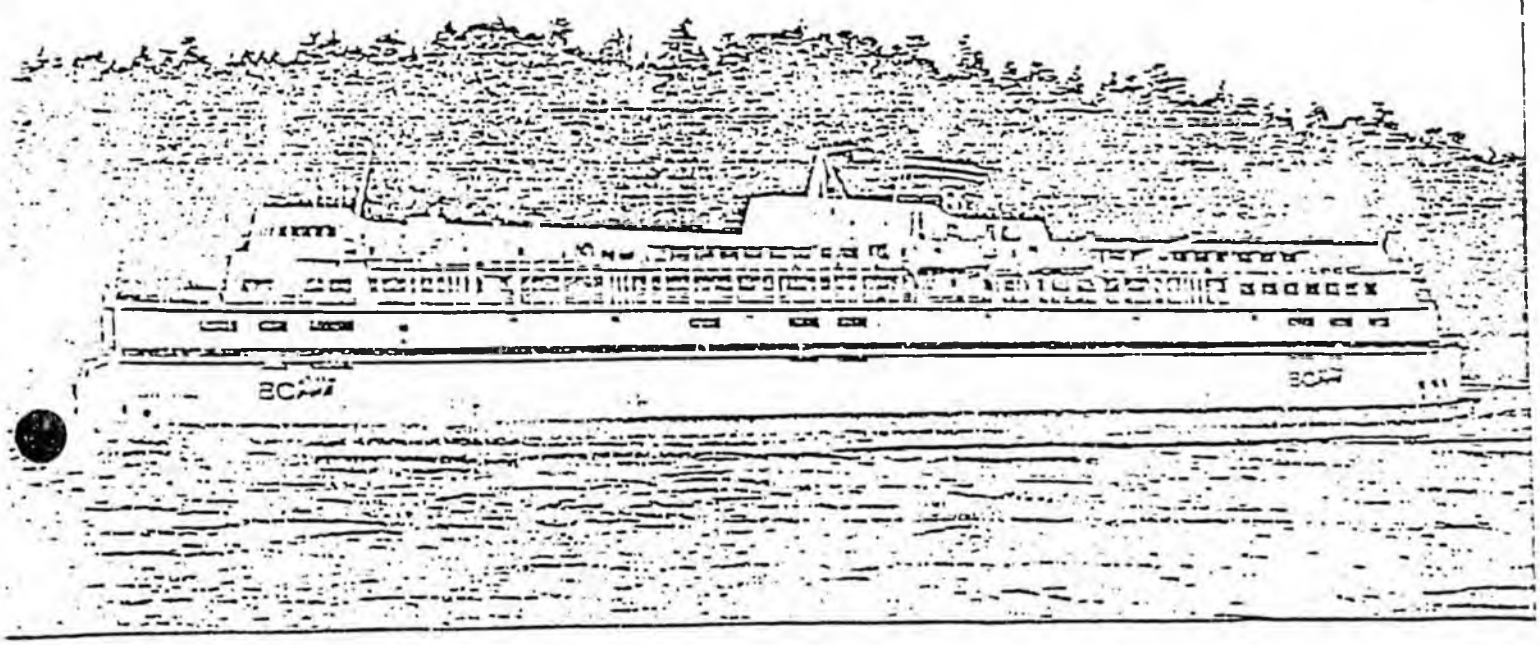
I recently received some additional material from the British Columbia Ferry Corporation. Attached is the FY 1984/85 annual report of the corporation and a report containing general information about the system. I hope you find this information useful. Please contact me if you have any questions.

MJ

Attachments

BRITISH COLUMBIA
FERRY CORPORATION

ANNUAL REPORT
1984/85



The Honourable
ROBERT G. ROGERS
Lieutenant Governor
of the Province of British Columbia

MAY IT PLEASE YOUR HONOUR:

I respectfully submit herewith the Annual Report of the British Columbia Ferry Corporation for the fiscal year ended March 31, 1985 in compliance with the provisions of the Ferry Corporation Act.

ALEX V. FRASER
Minister of Transportation and Highways

June 3, 1985

ALEX V. FRASER
Minister, Transportation & Highways
Province of British Columbia
Minister Responsible

S.M. HODGSON (1)
Chairman of the Board

R.H. WRIGHT (1)(3)
Vice-Chairman/ President
Oak Bay Marina Ltd.

M.D.W. YOUNG (3)
Barrister & Solicitor

A.L. MICHAUD (1)(4)
President
Michaud Investments

J. MORRIS (3)
Retired

W.B.M. HICK (1)(2)
Physician & Surgeon

W.A. DUNCAN (2)(4)
Retired

J.E. PRICE (4)
Managing Director
Beach Gardens Resort

A.L. COLLIER (1)
President & Chief
Executive Officer

G. BALDWIN (1)
General Manager

J.J. ESTOCK (1)
Assistant General Manager
Finance & Administration

K. BAGSHAW
Corporate Counsel

A.S. LUKINUK (1)
Corporate Secretary

(1) Member - Executive Committee
(2) Member - Finance Committee
(3) Member - Planning Committee
(4) Member - Audit Committee

The Honourable Alex V. Fraser
Minister of Transportation & Highways:

1984-85 yielded appreciable reductions in the B.C. Ferry Corporation's operating deficit. This was achieved while still meeting the Corporation's mandate of offering the best possible service in the most efficient manner. While 1983-84 was effectively a year of stabilization and overall operational streamlining, this past fiscal year has been one of significant adjustment to the service to high loss areas. At the same time, the modest traffic growth experienced in 1983-84 over that of 1982-83 was once again reversed in 1984-85. The traffic results were well below expectations, with vehicles at 4,460,069 and passengers at 11,912,943. This represents a decline of .5% in vehicles and 3.9% in passengers over 1983-84.

In keeping with the British Columbia Government's instructions to cure costs in all possible areas, a major assessment review of high loss areas was completed. The review, which touched on all aspects of service to the North Coast, Sunshine Coast and Gulf Islands, took a three-pronged approach: 1) to reduce operating costs, particularly during the low revenue off season period by more closely matching schedules to traffic demand and patterns; 2) to provide residents of communities dependent upon the ferries as a transportation link with a service that would meet their day to day requirements; and, 3) to maximize the Corporation's role in the province's vital tourist industry.

I am pleased to report that the success of the Ferry Corporation's ongoing cost reducing program is due in part to the spirit of cooperation that prevailed between the communities concerned and the Corporation in implementing cost reducing measures that have already yielded impressive results. For example, service to the North Coast was reduced between Prince Rupert and Port Hardy during traditionally low traffic months. However, the projected savings allowed the Corporation to carry out ship renovations necessary to implement a day boat operation during the summer tourist season. The summer of 1985 will see the launching of this new day cruise service between Prince Rupert and Port Hardy - a service that will substantially increase the tourist activity to northern communities.

Efficiency measures undertaken on the Sunshine Coast also involved a reduction in the number of sailings. However, a ramp at Langdale terminal was doubledecked with the result that the route can now be fully operated with a doubledecked ship. This has effectively increased the lift-off capacity while at the same time allowing the Corporation to operate the service in a more cost efficient manner.

While the emphasis this past year was directed to cutting costs on specific routes, overall savings were achieved in all facets of the operation. Labour costs, which account for the major part of the operating budget, were substantially reduced by a general streamlining of the establishment in line with the provisions of the collective agreement.

As mentioned, the anticipated turnaround in traffic levels did not materialize during 1984-85. Indeed, while in 1983-84 a slight increase in vehicles and passengers was experienced, this past year has seen a decline of 22,638 vehicles and 484,962 passengers. Nevertheless, despite the general decline in traffic, the month of August set an all-time record for passengers and vehicles. Also, a hopeful indication that recovery has begun is the performance of commercial vehicle traffic. For all routes, commercial traffic was up 3% over 1983-84 and 8% over 1982-83. For the last quarter of 1984-85, commercial traffic on the two Vancouver Island routes was up 6.8%. In the past, commercial traffic has often been a precursor or leading indicator of overall traffic trends.

With this in mind plans are underway to meet the increased demand during Expo '86. The fleet's expansion since 1980 by way of lifting five major vessels, plus the ships presently laid up, has put the Corporation in an excellent position to meet projected vehicle lift-off demands. In addition, bus passenger pick up and drop off zones are being revamped at the major terminals to make it a more attractive and convenient means of travel.

British Columbia's ferry fleet plays an important role in preserving the coastal residents' way of life by offering a vital transportation link. At the same time the fleet itself is seen by millions of tourists as a major attraction. The B.C. Ferry Corporation's employees, management and board of directors take pride in meeting the many and varied needs of their travelling public.

On behalf of the Board,

S. M. Hodgson

Stuart M. Hodgson
Chairman

The Corporation has now experienced three straight recessionary years with little or no growth in most categories of traffic. The notable exception to this pattern is the 3% increase in commercial vehicles – a hopeful sign toward economic recovery in British Columbia.

In spite of soft traffic patterns, the future looks promising. In the face of adversity over the past three years, costs have actually been reduced through careful planning of ship and crew schedules. It is encouraging to note that these and other continuing management efficiencies have resulted in a further 5% reduction of operating expenses while net revenue increased 5% in spite of declines in traffic. The increase in revenue was in part, a reflection of the very modest increase in fares. Vehicle fares increased by aproximately 5% in February of 1985.

The Corporation is now leaner, more efficient and well positioned to take advantage of the anticipated return to healthy traffic growth expected over the next two years.

Good progress was made this year in a continuing effort to improve overall efficiency of the fleet through the application of a more precise match between capacity and traffic. Input from local residents has become a regular feature of the planning process. Community meetings were held on the Sunshine Coast, the North Coast and the Gulf Islands to discuss proposed schedule changes.

Although service was cut back on some routes, the number of sailings for the entire system increased by 3% in 1984/85. There was a total of 70,313 one-way sailings.

Sunshine Coast service and efficiency were improved with the introduction of the converted "Queen of Alberni" into operation on the Langdale-Horseshoe Bay route in conjunction with upgraded terminal facilities at Langdale.

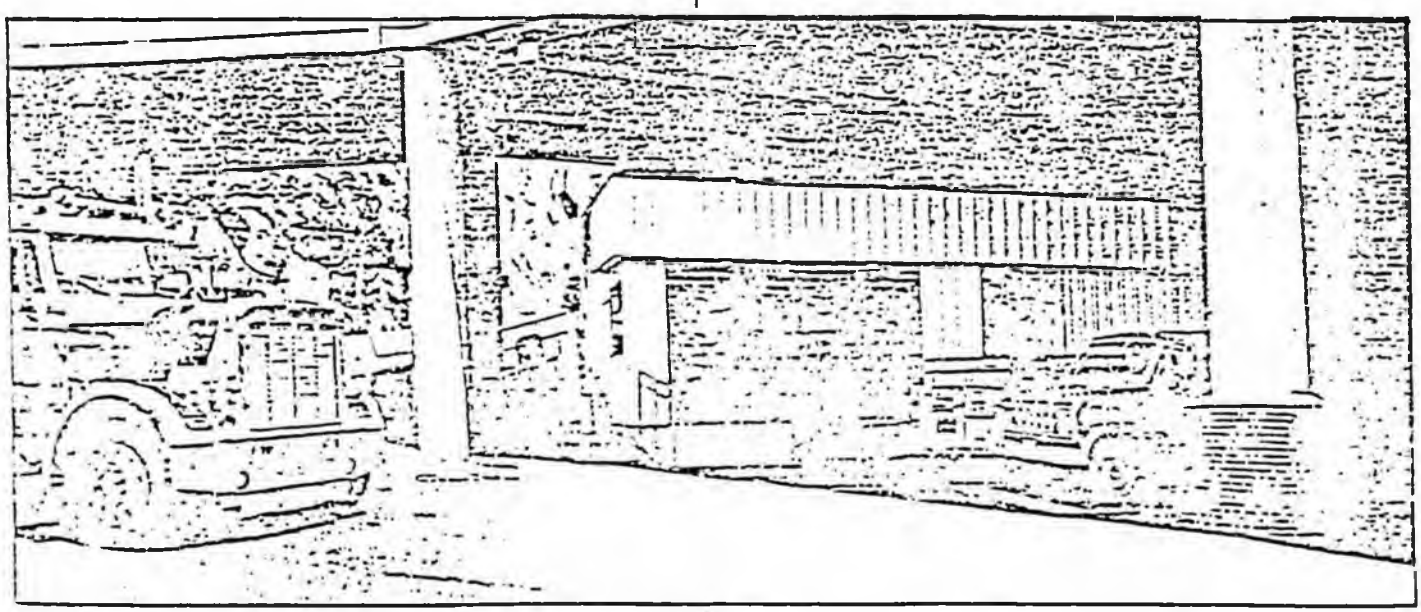
On the North Coast substantial cuts were made in winter service, with the elimination of the Tsawwassen leg of the Prince Rupert-Port Hardy route from the winter operation. A single ship made one trip per week to Port Hardy and two round trips to Skidegate.

In addition, the chartered Prince Rupert-Masset tug and barge service for drop trailers was terminated March 31, 1985. Commercial drop trailers will be carried on the regular ferry route from Prince Rupert to Skidegate. During 1984/85 it was decided that the summer service between Prince Rupert and Port Hardy would be a daylight operation commencing the summer of 1985.

The most significant improvements in efficiency have resulted from better scheduling of crews. Overtime costs have been substantially reduced. A policy of flexible vessel licences has enabled the Corporation to vary the size of crews throughout the day according to the requirements of traffic.

One of the new management tools introduced in 1984/85 was an Executive Network of microcomputers.

The Executive Network provides senior management with traffic statistics, revenue information, spreadsheet applications and forecasting models. Senior managers are using the system to monitor current traffic and demands on schedules. Historical data can be viewed in order to identify trends. By combining



Passenger waiting room, Horseshoe Bay

...se features with a forecasting model, it is possible to ...ly predict capacity utilizations, licence requirements and probable overloads. By using the spreadsheet application, senior managers can analyze various scenarios with regard to tariff and revenue items. The system, therefore, is a powerful tool that can aid senior management in both short term and long term planning.

Engineering

The Corporation's major construction project this year was the lifting of the "Queen of Alberni." The contract was placed February 27, 1984 and 105 days later, on June 11, 1984, the ship was back in service with a new upper car deck doubling its original vehicle capacity.

Coinciding with this project was a major upgrading of facilities at Langdale Terminal. The vehicle loading ramps were double-decked in order to permit simultaneous loading of both vehicle decks. New offices and waiting rooms were constructed and the holding compound layout was redesigned.

Modifications were commenced on the "Queen of the North" to suit the new "Day Cruise" service. Because of the cancellation of contracted tug and barge service to the Queen Charlotte Islands, both the "Queen of the North" and "Queen of Prince Rupert" were outfitted to carry refrigerated trucks by installation of new car deck exhaust systems to enable truck cooling units to operate during the crossing of Hecate Strait. The holding compound at Skidegate Terminal was increased in ... to accommodate drop trailer traffic.

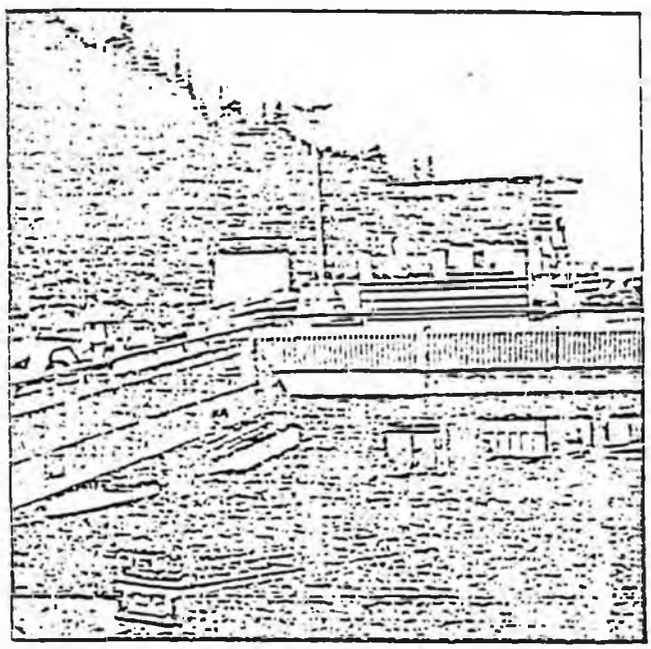
Improvements in facilities at major terminals have continued.

At Swartz Bay a new passenger pick-up facility was completed adjacent to the docks, thus shortening the walking distance for discharging foot passengers and alleviating congestion at the departure ticketing area. New toll booths were built in order to improve the flow of traffic and expand the holding compound. Planning is underway at Swartz Bay for double-laning the upper vehicle ramp at Number 1 Berth; for expansion of the refrigerated and dry stores area; and for construction of a new bus passenger loading facility which will include six bus bays and a new passenger waiting room.

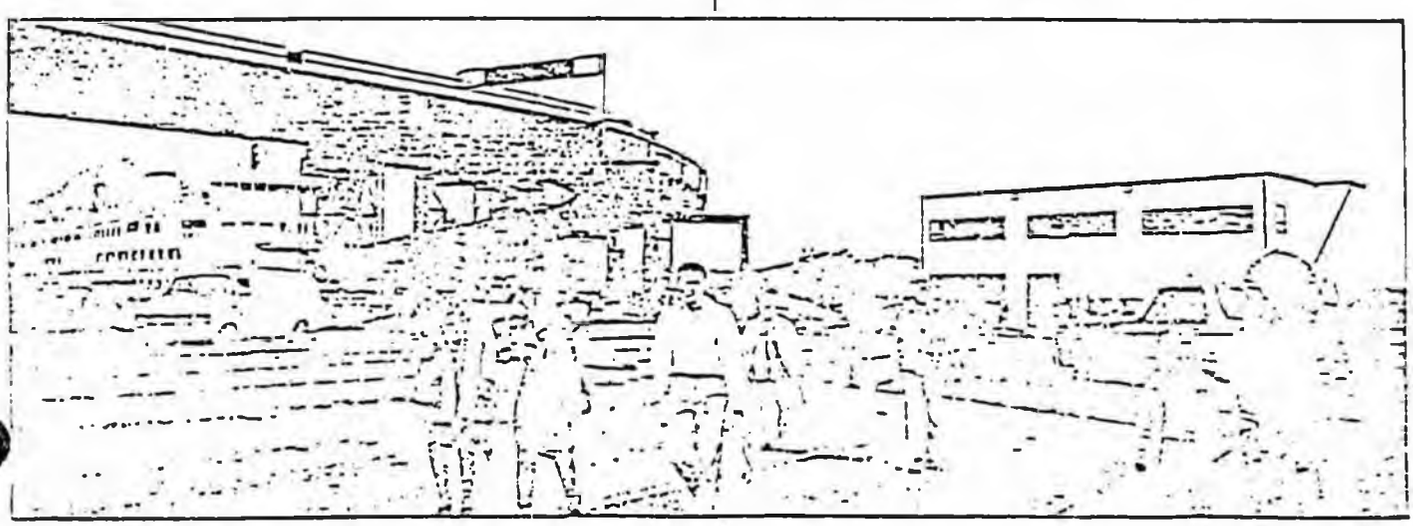
At Tsawwassen the upper vehicle ramp at Number 2 Berth has been widened to two lanes, thus speeding the loading and unloading process, and the cafeteria was expanded to provide additional seating.

At Horseshoe Bay the upper vehicle holding area was extended and a new passenger waiting room and control tower were built.

After a period of extensive testing during 1983-84, fuel metres have been fitted to all major vessels. The fuel metres, together with better ship scheduling, has resulted in total fuel consumption in 1984/85 of 76,258,000 litres, a 3% reduction from the previous year.



Control tower, Horseshoe Bay



Overhead ramp, passenger waiting room, and office, Langdale

New fleet colours are appearing on the vessels as they go into refit for regular maintenance. Approximately half the vessels have now been repainted. The EXPO 86 logo is being painted on funnels in conjunction with the repainting program.

Catering

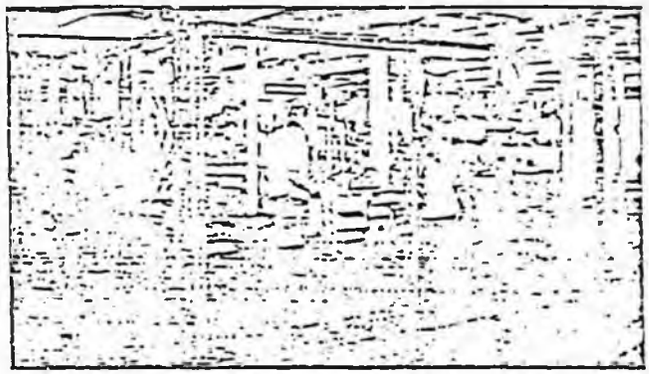
The past fiscal year was a period of consolidation for the Catering and Passenger Services area. Total revenue declined as a result of lower passenger traffic, smaller average expenditure per passenger and the closing of marginal outlets. Although within budget, the Gross Profit percentage was slightly lower than the previous year. Menu price increases were kept at a minimum in response to the public's resistance to high priced menu items.

General operating expenses were reduced substantially with the result that the net operating loss was reduced from previous years in spite of declining revenue.

Reductions in Route #10 (Port Hardy-Prince Rupert) operations have produced substantial drops in both liquor and stateroom revenue; however, the lost revenue was more than offset by reduced expenses. Anticipated sales increases on the new day run concept should more than replace these lost marginal sales with very productive revenue dollars.

Ongoing emphasis on newsstand development has produced an increase in both sales and newsstand gross profit in spite of limited passenger traffic. In support of this trend, the Vancouver Class vessels will be featuring new expanded gift shops with three vessels completed prior to the summer of 1985.

The new Tsawwassen test kitchen and Quality Control Supervisor continue to produce basic improvements in food quality. Although gradual, these improvements have proven to be lasting and consistent throughout the fleet. Revised food purchasing procedures have also been effective in improving quality consistence and value.

