ALASKA LEGISLATURE COMMITTEE FILES 1999-2000 8672
10034 HOUSE TRANSPORTATION

SJR

38

FISCAL NOTE

No. 1

STATE OF ALASKA
2000 LEGISLATIVE SESSION

BILL NO(S) Bill Version: SJR 38
Publish Date: 3/3/00

Revision Date/Time (Note if correction) _____ Dept. Affected _____

Title Approving transfer of railroad land BRU _____

Component _____

Sponsor Senator Gary Wilken

Requester _____ Component No. _____

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2000) cost: _____

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

Prepared by: _____ Phone 465-4940

Division Senate Transportation Date/Time 3/2/00

Approved by Commissioner Senator Jerry Ward, Chair Date _____

Agency _____

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GARY WILKEN
SENATOR
Districts 29 & 30
West Fairbanks

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Member: Health, Education, & Social Services (HESS)
Member: Legislative Budget & Audit
Member: State Affairs

Alaska State Legislature
Senate

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Fairbanks, Alaska 99701
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MEMORANDUM

TO: Representative Andrew Halcro
Chairman, House Transportation Committee

FROM: Senator Gary Wilken

DATE: March 30, 2000

RE: Request of hearing for SJR 38

I respectfully request that a hearing be scheduled in the House Transportation Committee to discuss SJR 38, "A resolution expressing support for a cooperative United States-Canada feasibility study on extending the North American rail system through British Columbia and the Yukon Territory to Alaska."

Senate Joint Resolution 38 is the Senate Companion to Representative Jeannette James' HJR 51. It will show support for Senator Frank Murkowski's effort to authorize and fund a feasibility study on the extension of the North American rail system to Alaska. This endeavor would be beneficial and could stimulate economic development for the state.

The resolution provides Senator Murkowski solid support from the Alaska Legislature for his work and this project. It passed the Senate on March 22, 2000 by a vote of 19-0, with one absent.

I have attached a sponsor statement for SJR 38. Please contact Ms. Kara Moriarty, at extension 3018, in my office if you have any questions or comments relating to this request.

Gary Wilken

GARY WILKEN
SENATOR
Districts 29 & 30
West Fairbanks

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Member: Finance
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SPONSOR STATEMENT

SJR 38

A Resolution expressing support for a cooperative United States-Canada feasibility study on extending the North American rail system through British Columbia and the Yukon Territory to Alaska.

Senate Joint Resolution 38 shows support from the Alaska Legislature for a feasibility study to be conducted on the extension of the North American rail system through Canada to Alaska.

Railroads provide safe, cost-effective, and reliable long distance transportation. Allowing Alaska to be connected to the rest of North America by rail will lead to increased economic development for the people of our state.

Senator Frank Murkowski is committed to this project and is proposing legislation that would establish and provide funding for a bilateral commission to conduct this feasibility study. The study would determine the best route, identify markers, and estimate construction costs for the project.

SJR 38 will send a strong message in support of completing this feasibility study, the first step towards connecting Alaska to the rest of North America by rail.

NEWS FROM THE OFFICE OF

FRANK MURKOWSKI

United States Senator • Alaska

Contact: Chuck Kleeschulte
For Immediate Release:
March 20, 2000

MURKOWSKI INTRODUCES ALASKA-CANADA RAILROAD EXTENSION BILL

View a copy of this legislation

WASHINGTON -- Alaska Sen. Frank Murkowski took another step in efforts to link the continental rail system with the Alaska Railroad when he introduced legislation in the Senate to create a bilateral U.S.-Canada Commission to study the feasibility of the rail link.

Murkowski last week announced legislation in the Senate that would create an 18-member commission, equally appointed by the President and the Canadian government, to conduct a technological and economic feasibility study of linking the rail system in Alaska to the "nearest appropriate point" in Canada. The commission would be charged with reporting on the results of its study within five years, and it would be authorized to spend $6 million in American funds on preliminary engineering and environmental work.

"Alaska and the Yukon both are woefully deficit in the transportation systems to move goods to market. A railroad extension might provide the essential transportation infrastructure to allow the Far North to blossom in the decades ahead, while protecting the environment. If a railroad connection proves to be economically, environmentally and socially sound, then let's move ahead. If not, let's drop the idea. But at the very least we need this commission to give the idea a honest hearing," said Murkowski.

Last year, after discussions with a group of Canadian parliamentarians, Canadian Ambassador Raymond Chretien, Canadian Minister of Transport David Collinette, and the Canadian-American Border Trade Alliance, Murkowski suggested it might make sense to build the roughly 1,200 miles of rail that would be needed to finish the linkup. The Alaska Railroad currently ends at Eielson Air Force Base, outside of Fairbanks, about 270 miles from the Canadian border, while the Canadian rail system ends at spurs to Fort Nelson or beyond Fort St. James, both about 900 miles from the Alaskan border.

Noting that America is continuing testing on a North American anti-missile defense system, Murkowski noted this is a particularly good time to launch a review of railroad extension since one of the prime sites under consideration for a missile interceptor base is at Delta Junction in Alaska, which could well

justify construction of the first 80 miles of the Alaska Railroad's extension toward the Canadian border.

Murkowski also encouraged a railroad conference held in Vancouver, B.C. in January. He said some estimates during the conference indicated the potential for such a line to carry up to 120 million tons of freight per year -- future mineral developments and timber making up the majority of the potential freight.

He noted the line would allow economic development of the mineral resources of the Yukon-Tanana uplands that stretch from Faro, Y.T., north to Fairbanks. The zone, home already to the Fort Knox gold mine in Alaska and the future home of mines working the huge Pogo gold deposit, contains large amounts of silver, tungsten, copper, lead, zinc and other ores. On the Alaska side of the border there are already more than 14 major hard-rock deposits identified, while in the Yukon there are more than 10 major mineral deposits known. This does not include the Alaska coal deposits a line could move to markets in the rest of North America or to port facilities connecting to East Asia.

Murkowski said the railroad's likely corridor is also filled with timber. He said within just 15 miles of a likely railroad corridor, there are 1.4 billion board feet of hardwood pole timber and almost 1.7 billion board feet of mixed pole timber.

"I am not an expert. I cannot verify the 120 million ton freight estimate. But it is fuel for thought and a reason why we need a comprehensive feasibility study," said Murkowski.

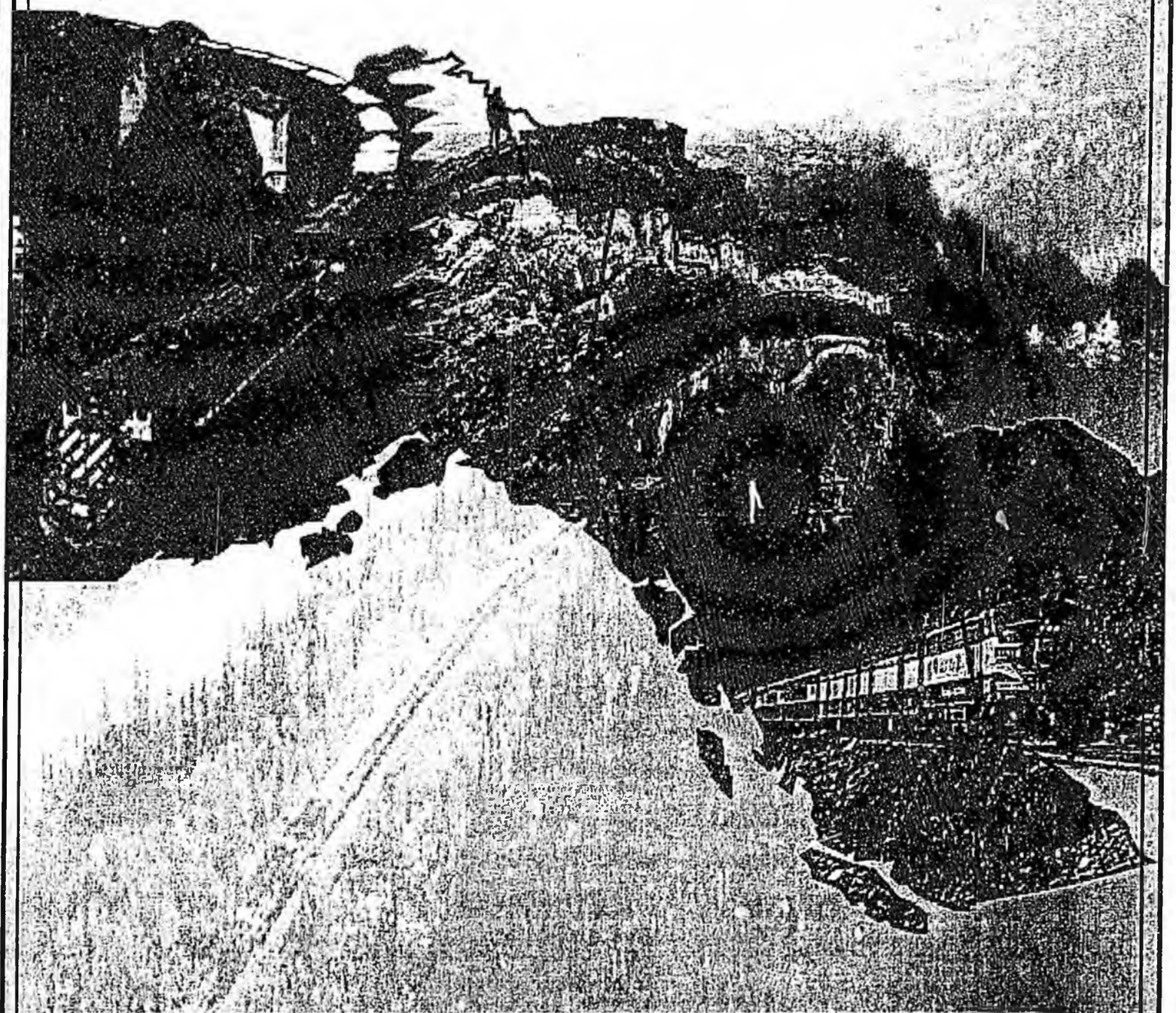
He said such a study commission might be opposed by environmentalists because of their bias against the use of natural resources or fear of the opening of undeveloped land in the north by a rail line. But Murkowski said a railroad should be most favored transportation system by environmentalists since railroads have small "footprints," and are controlled access systems that prevent uncontrolled development and uncontrolled land and wildlife impacts.