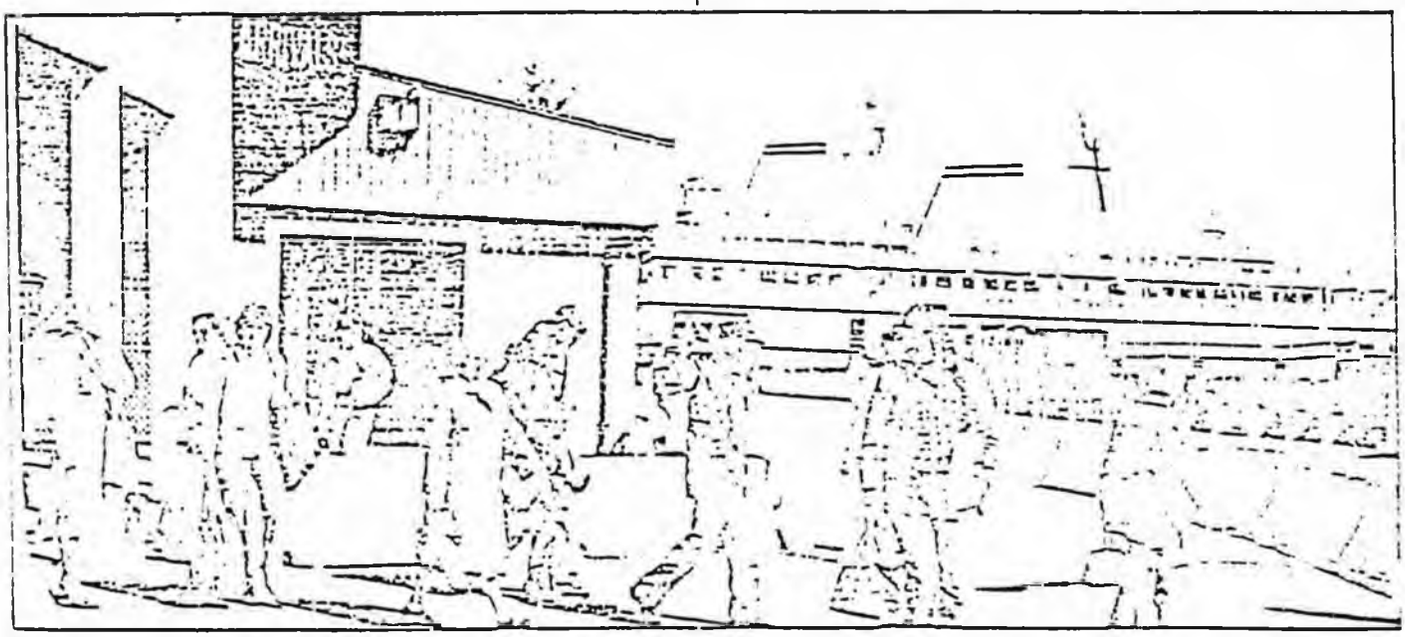


Expanded newsstand/giftshop

Communications

B.C. Ferries has continued to expand its role in the promotion of tourism, in recognition of the significance of this growing industry to British Columbia and the Corporation as a major source of revenue. A major activity this winter has been the promotion of the Day Cruise, which is to be introduced on the Northern route to Prince Rupert in the summer of 1985.

The Corporation has also expanded its activities in major travel shows in key market areas of the U.S. and Canada, working in close cooperation with Tourism B.C. and the tourism regions of the province. The past year also featured more involvement with local tourism communities in areas served by the Corporation.



Foot passenger arrivals, Swartz Bay

mputerized reservations for the Gulf Islands and North ast which were completed in 1983 have been streamlined, now offer an even more efficient service to travel agents and the general public. This process will continue as we prepare well ahead for the anticipated volume of enquiries that will be generated by Expo 86.

Labour Relations

The main Labour Relations activity during 1984 was the administration of the collective agreement that was concluded in 1983. This included developing a layoff and recall procedure with the Union which allowed the Corporation to downsize its work force.

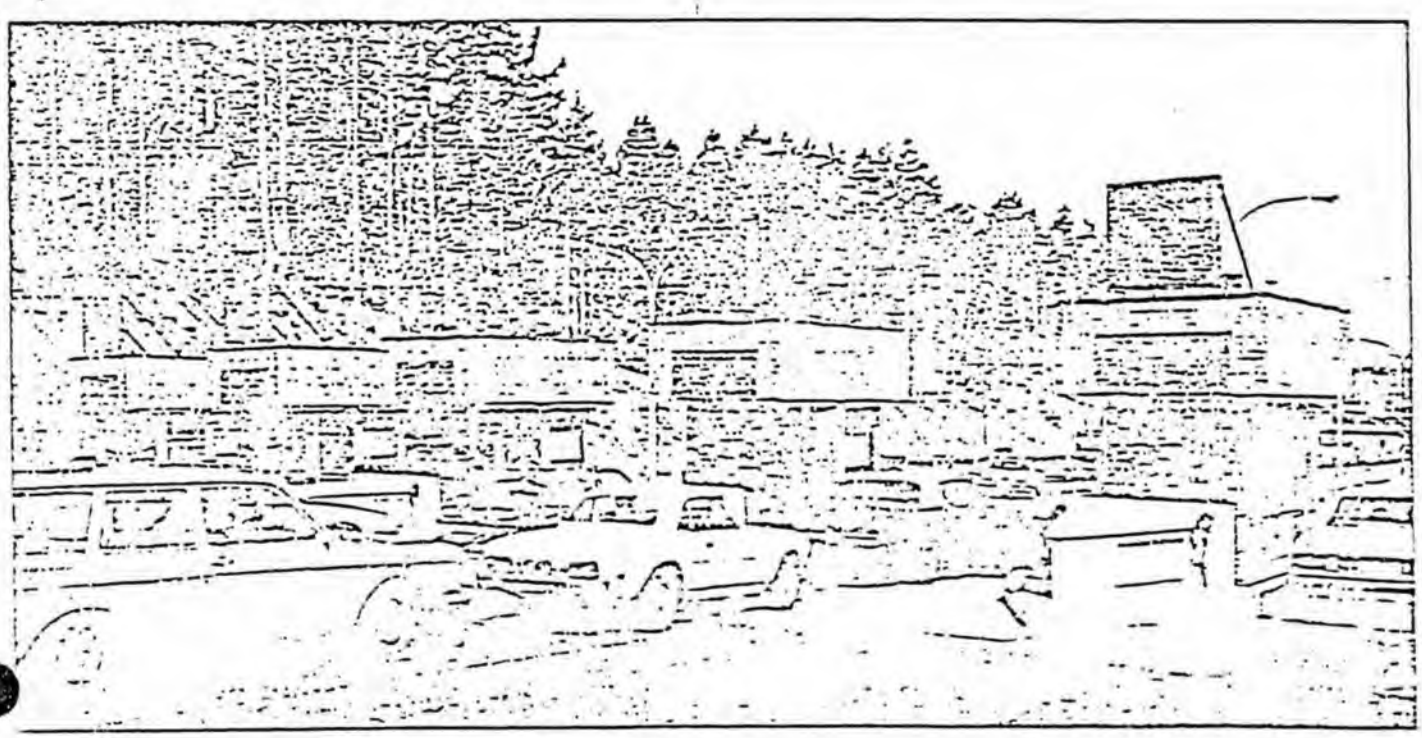
A number of grievances arose as a result of the new contract language; however, the parties were able to resolve these differences of opinion in accordance with procedures established under the collective agreement. This last fiscal year saw no time loss due to picket action of any kind, including third-party picketing.

Personnel

The greater flexibility in manning and improvements in scheduling afforded by the Agreement concluded on October 30, 1983, impacted most significantly on the personnel function in 1984. A new bargaining unit establishment, reflecting the Corporation's ongoing commitment to reduce overall wage costs by means of the rationalization of the Corporation's man resource requirement to a level commensurate with its operational requirements, was accepted and approved. At the same time the Corporation's commitment to reduce its outstanding banked overtime liability continued with positive results; careful manpower planning reduced the total banked overtime by 31%.

The new bargaining unit establishment of 1951 positions resulted in a reduction of 221 positions effective October 10, 1984. Where the reduction impacted on an employee it was effected in consultation with that employee, his Union representative and his Union executive. As a result of the extensive preparatory work completed, and despite the inevitable rippling effect of "bumping," the overall reduction in the number of employees was brought about with a minimum of disruption of personal inconvenience. Of those employees who were laid off and who elected to return to work with the Corporation when work is available, and after allowing for attrition of present regular employees through retirement, death, disabilities, etc. it is considered that the vast majority will return to work as full time regular employees within the next 18 months. In the interim, they will be offered every opportunity to work for the Corporation throughout the busy summer months or any other time that their services can be used.

A.L. Collier
President and
Chief Executive Officer

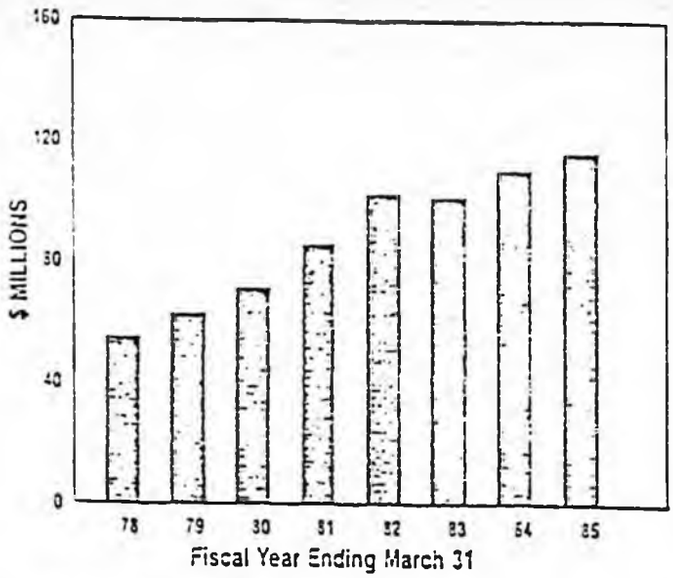


Vehicle toll booths, Swartz Bay

NET OPERATING REVENUE + 5%

Despite the lack of significant traffic growth in recent years, revenues have been growing as a result of regular, modest, annual fare increases.

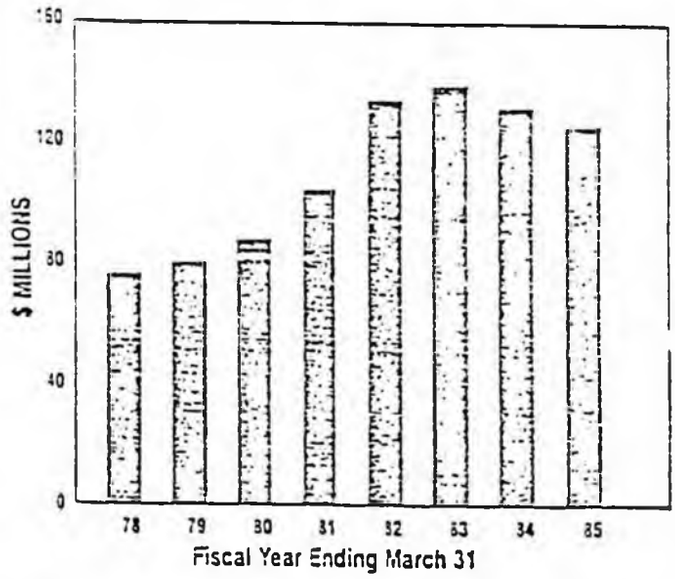
Net operating revenue has grown at an average rate of 7.7% per year over the past five years.



OPERATING EXPENSES – 5%

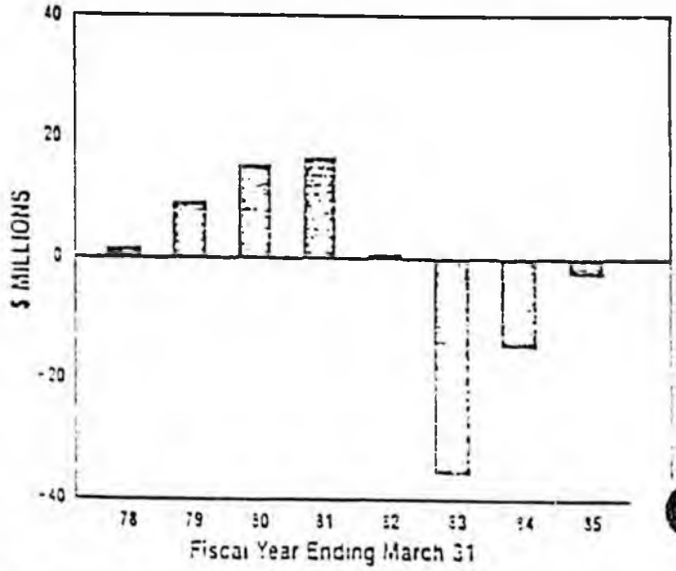
After a period of sharply rising costs in the late 70's and early 80's, operating expenses have been brought under control over the past three years.

This restraint was essential due to lack of traffic growth and a major reduction in the provincial government subsidy.



INCOME/LOSS AFTER SUBSIDY & DEPRECIATION

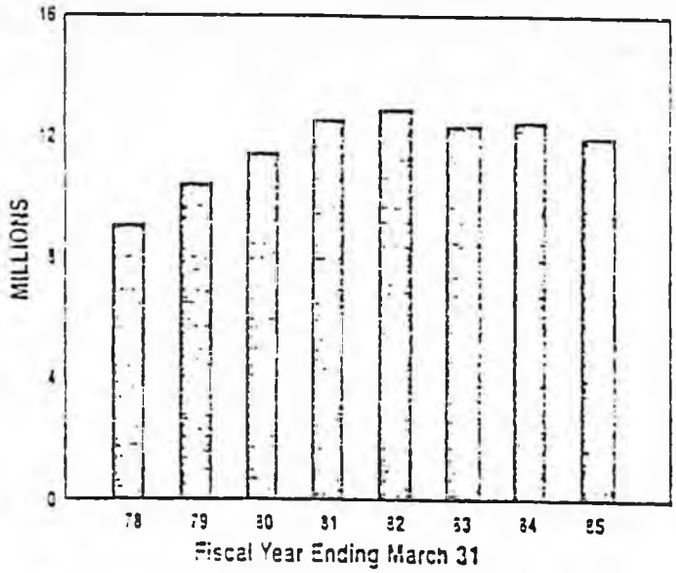
Despite the lack of traffic growth there has been a strong financial recovery over the past three years as a result of operating cost restraint and modest fare increases.



TOTAL PASSENGERS – 4%

After a small increase in 1983/84, passenger traffic has fallen again in 1984/85.

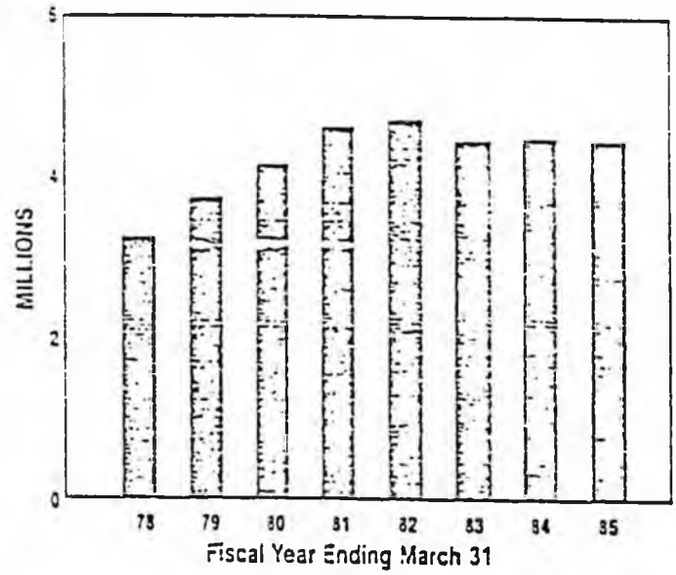
Over the past 24 years, 185 million passengers have been carried. The 200 millionth passenger is expected during the summer of 1986.



TOTAL VEHICLES – 0.5%

Total vehicle traffic has remained virtually unchanged over the past three years.

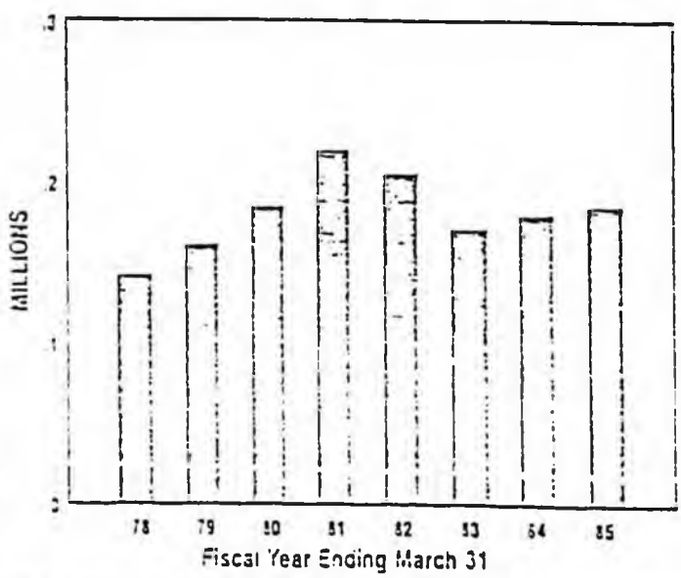
Over 67 million vehicles have been carried since 1960.



COMMERCIAL VEHICLES + 3%

Commercial vehicles have shown a steady increase over the past two years after suffering a sharp decline in the early 1980's.

In the past, commercial traffic has usually been a precursor or leading indicator of changes in other traffic categories.



THORNE RIDDELL
Chartered Accountants

AUDITORS' REPORT

To the Lieutenant-Governor in Council
Province of British Columbia

We have examined the balance sheet of British Columbia Ferry Corporation as at March 31, 1985 and the statements of income, deficit and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the Corporation as at March 31, 1985 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Thorne Riddell

Chartered Accountants

Victoria, Canada
May 21, 1985

Balance Sheet
as at March 31, 1985

ASSETS	1985	1984
	(expressed in thousands)	
CURRENT ASSETS		
Cash (Note 1)	$ 11,943	$ 3,861
Accounts receivable (Note 2)	800	505
Inventories (Note 3)	8,558	9,252
Prepayments and deposits	849	583
	22,150	14,201
RESERVED FUNDS (Note 4)	7,817	—
FIXED ASSETS (Note 5)		
Ships, berths, buildings, equipment and land	477,374	465,418
Less accumulated depreciation	204,709	173,645
	273,165	291,773
	$303,132	$305,974

APPROVED BY THE BOARD

Director

Director

LIABILITIES

	1985	1984
	(expressed in thousands)	
CURRENT LIABILITIES		
Accounts payable and accrued liabilities	$ 18,261	$ 19,456
Deferred revenue	1,675	1,544
	19,936	21,000
LONG-TERM DEBT (Note 6)	36,446	35,586
ACCRUED SICK LEAVE LIABILITY (Note 7)	5,218	5,844
	61,600	62,430

SHAREHOLDERS' EQUITY

SHARE CAPITAL		
Authorized		
1,000,000 shares without par value with a maximum consideration of $100,000,000		
Issued		
68,512 shares	6,351	6,351
CONTRIBUTED SURPLUS (Note 8)	250,401	250,401
DEFICIT	(15,720)	(13,708)
	241,532	243,544
COMMITMENTS (note 13)		
	$303,132	$305,974

Statement of Income

YEAR ENDED MARCH 31, 1985
(expressed in thousands)

	1985	1984
Operating Revenues		
Tolls	$100,628	$ 94,828
Catering	22,396	23,737
Other income (note 9)	2,506	1,949
	125,530	120,514
Less cost of food and goods sold	8,993	9,174
	116,537	111,340
Operating Expenses		
Salaries, wages and benefits	79,513	83,449
Fuel and lubricants	23,896	25,352
Materials, operating supplies and services	10,166	10,338
Contracted replacements, repairs and maintenance	5,263	6,950
Marketing, general and administrative	3,530	3,513
Charter fees	2,325	2,946
	125,308	132,553
Operating Loss Before Subsidy	8,771	21,213
Province of British Columbia Subsidy (note 10)	43,000	43,000
Income from operations	34,229	21,787
Interest Expense (note 11)	5,177	6,198
INCOME BEFORE DEPRECIATION	29,052	15,589
Depreciation	31,064	30,586
LOSS FOR THE YEAR AFTER DEPRECIATION	$ 2,012	$ 14,997

Statement of Deficit

YEAR ENDED MARCH 31, 1985
(expressed in thousands)

	1985	1984
Deficit (accumulated income reinvested in corporation assets) at beginning of year	$ 13,708	$ (1,289)
Loss for the year after depreciation	2,012	14,997
DEFICIT AT END OF YEAR	$ 15,720	$ 13,708

Statement of Changes in Financial Position

YEAR ENDED MARCH 31, 1985
(expressed in thousands)

	1985	1984
SOURCES (USES) OF CASH		
CASH FROM OPERATIONS (Note 12)	$ 28,355	$ 17,198
FINANCIAL ACTIVITIES		
Proceeds from promissory note issue	—	14,739
Repayment of note payable	—	(30,000)
Cash reserved for funding accrued sick leave liability	(4,172)	—
Sinking fund payments	(3,345)	(322)
Cash used in financial activities	(7,317)	(15,583)
INVESTMENT ACTIVITIES		
Fixed asset additions	(12,456)	(7,142)
Proceeds on sale of fixed assets	—	9
Cash used in investment activities	(12,456)	(7,133)
INCREASE (DECREASE) IN CASH	8,082	(5,518)
CASH AT BEGINNING OF YEAR	3,861	9,379
CASH AT END OF YEAR	$ 11,943	$ 3,861

Note: In this statement cash includes only cash available for day to day operations and does not include Reserved Funds cash.