Under the bill, the commission would be comprised of representatives from local communities and local/Native residents, individuals with economics, engineering and resource management backgrounds, including representatives with minerals, timber and wildlife and fisheries management training. Specifically the American side of the commission will contain two members from local communities, one representing the State of Alaska nominated by the Governor, one representing Alaska Natives, four from commercial activities including one associated with the Alaska Railroad, and two scholars employed by Alaska education institutes, one with subarctic engineering expertise.

-30-

Rails to Resources

Bringing Alaska and the Yukon closer to the world



United States Senator Frank H. Murkowski

Press Information Packet

March 16, 2000

Here is an Op-Ed on the Senator's view on expanding railroads in Alaska. It is timely because of the introduction of legislation to set up a commission to consider railroad extension. Please consider for use. (Words 988) 3-15/16-00

Let's Get Alaska's Economy Back on Track by Extending Railroads

By Senator Frank Murkowski

Senator Frank H. Murkowski of Alaska

Back in April 1915, President Woodrow Wilson decided that construction of a railroad to Alaska's Interior was the single greatest step he could take to unlock the then territory's great promise and to get the region's economy on track.

Some eighty-five years later times have ***not*** changed.

Alaska and the neighboring Yukon Territory in Canada are still North America's last uptapped storehouse of mineral and natural resource wealth. We now know where much of that treasure lies — economic transportation to get the materials to market being the chief impediment to its development.

Over the years one thing has changed: We now know how to develop our mineral, energy and timber resources in an environmentally sensitive manner, so we can protect the beauty and the wildlife of the North, while producing jobs to sustain the region's human inhabitants.

We know there is a mineral zone that extends throughout the Yukon-Tanana uplands near Faro, Y.T., north to Fairbanks. The zone, home already to the Fort Knox gold mine in Alaska and the future home of mines working the huge Pogo gold deposit, contains large amounts of silver, tungsten, copper, lead, zinc and other ores. On the Alaska side of the border there are already more than 14 major hardrock deposits identified, while in the Yukon there are more than 10 major mineral deposits known. This does not include the Alaska coal deposits a line could move to Lower 48 or East Asian markets.

The same zone is also filled with timber. Within just 15 miles of a likely 1,200-mile railroad corridor through Canada into Alaska, there are 1.4 billion board feet of hardwood pole timber and almost 1.7 billion board feet of mixed pole timber.

Further to the North lies a second developmental target that another railroad could help get on track. That is the huge low-pollution, high-quality coal deposits at Point Lay and also the vast minerals of the Amber mining district farther to the southeast.

It would take just a 90-mile line to carry the coal from Point Lay to the Red Dog mine where a 60-mile line along the existing mine haul road would carry it to tidewater. Such a railroad could bring energy, in the form of coal, to the mine where it could be used to power a new electro-refining technology that would add tremendous value to the zinc-lead ore being shipped from Alaska, and most importantly provide additional jobs to the region. It also would finally allow some of the North Slope's 6 trillion tons of coal to be exported.

It would take just a 150-mile line to access the vast hard-rock resources of the Ambler Mining District and bring them to the coast, or about a 350-

mile line to tie into the Alaska Railroad heading south.

Some would say talk of railroad extension is nothing more than "pie-in-thesky" rhetoric. But railroads offer a host of benefits. They are the most energy efficient form of transportation. More importantly, they are one of the most environmentally sensitive forms of transportation. Railroads offer controlled access that removes the environmental threat of uncontrolled development. They emit the lowest levels of air pollution and usually cause the least disruption to the land.

And a rail corridor would encourage the co-location of all pipelines and power transmission lines — a process that makes especially good environmental sense.

I propose a public/private alliance to conduct a comprehensive feasibility study. Let's join forces to make a modest investment to examine this carefully.
- US Senator Frank H. Murkowski, speaking to the CAN/AM Border Trade Alliance in September of 1999

Last year, after talks with Canadian Parliamentarians during the Canada-U.S. Interparliamentary Conference, I held discussions with Canadian Ambassador Raymond Chretien and Canadian Minister of Transport David Collinette, and later with the Canadian-American Border Trade Alliance. In January I was further encouraged by estimates that their might be 120 million tons of freight a year from new mines and timber development along the Alaska-Canada rail corridor that would utilize such a new railroad link.

Thus I am introducing legislation in Congress to advance consideration of that railroad project. My bill will create an impartial bilateral commission to study the economic, environmental and engineering feasibility of completing the transcontinental railroad linking Canada with Alaska.

A joint commission should have the funding — I'm proposing $6 million — and the authority to oversee a comprehensive feasibility study of a line from where the Canadian rail system ends at either Fort Nelson or near Fort St. James, about 900 miles from the Alaska border, northward to link up with the Alaska Railroad, 270 miles from the border near Fairbanks.

My bill would create an 18-member commission, half being appointed by each country. The commission would be fully representative of the residents of the area and also include scientific expertise to make sure that the difficult issues surrounding a railroad will be thoughtfully considered.

Quick action to set up the commission is particularly timely since a decision is likely within the next year on whether the United States should proceed with construction of an anti-missile defense system. And perhaps the best site for an initial 100-missile intercepter base is at Delta. That decision might justify extending the railroad to Fort Greeley, 80 miles closer to the border than Eielson Air Force Base — reducing the amount of additional track needed in Alaska to about 190 miles.

We should not be afraid to think seriously about big projects. Just because they're daunting, doesn't make them impossible. In this day and age of great concern for the environment: if one assumes -- as I do — that the resources of the Yukon and Alaska inevitably will be developed, then rail looks like a very healthy way to make that possible.

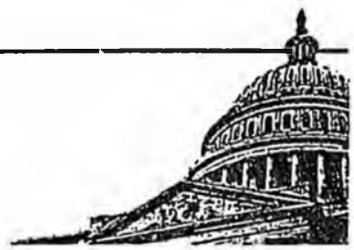
All the commission will do is bring about debate. It will consider and explore new ideas. If a railroad connection is economically, environmentally and socially sound, then we should move ahead with it. If it is not, then it should be dropped. But at the very least, let's give the idea an honest hearing, now before any more decades pass.

-30-

NEWS FROM THE OFFICE OF

FRANK MURKOWSKI

United States Senator • Alaska



For Immediate Release:
March 16, 2000

Chuck Kleeschulte or Cindi Bookout
O (202) 224-9306; H (301) 283-4149; O 224-8767
(Email: chuck_kleeschulte@murkowski.senate.gov)

Murkowski Introduces Alaska-Canada Railroad Extension Bill

FAIRBANKS — Alaska Sen. Frank Murkowski took another step in efforts to link the continental rail system with the Alaska Railroad when he announced today he will introduce legislation to create a bilateral U.S.-Canada Commission to study the feasibility of the rail link.

Murkowski announced legislation in the Senate that would create an 18member commission, equally appointed by the President and the Canadian government, to conduct a technological and economic feasibility study of linking the rail system in Alaska to the "nearest appropriate point" in Canada. The commission would be charged with reporting on the results of its study within five years, and it would be authorized to spend $6 million in American funds on preliminary engineering and environmental work.

"Alaska and the Yukon both are woefully deficit in the transportation systems to move goods to market. A railroad extension might provide the essential transportation infrastructure to allow the Far North to blossom in the decades ahead, while protecting the environment. If a railroad connection proves to be economically, environmentally and socially sound, then let's move ahead. If not, let's drop the idea. But at the very least we need this commission to give the idea a honest hearing," said Murkowski in announcing the legislation.

Last year, after discussions with a group of Canadian parliamentarians, Canadian Ambassador Raymond Chretien, Canadian Minister of Transport David Collinette, and the Canadian-American Border Trade Alliance, Murkowski suggested it might make sense to build the roughly 1,200 miles of rail that would be needed to finish the linkup. The Alaska Railroad currently ends at Eielson Air Force Base, outside of Fairbanks, about 270 miles from the Canadian border, while the Canadian rail system ends at spurs to Fort Nelson or beyond Fort St. James, both about 900 miles from the Alaskan border.

Noting that America is continuing testing on a North American anti-missile defense system, Murkowski noted this is a particularly good time to launch a review of railroad extension since one of the prime sites under consideration for a missile interceptor

base is at Delta Junction in Alaska, which could well justify construction of the first 80 miles of the Alaska Railroad's extension toward the Canadian border.

Murkowski also encouraged a railroad conference held in Vancouver, B.C. in January. He said some estimates during the conference indicated the potential for such a line to carry up to 120 million tons of freight per year — future mineral developments and timber making up the majority of the potential freight.

He noted the line would allow economic development of the mineral resources of the Yukon-Tanana uplands that stretch from Faro, Y.T., north to Fairbanks. The zone, home already to the Fort Knox gold mine in Alaska and the future home of mines working the huge Pogo gold deposit, contains large amounts of silver, tungsten, copper, lead, zinc and other ores. On the Alaska side of the border there are already more than 14 major hard-rock deposits identified, while in the Yukon there are more than 10 major mineral deposits known. This does not include the Alaska coal deposits a line could move to markets in the rest of North America or to port facilities connecting to East Asia.

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Under the bill, the commission would be comprised of representatives from local communities and local/Native residents, individuals with economics, engineering and resource management backgrounds, including representatives with minerals, timber and wildlife and fisheries management training. Specifically the American side of the commission will contain two members from local communities, one representing the State of Alaska nominated by the Governor, one representing Alaska Natives, four from commercial activities including one associated with the Alaska Railroad, and two scholars employed by Alaska education institutes, one with subarctic engineering expertise.