Summary of Accounting Policies

YEAR ENDED MARCH 31, 1985

In accordance with Section 8(7) of the Ferry Corporation Act the financial statements of the Corporation are prepared in accordance with generally accepted accounting principles. Significant accounting policies followed in the preparation of these financial statements are:

Inventories –

Inventories are valued at the lower of cost and current replacement cost.

Long-Term Disability –

Amounts paid to the Superannuation Branch of the Public Service Commission under the Long-Term Disability Plan are accounted for by the Corporation on the basis of accruing in the financial statements that portion estimated to be payable to employees until retirement for individual disability with the balance of the amounts paid being included in prepaid expenses.

Fixed Assets –

Acquired from the Province of British Columbia effective January 1, 1977:

(a) Ships

Ships, which comprise part of the total assets acquired from the Province effective January 1, 1977 by Order-In-Council dated December 16, 1976 and transferred at an assigned value of $1, have been revalued by the Corporation and are reflected in the accompanying financial statements at their estimated depreciated replacement value as at January 1, 1977 on the basis of construction records for labour and materials valued at 1977 cost exclusive of any federal ship building subsidies which may have been available during the extended period of years during which the individual ships were built and during which such subsidies fluctuated substantially. The estimated depreciated replacement value of the ships at January 1, 1977 is not intended to reflect fair market value of the fleet nor can it be considered to approximate fair market value because of the specialized nature and limited saleability of the ships themselves.

In addition, three ships presently under charter by the Province until 1994 are subchartered to the Corporation for the same period at an annual cost of $1 each, with the Corporation being responsible for all operating, repair, and maintenance costs. Under the terms of the subcharter agreement with the Province, the Corporation may in 1994 request that the Province exercise its option to purchase these ships at its own expense in accordance with the terms of its charter agreement. In the event that such option is exercised, clear title to the ships will be transferred to the Corporation. As a result of these transactions and agreements, these ships are reflected as capital assets of the Corporation in the accompanying financial statements and are similarly stated at their estimated depreciated replacement value as at January 1, 1977.

(b) Berths, buildings and equipment

Berths, buildings and equipment also comprise part of the total assets acquired from the Province effective January 1, 1977 by Order-In-Council dated December 16, 1976 and transferred at an assigned value of $1.

These assets are reflected in the accompanying financial statements at their estimated depreciated replacement value as at January 1, 1977 based upon an appraisal made by Universal Appraisal Company Limited as at that date.

Additions and disposals subsequent to January 1, 1977:

The costs of major replacements, additions, extensions and improvements are capitalized in the fixed asset accounts. The costs of maintenance, repairs, minor renewals or replacements are charged against income. On retirement or disposal of fixed assets, the costs thereof and the related accumulated depreciation are eliminated from the accounts and any gains or losses are reflected in the statement of income.

On October 1, 1983 the remaining buildings and equipment at Deas Dock facility, not acquired from the Province on January 1, 1977 were transferred at an assigned value of $1. These assets are reflected in the accompanying financial statements at their estimated depreciated replacement value as at October 1, 1983 based upon an appraisal made by Universal Appraisal Company Limited as at that date.

Depreciation –

Fixed assets are depreciated on the straight line method based upon the following useful lives:

Ships	25 years
Berths	5 - 10 years
Buildings and equipment	4 - 25 years

Amortization of Promissory Note Discount and Issue Costs –

Promissory note discount is amortized on a compound interest method over the term of the debt. Issue costs are amortized on a straight-line basis over the term of the debt.

Provision for Annual Refit Costs –

The Corporation provides for ship refit expense by charging against income the anticipated costs over the period between refits.

Notes to Financial Statements

YEAR ENDED MARCH 31, 1985

1. CASH AND SHORT-TERM INVESTMENTS

Funds, other than those required for immediate settlement of liabilities, are invested in short-term commercial securities authorized pursuant to the terms and provisions of the Financial Administration Act of British Columbia. The investments are arranged through the Ministry of Finance of the Province.

2. ACCOUNTS RECEIVABLE

Provision has been made for the uncollectibility of a 1980 accounts receivable of $1,950,519 due from the British Columbia Steamship Company (1975) Ltd. for the lease and modifications to the Lessee s specifications of the M.V. "Queen of Prince Rupert".

3. INVENTORIES

	1985	1984
	(expressed in thousands)	
Spare components, parts and supplies	$ 6,987	$ 6,332
Fuel and lubricants	1,153	1,980
Goods for resale and catering supplies	413	440
	$ 8,553	$ 8,252

4. RESERVED FUNDS

The Corporation has segregated assets that are required for specific purposes or as required by long-term debt obligations.

	1985	1984
	(expressed in thousands)	
Sinking funds for long-term debt (note 5)		
Administered by the Province	$ 345	$ —
Administered by the Corporation	3,300	—
	3,645	—
Fund for accrued sick leave liability (note 7)	4,172	—
	$ 7,817	$ —

5. FIXED ASSETS

	1985 (expressed in thousands)			1984
	Cost or Appraised Value	Accumulated Depreciation	Net Book Value	Net Book Value
Ships owned	$ 282,725	$ 105,472	$ 177,253	$ 192,581
Ships under capital lease	72,697	22,256	50,441	43,771
Berths, buildings and equipment	120,524	76,981	43,543	50,966
Land	723	—	723	723
Construction in progress	1,205	—	1,205	3,732
	$ 477,874	$ 204,709	$ 273,165	$ 291,773

6. LONG-TERM DEBT

	1985	1984
	(expressed in thousands)	
Long-term debt issued by the Corporation		
8.95% Promissory notes (effective rate of 15.75%), are repayable in five equal annual instalments of $5.7 million commencing March 5, 1988	$ 28,500	$ 28,500
Less unamortized discount and issue costs	6,473	7,332
	22,027	21,168
12.08% Promissory note (effective rate of 12.44%) due September 9, 2003 is repayable by annual sinking fund payments of $322,492 commencing September 9, 1984	14,758	14,758
Less unamortized issue costs	17	18
	14,741	14,740
	36,768	35,908
Sinking fund payment required within one year	322	322
	$ 36,446	$ 35,586

Principal and sinking fund payments due in each of the next five years:

1986	1987	1988	1989	1990
$322,492	$322,492	$6,022,492	$6,022,492	$6,022,492

The Province of British Columbia unconditionally guarantees the payment of principal and interest on the Promissory notes.

7. ACCRUED SICK LEAVE LIABILITY

On September 1, 1978 the Corporation introduced short-term illness and injury and long-term disability plans and as of that date all employees ceased accruing sick leave credits. Under the collective agreement with the employees, in the event of illness, the accumulated sick time may be withdrawn prior to retirement and on retirement any balance remaining is payable in cash at 50% of accredited time. The liability as at March 31, 1985 based upon a recent actuarial evaluation by Reed Stenhouse Associates Limited established the present lump sum value of cash payouts on retirement to all employees at $4,172,000 which, with interest will accumulate an amount required to meet those obligations. The recorded liability as actuarially evaluated in 1982 with accrued interest net of withdrawals to 1985 exceeded the current evaluation by $1,569,391. One third of the excess is reflected in current operations and the balance will be reflected in operations of the next two fiscal periods. Funds reserved for liquidation of this liability are invested in short-term commercial security (Note 1).

8. CONTRIBUTED SURPLUS

	1985	1984
	(expressed in thousands)	
Excess of estimated depreciated replacement value over assigned value of $1 of assets acquired from the Province of British Columbia		
– Ships, berths, buildings and equipment effective January 1, 1977	$ 249,674	$ 249,674
– Buildings and equipment effective October 1, 1983	727	727
	$ 250,401	$ 250,401

9. OTHER INCOME

	1985	1984
	(expressed in thousands)	
Parking and ancilliary traffic revenue	$ 947	$ 837
Interest earned on funds in bank and short-term investments	1,559	1,112
	$ 2,506	$ 1,949

10. PROVINCIAL SUBSIDY AND BENEFITS

The Corporation receives a subsidy from the Province of British Columbia which is determined annually.

Included in fixed assets as "ships under capital lease" are three ships leased from the Province at an annual cost of $1 each. The annual cost of these charters to the Province is $4,819,800. In addition the Corporation utilizes Crown land for terminals and highway access without rental or property taxes. The value of these benefits is indeterminable. The Corporation, as an agent of the Crown, is not liable to taxation, including taxation on improvements, except insofar as the Crown is liable.

The Corporation utilizes Ministries and Agencies of the Provincial Government for negotiation and purchase of fuel, materials, and communications. The aggregate of these transactions is $39.3 million (1984 - $45.3 million).

11. INTEREST EXPENSE

	1985	1984
	(expressed in thousands)	
Interest expense, amortization of promissory note discount and amortization of debt issue cost on:		
– long term debt	$ 5,171	$ 4,292
– short term borrowings	6	1,906
	$ 5,177	$ 6,198

12. CASH FROM OPERATIONS

	1985	1984
	(expressed in thousands)	
Loss for the year after depreciation	$(2,012)	$(14,997)
Items not involving cash		
Depreciation	31,064	30,586
Amortization of promissory note discount and issue costs	860	741
Loss on retirement of fixed assets	—	248
Increase (decrease) in accrued sick leave liability	(626)	(164
Cash generated from continuing operations	29,286	16,742
Cash generated from (used for) operating working capital		
Accounts receivable	(295)	104
Inventories	695	259
Prepayments and deposits	(266)	1,542
Accounts payable and accrued liabilities	(1,195)	(1,349)
Deferred revenue	(130	(100)
Cash generated from operations	$ 28,355	$ 17,198

13. COMMITMENTS

The Corporation is contractually committed to modify the passenger areas on the M.V. "Queen of the North" and to complete terminal compound improvements at Skidegate and Departure Bay. The total estimated cost of these capital projects is $0.9 million and as at March 31, 1985 the estimated remaining cost to complete these commitments is $0.4 million.

Not included in the accounts is a lease commitment of $5.4 million for the M.V. "Quinsam" which is fully recoverable through a non-cancellable sub-lease with the Ministry of Transportation and Highways for British Columbia.

14. COMPARATIVE FIGURES

Certain comparative figures for the previous year have been reclassified to conform with the March 31, 1985 financial statement presentation.

Statistical Review

YEAR ENDED MARCH 31

	1985	1984	1983	1982	1981	1980
			(expressed in thousands)			
Financial						
Operating Revenue – Gross	$125,530	$120,514	$110,589	$112,199	$ 99,552	$ 82,367
Operating Expense	125,308	132,553	139,013	133,856	104,956	88,695
Operating Loss before Subsidy	8,771	21,213	37,213	31,221	14,261	13,567
Subsidy	43,000	43,000	43,000	58,891	53,106	49,447
Cash Flow from Operations	23,355	17,198	(3,005)	35,831	44,811	38,583
Depreciation and Amortization	31,064	30,586	34,724	26,087	22,148	20,271
Interest on Debt	5,177	5,198	5,073	893	779	880
Working Capital (Deficiency)	2,214	(6,799)	(37,505)	(11,495)	15,612	21,878
Additions to Property	12,456	7,142	25,804	74,376	44,919	39,369
Total Assets	303,132	305,974	335,370	357,817	334,596	312,048
Long-term Debt	36,446	35,586	20,428	31,716	13,764	15,513
Operating						
Traffic						
– Passengers	11,913	12,398	12,275	12,764	12,513	11,423
– Vehicles	4,460	4,483	4,463	4,713	4,526	4,161
Miles						
– Passengers	269,703	283,745	278,975	339,395	334,073	314,844
– Vehicles	96,531	97,569	97,020	118,533	116,313	10[illegible] 3
Utilization						
– Passengers	28%	25%	27%	26%	28%	[illegible]%
– Vehicles	58%	56%	50%	46%	50%	57%

CORPORATE INFORMATION

HEAD OFFICE

818 Broughton Street
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V8W 3G3

CORPORATE COUNSEL

Ladner Downs
2100 Pacific Centre South
700 W. Georgia Street
Vancouver, B.C.
V7Y 1A8

BANKERS

Bank of Nova Scotia
Victoria, B.C.

Canadian Imperial Bank of Commerce
Victoria, B.C.

Statistical Review

YEAR ENDED MARCH 31

	1985	1984	1983	1982	1981	1980
			(expressed in thousands)			
Financial						
Operating Revenue – Gross	$125,530	$120,514	$110,669	$112,199	$ 99,552	$ 82,867
Operating Expense	125,308	132,553	139,013	133,356	104,956	88,595
Operating Loss before Subsidy	8,771	21,213	37,213	31,221	14,251	13,667
Subsidy	43,000	43,000	43,000	58,891	53,106	49,447
Cash Flow from Operations	28,355	17,198	(3,005)	35,331	44,311	38,583
Depreciation and Amortization	31,084	30,586	34,724	26,087	22,148	20,271
Interest on Debt	5,177	5,198	5,073	393	779	880
Working Capital (Deficiency)	2,214	(6,799)	(37,506)	(11,495)	15,512	21,373
Additions to Property	12,456	7,142	26,804	74,376	44,919	39,369
Total Assets	303,132	305,974	335,370	357,817	334,696	312,048
Long-term Debt	36,446	35,586	20,428	31,716	13,764	15,513
Operating						
Traffic						
– Passengers	11,913	12,398	12,275	12,764	12,513	11,423
– Vehicles	4,460	4,483	4,463	4,713	4,526	4,161
Miles						
– Passengers	269,703	283,745	278,975	339,395	334,078	314,344
– Vehicles	96,531	97,569	97,020	116,633	116,318	106,735
Utilization						
– Passengers	28%	29%	27%	26%	28%	26%
– Vehicles	33%	36%	33%	42%	39%	37%

CORPORATE INFORMATION

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BANKERS

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Victoria, B.C.

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Victoria, B.C.

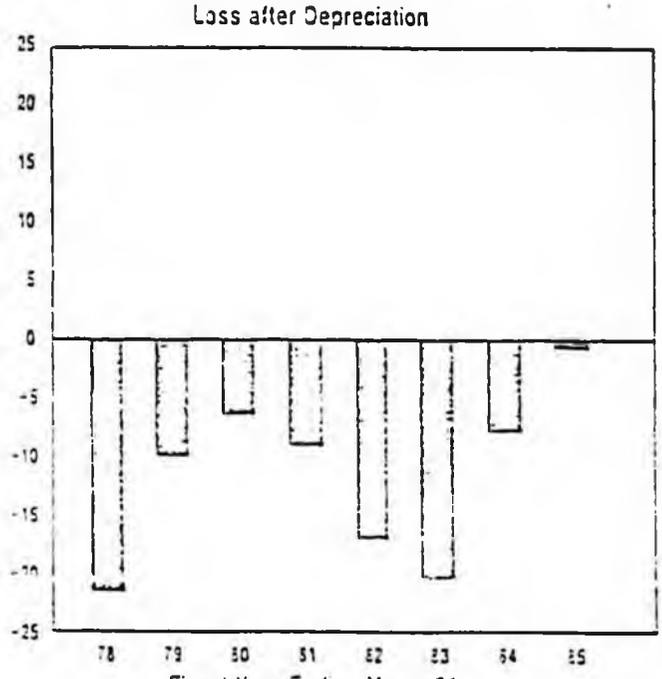
VANCOUVER ISLAND

The two Mainland-Vancouver Island routes are among the busiest ferry routes in the world, carrying 7.8 million passengers and 2.8 million vehicles in 1984/85.

A concentrated effort at improving cost efficiency over the past 3 years has resulted in a tremendous reduction in the loss.

For the first time this year the Vancouver Island routes are very close to a break-even operation.

VANCOUVER ISLAND
Loss after Depreciation

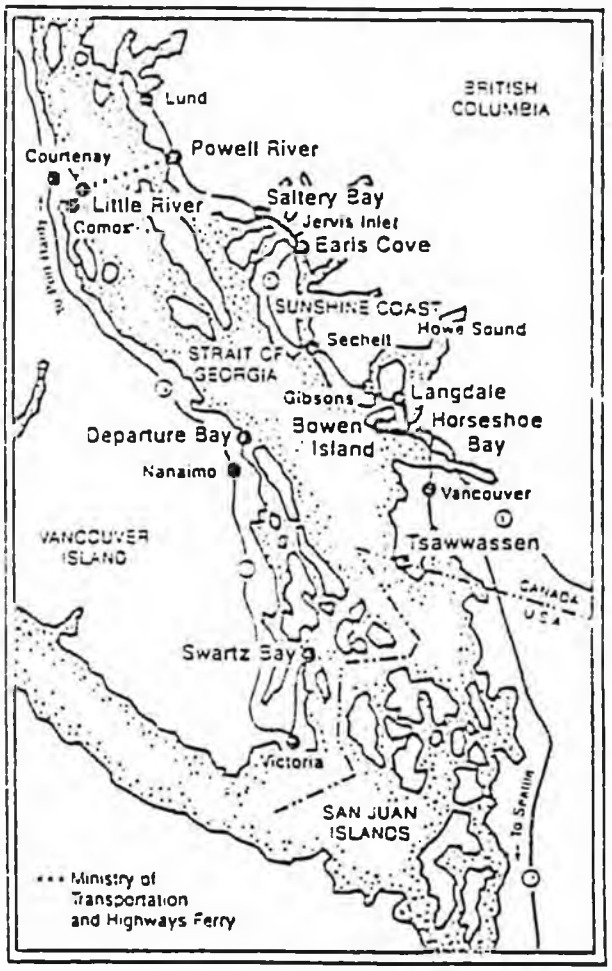


SUNSHINE COAST

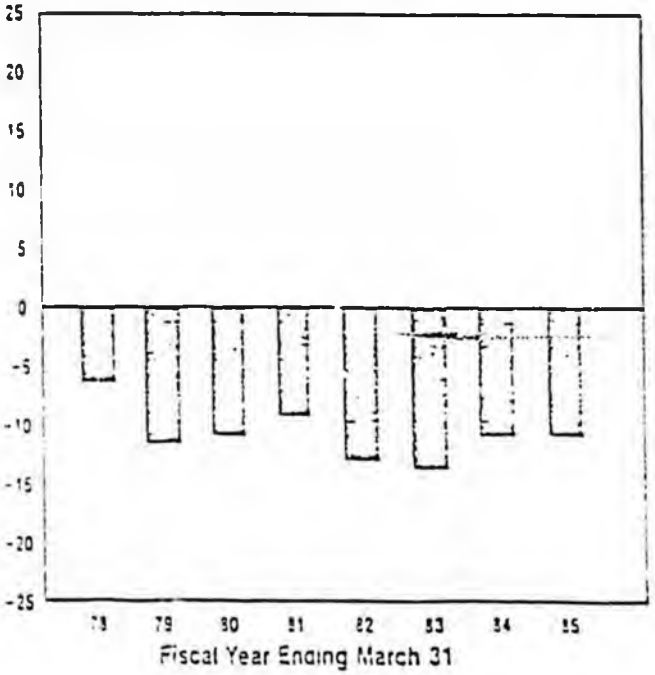
The Sunshine Coast includes four routes:
Horseshoe Bay - Langdale
Horseshoe Bay - Bowen Island
Earls Cove - Saltery Bay
and the passenger-only service from Langdale-Gambier Island-Keates Island.

These routes carried 2.5 million passengers and 1 million vehicles in 1984/85. Although traffic has declined in each of the past three years, there has been an improvement in the financial performance.

The loss in 1984/85 was $11 million, virtually unchanged from the previous fiscal year.



SUNSHINE COAST
Loss after Depreciation

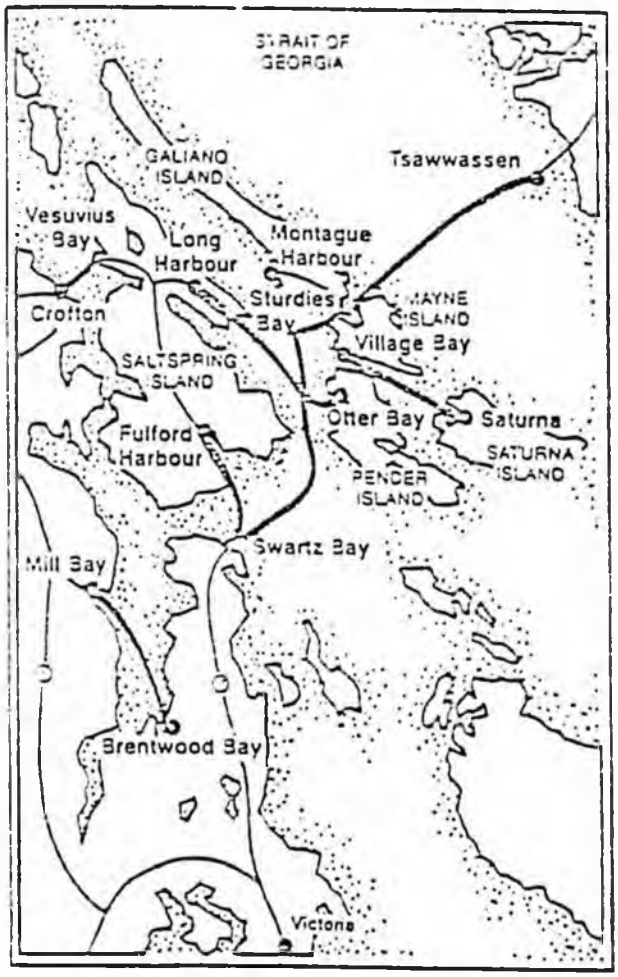


GULF ISLANDS

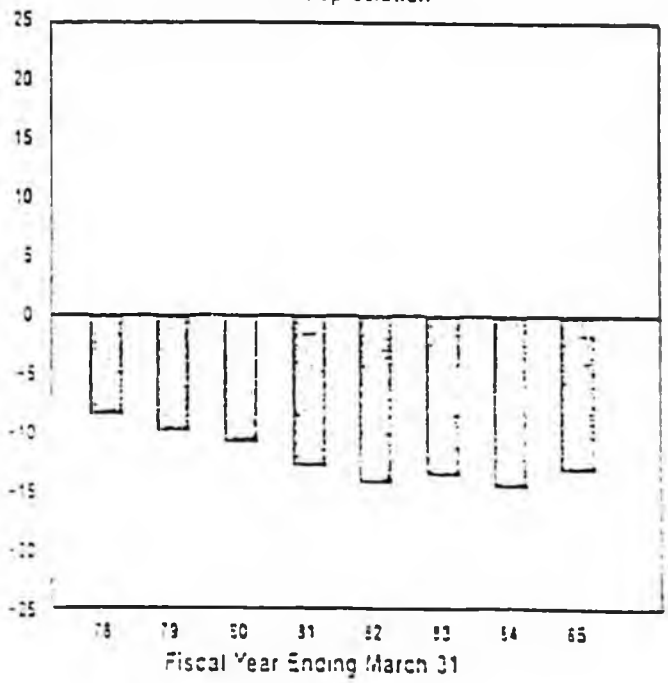
The Gulf Islands vessels service the islands of Salt Spring, Pender, Galiano, Mayne and Saturna. The region also includes the Brentwood-Mill Bay route.

In 1984/85 these routes carried 1.5 million passengers and 623,000 vehicles.

The operating loss in 1984/85 was $13 million, which is a 9% reduction from the previous year.



GULF ISLANDS
Loss after Depreciation



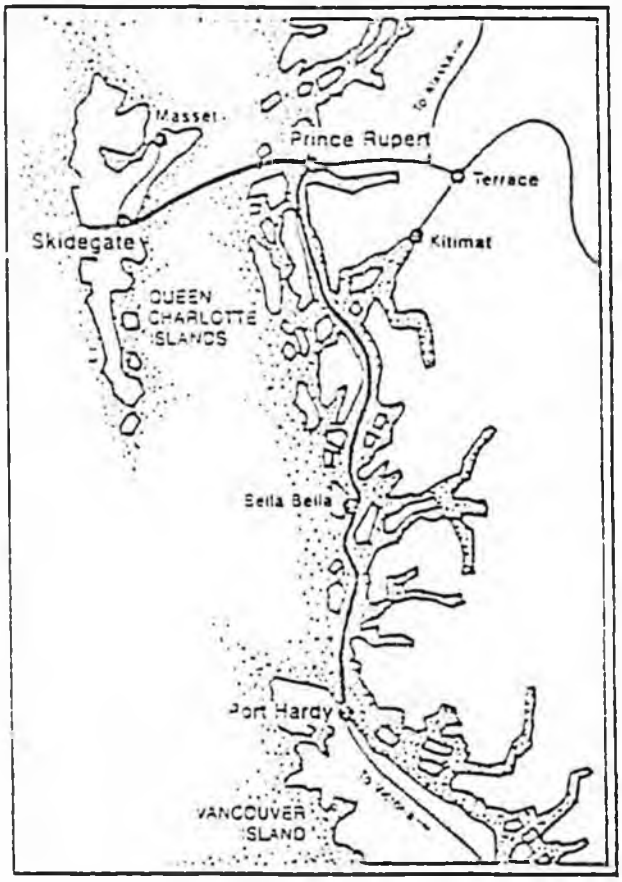
NORTH COAST

The North Coast services include:
Prince Rupert - Port Hardy
Prince Rupert - Skidegate.

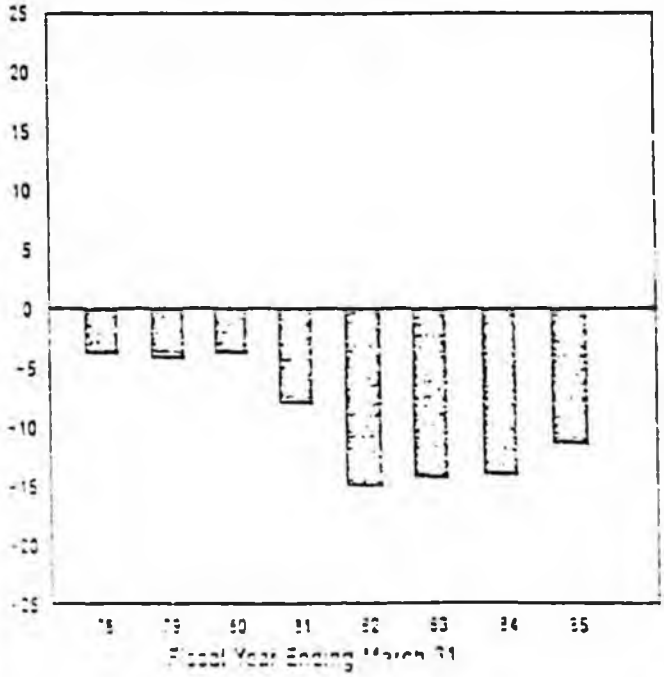
In addition the Corporation has contract services for passenger routes from Prince Rupert to Port Simpson and Kincolith.

Until March 31, 1985 there was also a contract tug-and-barge service between Prince Rupert and Masset.

For the three years previous to 1984/85 the loss on these routes averaged about $15 million per year. With the elimination of Tsawwassen-Port Hardy service and other cost efficiencies the operating loss has been reduced by 19% to $11 million.



NORTH COAST
Loss after Depreciation



Year End	Passengers	Vehicles
March 31, 1961	692,000	221,000
March 31, 1962	2,040,000	697,000
March 31, 1963	2,665,000	895,000
March 31, 1964	3,180,000	1,034,000
March 31, 1965	3,300,000	1,185,000
March 31, 1966	4,000,000	1,333,000
March 31, 1967	4,477,000	1,516,000
March 31, 1968	4,361,000	1,530,000
March 31, 1969	4,774,000	1,733,000
March 31, 1970	5,571,000	2,102,000
March 31, 1971	5,963,511	2,228,412
March 31, 1972	6,771,837	2,552,505
March 31, 1973	7,629,385	2,824,964
March 31, 1974	8,538,297	3,169,582
March 31, 1975	9,612,501	3,558,234
March 31, 1976	9,912,738	3,760,099
March 31, 1977	8,383,502	3,044,167
March 31, 1978	9,018,976	3,258,017
March 31, 1979	10,399,203	3,758,628
March 31, 1980	11,423,405	4,161,302
March 31, 1981	12,512,398	4,525,917
March 31, 1982	12,763,664	4,712,951
March 31, 1983	12,275,466	4,462,731
March 31, 1984	12,397,905	4,482,707
March 31, 1985	11,912,943	4,460,069
Total	184,676,231	67,306,285

	Year Built	Year Converted	Overall Length	Gross Tons	Capacity Auto	Capacity Pass.
Jumbo Class						
Queen of Alberni	1976	'84	546	5863	310	1415
Queen of Cowichan	1976		457	6551	362	1466
Queen of Coquitlam	1976		457	6551	362	1466
Queen of Oak Bay	1981		457	6969	362	1466
Queen of Surrey	1981		457	6969	362	1466
V Class						
Queen of Vancouver	1962	'70,'81	426	5430	258	1360
Queen of Victoria	1962	'70,'81	426	5430	258	1360
Queen of Esquimalt	1963	'69,'82	426	5430	376	1360
Queen of Saanich	1963	'72,'82	426	5430	376	1360
Stretched Class						
Queen of Nanaimo	1964	'73	426	4939	192	987
Queen of New Westminster	1964	'74	426	4904	192	987
Queen of Burnaby	1965	'73	426	4903	192	987
Northern Ships						
Queen of Prince Rupert	1966		332	5864	80	458
Queen of the North	1969	'80	410	8807	135	750
Major Ships						
Queen of Sidney	1960		336	3123	138	999
Queen of Tsawwassen	1960		336	3127	138	989
Minor Ships						
Bowen Queen	1965	'79	279	1476	70	390
Mayne Queen	1965	'79	279	1476	70	340
Powell River Queen	1965	'79	279	1486	70	400
Howe Sound Queen	1964		241	795	70	330
Queen of the Islands	1963		236	1717	40	483
Mill Bay	1956		120	175	16	168
Saltspring Queen	1949		145	276	30	187
Vesuvius Queen	1950		150	277	32	177
Dogwood Princess II	1979		42	21	—	38

BRITISH COLUMBIA FERRY CORPORATION

1986 FACT SHEET

Chairman of the Board - Stuart M. Hodgson
President & Chief Executive Officer - Andrew L. Collier
General Manager & Chief Operations Officer - George Baldwin

Ships and Areas Covered

Vancouver - Victoria (Tsawwassen - Swartz Bay)

M.V. "Queen of Esquimalt"
M.V. "Queen of Saanich"
M.V. "Queen of Vancouver"
M.V. "Queen of Victoria"

Vancouver - Nanaimo (Horseshoe Bay - Departure Bay)

M.V. "Queen of Alberni"
M.V. "Queen of Cowichan"
M.V. "Queen of Oak Bay"
M.V. "Queen of Surrey"

Sunshine Coast (Horseshoe Bay - Langdale)

M.V. "Queen of Coquitlam"

Vancouver Island - Salt Spring Island

M.V. "Bowen Queen" (Swartz Bay - Fulford Harbour)
M.V. "Salt Spring Queen" (Vesuvius - Crofton)

Vancouver Island - Gulf Islands (Swartz Bay, Mayne, Galiano, Pender, Saturna Is.)

M.V. "Mayne Queen"
M.V. "Vesuvius Queen" (Swartz Bay - Gulf Is. Supplementary)

Sechelt - Powell River (Earls Cove - Saltery Bay)

M.V. "Powell River Queen"

Horseshoe Bay - Bowen Island (Snug Cove)

M.V. "Howe Sound Queen"

Vancouver - Gulf Islands (Tsawwassen - Galiano - Mayne - Pender - Salt Spring Is.)

M.V. "Queen of Tsawwassen"

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Port Hardy - Bella Bella - Prince Rupert (Summer)
Port Hardy - Bella Bella - Prince Rupert - Skidegate (Winter)

M.V. "Queen of the North" (Year-round)

Prince Rupert - Skidegate (Summer)

M.V. "Queen of Prince Rupert"

Brentwood - Mill Bay

M.V. "Mill Bay"

Langdale - Gambier Island - Keats Island

M.V. "Dogwood Princess II"

Prince Rupert - Port Simpson - Kincolith

Passenger Service only (under contract)

Other Vessels

M.V. "Queen of Burnaby"
M.V. "Queen of the Islands"
M.V. "Queen of Nanaimo"
M.V. "Queen of New Westminster"
M.V. "Queen of Sidney"

Pay Parking Lots Available

Departure Bay	350	vehicles
Horseshoe Bay	180	"
Langdale	85	"
Swartz Bay	450	"
Tsawwassen	1250	"

Catering

Passengers have the convenience of an enlarged cafeteria system on the converted ferries. These cafeterias have seating for up to 224 people at one time. There is also a snack bar on the four vessels operating between Tsawwassen and Swartz Bay. These ships also provide buffet service during the peak summer schedule. Catering facilities are also on most other vessels servicing the major routes and at major terminals except Horseshoe Bay.

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Employees

There are approximately 2000 employees in the system, compared with 200 when the ferry service began in 1960.

Ships Services

Passenger elevators have been installed in all the major and 'C' Class ships, specifically for those who are unable to manage the stairs. The M.V.s "Queen of Sidney" and "Queen of Tsawwassen" do not have elevators. All major ferries have nursing mothers facilities, non-smoking sections, and restrooms for the disabled.

Machine Repair Shop

A service unique to the ferry business is the combined machine repair shop established at Deas Dock on the Fraser River, which allows for a planned program of continuing preventative maintenance. Another unique service is the most modern and completely equipped life raft servicing centre in Canada, also located at Deas Dock. Refitting and lay-up berths are now in operation on the man-made basin at this location.

Capsule History

The idea of a ferry system germinated when Vancouver Island was isolated during the Seamen's Strike in July 1958. Private ferry companies were approached to provide the solution with the Provincial Government undertaking to build highway and wharf facilities on Vancouver Island and the mainland to provide the quickest possible service. When private industry turned down the plan, the Government decided to go ahead on its own.

In March 1959, the Provincial Government announced plans to enter the ferry business. The first contracts were let to Victoria Machinery depot and Burrard Dry Dock for the M.V. "Sidney" and the M.V. "Tsawwassen".

Landings were built at Swartz Bay to service Victoria and at Tsawwassen to service Vancouver. At the latter site, a two-mile causeway was built which used 2,500,000 cubic yards of boulder, rock, and gravel fill.

Inauguration of the two-hour service started on June 15, 1960.

On September 1, 1961, the Gulf Island Service was purchased by the British Columbia Ferry Authority. In October 1961, Black Ball Ferries Ltd., which operated ferries from Horseshoe Bay to Nanaimo and to the Sunshine Coast, was purchased.

The inaugural run of the M.V. "Queen of Prince Rupert", sailing the Inside Passage to Prince Rupert from Kelsey Bay, was in May 1966.

. . . . /4

In April 1967, British Columbia Ferries purchased the "Pere Nouvel", which was renamed the M.V. "Sunshine Coast Queen", to replace the "Langdale Queen" and the "Sechelt Queen" on the Howe Sound service. This double-ended ferry was the largest in the fleet at that time, having a capacity of over 180 cars. This is no longer the case, as the stretch-lifted ferries now have lift-off capabilities of up to 400 vehicles. The "Sunshine Coast Queen" has since been sold.

In June 1967, the M.V. "Mill Bay" was purchased from Coast Ferries and serves the Saanich Peninsula between Brentwood Bay, on the Peninsula, to Mill Bay, approximately 15 miles from Duncan.

The "Howe Sound Queen", which has a carrying capacity of 70 automobiles, was taken over to replace the "Bowen Queen" to alleviate the increasing traffic on the Horseshoe Bay/Bowen Island route.

The jumbo vessels, Queens of "Cowichan" and "Coquitlam", were added to the fleet in 1976. Both capable of carrying 362 automobiles each, they were joined by the "Queen of Alberni", built specifically to carry overheight, commercial, and recreational vehicles. All have elevators and on board cafeterias.

On January 1, 1977, British Columbia Ferries became British Columbia Ferry Corporation, a Crown Corporation. The Chairman of the Board is Stuart Hodgson, President is Andrew Collier. George Baldwin is the General Manager.

Three minor vessels, the M.V.s "Mayne Queen", "Powell River Queen", and "Bowen Queen", were stretched and repowered in 1979. Each ship is now capable of carrying 70 vehicles.

In May 1979, the "Dogwood Princess II" replaced the "Dogwood Princess" on the Gambier and Keats Islands route. The new passenger-only vessel carries 38 people.

On May 29, 1980, the M.V. "Queen of the North", formerly the "Queen of Surrey", commenced service on the Inside Passage run. Port Hardy became the new terminus on northern Vancouver Island on May 31, 1979, replacing Kelsey Bay. During the summer, this vessel departs from Port Hardy every other day with an en route stop at Bella Bella once a week. In the off-season service between the two ports is on a once-weekly basis.

The "Queen of Prince Rupert" was chartered by B.C. Steamship Company to operate between Seattle, Washington and Victoria during the summer of 1980. She was returned to B.C. Ferries in October of that year and commissioned to the service between Prince Rupert and Skidegate, Queen Charlotte Islands. The "Queen of Prince Rupert" operates on the Skidegate - Prince Rupert route in the summer.

Two more jumbo (360-car) ferries, the Queens of "Surrey" and "Oak Bay", were built at Burrard Yarrows Corporation in Vancouver and Victoria. They entered service in May and June of 1981.

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An innovative new conversion program was begun in 1981 with the "lifting" of two of the "stretched" vessels, the Queens of "Vancouver" and "Victoria". Each ship was cut in half horizontally, just below the passenger (promenade) deck, raised vertically 10 feet on hydraulic jacks, and an upper car deck was added. This same operation has since been effected on the Queens of "Saanich" and "Esquimalt" and these four converted ships are now carrying record loads of vehicles.

On June 15, 1985, the B. C. Ferry Corporation celebrated its 25th Anniversary of operation, a significant milestone in the history of British Columbia.

On October 6, 1985, the 14 saltwater ferries (formerly operated by the Provincial Ministry of Transportation and Highways) were transferred to the B.C. Ferry Corporation making the Crown Corporation one of the largest ferry operations in the world in terms of number of ships (39) and number of routes (24). Over 400 employees joined B.C. Ferries at the same time, increasing the number of workers in the ferry fleet to approximately 2600, rising to over 3000 in summer.

Alterations and Innovations

Over the years since the inception of the ferry service, innovations have continuously been undertaken to improve and increase capacities. When the first two ships were built, they were modelled on the style of Black Ball ferries. The Queens of "Sidney" and "Tsawwassen" are both very similar to Black Ball's "Coho". Then, when the next seven ships were built, the plans differed and, because of this change, each of these ships have been able to undergo alterations that have greatly improved their lift-off potential.

In 1968, ramps were installed on the car decks leading to mezzanine decks affixed to the midships bulkhead. This innovation increased the car carrying space from 110 vehicles to 150. Then, starting in 1969, an amazing (at that time) alteration took place. Each ship was taken to the shipyard, cut in half, and an 84 foot section was built, floated into place, and the ship was welded together again! This further increased the capacity for vehicles to 200. At the same time, the dining rooms were extended and solarium seating was added in the new section aft of the bridge on the sun deck.

As time went on, more and more people were using the popular ferries, and line-ups in the peak travel periods became a problem. More ferries were needed, so three new vessels were commissioned. Two of them were built on the lines of Washington State ferries; the third, with basically the same lines, was constructed to carry primarily overheight, recreational, and commercial traffic. This was in 1976 but in 1979, it became evident that another two 'C' Class (or Super ferries) were required and they were built with yet more improvements, enabling them to carry 350 cars.

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In the spring of 1981, an enormous and exciting conversion program was commenced. Two of the original seven major vessels, those built between 1961 and 1964 and which had already been "stretched", were now to be "lifted". The ship was cut in half again, this time horizontally, the top half raised on hydraulic jacks, and a new deck inserted. The upper sun deck solariums also underwent change, they were covered in and made into more useful and attractive seating areas. The midships lounge on the promenade deck was also renovated with a snack bar added. Since then, two more of this class vessel have been converted, this time adding ramps, bringing the car carrying capability to, believe it or not, 400 cars!

The "Queen of Alberni", B.C. Ferries' "overheight vehicle" ship, was lifted in the spring of 1984 increasing her car-carrying capacity from 150 to 300 vehicles and returned to service on the Horseshoe Bay/Langdale route 3 months later.

At her 1986 refit, the "Queen of Alberni's" passenger lounges and cafeteria were enlarged making this vessel more suitable for service on the Horseshoe Bay/Departure Bay route.

During the Expo season (May - October, 1986), five ferries that had been in lay-up were repainted in the new B.C. Ferry colours (red, marine blue, and white) and came into service to assist with the heavy demand expected during the World's Fair.

Yes, since 1960, there have been many changes, both on and off the ships of B.C. Ferries. Carpeted decks, where there was once linoleum; cafeterias with an extensive menu; elevators (the new ships have two each); restrooms for the disabled; and pay phones. And ashore, special ramps had to be constructed to comply with the converted vessels' modifications; overhead walkways extended, improved, and carpeted for foot pasesengers' comfort; greater parking areas; new and more ticket booths; and extra berths and docking facilites. The list just goes on!

Marketing & Public Relations
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ALASKA STATE LEGISLATURE
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RESEARCH AGENCY

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January 15, 1987

MEMORANDUM

TO: Representative Bette Cato

FROM: Mary Jennings MJ
Legislative Analyst

RE: **Options for the Alaska Marine Highway System to Operate Similarly to Cruise Ships**
Research Request 87.058

You requested a discussion of options for the Alaska Marine Highway System (AMHS) to operate more similarly to cruise ships on the mainline route. The mainline is the route from Seattle to Skagway via Prince Rupert; four ships operate on the mainline at different times of the year.

Background

The number of cruise ships that operate in the waters of Southeast Alaska has grown dramatically during the past few years. According to the State Division of Tourism, over 90 percent of all tourists in Southeast arrive by way of cruise ships. Although specific data are not available from cruise ship companies, one can assume that the expansion that has occurred is an indicator of profitabity. The AMHS vessels that operate on the mainline generate revenue equal to approximately 80 percent of costs. Since ferries and cruise ships operate basically over the same route, the question arises as to why the cruise ships are able to operate at a profit and the ferries are not. The following sections of this memorandum present a discussion of options that would allow the AMHS to operate more similarly to cruise ships.

Reducing Labor Costs

Labor costs of onboard personnel of AMHS ferries account for approximately 60 percent of a vessel's operating costs. According to persons contacted in various cruise ship companies, the labor costs of cruise ships are much lower than ferries. None of the cruise ship companies were willing to give specific data concerning operating costs, but one company official estimated that the labor cost of the AMHS were more than twice as high as the labor costs of a cruise ship. The official added that this was not due to less on-board personnel but because cruise ships utilized nonunion labor at relatively low wages.

Due to union labor on AMHS vessels, labor costs can be reduced only by contract negotiations. Contracts are scheduled for negotiation during 1988. Potential cost savings may be realized if contracts can be negotiated for lower wages, although it is doubtful that the unions would accept wages at the same level as cruise ship workers.

Leasing to Private Industry

According to the Executive Director of the Inland Boatman's Union, the current contract does not allow nonunion workers on vessels leased by the State. The union does not feel that this is a negotiable issue. Therefore, even if mainline operation were leased to the private sector it would still be difficult to lower labor costs to cruise ship levels. The option of selling the vessels to private industry also exists, but because this would remove the vessels from control of the State, this option was not researched.

Year Round Full Capacity

A cruise ship company representative stated that cruise ship lines are able to operate profitably because their vessels operate at full capacity year-round. This is achieved by operating in different locations, such as Europe and the South Pacific, during the winter in North America. According to Joe Camp, Deputy Commissioner of the Alaska Marine Highway System, the level of ferry useage drops by approximately half during the period from October to May. Mr. Camp did not feel it was feasible for AMHS ferries to operate outside Alaska during the winter because this would leave many Alaska communities without ferry transportation. He also doubted that ferry unions would be amenable to operating outside Alaska for half of the year.