The bill will formally be introduced in the Senate on Monday, March 20. -30-

Resolution of Support for a U.S.-Canada Cooperative Feasibility Study on Extending the North American Rail System through British Columbia, the Yukon Territory, and to Alaska

Alaska-Canada Rail Link Conference, January 20, 2000, Vancouver, BC

Whereas, rail transportation is the most cost-effective long distance method of overland transportation; and,

Whereas, rail transportation is an essential component of the North American inter-modal transportation system; and,

Whereas, rail transportation is energy efficient, capable of moving goods three to nine times as far as highway transportation with a given amount of fuel; and,

Whereas, rail transportation emits lower levels of carbon monoxide, carbon dioxide, nitrogen oxides and volatile organic compounds than other modes of freight transportation; and,

Whereas, rail transportation systems allow controlled access and reduced overall impacts to environmentally sensitive regions; and,

Whereas, rail transportation remains an important component of national and continental defense planning; and,

Whereas, the continental rail system cannot be said to be complete until it includes all states, provinces and territories; and,

Whereas, the Government of Alaska recently enacted legislation to reauthorize the delineation and acquisition of a rail transportation corridor from the present terminus of the Alaska Railroad to the Alaska-Yukon border; and,

Whereas, Alaska, the Yukon Territory, and British Columbia contain extensive oil and gas, mineral and timber resource reserves that currently are inaccessible, and require bilateral cooperation in the development of freight transportation infrastructure to facilitate their utilization for the benefit of the United States and Canada; and,

Whereas, northern rail transportation may provide significant potential for the visitor industry by facilitating the comfortable movement of passengers over long distances while minimizing the impact of such movement on the surrounding environment; and,

Whereas, ongoing research and advancement in rail technology continues to increase the efficiency of rail transportation, ensure rail safety, and decrease the impact of rail transportation on the environment,

Therefore be it resolved, that the undersigned call upon the United States and Canada to engage in a cooperative feasability study to examine the costs and benefits of constructing a rail connection to link Alaska and the Yukon Territory via northern British Columbia with the existing North American rail system; and,

Be it further resolved, that a bilateral commission representing local governments, business interests, and aboriginal stakeholders be created to define the goals and objectives for the cooperative feasability study, and to report the results of the study to the appropriate governmental entities of Canada and the United States; and,

Be it further resolved, that funding for operation of the bilateral commission and for the conduct of the cooperative feasability study should be considered a priority by the federal, state, provincial and territorial governments; and,

Be it further resolved that copies of this resolution shall be disseminated to local, provincial, territorial, state and federal governments in the affected regions of the United States and Canada.

Ed Asp, Dease Lake & Tahltan District Chamber of Commerce
Laurel Barger-Sheen, Delta Junction Chamber of Commerce
Dave Beatty, Ironworkers Local 97
Tom Blackbird
John Blair, McElhanney Land Surveys
Douglas Blamey, Whistle Poke Railway Co.
Kells Boland, Prolog Canada Inc.
Morris Booth, The Bering Connection
J. D. (David) Broadbent, Canadian Arctic Railway
Al Broadfoot, Thompson Foundry
Bill Brophy, Fairbanks Industrial Development Corporation
Jim Carlyle, Seaspan International Ltd.
Gil Carmichael, Board of Directors, Intermodal Transportation Institute
Domenico Celli, Canadian Arctic Railway
Terry Chandler
Alben Chmelauskas, MacMillan Bloedel Paper Co.
Jim Christie, McElhanney Land Surveyors
Marshall Cohoe, Confederation Pacific Roadways Ltd.
George Colquhoun
Hal Cooper, Cooper Consulting Company
Iain Cuthbert, Triton Environmental Consultants
Graham Dallas
Lyle Dallman, Ahtna Enterprise Corp.
Paul Daniels, The Bering Connection
Steven Dean, Teck Corp.
Jesse Duke, Yukon Dept. Of Economic Development
James Evavold, A Financial Source
Bruce Feltham
Michael Fournier
Peter Fraser, Pacific Corridor Enterprise Council
T. C. Fuglestad, Tryck Nyman Hayes, Inc.
Jim Gleeson
David Gobel, Technical Services and Design
Gloria Goodwin, Fort St. James Chamber of Commerce
Diane Gregory, Kennecott Canada Exploration
Paul Grigsby, BC Chamber of Commerce
Kees Groot, Canadian Arctic Railway
Pete Hallgren, City of Delta Junction (Ft. Greely Reuse Authority)
John Hansen, Northwest Cruise Ship Association
David Hayer
Gordon Hazlewood
Joe Henri, International Bering Strait Tunnel and Rail Group
Laurie Herman, Alaska Railroad
Scott Hinds
Steve Hites, Skagway Street Car Company
Jeannette James, Alaska House of Representatives
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Tony Tennessy
Bob Tivy
Jim Togyi, Ft. Saint James
Greg Vezina, Canadian Arctic Railway
Thomas Vissing, University of British Columbia
Patrick Weber, Canadian Arctic Railway
James Wilson
Milton Wiltse, Alaska Division of Geological and Geographic Surveys
John Winter, BC Chamber of Commerce
Mike Young, Fairbanks North Star Borough Assembly
R. Walt Young
Tom Zbaren, Hebert Research
Richard Zimmer

Rails to Resources Act of 2000 (Introduced in the Senate)

S 2253 IS

106th CONGRESS

2d Session

S. 2253

To authorize the establishment of a joint United States-Canada commission to study the feasibility of connecting the rail system in Alaska to the North American continental rail system; and for other purposes.