Package Tours

Travel agents suggested that AMHS could compete more effectively if trips were offered as a package of complete services. Agents stated that the majority of cruise ship passengers buy package tours that include all aspects of their trip, from meals to airfare. According to travel agents with whom I spoke, the AMHS would have to change several areas of service in order to accommodate the package tour traveler. One travel agent suggested that the AMHS should redesign staterooms into a uniform two-bed size because this is the standard package tour booking size. (Ferries are designed in two, three and four-bed size.) One agent suggested that ferries should dock in communities for longer periods of time and only during the day. The agent stated that because the ferries tend to dock in the middle of the night, it is difficult to coordinate ferry useage with other tourism-related activities. The agent also suggested that the ferries should dock closer to downtown areas because this is more convenient for tourists.

Other travel agents suggested that the ferry should offer higher quality food and onboard entertainment, such as discos and gaming.

The AMHS representatives felt that many of the changes to allow package tours would be costly and would conflict with the system's goal of providing basic transportation services for Alaskans. One official stated that to redesign all staterooms into a two-bed size would require a great deal of lay up time and would be expensive. Additionally, AMHS stated it would be difficult to schedule mainline vessels for strictly daytime docking because this would conflict with the schedules of feeder vessels that also use mainline docks. Another AMHS official stated that many downtown docking facilities that the cruise ships use would not accommodate ferries because of the need for vehicle-loading facilities.

Additional Marketing

One cruise ship company stated that a high level of marketing is an important factor in determining the level of business of a cruise ship company. According to Joe Camp, marketing of the AMHS has suffered in the past two fiscal years due to budget cuts. He stated that the system plans to spend more money on marketing this year and will emphasize mainline operations. For example, Mr. Camp stated that a "weekend getaway" promotional program is being developed to encourage Seattle area residents to ride the ferry during the months of May and September when ferry traffic is moderate. The system plans to offer a package tour that will include a ferry ride to a port in Alaska and a flight back to Seattle. The AMHS is working with the Port of Seattle, Alaska Airlines and Seattle area travel agents.

Raising Ticket Prices.

During the summer of 1987, a roundtrip ticket on the AMHS between Seattle and Skagway will cost $396. A comparable length trip on a cruise ship will cost anywhere from $2,000 to $5,000 dollars. As mentioned earlier, the cruise ship package includes many other services besides travel. If the AMHS were to include additional services with the ticket price, then rates may be increased to be more comparable with cruise ship rates. It is questionable whether it would be feasible for the system to offer different levels of service on the mainline route--one level for package tours and another level to provide basic transportation needs. According to AMHS, the additional administration to provide two levels of service would be costly. Additionally, operations of the ship would have to altered drastically to provide the same services offered on cruise ships.

Independent Travelers

Bob Dindinger, who is a member of the Southeast Tourism Marketing Council, felt that the AMHS could best increase tourist useage by targeting the independent traveler. He stated that the independent traveler is not as convenience-oriented as a tour ship traveler and therefore is more amenable to ferry useage.

A study by the State Division of Tourism indicates that during the 1970s, 68 percent of independent travelers came through Southeast and today only seven percent visit this area. The study indicates that the majority of independent travelers now visit the Southcentral area. Mr Dindinger felt that this is due to promotional campaigns by Anchorage and Fairbanks directed toward the independent traveler. He stated that the council is currently working with the State Division of Tourism and tourism-related businesses in Southeast, including the AMHS, to develop a promotional campaign to attract independent travelers to Southeast.

Mr. Dindinger had other ideas that would allow the ferry system to compete more aggressively in the overall tourism market. He suggested that a travel agent's commission for booking ferry space should be raised from the current seven percent to ten percent. He stated that a ten percent commission is the standard commission awarded to travel agents. Mr. Dindinger felt that the seven percent commission awarded by the AMHS is a disincentive to travel agents who might otherwise promote ferry travel. Mr. Dindinger added that a study has shown that over half of all independent travelers utilize travel agents.

Mr. Dindinger also suggested that the system should pre-sell only 80 percent of its space 90 days before departure instead of the current 90 percent. He felt the remaining 20 percent should be sold full price. He felt that this would increase revenues because less space would discounted by a travel agent's commissions. He also noted that it might leave more space open to Alaskans, who tend to make reservations closer to departure dates.

I hope you find this information useful. If you have any questions please feel free to contact me.

MJ

STATE OF ALASKA
THE LEGISLATURE

JAN 6 1987

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LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M December 12, 1986

SUBJECT: Alaska Marine Highway System
(Work Order No. 15-0270)

TO: Representative Bette Cato

FROM: George Utermohle GU
Legislative Counsel

You have asked whether certain recommendations for improvements to the Alaska Marine Highway System (AMHS) can be implemented through legislation. This memorandum addresses those recommendations.

ONE: ALLOW AHMS TO OPERATE AS A SEPARATE ENTITY FROM THE DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

Government agencies may be conferred with a wide range of independence. Most government agencies are established as subordinate entities within a department and are subject to the centralized administration and control of the commissioner of the department. The divisions within the departments fall into this category. Certain other agencies are attached to a department only for administrative purposes and have a legislative mandate distinct from that of the department. These agencies, such as the Alaska State Building Authority, the Alaska Housing Finance Corporation, and the Alaska Railroad Corporation, are usually state corporations and operate independently of any policy control by the commissioner of the department. Even among these independent agencies there is considerable variation in the amount of autonomy conferred on them. The agency with the greatest degree of independence is the Alaska Railroad Corporation (ARRC). ARRC maintains its own administrative and budgeting functions, as well as policy development functions independent of any other state agency, including the legislature. This high degree of independence is granted by the legislature and thus can be reduced or eliminated by the legislature.

Generally, the highest degree of independence occurs at the department level. Any state agency could be raised to the level of department. The former Division of Corrections was moved from the Department of Health and Social Services and was made into a separate department of its own. The major draw backs to this approach are the costs involved and the Alaska Constitution. When a department is created a commissioner and staff must be hired, and independent accounting, budgeting, purchasing, personnel, and other services must be established. The Alaska Constitution limits the executive branch of government to twenty principal departments. (art. III, sec. 22, Ak Const.) There are currently fifteen principal departments in the executive branch.

The Alaska Marine Highway System is currently a line division within DOTPF and is subject to administrative, budgetary, and policy oversight by the commissioner. AMHS would achieve greater independence from DOTPF by making it a an independent corporation within the department. HB 23 (Fourteenth Legislature) did exactly that. HB 23 created the Alaska Marine Highway Authority as a corporation within DOTPF. The department would exercise no control over the Authority, but could handle the administrative functions such as purchasing, payroll, etc.

TWO. ALLOW AMHS TO OPERATE WITHOUT REQUIRING IT TO MAKE A PROFIT LIKE THE ALASKA RAILROAD CORPORATION.

AMHS is not required to make a profit. Neither is ARRC. The only mandate to ARRC is that it should generally operate the railroad on a self-sustaining basis.

AHMS is not required to return a profit or even break even under its current mandate. HB 23 did not change this, even though management of the marine highway system was transferred to an independent state corporation.

THREE: SEPARATE MANAGEMENT, ACCOUNTING, AND OPERATION OF THE MARINE HIGHWAY SYSTEM FROM DOTPF.

AMHS can operate independently of the administrative structure of DOTPF by creating an independent administrative structure within the current division. Administrative independence can also be achieved by conferring the necessary authority on an independent state corporation to manage the marine highway system. Administrative independence comes as a matter of course when an agency is made a department.

The Alaska Marine Highway Authority proposed in HB 23 had considerable control over its own operations. HB 23 did not specifically mention whether the authority was to perform its own administrative work. Whether an independent authority does its own administrative work is mostly a matter of whether the legislature appropriates funds for administrative services. So, it is not necessary for HB 23 to confer administrative independence on the Alaska Marine Highway Authority, but mention of such an intent in the bill would assure that money will be allocated to that function.

FOUR: ENSURE THAT AMHS CONTINUES TO PROVIDE IN-STATE TRANSPORTATION SERVICES.

Establishing priorities for the service by AMHS is a very straight forward process. All that is required is that the legislature establish those priorities. Such priorities can be established through appropriations or through legislation establishing priorities or levels of service for the marine highway system. For example, if you wish to ensure that ferry service is provided to certain towns or no service is provided outside the state, these requirements can be specified in statute.

FIVE: PROVIDE A MECHANISM FOR OVERSIGHT AND INPUT TO THE MARINE HIGHWAY SYSTEM, PARTICULARLY FROM PRIVATE INDUSTRY.

State agencies receive oversight and input on a daily basis from the public which they serve. Oversight and input are also received from commissioners, the governor, and the legislature (especially through the budget process). In a number of instances the legislature has created specific mechanisms for input and oversight of state agencies. These mechanisms vary in formality from the loosely-knit but extensive system of fish and game advisory boards to the boards of independent state corporations which have explicit requirements for public and private industry members.

In HB 23 an independent state corporation was created with responsibility for operating the marine highway system. The board of the corporation included a number of seats restricted to members of various private industry groups and to members of the public from various parts of the state. Such a mechanism as this assures that some oversight and input to the marine highway system takes place.

If you should decide to introduce legislation on the marine highway system, please contact me with your specific proposals. If I can provide further assistance, please contact me.

GU:mkr
m7/066

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DEPUTY COMMISSIONER—ALASKA MARINE HIGHWAY SYSTEM

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August 14, 1986

Mr. Stephan Mason
Acting Chairman
Coalition for the Improvement of
Alaska Marine Highway System
P. O. Box 9625
Ketchikan, AK 99901

Dear Mr. Mason:

I appreciate the opportunity to reply to your letter of August 2. Many of the questions have been asked of me personally on my various ship visits and obviously my answers have not reached all the right ears. The following should provide factual data and I hope it will clear up some popular misconceptions currently in circulation. The deadline you imposed has made it difficult to research all of the technical and detailed data you have requested. That information will be forwarded at a later date. I will restate or paraphrase your question, then provide the answer.

1. Q. Give us background information regarding lost jobs.

   A. For FY 87 Alaska Marine Highway System (AMHS) like other branches of State government, was cut below FY 86 levels. These cuts came in several increments of various amounts during the budget process and included cost avoidances achieved through reduction in fuel prices. It was and continues to be our goal to provide the maximum amount of service to the public with the resources available. During the process it was determined that cutting of approximately $700,000 in vessel personal services would result in less severe cuts in scheduled vessel service than would otherwise be required. This decision was made for two reasons; 1) to continue maximum service to the public and 2) maximum service means maximum employment. The guidelines used to determine which positions would be cut were; 1) not adversely effect safety, 2) not adversely effect passenger services and 3) keep additional overtime to a minimum. The Director of Operations outlined the requirements to the shoreside department heads who then met and agreed on specific positions for cuts. I reviewed and approved the cuts.

2. Q. How much money was estimated would be saved by each department cut and all collectively?

   A.

Engineer Department	$178,000
Deck Department	303,700
Purser	33,300
Steward	208,800
Total	$723,800

3. Q. How much increased overtime has been submitted from each department since the job cuts. How much increased overtime has been submitted collectively?

   A. There has been substantial overtime submitted. It is being compiled and analyzed as limited staff time permits. I will forward the results of this effort when it is completed.

4. Q. When exactly can we expect all these lost jobs to be reinstated?

   A. AMHS is conducting an internal review of shipboard manning comparing required functions and work loads with manning. This study is expected to be completed this fall. Upon completion of this review, the preliminary finding will be reviewed with union and operating personnel prior to making any final determination. Both licensed and unlicensed input will be solicited and discussed. The result of this process should provide us with a valid manning document, based on required functions, workloads and services aboard each vessel.

5. Q. How many jobs have been eliminated from Department of Transportation and Public Facilities beach operations in accordance with recent funding cuts. What job positions and titles were eliminated and were these people terminated or moved to other positions within your operation? What exactly is the revenue savings currently reflecting these job cuts on the beach?

   A. The following matrix should answer the above questions for AMHS.

FY 87 Budget Reductions prior July 1

Position/Title	Who	Action	Where did the incumbent go	Estimated Savings (in Thousands)
Administrative Assistant	vacant	Delete	vacant	34.1
Director of Marketing & Services	Emery	Delete	accepted classified service job	89.9
Secretary I	McCorcle	Delete	transferred to another department	31.8
Reservation Specialist	vacant	Delete	vacant	46.6
Accounting Clerk II	Roberson	PFT to seasonal	reduced pay	15.3
Accounting Clerk II	Harrigan	PFT to seasonal	reduced pay	10.6
Accounting Clerk II	Ketcham	PFT to seasonal	reduced pay	10.6
Clerk III	Salazar	PFT to seasonal	reduced pay	5.2
Clerk III	Seagrave	PFT to seasonal	reduced pay	5.2
Clerk III	Annand	PFT to seasonal	reduced pay	5.2
Clerk III	vacant	PFT to seasonal	reduced pay	5.2
Clerk III	vacant	PFT to seasonal	reduced pay	5.2
Clerk IV	Romzek	PFT to seasonal	reduced pay	5.8
Budgeted overtime for various positions		Delete		48.6
				309.3

Additional Cuts ordered since July 1

Position/Title	Who	Action	Where did the incumbent go	Estimated Savings (in Thousands)
Director of Operations	Black	Terminated	Terminated August 15	82.9
Secretary I	Vaden	Layoff	Lay off 8/29	27.6
Planner	Lindbeck	Layoff	Bumped down Jr. person lay off 8/29	45.2
Payroll Supervisor	O'Connor	retirement	leave vacant	45.7
Ferry Services Manager III	Clark	retirement	leave vacant	43.8
Accounting Technician I	Reddekopp	PFT reduced to 30 hr wk	reduced pay	12.6
Clerk III	Del Fierro	PFT reduced to 30 hr wk upon retirement	reduced pay beginning September 26	10.0
Stockhandler	Currie	Seasonal reduced from 9.6 months to 6 months	reduced pay	11.9
			Total	279.7

The net result is that approximately 15 percent of the total shoreside AMHS staff have had their jobs eliminated, held vacant or experienced some lesser degree of negative effect on their pay.

6. Q. How does that revenue savings correspond to the estimated revenue cuts the shore-side DOT&PF operations are expected to take in response to current funding cuts?

A. The Department of Transportation and Public Facilities was required to take an overall 15% cut in the operating budget. If each element within the Department had been required to absorb that degree of cut the AMHS service and employment would have been severely crippled. By allocating total DOT&PF resources AMHS initially took approximately a 10% cut while the rest of the Department absorbed the rest. Impacts of this funding level would have included laying up the Columbia indefinitely and dropping one main line ship from winter service to southeast. When presented to the Governor this was considered unacceptable and he restored $2 million to take the COLUMBIA out of layup and put on schedule to take advantage of the busy season. This meant that AMHS took approximately a 7% cut while the rest of the Department took an 18% cut.

7. Q. May we have an official statement concerning Mr. Black's dismissal?

A. Mr. Black was relieved of duties as Director of Operations on July 16. He has been assigned some technical projects to work on prior to his final day at work on August 15.

8. Q. What transfer of job functions will this represent?

A. There are no plans to refill the position at this time nor has a decision been made as to whether or not it will be refilled. In the interim, I am taking on the responsibility of the Division and am relying heavily on the Port Captain, Port Engineer and Passenger Services Manager for day-to-day operations.

9. Q. Who has access to our reservations system and to our standby reservations and wait lists? What kind of confidentiality can we expect in regard to protecting our reservations from being raided by private enterprise?

A. All AMHS terminals have access to Reservation Management System (RMS II). Vista Travel in Fairbanks is the only travel agency with access to RMS and they finally became operational in late June 1986. Because of the special equipment requirements and technical difficulties experienced when we were actively attempting to bring

Vista Travel "on-line" I believe it would be almost impossible for an unauthorized party to gain usable access to RMS II. I have heard many rumors that "STARDANCER" has access to RMS II. I don't believe it. I have heard stories that "someone made a reservation on AMHS and was immediately called by STARDANCER and offered a better deal". I would like to talk to someone this actually happened to in order to attempt to reconstruct what happened. The only possible connection of STARDANCER to State of Alaska "lists" I am aware of is the fact that the Division of Tourism compiles a computer list of all people who respond to their Vacation Planner questionnaire and indicate they would consider visiting Alaska by "ferryliner" and this list is available for sale to any firm wishing to purchase it.

10. Q. What were the exact figures on passenger and vehicle reservations made for the special Expo sailing of the M/V MATANUSKA?

A.

	Southbound	Northbound
Passengers	159	147
Vehicles	13	24

At no time was either sailing booked full and there is no reason potential passengers should have been told it was full.

11. Q. Exactly how many reservations were made for Alaska State Government officials and dignitaries?

A. One. A reservation was made for DOT&PF Commissioner Knapp with the hope that he would be available to make the trip and present a letter from Governor Sheffield to the "Counsel General of the Expo". Other State business prevented Commissioner Knapp from making the trip and Captain R. M. Johnson presented the letter from the Governor.

12. Q. Were Governor Sheffield and Lt. Governor McAlpine scheduled to sail on that special Expo trip.

A. No.

13. Q. Exactly how many passengers actually showed for the sailing? How may vehicles?

A.

	Southbound	Northbound
Passengers	75	75
Vehicles	10	17

14. Q. Please give us the exact amount collected on the cancellation fees.

A. None. All passengers who paid in advance made the trip. Since there were numerous staterooms and car deck space available for additional passengers desiring to make reservations the manifests were not purged of those who had not paid.

15. Q. How much revenue was expended on the Expo sailing?

A. The M/V MATANUSKA was operating on the Seattle route, Tuesday sailings. On May 20, the M/V MATANUSKA called in Vancouver, B. C. instead of proceeding on south to Seattle, therefore the only additional costs of the "Expo trip" were those incurred directly as a result of calling in Vancouver. Those costs were as follows:

Agency fee	Canadian	$1,350.00
Pilot	Canadian	2,017.55
Berthage	Canadian	2,700.18
Miscellaneous	Canadian and U.S.	596.62
Total	U. S.	$4,936.56

16. Q. Please give us a complete description of the complete Expo advertising campaign and its cost.

A. No money was budgeted or expended on special advertising for the Expo sailing. Maximum advantage was taken of radio public service announcements, press releases and media interviews, all at no cost to AMHS.

17. Q. A number of questions were asked concerning repairs and upgrade to the Haines and Skagway docks with the implication that these were undertaken by AMHS in order to accommodate STARDANCER.

A. I will deal with Skagway first. The City of Skagway obtained a grant from the State of Alaska to improve the ore dock to accommodate SUNDANCER. AMHS had no part in that grant. The Haines transfer bridge and tower were old and in need of replacement just as the Petersburg and Wrangell facilities were. Replacement of the Haines facilities was budgeted in FY 81. Design specifications were completed and received FHWA approval in January 1981. The project was advertised in November 1983 and construction began March 6, 1984. This dock was designed for AMHS vessels only. The STARDANCER was modified to fit Haines rather than the other way around, and for the record STARDANCER pays approximately $1,000.00 per hour to use the Haines dock on a not to interfere basis with AMHS vessels.

18. Q. Who authorized the solicitation of AMHS traffic in line for boarding AMHS vessels by McDonald Enterprise/Sundance Cruise lines? Who authorized their use of the Haines terminal building for the same?

A. No one. In fact the State Terminal Tariff prohibits their use of our building. When it was brought to my attention that this was happening, I immediately had it stopped.

19. Q. How much of the Haines dock was federally funded? How much was State taxpayer funded?

A. Haines terminal project

State general funds	$ 159,591.91
FHWA funds	2,246,636.09
Total	$2,406,228.00

20. Q. Was the M/V COLUMBIA instructed to priority-load Juneau vehicles out of Haines during the summer of 1985? If so, who authorized it and for what reasons?

A. There were no changes in standby loading procedures ordered for M/V COLUMBIA or any other vessels out of Haines last summer.

21. Q. Was the M/V AURORA instructed to load only Ketchikan/Hollis traffic out of Prince Rupert during the summer of 1985?

A. No. If there was space available after loading all reserved vehicles, standby vehicles would be loading in their order on the standby list.

22. Q. Why have you not initiated an additional flyer inclusion on all tickets indicating a passengers "final destination"?

A. This may be a good idea as the data would be useful. We do have data on passengers disembarking at Haines and Skagway but we do not have final destination. Presently there is no staff time available to compile the data because of other higher priority work and reduced staff.

23. Q. What was price per gallon for fuel in Seattle and Skagway during the time M/V MALASPINA was on the Seattle run in the winter of 1985? (December 1984, January and February 1985). How much fuel did M/V MALASPINA purchase from each facility during that time?

A.

	Price	Amount Purchased
Skagway	.919 gal	208,193 gals
Seattle	.738 gal	202,649 gals

The M/V MALASPINA is required to fuel in Skagway for stability reasons.

24. Q. What is being done to publish and promote the life saving and waterway safety contributions of the Alaska Marine Highway vessels.

A. If the press has not already covered the story a press release is prepared. In addition, articles are carried in the DOT&PF newsletter In Transit as appropriate.

25. Q. May we have a complete list of all rescue operations by AMHS vessels, all records of assistance to vessels in trouble, and all contributions made by AMHS vessels in the area of public waterway safety?

A. No specific record is kept other than the entries in the ship's logs. Complete retrieval would require prohibitive efforts.

26. Q. We would greatly appreciate receiving a full and complete selection of personal and/or community commendations which exist. (In the area mentioned in Q. 25.)

A. No such file exists. As such letters and/or commendations are received, they are sent with a forwarding letter to the vessel Master and/or individuals as appropriate. An example is enclosed.

27. Q. Please give us a description of the Seattle phone reservation system from 1982 to the present.

A. In 1982 and until December 1984, the Seattle office had four telephone reservation clerks. Reservations were centralized in Juneau in December 1984 and toll free lines from both "outside" and within Alaska were established to the Juneau office. The Seattle "reservations" office was closed (the terminal and ticketing remained) and the four reservation clerk positions were transferred to Juneau.