IN THE SENATE OF THE UNITED STATES

March 20, 2000

Mr. MURKOWSKI introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

A BILL

To authorize the establishment of a joint United States-Canada commission to study the feasibility of connecting the rail system in Alaska to the North American continental rail system; and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the 'Rails to Resources Act of 2000'.

SEC. 2. FINDINGS.

Congress finds that--

(1) rail transportation is an essential component of the North American intermodal transportation system;

(2) the development of economically strong and socially stable communities in the western United States and Canada was encouraged significantly by government policies promoting the development of integrated transcontinental, interstate and interprovincial rail systems in the states, territories and provinces of the two countries;

(3) United States and Canadian federal support for the completion of new elements of the transcontinental, interstate and interprovincial rail systems was halted before rail connections were established to the state of Alaska and the Yukon Territory;

(4) both public and private lands in Alaska, the Yukon Territory and northern British Columbia, including lands held by aboriginal peoples, contain extensive deposits of oil, gas, coal and other minerals as well as valuable forest products which presently are inaccessible, but which could provide significant economic benefit to local communities and to both nations if an economically efficient transportation system was available;

(5) per ton of freight moved, rail transportation systems emit lower levels of carbon monoxide, nitrogen oxides and volatile organic compounds than other modes of freight transportation;

(6) rail transportation systems are capable of moving cargo with up to nine times the energy efficiency of highway transportation;

(7) rail transportation in otherwise isolated areas facilitates controlled access and reduced overall impact to environmentally sensitive areas;

(8) the extension of the continental rail system through northern British Columbia and the Yukon Territory to the current terminus of the Alaska Railroad would significantly benefit the U.S. and Canadian visitor industries by facilitating the comfortable movement of passengers over long distances while minimizing effects on the surrounding areas;

(9) extension of the Alaska Railroad system to the Canadian border is consistent with the intent of Congress as expressed in the Alaska Railroad Organic Act of 1914, which called for a system of up to 1,000 miles in length; and

(10) ongoing research and development efforts in the rail industry continue to increase the efficiency of rail transportation, ensure safety, and decrease the impact of rail service on the environment.

SEC. 3. AGREEMENT FOR A UNITED STATES-CANADA BILATERAL COMMISSION.

The President is authorized and urged to enter into an agreement with the government of Canada to establish a joint commission to study the technological and economic feasibility of linking the rail system in Alaska to the nearest appropriate point on the North American continental rail system.

SEC. 4. COMPOSITION OF COMMISSION.

(a) MEMBERSHIP-

(1) TOTAL MEMBERSHIP- The Agreement should provide for the Commission to be composed of 18 members, of which 9 members are appointed by the President and 9 members are appointed by the government of Canada.

(2) GENERAL QUALIFICATIONS- The Agreement should provide for the membership of the Commission, to the maximum extent practicable, to be

representative of--

(A) the interests of the local communities (including the governments of the communities), aboriginal peoples, and businesses that would be affected by the connection of the rail system in Alaska to the North American continental rail system; and

(B) a broad range of expertise in areas of knowledge that are relevant to the significant issues to be considered by the Commission, including economics, engineering, management of resources (such as minerals and timber), social sciences, fish and game management, environmental sciences, and transportation.

(b) UNITED STATES MEMBERSHIP- Under the Agreement, the President shall appoint the United States members of the Commission as follows:

(1) Two members from among persons who are qualified to represent the interests of communities and local governments of Alaska.

(2) One member representing the State of Alaska, to be nominated by the Governor of Alaska.

(3) One member from among persons who are qualified to represent the interests of Native Alaskans residing in the area of Alaska that would be affected by the extension of rail service.

(4) Four members from among persons involved in commercial activities in Alaska who are qualified to represent commercial interests in Alaska, of which one shall be a representative of the Alaska Railroad Corporation.

(5) Two members from among scholars employed in institutions of higher education in Alaska, at least one of whom must be an engineer with expertise in subarctic transportation.

(c) CANADIAN MEMBERSHIP- The Agreement should provide for the Canadian membership of the Commission to be representative of broad categories of interests of Canada as the government of Canada determines appropriate, consistent with subsection (a)(2).

SEC. 5. GOVERNANCE AND STAFFING OF COMMISSION

(a) CHAIRMAN- The Agreement should provide for the Chairman of the Commission to be elected from among the members of the Commission by a majority vote of the members.

(b) COMPENSATION AND EXPENSES OF UNITED STATES MEMBERS-

(1) COMPENSATION- Each member of the Commission appointed by the President who is not an officer or employee of the Federal Government shall be compensated at a rate equal to the daily equivalent of the annual rate of basic pay prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code, for each day (including travel time) during

which such member is engaged in the performance of the duties of the Commission. Each such member who is an officer or employee of the United States shall serve without compensation in addition to that received for services as an officer or employee of the United States.