28. Q. How many phone lines existed at which periods of time? When was the toll free 800 number installed? How long was it in existence and how much did it cost? When was it removed, how many non-toll free lines were installed to replace it?

A. When the Centralized Reservation Office was established in Juneau in December 1983 it was set up with two Alaska-only toll free lines, four "outside" toll free lines and three local lines. The "outside" toll free lines were discontinued in April 1986 because of budgetary restrictions. At that time an additional Alaska-only toll free line and three additional non-toll free (907) lines were installed. The actual bills paid for the toll free lines are as follows:

		Outside lines	Alaska only lines
January	1985	$ 4,612.92	
February	1985	3,337.19	$ 7,793.54
March	1985	4,191.61	16,486.63
April	1985	5,510.98	12,507.86
May	1985	8,059.46	15,307.62
June	1985	7,714.86	15,307.62
July	1985	8,456.62	15,307.62
August	1985	5,828.09	17,263.15
September	1985	4,481.02	16,264.00
October	1985	3,201.24	4,898.77
November	1985	2,506.58	6,716.92
December	1985	3,152.71	751.11
January	1986	7,141.40	1,515.70
February	1986	6,391.85	23,741.05
March	1986	4,878.45	21,099.20
April	1986	101.32	25,646.09
May	1986		25,621.65
June	1986		29,342.40
July	1986		28,681.00
		$79,566.30	$284,251.93

29. Q. Josephine Emery was Director of Marketing for what period of time?

A. Mrs. Emery was Director of Marketing and Services from January 1984 until May 1986.

30. Q. Could you please give us a description of her duties as Director of Marketing?

A. Her primary responsibilities included managing a $4.7 million operating budget along with the development, revision and communication of policies, rules and procedures for the promotion and sales of passenger, vehicle and stateroom space on the system which carries approximately 370,000 passengers and 100,000 vehicles.

She participated in the tourism industry to promote travel on the system, monitored community needs and probable effects of changing schedules or capacity; monitored passenger services on vessels; and responded to customer complaints.

She also supervised 65 employees, located in 18 offices and terminals in Seattle, Washington; Prince Rupert, B. C. and Alaska. She was responsible for publication and distribution of seasonal schedules and acted as project manager for the development and maintenance of a second generation computerized Reservation Management System (RMS II).

31. Q. What were her accomplishments as Director of Marketing?

A. She was Project Manager for the development of second generation Computer Reservation Management system; centralized and increased reservation sales office hours. Introduced toll-free numbers and introduced electronic call distribution system in central reservation office to assist planning for proper staffing, monitor efficiency and provide necessary data for future staffing levels; timely publication and distribution of printed schedules; employees in uniforms to improve Alaska Marine Highway system image and assist in public identification; coordinated promotional programs with the State Division of Tourism; and served on the Board of Directors of the Southeast Tourism Council and Juneau Convention and Visitor Bureau.

32. Q. Please give us a brief history of her prior marketing experience.

A. 1978 - 1980 Instructor - Tanana Valley Community College. Instructed three credit course - "Fundamentals of Transportation".

1974 - 1978 Manager, Passenger Services and Sales. Wien Air Alaska, Fairbanks.

1961 - 1974 Supervisor, Marketing and Sales - Western Airlines. Seattle, San Francisco, Ketchikan and Anchorage.

33. Q. How much was the advertising budget for FY 82 through FY 86?

A. The base budget printing and advertising line item for FY 82 through FY 86 was as follows:

FY 82	121.7
FY 83	149.4
FY 84	177.7
FY 85	125.3
FY 86	161.4

34. Q. What was the general breakdown of advertising costs for FY 85 and FY 86?

A. FY 85 breakdown: Summer and Winter schedules printing $90,000; tickets $20,000; miscellaneous printing and print advertising $14,000.

FY 86 breakdown: Summer and Winter schedules printing $100,000; tickets $30,000; miscellaneous printing, photo contest and print advertising $31,000.

35. Q. Who decided to implement the cancellation fees?

A. I did.

36. Q. Do you think the cancellation fees are particularly unfair during the busy summer months when the rooms, in particular, can be resold and bring in their expected revenue?

A. No, I do not. The cancellation penalty is a tool to encourage people who change their mind about traveling to cancel their reservation in order that we may then offer the space to someone on our "wait-list", a new innovation which allows our reservation's center personnel to confirm reservations for people on the wait-list as cancellations occur. This is in contrast to the standby list which only allows people in the terminal to board if there is a no-show. Before the penalty individuals were not cancelling their reservations causing the computer to show the vessel "booked solid". Other potential passengers then could not make reservations and when the person with the original reservation "no showed" we sailed with light loads. Staterooms almost always are filled on board by "cabin standby", passengers, but others may have decided not to travel because of non-availability of confirmed car deck or stateroom space.

37. Q. For exactly how many years was the no-charge stopover option available?

A. Staterooms have always been charged on a trip segment basis. This is the first year trip segment fares have been charged for other classes of fares.

38. Q. Who decided to discontinue this attractive travel incentive?

A. I did to help cover some of our costs during a year when operation of our vessels was directly tied to earned revenue for the first time.

39. Q. Could you please give us the cost increase figures on a fare from Seattle/Skagway with stops in Ketchikan, Wrangell, Petersburg, Juneau and Haines as opposed to a through fare?

A.

Trip Segment Fare		Through Fare	
Sea-Ktn	138	Sea-Sgy	208
Ktn-Wrg	22		
Wrg-Psg	14		
Psg-Jnu	36		
Jnu-Hns	18		
Hns-Sgy	10		
Total	238	Total	208

40. Q. Are you considering reinstating the travel incentive of through fares?

A. Yes, either through elimination of or by lowering the difference in costs.

41. Q. May we have a list of private organizations that the State has contracted with for labor with their physical location and address?

A. AMHS has contracted on occasion for specific jobs when cost analysis has shown contracting out to be less expensive. Specifically, the M/V MATANUSKA staterooms were cleaned by Coast Janitorial Service following the reengining of that vessel in Portland. The contracted

job cost $8,230.00. The Chief Steward has stated he needed 10 stewards to do the job which would have cost $21,918.00 per diem and wages (minimum guarantee included) and $376.70 in travel cost. The cost avoidance was approximately $14,064.70. Additionally, a contract has been signed with a company, Wright Service, to provide assistance in cleaning staterooms on the vessel turn arounds in Skagway. The contract calls for a cost of $6.25 per room. This is measured against the cost of "turn around" stewards from Juneau to Skagway to Juneau and the overtime plus the limited time in port. This program has been accepted by Chief Stewards as necessary, especially when there is limited turn around time in Skagway. Other contracts are entering into only if specific cost avoidance can be shown.

42. Q. How much was spent on contracted labor in 1984, 85 and 86?

A. This information is not readily available. As staff time will allow the answer will be researched and the information provided at a later date.

43. Q. How many "Comprehensive Plans" have been done regarding proposed operating plans for the Alaska Marine Highway System?

A. The Alaska Marine Highway is currently developing a comprehensive System Plan as recommended in the 1984 AMHS Task Force Report. It is scheduled to be completed this fall, and to my knowledge this is the only comprehensive plan developed in recent history.

The Southeast Region of DOT&PF has a Southeast Transportation Plan developed in 1980 that address AMHS as well as other modes of transportation in Southeast Alaska. It was updated earlier this year. It is a plan that addresses transportation from a regional aspect and does not go into detail nor does it address all the aspects that the AMHS System Plan will include.

44. Q. Is the AMHS System Plan Policy Workshop report yet another "proposed comprehensive plan"?

A. No. It is a small portion of the System Plan under development.

Sincerely,

Joe D. Camp
Deputy Commissioner

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Enclosure

cc: copy of August 2, 1986 Coalition letter
enclosed
The Honorable Robert H. Ziegler, Sr.
Alaska State Legislature
The Honorable Jim Duncan
Alaska State Legislature
The Honorable Richard I. Eliason
Alaska State Legislature
The Honorable Peter Goll
Alaska State Legislature
The Honorable Ben Grussendorf
Alaska State Legislature
The Honorable Mike M. Miller
Alaska State Legislature
The Honorable Bill Ray
Alaska State Legislature
The Honorable John Sund
Alaska State Legislature
Karen Hofstad, President
Southeast Conference
R. J. Knapp, Commissioner
Len Laurance, Chairman
Governor's Task Force
The Honorable Robin L. Taylor
Alaska State Legislature

* * * * * DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES * * * * *

SHORT FORM PAGE	BUDGET COMPONENT	86 ACT	87 AUTH	87 REV	88 GOV	88 GOV - 87 REV COMPARISON	
	TRANSPORTATION						
	OFFICE OF THE COMMISSIONER						
2	COMMISSIONER'S OFFICE	641.6	575.8	536.9	504.1	-32.8	-6.1%
4	STATEWIDE DEPUTY COMMISSIONER	779.0	242.7	218.5	207.9	-10.6	-4.9%
6	EQUAL EMPLOYMENT & CIVIL RIGHT		704.1	704.1	681.7	-22.4	-3.2%
8	INTL ARPT REVENUE CNTRL OFFICE				228.5	228.5	100.0%
10	DATA AND WORD PROCESSING	8.3					
12	INTERNAL REVIEW	679.5	842.5	842.5	842.5		
	*** PROGRAM TOTAL ***	2108.4	2365.1	2302.0	2464.7	162.7	7.1%
	STATEWIDE MANAGEMENT & FINANCE						
16	MANAGEMENT AND FINANCE	2102.7	2124.6	2124.6	2456.6	332.0	15.6%
18	DATA AND WORD PROCESSING	72.7					
20	STATE EQUIPMENT FLEET	304.6	441.0	441.0	756.5	315.5	71.5%
	*** PROGRAM TOTAL ***	2480.0	2565.6	2565.6	3213.1	647.5	25.2%
	STATEWIDE INFORMATION SYSTEMS						
24	INFORMATION SYSTEMS	2435.4	2167.8	1911.8	1911.8		
	STATE PLANS, PROGRAMS & BUDGET						
28	PLANS, PROGRAMS & BUDGET	1769.8	1846.2	1669.3	1673.1	3.8	0.2%
30	STATEWIDE AVIATION PLANNING	274.9	250.5	245.8	245.8		
32	DATA AND WORD PROCESSING	98.4					
34	UNBUDGETED RSA'S HPR/IARF	823.3					
	*** PROGRAM TOTAL ***	2966.4	2096.7	1915.1	1918.9	3.8	0.2%
	STATEWIDE RESEARCH						
38	STATEWIDE RESEARCH	964.3	774.9	711.2	746.2	35.0	4.9%
	STATEWIDE ENG & OPS STANDARDS						
42	ENG & OPS STANDARDS	2453.0	2286.0	2050.7	1741.7	-309.0	-15.1%
44	DATA AND WORD PROCESSING	15.6					
46	CIP PROGRAM	2657.4	3497.5	3497.5	3754.8	257.3	7.4%
48	UNBUDGETED RSA'S	69.7					
	*** PROGRAM TOTAL ***	5195.7	5783.5	5548.2	5496.5	-51.7	-0.9%
	CENTRAL REGION ADMIN SERVICES						
52	ADMINISTRATIVE SERVICES	2073.9	1710.1	1618.7	1618.7		
54	STATE EQUIPMENT FLEET	5814.5	6132.1	6132.1	6116.7	-15.4	-0.3%
56	DATA AND WORD PROCESSING	20.7					
58	AIRPORT LEASING	328.2	271.2	271.2	391.9	120.7	44.5%
	*** PROGRAM TOTAL ***	8237.3	8113.4	8022.0	8127.3	105.3	1.3%
	CENTRAL REGION PLANNING						
62	PLANNING	1516.4	1113.6	1046.1	963.8	-82.3	-7.9%
64	DATA AND WORD PROCESSING	8.5					
66	UNBUDGETED RSA'S	694.3					
	*** PROGRAM TOTAL ***	2219.2	1113.6	1046.1	963.8	-82.3	-7.9%
	CENTRAL REGION DESIGN & CONST.						
70	ENGINEERING MANAGEMENT	2166.2	5233.8	5140.4	4987.3	-153.1	-3.0%
72	DATA AND WORD PROCESSING	43.7					
74	CIP PROGRAM	20282.6	23139.0	23139.0	22850.2	-288.8	-1.2%

* * * * * DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES * * * * *

SHORT FORM PAGE	BUDGET COMPONENT	86 ACT	87 AUTH	87 REV	88 GOV	88 GOV - 87 REV COMPARISON	
	*** PROGRAM TOTAL ***	22492.5	28372.8	28279.4	27837.5	-441.9	-1.6%
	CENTRAL REGION MAINT. & OPER.						
78	HIGHWAYS AND AVIATION	28462.6	26956.5	21193.8	16989.4	-4204.4	-19.8%
80	TRAFFIC SIGNAL MANAGEMENT	826.0	1126.0	1126.0	1126.0		
82	FACILITIES	3429.0	3395.7	2927.7	2901.2	-26.5	-0.9%
84	ADMINISTRATION	1283.6	1155.3	996.5	864.4	-132.1	-13.3%
	*** PROGRAM TOTAL ***	34001.2	32633.5	26244.0	21881.0	-4363.0	-16.6%
	ANCHORAGE INT AIRPORT						
88	FIELD MAINTENANCE	2661.3	3090.0	3090.0	3068.9	-21.1	-0.7%
90	BUILDING MAINTENANCE	3483.1	3647.8	3647.8	4140.4	492.6	13.5%
92	SECURITY	3879.5	4063.0	4063.0	4326.0	263.0	6.5%
94	CUSTODIAL	2797.6	3272.2	3272.2	3204.9	-67.3	-2.1%
96	EQUIPMENT MAINTENANCE	1275.8	1319.5	1319.5	1319.5		
98	ADMINISTRATION	3224.7	3661.7	3661.7	3989.6	327.9	9.0%
100	DATA AND WORD PROCESSING	1.5	60.8	60.8	60.8		
	*** PROGRAM TOTAL ***	17323.5	19115.0	19115.0	20110.1	995.1	5.2%
	NORTH REGION ADMIN. SERVICES						
104	INTERIOR DIS. ADMIN. SERVICES	2044.7	1672.8	1672.8	1540.4	-132.4	-7.9%
106	WESTERN DIS. ADMIN. SERVICES	344.5	337.0	188.1	164.1	-24.0	-12.8%
108	SOUTHCENTRAL DIS. ADMIN. SVCS	403.1	345.6	195.6	195.6		
110	DATA AND WORD PROCESSING	33.2	38.5	32.7	32.7		
112	INTERIOR DIS STATE EQUIP FLEET	6730.8	7008.6	7008.6	7008.6		
114	WESTERN STATE EQUIP. FLEET	871.3	935.2	935.2	963.2	28.0	3.0%
116	SC DISTRICT STATE EQUIP. FLEET	2141.6	2328.3	2328.3	2300.3	-28.0	-1.2%
118	AIRPORT LEASING/PROPERTY MGMT				337.8	337.8	100.0%
	*** PROGRAM TOTAL ***	12569.2	12666.0	12361.3	12542.7	181.4	1.5%
	NORTHERN REGION PLANNING						
122	PLANNING	1197.1	975.6	975.6	951.1	-24.5	-2.5%
124	UNBUDGETED RSA'S, UPR P.R. 505	327.8					
	*** PROGRAM TOTAL ***	1524.9	975.6	975.6	951.1	-24.5	-2.5%
	NORTHERN REGION DESIGN & CONST						
128	ENGINEERING MANAGEMENT	2382.1	2967.9	2857.6	2848.3	-9.3	0.3%
130	DATA AND WORD PROCESSING	105.5					
132	CIP PROGRAM	18732.8	21133.4	21133.4	21022.5	-110.9	-0.5%
	*** PROGRAM TOTAL ***	21220.4	24101.3	23991.0	23870.8	-120.2	-0.5%
	INTERIOR DISTRICT MAINT & OPER						
136	HIGHWAYS & AVIATION	23069.1	21060.5	16853.1	14947.3	-1905.8	-11.3%
138	FACILITIES	4709.4	4682.2	3877.4	3654.4	-223.0	-5.8%
140	ADMINISTRATION	1107.1	763.2	763.2	589.0	-174.2	-22.8%
	*** PROGRAM TOTAL ***	28885.6	26505.9	21493.7	19190.7	-2303.0	-10.7%
	WESTERN DISTRICT MAINT & OPER						
144	HIGHWAYS AND AVIATION	4122.0	3893.6	3007.6	2695.9	-311.7	-10.4%
146	FACILITIES	670.7	661.0	574.8	574.8		
148	ADMINISTRATION	306.7	159.5	135.6	135.6		
	*** PROGRAM TOTAL ***	5099.4	4714.1	3718.0	3406.3	-311.7	-8.4%
	SOUTHCENTRAL DISTRICT M & O						

* * * * * DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES * * * * *

SHORT FORM PAGE	BUDGET COMPONENT	86 ACT	87 AUTH	87 REV	88 GOV	88 GOV - 87 REV COMPARISON	
152	HIGHWAYS AND AVIATION	6728.6	6413.1	5046.5	4048.4	-998.1	-19.8%
154	FACILITIES	1719.9	1930.2	1742.4	1692.0	-50.4	-2.9%
156	ADMINISTRATION	431.8	329.1	279.7	279.7		
	*** PROGRAM TOTAL ***	8880.3	8672.4	7068.6	6020.1	-1048.5	-14.8%
	FAIRBANKS INT AIRPORT						
160	FIELD MAINTENANCE	1306.4	1694.1	1694.1	1584.1	-110.0	-6.5%
162	BUILDING MAINTENANCE	1225.5	1432.3	1432.3	1382.3	-50.0	-3.5%
164	SECURITY	2736.8	2717.9	2717.9	3032.8	314.9	11.6%
166	CUSTODIAL	619.4	683.1	683.1	658.1	-25.0	-3.7%
168	ADMINISTRATION	1049.5	1367.8	1367.8	1417.8	50.0	3.7%
	*** PROGRAM TOTAL ***	6937.6	7895.2	7895.2	8075.1	179.9	2.3%
	S.E. REGION ADMIN. SERVICES						
172	ADMINISTRATIVE SERVICES	1313.0	1039.8	898.1	953.1	55.0	6.1%
174	DATA AND WORD PROCESSING	9.8					
176	STATE EQUIPMENT FLEET	1740.0	2015.4	2015.4	1660.6	-354.8	-17.6%
	*** PROGRAM TOTAL ***	3062.8	3055.2	2913.5	2613.7	-299.8	-10.3%
	SOUTHEAST REGION PLANNING						
180	PLANNING	547.5	376.8	345.3	365.3	20.0	5.8%
182	DATA AND WORD PROCESSING	10.6					
	*** PROGRAM TOTAL ***	558.1	376.8	345.3	365.3	20.0	5.8%
	SOUTHEAST REGION DES. & CONST.						
186	ENGINEERING MANAGEMENT	1246.5	1322.4	1245.9	4012.8	2766.9	222.1%
188	DATA AND WORD PROCESSING	63.6					
190	CIP PROGRAM	8087.0	8671.2	8671.2	5833.1	-2838.1	-32.7%
192	UNBUDGETED RSA'S SCH SUR/DSGN	2.2					
	*** PROGRAM TOTAL ***	9399.3	9993.6	9917.1	9845.9	-71.2	-0.7%
	SOUTHEAST REGION M & O						
196	HIGHWAYS & AVIATION	7996.5	7611.8	6305.6	4339.6	-1966.0	-31.2%
198	FACILITIES	4890.2	4608.7	3872.4	3726.9	-145.5	-3.8%
200	ADMINISTRATION	393.1	392.6	326.2	324.7	-1.5	-0.5%
	*** PROGRAM TOTAL ***	13279.8	12613.1	10504.2	8391.2	-2113.0	-20.1%
	MARINE ADMINISTRATION						
204	ADMINISTRATION	2405.4	2226.7	2226.7	2331.7	105.0	4.7%
206	DATA AND WORD PROCESSING	46.8					
	*** PROGRAM TOTAL ***	2452.2	2226.7	2226.7	2331.7	105.0	4.7%
	MARINE FACILITIES ENGINEERING						
210	MANAGEMENT	393.5	433.0	433.0	433.0		
212	CIP	970.8	1341.5	1341.5	1393.1	51.6	3.8%
	*** PROGRAM TOTAL ***	1364.3	1774.5	1774.5	1826.1	51.6	2.9%
	MARINE MARKETING AND SERVICES						
216	MARKETING MANAGEMENT	1410.2	1363.2	1363.2	2271.2	908.0	66.6%
218	SOUTHEAST SHORE FACILITIES	2389.8	2712.9	2712.9	2359.6	-353.3	-13.0%
220	SOUTHWEST SHORE FACILITIES	650.6	678.2	678.2	468.0	-210.2	-31.0%
222	DATA AND WORD PROCESSING	258.7					
	*** PROGRAM TOTAL ***	4709.3	4754.3	4754.3	5098.8	344.5	7.2%
	MARINE OPERATIONS						

* * * * * DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES * * * * *

SHORT FORM PAGE	BUDGET COMPONENT	86 ACT	87 AUTH	87 REV	88 GOV	88 GOV - 87 REV COMPARISON	
226	MANAGEMENT	820.2	1047.8	1047.8	1201.1	153.3	14.6%
228	SOUTHEAST VESSEL OPER/OVERHAUL	47337.4	44267.1	44267.1	36571.2	-7695.9	-17.4%
230	SOUTHWEST VESSEL OPER/OVERHAUL	9416.0	9315.6	9315.6	8041.6	-1274.0	-13.7%
	*** PROGRAM TOTAL ***	57573.6	54630.5	54630.5	45813.9	-8816.6	-16.1%
232	RETIREMENT INCENTIVE PROGRAM				1143.3	1143.3	100.0%
	*** TRANSPORTATION TOTAL ***	277940.7	279857.1	262229.9	246157.6	-16072.3	-6.1%
	********** TOTAL AGENCY EXPENDITURES	277940.7	279857.1	262229.9	246157.6	-16072.3	-6.1%
	********** AGENCY FUNDING						
	FED RCPTS	3058.4	3697.6	3697.6	3697.6		
	GEN FUND	176161.1	161446.1	143380.6	120972.0	-22408.6	-15.6%
	OTHER FUNDS	98721.2	114713.4	115151.7	121488.0	6336.3	5.5%

13	* * * * * DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES * * * * *				13
14	* * * * * * *		* * * * * *		14
15	STATEWIDE PROGRAMS		15,751,200	7,747,700	8,003,500 15
16	OFFICE OF THE COMMISSIONER				16
17	COMMISSIONER'S OFFICE (6 POSITIONS)	504,100			17
18	STATEWIDE DEPUTY COMMISSIONER (4 POSITIONS)	207,900			18
19	EQUAL EMPLOYMENT AND CIVIL RIGHTS (12 POSITIONS)	681,700			19
20	INTERNATIONAL AIRPORT REVENUE FUND CONTROLLER'S OFFICE (4 POSITIONS)	228,500			20
21	INTERNAL REVIEW (14 POSITIONS)	842,500			21
22	STATEWIDE MANAGEMENT AND FINANCE				22
23	MANAGEMENT AND FINANCE (42 POSITIONS)	2,456,600			23
24	STATE EQUIPMENT FLEET (9 POSITIONS)	756,500			24
25	STATEWIDE INFORMATION SYSTEMS				25
26	INFORMATION SYSTEMS (31 POSITIONS)	1,911,800			26

DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES (CONT.)

	Allocations	Appropriation Items	Appropriation Fund Sources: General Fund	Appropriation Fund Sources: Other Funds
STATEWIDE PLANS, PROGRAMS, AND BUDGET				
PLANS, PROGRAMS AND BUDGET (31 POSITIONS)	1,673,100			
STATEWIDE AVIATION PLANNING (4 POSITIONS)	245,800			
STATEWIDE RESEARCH				
STATEWIDE RESEARCH (12 POSITIONS)	746,200			
STATEWIDE ENGINEERING AND OPERATIONS STANDARDS				
ENGINEERING AND OPERATIONS STANDARDS (28 POSITIONS)	1,741,700			
CIP PROGRAM (58 POSITIONS)	3,754,800			
CENTRAL REGION PROGRAMS		58,809,600	24,627,300	34,182,300
CENTRAL REGION ADMINISTRATIVE SERVICES				
ADMINISTRATIVE SERVICES (36 POSITIONS)	1,618,700			
STATE EQUIPMENT FLEET (58 POSITIONS)	6,116,700			
AIRPORT LEASING (7 POSITIONS)	391,900			
CENTRAL REGION PLANNING				
PLANNING (18 POSITIONS)	963,800			
CENTRAL REGION DESIGN AND CONSTRUCTION				
ENGINEERING MANAGEMENT (75 POSITIONS)	4,987,300			
CIP PROGRAM (521 POSITIONS)	22,850,200			
CENTRAL REGION MAINTENANCE AND OPERATIONS				
HIGHWAYS AND AVIATION (241 POSITIONS)	16,989,400			
TRAFFIC SIGNAL MANAGEMENT	1,126,000			
FACILITIES (26 POSITIONS)	2,901,200			
ADMINISTRATION (18 POSITIONS)	864,400			
ANCHORAGE INTERNATIONAL AIRPORT		20,110,100		20,110,100

DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES (CONT.)				
		APPROPRIATION	APPROPRIATION FUND SOURCES	
	ALLOCATIONS	ITEMS	GENERAL FUND	OTHER FUNDS
FIELD MAINTENANCE (50 POSITIONS)	3,068,900			
BUILDING MAINTENANCE (49 POSITIONS)	4,140,400			
SECURITY (79 POSITIONS)	4,326,000			
CUSTODIAL (69 POSITIONS)	3,204,900			
EQUIPMENT MAINTENANCE (15 POSITIONS)	1,319,500			
ADMINISTRATION (24 POSITIONS)	3,989,600			
DATA AND WORD PROCESSING	60,800			
NORTHERN REGION PROGRAMS		65,981,700	26,832,200	39,149,500
NORTHERN REGION ADMINISTRATIVE SERVICES				
INTERIOR DISTRICT ADMINISTRATIVE SERVICES (30 POSITIONS)	1,540,400			
WESTERN DISTRICT ADMINISTRATIVE SERVICES (3 POSITIONS)	164,100			
SOUTHCENTRAL DISTRICT ADMINISTRATIVE SERVICES (7 POSITIONS)	195,600			
DATA AND WORD PROCESSING	32,700			
INTERIOR DISTRICT STATE EQUIPMENT FLEET (56 POSITIONS)	7,008,600			
WESTERN DISTRICT STATE EQUIPMENT FLEET (9 POSITIONS)	963,200			
SOUTHCENTRAL DISTRICT STATE EQUIPMENT FLEET (21 POSITIONS)	2,300,300			
AIRPORT LEASING AND PROPERTY MANAGEMENT (5 POSITIONS)	337,800			
NORTHERN REGION PLANNING				
PLANNING (16 POSITIONS)	951,100			
NORTHERN REGION DESIGN AND CONSTRUCTION				
ENGINEERING MANAGEMENT (38 POSITIONS)	2,848,300			

DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES (CONT.)					
	ALLOCATIONS	APPROPRIATION ITEMS	APPROPRIATION FUND SOURCES GENERAL FUND	OTHER FUNDS	
CIP PROGRAM (484 POSITIONS)	21,022,500				
INTERIOR DISTRICT MAINTENANCE AND OPERATIONS					
HIGHWAYS AND AVIATION (174 POSITIONS)	14,947,300				
FACILITIES (25 POSITIONS)	3,654,400				
ADMINISTRATION (7 POSITIONS)	589,000				
WESTERN DISTRICT MAINTENANCE AND OPERATIONS					
HIGHWAYS AND AVIATION (30 POSITIONS)	2,695,900				
FACILITIES (5 POSITIONS)	574,800				
ADMINISTRATION (2 POSITIONS)	135,600				
SOUTHCENTRAL DISTRICT MAINTENANCE AND OPERATION					
HIGHWAYS AND AVIATION (57 POSITIONS)	4,048,400				
FACILITIES (16 POSITIONS)	1,692,000				
ADMINISTRATION (6 POSITIONS)	279,700				
FAIRBANKS INTERNATIONAL AIRPORT		8,075,100		8,075,100	
FIELD MAINTENANCE (17 POSITIONS)	1,584,100				
BUILDING MAINTENANCE (8 POSITIONS)	1,382,300				
SECURITY (43 POSITIONS)	3,032,800				
CUSTODIAL (13 POSITIONS)	658,100				
ADMINISTRATION (12 POSITIONS)	1,417,800				
SOUTHEAST REGION PROGRAMS		21,216,100	10,228,800	10,.87,300	
SOUTHEAST REGION ADMINISTRATIVE SERVICES					
ADMINISTRATIVE SERVICES (22 POSITIONS)	953,100				
STATE EQUIPMENT FLEET (15 POSITIONS)	1,660,600				

DEPARTMENT OF TRANSPORTATION/PUBLIC FACILITIES (CONT.)				
	ALLOCATIONS	APPROPRIATION ITEMS	APPROPRIATION FUND SOURCES GENERAL FUND	OTHER FUNDS
SOUTHEAST REGION PLANNING				
PLANNING (5 POSITIONS)	365,300			
SOUTHEAST REGION DESIGN AND CONSTRUCTION				
ENGINEERING MANAGEMENT (47 POSITIONS)	5,012,800			
CIP PROGRAM (118 POSITIONS)	5,833,100			
SOUTHEAST REGION MAINTENANCE AND OPERATIONS				
HIGHWAYS AND AVIATION (55 POSITIONS)	4,339,600			
FACILITIES (26 POSITIONS)	3,726,900			
ADMINISTRATION (6 POSITIONS)	324,700			
ALASKA MARINE HIGHWAY SYSTEM		55,070,500	51,026,800	4,043,700
MARINE ADMINISTRATION				
ADMINISTRATION (46 POSITIONS)	2,331,700			
MARINE FACILITIES ENGINEERING				
MANAGEMENT (5 POSITIONS)	433,900			
CIP PROGRAM (22 POSITIONS)	1,393,100			
MARINE MARKETING AND SERVICES				
MARKETING MANAGEMENT (32 POSITIONS)	2,271,200			
SOUTHEAST SHORE FACILITIES (38 POSITIONS)	2,359,600			
SOUTHWEST SHORE FACILITIES (5 POSITIONS)	468,000			
MARINE OPERATIONS				
MANAGEMENT (16 POSITIONS)	1,201,100			
SOUTHEAST VESSEL OPERATIONS AND OVERHAUL (627 POSITIONS)	36,571,200			
SOUTHWEST VESSEL OPERATIONS AND OVERHAUL (98 POSITIONS)	8,041,600			

January 27, 1987

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
OPERATING BUDGET COMPARISON
AND NARRATIVE OVERVIEW
FY86 AUTHORIZED - FY88 GOVERNOR'S REQUEST
(in millions)

Source of Funding	FY86 Authorized	FY87 Authorized	FY87 Revised	FY88 Governor's Request*	$ Change FY87 Rev. to FY88
Gen. Fund	$177.8	$161.4	$143.4	$124.1	($19.3)
Other Funds	116.2	118.5	118.8	122.1	3.3
Dept. Totals	$294.0	$279.9	$262.2	$246.2	<$16.0>
% G.F. Change From Previous Year	<0.4>%	<9.2>%	<11.2>%	<13.5>%	

*Excludes $5.2 million switch to user fees for Dalton Highway toll charges.

General fund decrements totalling $21.1 million and one general fund increment for $1.8 million for Marine Highways Risk Management increases have been accepted by the Governor. This is a net reduction of $19.3 million for the Department of Transportation and Public Facilities (DOT&PF). This yields a 13.5% departmental reduction from the FY87 Revised general fund budget. Please note this includes a net reduction of approximately 14% for the Alaska Marine Highway System (AMHS) and a 13.1% cut for all remaining DOT&PF general funds.

In addition, it is proposed that $5.2 million be changed from general funds to user fees to reflect operation of the Dalton Highway as a toll road. This would bring the general fund (GF) reduction to $24.5 million, or 17.1% of the Department's FY87 Revised GF budget. However, since this proposal would require separate legislative action this funding change is being considered as a part of the proposal for new legislation rather than as a part of the Department's budget.

Excluding the AHMS, and the Dalton Toll proposal, a general fund reduction of 13.1% and $11.0 million from the FY87 Revised GF level of $84 million is proposed. This 13.1% reduction in FY88

would mean that units of the department other than AHMS have been reduced by 36.1% since the FY86 authorized GF budget.

A net reduction for the general fund portion must be viewed in light of the overall impact to revenue from cuts to the AMHS. The AMHS has a FY'87 general fund revised budget of approximately $60 million and a subsidy level of about $30 million. We have identified the impacts from reducing the subsidy level by about $6 million, which results in a total reduction to the AMHS general fund budget of about $8.4 million due to revenue cuts.

MAJOR HIGHLIGHTS

The following depicts the major impacts from adoption of these proposals:

(1) Elimination of all state maintenance on nearly 1,600 miles of roads currently on the state maintenance system that are not considered the highest priority routes, or do not require minimal maintenance efforts due to investment of federal funds;

(2) Elimination of all maintenance except for minimal safety repairs and physical highway protection (which adds a hidden cost for increased legal liability) for approximately 800 miles of highways that are not priority routes, but have federal investment requiring continued state efforts to protect this investment;

(3) Reduction of maintenance funding by another 8% on the remaining 2900 miles of roads, which means a total reduction well in excess of 25% for maintenance and operation of these facilities in less than 18 months;

(4) Elimination or reduction of airport maintenance by over 7%, with particular emphasis on daytime operations only and major reduction of winter maintenance at certain airports statewide;

(5) Substantial reductions in Marine Highway service including unmanned layup of 6 vessels for a total of 29 months. This will affect at least 230 crew members. This leaves the Southeast system with no change to summer service, but only one mainline vessel and one feeder vessel for the other 8 months of the year, and the Southwest system with single vessel service for 6 months and no service for 2 months during the winter.

(6) Institution of a toll or user fee charge of approximately $500 per trip, per 18-wheeler for commercial use of the James Dalton Highway north of the Yukon River, which

may lead to eventual closure due to inability to recover adequate fees;

(7) Elimination of maintenance for campgrounds, rest areas, turnouts and waysides, land fills, and litter pickup for state highways to preserve funds for essential M&O functions; and

(8) Reductions in facilities maintenance including janitorial services for state buildings from 5 to 3 days per week, grounds-keeping, and clearing of snow and ice from sidewalks and parking areas.

HIGHWAY MAINTENANCE & OPERATIONS

The impact to highway M&O is particularly troublesome when viewed in a longer term context. Since 1980, DOT&PF's responsibilities have grown over 10%, while available real dollars have decreased by nearly 30% under the FY'87 revised budget.

To gain additional perspective, consider the likely effects of the FY'87 reductions already taken:

(1) Little preventative maintenance anywhere on the system, which means little highway crack sealing, patching or resurfacing.

(2) Traffic services such as snow plowing, striping, and pothole patching can only be performed on a priority basis, and roads to recreational areas and low traffic rural and suburban areas can be plowed only if time permits; and

(3) Routine summer maintenance will have to be eliminated or drastically curtailed if extraordinary winter snow and ice conditions occur.

Following the M&O cuts in August 1986, it is no longer possible to cut further on the basis of a straight percentage decrease across the entire system. Instead, it has been necessary to structure further reductions on a programmatic basis by classifying the highway system as follows:

(1) Category I: Priority routes that provide the intrastate connecting system between the population and economic centers, airports, and major harbors, thereby covering Alaska's fundamental transportation links.

(2) Category II: Routes where the state has invested sufficient federal funds to contractually bind us to provide a minimum level of maintenance to realize anticipated service life of the constructed improvements.

(3) Category III: All other routes that the state currently has on the state maintenance system.

We have further differentiated the importance of state efforts for maintenance into eight groups. These are in increasing order of importance (1) snow and ice control on Category III roads within organized governmental units; (2) all activities on Category III roads within organized governmental units; (3) snow and ice control on Category II routes within organized governmental units; (4) snow and ice control for Category III routes outside governmental units; (5) snow and ice control on Category II roads outside governmental units; (6) all activities on Category III roads outside governmental units; (7) maintenance at 30% of historical levels for Category II roads within governmental units; and (8) maintenance at 30% of historical levels on Category II routes outside governmental units.

The basic assumption is that a currently organized governmental unit would be better able, and probably more likely, to assume maintenance responsibilities for routes within their boundaries than people outside of a governmental unit Please note this may require legislative action to grant road powers in certain cases. This also recognizes that for many routes in rural areas there is not an identifiable user group to assume this responsibility. We have also assumed that while snow and ice control is important, it is less critical in the long run than basic life/safety and structural maintenance efforts, partially because of our agreement with the Federal Highway Administration (FHWA) to prevent highway deterioration.

While we tried to structure the decrements in increasing order of importance, and with as much individual selection as possible to allow decisions other than simply "take it or leave it," it is important to underscore the radical and severe nature of these propos s. First, these cuts have been prepared on top of other [illegible] cuts that we're currently managing, with cost data gaps [illegible]ng current performance. Second, there has been no public involvement to review and legitimize the methodology. Third, there may be administrative code and federal legal constraints hindering or preventing implementation of some of these proposals. Finally, there is probably a hidden cost of increased legal liability from implementing these proposals, which needs to be scrutinized.

AVIATION/BUILDING MAINTENANCE & OPERATIONS

The FY'87 aviation cuts have also severely curtailed preventative maintenance work, such as runway crack sealing and patching. Snow and ice removal may not always occur, depending on available manpower. Certified airports may not be open for all scheduled flights if safe operational conditions cannot be provided, or if overtime is not available to provide required crash/fire/rescue (CFR) services. Additional curtailment of routine summer maintenance efforts may also occur.

The proposed FY'88 decrements reduce these efforts further, and force more service elimination. Elimination of winter maintenance may force operators to perform their own snow control or to switch to a different airport. Reductions or elimination of CFR activities may restrict the types of aircraft now using certain runways. Specific impacts include the winter closure of Nome's North/South runway, and service reductions or eliminations at Barrow, Umiat, Northway, Bettles, Tanana, Unalakleet, Talkeetna, and Kotzebue. If significant cuts are pursued in the aviation M&O area, more work is needed to ensure an equitable level of service reductions statewide.

FY'87 reductions for building M&O have meant that efforts on heating and ventilation components have been limited to emergency repairs. Considerable deferred maintenance continues to accrue. Any FY'88 cuts would further exacerbate these problems.

ALASKA MARINE HIGHWAY SYSTEM

To date the AMHS has not incurred any substantial reductions in available general funds, although there have been service reductions to offset cost increases. Since the AMHS's portion of DOT&PF overall general fund budget is about 40%, it has become necessary to scrutinize all components carefully and to propose ways to achieve significant general fund reductions to accommodate your request.

Since the AMHS is a transportation entity that generates revenue, the true cost to the state is not the total general fund appropriation, but is the net general fund cost or subsidy. Accordingly, we have proposed three sets of decrements to reduce the net subsidy by about $6 million for FY'88. Although we have not structured our proposal in this fashion, we believe serious consideration should be given to changing the current budget method to provide program receipt authority to expend generated revenues, along with the general fund subsidy needed to achieve the selected service level. This separation in funding would make it clearer to all concerned there is a revenue aspect to the AMHS.

The following depicts the specific impacts from reducing the subsidy level by $6 million:

(1) Reduce M/V MALASPINA service by four months. Reduce M/V Taku service by six months. Both vessels would be placed in unmanned layup. In combination with the already scheduled layup of the M/V COLUMBIA for six months and the overhaul periods for every ship, this will leave only one mainline vessel in service from Seattle or Prince Rupert to Skagway for eight months of the year. This will impact approximately 164 crew members during this period.

(2) Reduce M/V AURORA service by four months resulting in single feeder vessel service in Southeast for eight months of the year versus the current four month period. The M/V CHILKAT would increase service by four months to supplement service between Ketchikan and Prince of Wales Island.

(3) Reduce M/V BARTLETT service by six months. The M/V TUSTUMENA will provide service for the entire Southwest system, resulting in general service reductions in the winter, particularly between Valdez and Cordova. There would be no service for two months during the winter.

There are several key assumptions under each scenario. The basic intent is to maximize service for Alaskans, at the expense of tourist business if necessary. Although no service or cost saving assumptions have been included for eliminating Seattle service since current data is inconclusive, we intend to continue reviewing this option as a means to improve service for Alaskans without increasing the subsidy. Another key assumption is that it would be more cost efficient to maintain the same level of summer service for the entire 1987 summer before instituting reductions. This is because of (1) the FY'87 budget authorizes initiation of this level; (2) these are the high revenue months; (3) we have already published our schedule and are accepting reservations; and (4) it would minimize the impact from implementing cuts immediately. If earlier implementation of service cuts is desired, we can analyze this further.

We have not made any assumptions regarding possible savings to minimize service cuts by fare increases. Further work is needed to ascertain what service level savings can be obtained without increasing the subsidy, although we believe there are some possibilities here. Finally, no assumptions have been made about further savings from negotiating wage and benefit concessions or

crew size reductions, or through major streamlining of the administrative side. Please also note there is an increment to fund additional risk management expenses not covered in the current base budget, which if not funded will cause a further reduction in service.

It is important to underscore that the proposed service cuts are not "set in concrete," but merely a general sense of what service levels would be by reducing the subsidy level by $6 million. On the other hand, our current review of available data suggests that changes fairly close to these would be needed to obtain the targeted level of savings. The AMHS is a difficult entity to analyze correctly to achieve the savings we believe can be made, while preserving essential service levels. Any decision to achieve major subsidy reductions will require more work together to ensure we have a rational proposal.

JAMES DALTON HIGHWAY

While the Dalton Highway remains an important transportation facility, we believe it is reasonable to consider covering all or some of the high annual M&O costs through a user fee or toll charge. This is not a new issue, as evidenced by the state's success in including the special provision in Sec. 1113 of the Alaska National Interest Lands Conservation Act, which allows the charging of tolls without facing an obligation to repay federal-aid highway money used to construct the road.

The primary user and beneficiary from continued operation are North Slope oil producers and Aleyska. While it can be argued that we'd be biting the hand that feeds us, and clearly there would be some reduction in tax receipts because of the additional costs, we know of no covenant or agreement requiring continuation of this support at our expense. The Department of Law has advised us that there may be some changes to state statutes needed prior to initiating this proposal.

The per mile M&O cost for the Dalton is higher by at least 70% than for any other major rural transportation route in Interior District. Further, it is worth noting that since state assumption of this responsibility in 1973, we have spent about $50 million in state capital dollars to support this function. While it is conceivable that the net effect over time might be closure of the road because aviation and/or marine modes are selected as the more economical means for support of North Slope oil activities, we believe these are exactly the type of hard choices Alaskans are facing under declining revenues.

Outside of the hue and cry from the oil industry, the other major group negatively impacted would be the trucking industry, particularly owner-operators. We are sympathetic to this concern in light of currently depressed conditions, but ultimately the most cost efficient means of transporting goods must be used to maintain economic stability and growth in Alaska. One answer, which incidentally might also help address the general complaints about "unfair" competition from the Alaska Railroad Corporation (ARRC), would be an interim state assisted training program to relocate trucking industry people into other job opportunities. Another entity that would be negatively impacted if the Dalton closed would be the ARRC since they now haul a fair portion of this business to Fairbanks. It might be necessary to contact them to obtain an assessment of this impact.