(2) TRAVEL EXPENSES- The members of the Commission appointed by the President shall be allowed travel expenses, including per diem in lieu of subsistence, at rates authorized for employees of agencies under subchapter I of chapter 57 of title 5, United States Code, while away from their homes or regular places of business in the performance of services for the Commission.

(c) Staff-

(1) IN GENERAL- The Agreement should provide for the appointment of a staff and an executive director to be the head of the staff.

(2) COMPENSATION- Funds made available for the Commission by the United States may be used to pay the compensation of the executive director and other personnel at rates fixed by the Commission that are not in excess of the rate payable for level V of the Executive Schedule under section 5316 of title 5, United States Code.

(d) OFFICE- The Agreement should provide for the office of the Commission to be located in a mutually agreed location within the impacted areas of Alaska, the Yukon Territory, and northern British Columbia.

(e) MEETINGS- The Agreement should provide for the Commission to meet at least biannually to review progress and to provide guidance to staff and others, and to hold, in locations within the affected areas of Alaska, the Yukon Territory and northern British Columbia, such additional informational or public meetings as the Commission deems necessary to the conduct of its business.

(f) PROCUREMENT OF SERVICES- The Agreement should authorize and encourage the Commission to procure by contract, to the maximum extent practicable, the services (including any temporary and intermittent services) that the Commission determines necessary for carrying out the duties of the Commission. In the case of any contract for the services of an individual, funds made available for the Commission by the United States may not be used to pay for the services of the individual at a rate that exceeds the daily equivalent of the annual rate of basic pay prescribed for level V of the Executive Schedule under section 5316 of title 5, United States Code.

SEC. 6. DUTIES.

(a) Study-

(1) IN GENERAL- The Agreement should provide for the Commission to study and assess, on the basis of all available relevant information, the technological and economic feasibility of linking the rail system in Alaska to the North American continental rail system through the continuation of the rail system in Alaska from its northeastern terminus to a connection with the continental rail system in Canada.

(2) SPECIFIC ISSUES- The Agreement should provide for the study and assessment to include the consideration of the following issues:

(A) Railroad engineering.

(B) Land ownership.

(C) Geology.

(D) Proximity to mineral, timber and other resources.

(E) Market outlook.

(F) Environmental considerations.

(G) Social effects, including changes in the use or availability of natural resources.

(H) Potential financing mechanisms.

(3) ROUTE- The Agreement should provide for the Commission, upon finding that it is technologically and economically feasible to link the rail system in Alaska as described in paragraph (1), to determine one or more recommended routes for the rail segment that establishes the linkage, taking into consideration cost, distance, access to potential freight markets, environmental matters, and such other factors as the Commission determines relevant.

(4) COMBINED CORRIDOR EVALUATION- The Agreement should also provide for the Commission to consider whether it would be useful and technologically and economically feasible to combine the power transmission infrastructure and petroleum product pipelines of other utilities into one corridor with a rail extension of the rail system of Alaska.

(b) REPORT- The Agreement should require the Commission to submit to Congress and the Secretary of Transportation and to the Minister of Transport of the government of Canada, not later than 5 years after the Commission commencement date, a report on the results of the study, including the following:

(1) FEASIBILITY- The Commission's findings regarding the technological and economical feasibility of linking the rail system in Alaska as described in subsection (a)(1).

(2) ROUTE- If such an action is determined technologically and economically feasible, the Commission's recommendations regarding the preferred route and any alternative routes for the rail segment establishing the linkage.

SEC. 7. COMMENCEMENT AND TERMINATION OF COMMISSION.

(a) COMMENCEMENT- The Agreement should provide for the Commission to begin to function on the date on which all members are appointed to the Commission as provided for in the Agreement.

(b) TERMINATION- The Commission shall terminate 90 days after the date on which the Commission submits its report under section 6.

SEC. 8. FUNDING.

(a) RAILS TO RESOURCES FUND- The Agreement should provide for the following:

(1) ESTABLISHMENT- The establishment of an interest-bearing account to be known as the

'Rails to Resources Fund'.

(2) CONTRIBUTIONS- The contribution by the United States and the government of Canada to the Fund of amounts that are sufficient for the Commission to carry out its duties.

(3) AVAILABILITY- The availability of amounts in the Fund to pay the costs of Commission activities.

(4) DISSOLUTION- Dissolution of the Fund upon the termination of the Commission and distribution of the amounts in the Fund between the United States and the government of Canada.

(b) AUTHORIZATION OF APPROPRIATIONS- Funds are hereby authorized to be appropriated to any Fund established as described in subsection (a)(1) in the total amount of $6,000,000, to remain available until expended.

SEC. 9. DEFINITIONS.

In this section:

(1) AGREEMENT- The term `Agreement' means an agreement described in section 2.

(2) COMMISSION- The term `Commission' means a commission established pursuant to any Agreement.

(3) COMMISSION COMMENCEMENT DATE- The date determined under section 6(a).