A toll to recover the full charge of the department's maintenance and operations costs for the Dalton Highway would mean a charge of about $500 per trip for an 18-wheeler. Our costs are estimated to be $5.2 million annually, approximately $4.3 million in Interior M & O's Highway and Aviation component and $.9 million in the Facilities component. In addition, we have requested an increment for $.4 million in user fees to cover the costs associated with collection of the toll charges (.3 million would be the

annual cost, plus a one time cost of moving and modifying the checkpoint facility). The proposed toll does not include the capital coats for resurfacing or major maintenance of this road.

ADMINISTRATION/PLANNING/DESIGN & CONSTRUCTION

During prior reduction reviews, considerable general funds reductions were obtained in these areas. A total of 30.5% of general funds have been cut in these areas between the FY'86 authorized and FY'87 revised budgets. For example, a considerable portion of the reductions made to achieve the FY'87 revised budget were in these areas, allowing AMHS and M&O cuts to be considerably less than otherwise would have been the case.

Our decrements do include some additional general fund cuts in the planning areas. Otherwise, we are not proposing any further cuts at this time. It appears that sizeable "fat" trimming has already occurred. There is also a potential problem of making reductions to the point that we face problems with the FHWA and Federal Aviation Administration as to whether we are maintaining sufficient state funded management and administration to continue qualifying for federal highway and aviation money. Finally, we do not want to propose any cuts in the administrative or accounting side at least until we have a better handle on the magnitude of those problems, and the level of resources needed to fix them.

One change in the transfer area warrants mention. We are proposing to raise the State Equipment Fleet (SEF) fixed fee rate from 51% of the budgeted FY'87 rate back to 72% of that rate. This rate was dropped as a one-time cost savings measure for FY'87, with an understanding that the rate would be re-instated to keep the Highway Working Capital Fund fiscally sound over the long term. It is our intention to maintain the 72% rate level for at least the next two years, and then reassess what, if any, additional adjustments are needed, particularly in light of possible reduced need for equipment due to other budget reductions. We project this increase will allow us to meet vehicle replacement demand, while maintaining a positive cash flow. This means increased fee costs of about $1.8 million for DOT&PF, which represents about 85% of the SEF's business.

REORGANIZATION SAVINGS

The attached budget submission includes some adjustments for organizational changes that have already been made, including the deletion of a net 5 PX positions based on already taken personnel actions. While further general fund savings are anticipated through additional reorganization and streamlining of current operations, we are not prepared to present any further proposals at this time.

The Commissioner wants to assess the overall operations for a period of time to ensure we don't destroy valuable portions of the organization that are working well. It may be that some of these savings won't materialize until mid to late FY'88 or at the start of FY'89. Accordingly, we respectfully request an understanding that any savings in these areas will be given priority consideration for use to restore reduced or deferred DOT&PF M&O activity.

REVENUE GENERATION

One way to offset some of the impact of both the proposed FY'88 and actual FY'87 reductions is to generate more revenue through our proposal to increase the motor fuel tax from 8¢ to 16¢ per gallon. We estimate this will generate approximately $20 million in additional revenue. We recommend using this increase to help local governments and communities to pay for the increased M&O costs for those roads and highways removed from the state maintenance system. There may be other ways to generate further receipts, such as airport landing and tie-down fees, to offset other reductions. We will continue to review these possibilities.

SUMMARY

DOT&PF provides the state with numerous, essential transportation services. There is no doubt that transportation serves a critical economic role in a state such as ours. We fear pursuing major cuts, particularly in highway and aviation M&O, will only exacerbate our current problems.

Accordingly, until we can develop some of these proposals more fully, including greater acceptance by local communities of many of these responsibilities, it is imperative that we carefully analyze adoption of the large reductions we have identified, and if possible, find other revenues to avoid drastic reductions.

OVERVIEW OF QUESTIONS ASKED BY HOUSE FINANCE COMMITTEE MEMBERS DURING A PRESENTATION BY THE DEPARTMENT OF TRANSPORTATION.

Tuesday, January 26 1987, Commissioner Gutierrez and staff for the Department of Transportation gave a budget presentation and overview to the House Finance Committee.

Attached please find the Department's proposed FY 88 budget from the Governor's office and an overview of the proposed budget changes and cuts.
Much of the information presented at this meeting is in the attached DOT overview report. Rather than be repetitive I felt it may be helpful to update you on some of the questions raised by House Finance Committee members at this meeting.

1. Why have such substantial cuts been made in the areas of M & O and to the Alaska Marine Highway System?

   In 1985, major cuts were made in the areas such as management and design and construction. No cuts have been made in the AMHS and very minimal cuts, have been made in M & O during the previous few years budget cuts. Another point to consider is that when looking at the cuts made to AMHS these cuts reflect cuts from the 1987 "actual" figure and not the revised figures - therefore, the cut to AMHS is actually less than in other areas.

2. How did the department go about categorizing Class 1, 11 and 111 roads - were they categorized on a user basis?

   No. The department felt that if roads were categorized on a user basis, heavily populated areas would have a great deal more Class 1 roads than rural areas. Several factors were taken into consideration including whether the road provides freight transportation needs (Valdez to Fairbanks), whether the road provides the only access to the area, how many people live in the area and numerous other factors where also taken into consideration. The department feels that this area is one that will need further consideration and will ask for community input and advice from local area DOT personnel to help prioritize the roads.

3. With the Capital Projects Cleanup, why can't we just get a computer print out of the total number of projects currently authorized? Then, compile a list of those projects that are physically under construction, complete these projects and start over again with all other projects so that are books and information would be correct and so that the problems with the Federal Government Highway on reimbursement of Federal dollars could be overcome? How long would it take to get this list?

It would be possible to compile a list and have it available in a very short time, 3-5 days. The department feels this would be very inaccurate as the problem is with billings not being made to projects. Therefore, it would take some time to figure out what monies had not been billed to projects and get the paper path moving along. Also, some projects are in the planning and design phase, some are under construction, some have been completed and require outstanding bills to be logged in before the project can be closed out. Because of the methods used for billing to the projects and the way in which project tracking has been done, the department now finds that there are currently thousands of projects that are in question.
Because of the poor accounting system information requested on projects before 1985 is difficult to provide accurately. The older the project, the harder it becomes to provide accurate information.

As of 6/30/85, the capital projects clean up list identified each project and the status of the project. When the department changed over to the new state accounting system this information was not recorded. The department is currently working on correcting the problems that exist.
Mr. Bob Poe has been hired to head up this project and the department is currently working on:

1. Correcting the Federal billing system problem. At the present time all bills submitted for Federal reimbursement receive a manual audit from the Feds before reimbursement is made. This is partly due to previous incorrect billings and also an inefficient system for compiling the bills.
   The department is in the process of requesting proposals for putting in place a system that will adequately perform all FHWA billings. The contract should be awarded within 45 days and the system should be in place in 6 months.

2. The department is also bringing on board two C.P.A.'s to help set up and administer the new accounting system.

4. Is there statutory language changes required to turn the Dalton Highway into a toll road? Is there anything that prevents turning a road that received consideral Federal funds into a toll road?

Based on discussions with the Department of law, DOT believes it advisable to amend As 19.40 to make it clear this arrangement would be legal, therefore yes, an amendment to the AS 19.40 would be required. The State of Alaska has a specific exemption from the requirements under Section 11.13 of the lands bill and relieves the state of any requirement to repay Federal monies used to build this road.

5. On the three tier maintenance program plan, is there some kind of legislation needed to establish a tier reduction program rather than the usual pro-rated reductions usually implemented?

The Department would like to investigate this further, As Mr. Hickey sees it now the statutes provide the Commissioner with a great deal of latitude to make these decisions. The department has administrative procedures in place as well as regulations which require the department to receive public input and recommendations however, at the present time it does not appear that anything legislative would be required.
This will need to be looked into further.

6. You refer to an increase in legal liability because of the reduced maintenance, could you explain further?

The Commissioner stated the department will have to state the level of service it will provide. He feels that if in fact, a road is open, there is a responsibility to provide a minimum level of maintenance on the road. The Commissioner is not sure what this level is and he feels the department will need to consult with the Attorney General's office for legal direction. However, he has raised the question and feels it must be addressed.

7. How will user fees on the Dalton Highway affect the lift axle? If the axle is on the truck would there be a toll for this axle? How is the department addressing the overall lift axle question?

In terms of the toll charge, if the axle were down and used for weight carrying purposes, it would be charged at the same level - $100/axle.
As far as the question on regulations, the department has suspended implementation of the regulation to give the department and the legislature a chance to look at some of the issues. There is considerable controversy about some of the issues and, frankly, with the rapid change in economic conditions this issue may require rethinking on how to phase in a proposal. The department still has some basic concerns. There are a lot of concerns about the safety of using the lift axle, the test performed by the department would suggest they are a problem and many drivers have stated to the department in hearings that they are a problem.

Enforcement is a problem because they are used for weight purposes at the scale houses and then in order to avoid wear and tear they are not used.
The department is looking at a new proposal that would allow for lift axles to continue under certain conditions such as Washington has just done.
Steerable as opposed to fixed
Certification from the manufacturer that they are properly guaged to carry the weight they are carrying
Controls on the outside only
The department is still looking into this but feels this type of proposal may be acceptable.

8. Do you envision the $20 million revenue from doubling the motor fuel tax coming back to municipal governments through some sort of statutory shared taxes or how do you envision this? How does the $20 million relate to the actual cost of maintaining roads today?

The administration is going to propose legislation to provide for the pass back of this money. The total M & O cut talked about in Category 1 11 and 111 is about $10 million. With the cuts taken in the past plus this years $10 million total cuts in the past few years in M & O will total about $20 million. This therefore should be sufficient to offset these cuts.

9. Who would have to pay for use of the toll road?

The proposal is a new proposal and has a charge for light vehicles, this charge would be less but there would be a charge for any user of the road on a structured basis.

10. Where do you place schools in the three category system?

It would be catagorized depending on whether the school is on a route. If the school is on a category 111 route we would be looking for the schools to take on the responsibility.
DOT may have to reconsider this categorizing and receive additional input.
Concerns were expressed by Senator Fischer about the roads to schools not being open and yet the constitutional requirement to provide education.
DOT will have to consider this.

11. Why is there an increase in the total dollars for the state equipment fleet, state planning and research and yet dramatic cuts are shown for M & O. What are the philosophical goals of the department?

The administrative sections, planning, research and administration is roughly 12% of the overall general fund dollars of the department budget. In FY 87 revised a large cut was made in these areas and none in AMHS and very little in O & M. The department would be willing to look at the budget more closely as the figures shown are not set. Until the department has a better feel for things such as the Capital Project cleanup they did not want to get rid of any available personnel.

STATE OF ALASKA 1987 LEGISLATIVE SESSION
FISCAL NOTE

REQUEST:

Bill Version : HB 62
Publish Date :

Revision Date:
Title : "An Act...establishing the Alaska Marine Highway Authority."
Sponsor : Cato
Requestor : Cato

Agency Affected : DOT&PF - AMHS
BRU : Marine Administration and Marine Facilities Engineering
Components : Administration and Engineering Management

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES		197.7	197.1	207.0	217.4	228.3
TRAVEL		104.0	109.2	114.7	120.4	126.4
CONTRACTUAL		238.2	134.6	141.3	148.4	155.8
SUPPLIES		19.5	20.5	21.5	22.6	23.7
EQUIPMENT		20.5				
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING		569.9	461.4	484.5	508.8	534.2
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		569.9	461.4	484.5	508.8	534.2
FEDERAL FUNDS						
OTHER						
TOTAL						

POSITIONS:

FULL-TIME		4	4	4	4	4
PART-TIME						
TEMPORARY						

ANALYSIS : (Attach a separate page if necessary)

See Attached

Prepared by : Mark S. Hickey, Deputy Commissioner, Operations Phone : 465-3900
Division : Commissioner's Office Date : 01/29/87

Approved by Commissioner : [signature] Date : 1/30/87
Agency : Dept. of Transportation and Public Facilities

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)
Senate Secretary

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. 62

HB 62

FISCAL NOTE ANALYSIS

During FY 84, the Department of Transportation and Public Facilities completed a program of reorganization. Basically, the efforts were toward regionalization of the Department and decentralization of the functions within its operation. As a result, Marine Highway System became a "region" or a stand alone operating unit headed by a Deputy Commissioner.

After almost three years of operating at the new level, the Alaska Marine Highway System has shaken-down internally with planned organization adjustments to ensure all functions previously accomplished outside the System are covered. The current organization with a minimum of additional positions would be required for independent operation as the "Alaska Marine Highway Authority". The new positions required are identified on the attached Request for New Position forms.

No funds for the increased operation of vessels are being requested in this fiscal note. Such an increase would require additional funds whether the System is managed as an Authority or under the present organization within the Department of Transportation and Public Facilities.

It is assumed the Authority would continue to utilize the State Accounting System and other State computer resources, including those needed to support our Reservations Management System. The requirements will remain the same under the current organization or an Authority.

The following assumptions were made:

1. The legislation would take effect July 1, 1987.

2. The "Alaska Marine Highway Authority's" time and attendance, personnel, and leave accounting computer systems will be completed with existing funding and will interface with existing State systems.

3. There would be an annual appropriation for full operating costs of the Authority each year that would include all revenues generated (Program Receipts) and a General Fund subsidy appropriation to cover the balance of costs needed to maintain the currently budgeted level of vessel operating schedules.

4. An inflation factor of five percent has been included for future years beyond FY 88.

5. The position of Deputy Commissioner would be converted to Executive Director and administrative support would be provided to the Board of Directors by the existing staff and the additional positions requested. No transfers of positions would be made from the Department of Transportation and Public Facilities.

6. The Authority would continue to use:

   A. State-owned office buildings.
   B. The State mail system
   C. The State equipment fleet.
   D. The statewide purchasing contracts (i.e. fuel).
   E. "Shared" communications lines.
   F. Insurance, bonding, etc., as now supplied.
   G. Legal services from the Attorney General's Office.

7. The Directors of the Authority would meet an average of three days per month, or thirty-six days per year.

DETAIL OF FY 88 COSTS

MARINE ADMINISTRATION BRU

Personal Services - 1 PFT Position			$ 53.3
Analyst/Programmer IV	$ 53.3		
Travel			65.0
Transportation and per diem for seven directors to attend monthly meetings (3 days each in various locations statewide)	35.0		
Transportation and per diem for Executive Director, section chiefs, and other staff as required to attend monthly directors' meetings.	30.0		
Contractual Services			$163.2
Professional Services		$122.5	
Transcription services for directors' meetings	$ 2.5		
Annual audit by CPA	20.0		
Initial legal services	100.0		

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. 62

Contractual Services (Continued)			
Communication		9.5	
Local telephone service for new position	.5		
Long distance telephone cost	2.0		
Postage	5.0		
Network connect fees for new terminal	2.0		
Advertising, Printing and Binding		20.0	
Printing, photography, etc.	5.0		
Advertising of directors' meetings	5.0		
Initial printing of stationery	10.0		
Rental for Land, Buildings and Space		1.2	
Room rental for directors' meetings	1.2		
Other Expenditures and Services		10.0	
Mail clerk services (to be RSA'd to DOT&PF)	10.0.		
Supplies and Materials			9.5
Office & Library Supplies Routine supplies for new position and directors' meetings	7.5		
Data Processing Supplies	2.0		
Equipment			10.5
Office equipment for new position	.5		
Data processing equipment for new position	10.0		
Marine Administration BRU TOTAL			$301.5

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. 62

MARINE FACILITIES ENGINEERING BRU

Personal Services - 3 PFT Positions		$134.4
Maintenance Worker II	$ 46.4	
2 Maintenance Worker I's	88.0	
Travel		39.0
Transportation and per diem for Maintenance Workers to perform maintenance of terminal facilities	39.0	
Contractual Services		75.0
Professional Services Environmental engineering, right-of-way, EEO compliance, etc. (Currently performed by DOT&PF)	50.0	
Minor Repair and Maintenance Minor repairs beyond the scope of work performed by Maintenance Workers	25.0	
Supplies and Materials		10.0
Repair & Maintenance Supplies Structural materials and minor tools as needed	10.0	
Equipment		10.0
Outfitting of maintenance shop		
Marine Facilities Engineering BRU TOTAL		$268.4

CONTINUATION of FISCAL NOTE ANALYSIS

For Bill/Resolution No. 62

SUMMARY OF FY 88 COSTS

	Marine Administration	+	Marine Fac. Engineering	=	Total
Personal Services	53.3 (1 PFT)		134.4 (3 PFT)		187.7 (4 PFT)
Travel	65.0		39.0		104.0
Contractual Services	163.2		75.0		238.2
Supplies & Materials	9.5		10.0		19.5
Equipment	10.5		10.0		20.5
Totals	301.5	+	268.4	=	569.9

FY 89 COSTS

FY 88 costs include an inflationary increase of 5% after deletion of the following one-time costs:

Contractual Services (Marine Administration BRU)		$110.0
Initial Legal Fees	$100.0	
Initial Printing Costs	10.0	
Equipment (Both BRU's)		20.5

Position Title	Analyst/Programmer IV	No. of Positions	1	Range/Step	19/A	Barg. Unit	G
Time Status	PFT	Staff Months	12.0	Location	Juneau	Election District	04

Type of Expenditure		Amount
1	2	3
Salary	40.032	
Benefits	13.271	
Premium Pay		
Other		
Total Personal Services		53.3
Travel		
Contractual		2.5
Commodities		.5
Equipment		10.5
Other		
Total Cost		66.8

Funding Source for Total Cost		
Federal Receipts	1002	
G. F. Match	1003	
General Fund	1004	66.8
I-A Receipts	1006	
CIP Receipts	1061	
Other		

Justification

Creation of an Authority would require data processing support services which are currently provided by the Department of Transportation and Public Facilities.

This position will be responsible for systems maintenance and enhancement of the reservations system (RMS II) and other information systems specific to the Alaska Marine Highway Authority.

Equipment costs include office equipment and necessary computer equipment (terminal, microcomputer, printer, etc.).

Request For New Position

Agency: Dept. of Transportation and P.F.
Alaska Marine Highway System

BRU: Marine Administration

Component: Administration

FY 88

Position Title	Maintenance Worker II	No. of Positions	Range/Step	Barg. Unit
		1	54/A	LTC
Time Status	Staff Months	Location	Election District	
PFT	12.0	Juneau	04	

Type of Expenditure		Amount
1	2	3
Salary	32,391	
Benefits	11,064	
Premium Pay 10 hrs OT/mo.	2,990	
Other		
Total Personal Services		46.4
Travel		13.0
Contractual		.5
Commodities		.5
Equipment		1.0
Other		
Total Cost		61.4

Funding Source for Total Cost		
Federal Receipts	1002	
G. F. Match	1003	
General Fund	1004	61.4
I-A Receipts	1006	
CIP Receipts	1061	
Other		

Justification

The legislation exempts the Department of Transportation and Public Facilities from maintenance of the facilities operated by the Authority.

This position will serve as the lead for a maintenance team required to service Alaska Marine Highway System terminals, building, and docks.

Request For New Position

Agency: Dept. of Transportation and P.F.
BRU: Alaska Marine Highway System
Component: Marine Facilities Engineering
Engineering Management

FY 88

Position Title	Maintenance Worker I	No. of Positions	1	Range/Step	55/A	Barg. Unit	LTC
Time Status	PFT	Staff Months	12.0	Location	Juneau	Election District	04

Type of Expenditure		Amount
1	2	3
Salary	30,592	
Benefits	10,561	
Premium Pay 10 hrs OT/mo.	2,825	
Other		
Total Personal Services		44.0
Travel		13.0
Contractual		.5
Commodities		.5
Equipment		1.0
Other		
Total Cost		59.0

Funding Source for Total Cost		
Federal Receipts	1002	
G. F. Match	1003	
General Fund	1004	59.0
I/A Receipts	1006	
CIP Receipts	1061	
Other		

Justification

The legislation exempts the Department of Transportation and Public Facilities from maintenance of the facilities operated by the Authority.

This position is part of a three position maintenance team required to service Alaska Marine Highway System terminals, buildings, and docks.

Request For New Position

Agency: Dept. of Transportation and P.F.
BRU: Alaska Marine Highway System
Component: Marine Facilities Engineering
Engineering Management

FY 88

STATE OF ALASKA 1987 LEGISLATIVE SESSION
FISCAL NOTE

REQUEST

Bill Version: HB 62
Publish Date:

Revision Date:
Title: An act relating to ferries and ferry terminals and establishing the Alaska Marine Highway Authority

Agency Affected: Division of Personnel
BRU: Personnel

Sponsor: Cato
Requestor:

Components: Centralized Administrative Services

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

POSITIONS:

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

ANALYSIS: Attach a separate page if necessary

There would be no fiscal impact on the Division of Personnel.

Prepared By: Diana DeSimone, Director
Division: Division of Personnel
Phone: 465-4430
Date: 1/28/87

Approved by Commissioner: Garrey Baskett
Agency: Department of Administration
Date:

Distribution (by preparer):
- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)
- Senate Secretary

Rev. 9/16/86

POSITION PAPER
HB 62

House Bill 62 establishes the Alaska Marine Highway Authority as an independent public corporation for the operation, management, planning and construction of the State's marine highway system.

Section 19.70.040 specifies that the authority shall hire an executive director and may employ additional staff as necessary. The proposed language clearly and appropriately places the employees of the Authority in the classified service. However, the status of the executive director and legal counsel are not clearly delineated.

> "The executive director and legal counsel are in the exempt service under AS 39.25.110."

Also add another section to the bill which states:

> "AS 39.25.110 is amended by adding a new paragraph to read:
>
> (23) The executive director and legal counsel of the Alaska Marine Highway Authority."

The Department of Administration/Division of Personnel's position on this bill is neutral.

Diana DeSimone 1/30/87

Diana DeSimone, Director — Date
Division of Personnel

Garrey Peska

Commissioner Garrey Peska — Date
Department of Administration

THE PRECEDING PAGES WERE TREATED AS
A UNIT IN THE ORIGINAL FILE.