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ALASKA-CANADA RAIL LINK CONFERENCE PACKET

Revised: February 10, 2000

January 20, 2000
Vancouver, B.C. Canada

From: the office of Representative Jeannette James
Room 102, Alaska State Capitol
Juneau, Alaska 99801-1182

Email: rail@legislator.com
URL: www.repjames.org

Sponsors
Alaska Canada Rail Link Conference

January 20, 2000
Vancouver, B.C. Canada

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January 19, 2000

The Honorable Jeannette James
Alaska State Legislature
State Capitol, Room 102
Juneau, AK 99801-1182

Dear Representative James:

Thank you for hosting a conference on improving the transportation link between Alaska, Canada, and the lower 48. I appreciate your efforts to keep the channels of communication open between interested governmental representatives.

I also appreciate your past efforts in getting through legislation, which I signed, to delineate a corridor to connect the Alaska Railroad to the Canadian Border. Transportation infrastructure is vital to the prosperity of Alaska.

I will be interested in hearing from you and our Department of Transportation and Alaska Railroad representatives on the outcomes of your meeting. I wish you and the other conference participants good luck in your discussions.

Sincerely,

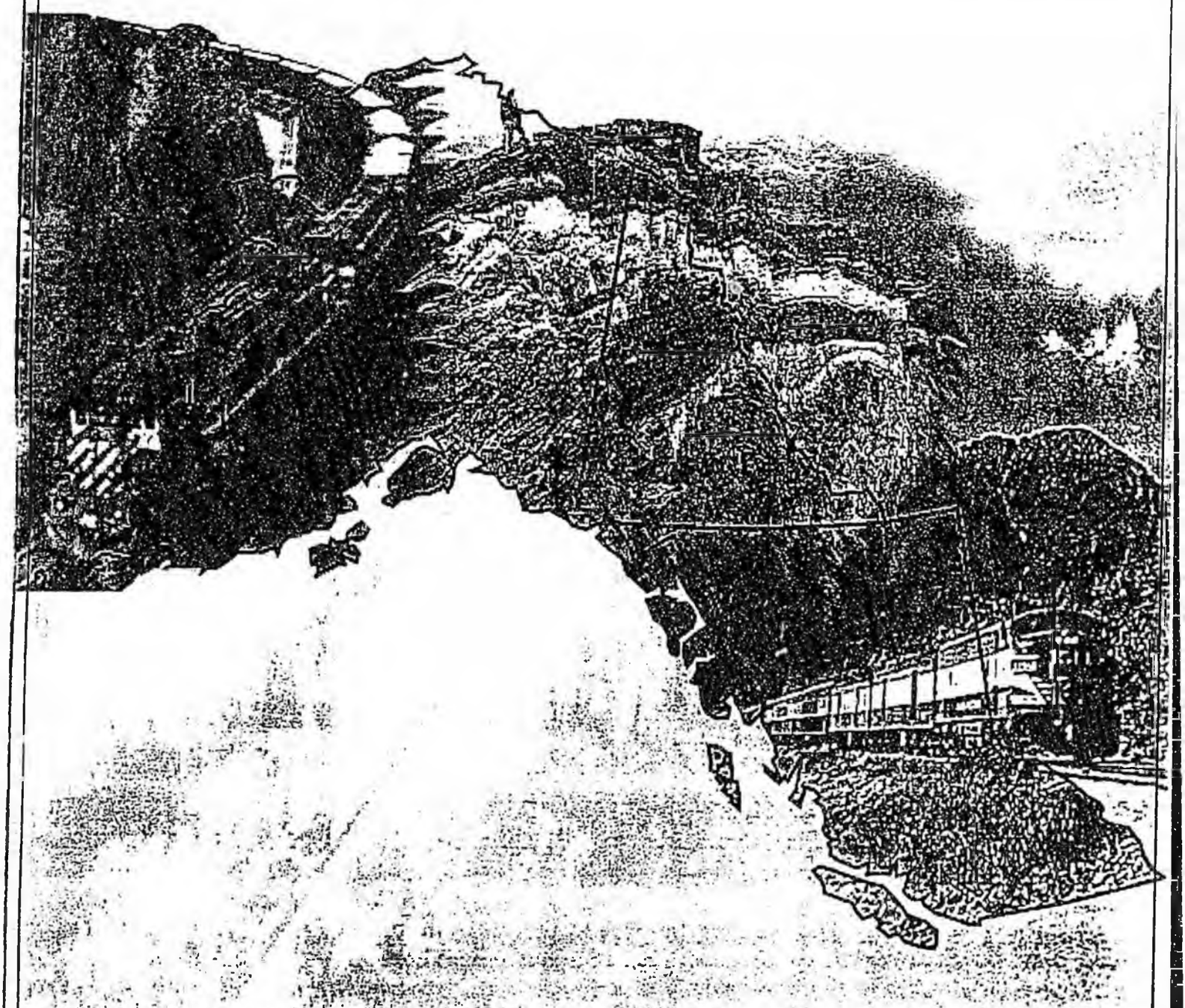
Tony Knowles
Governor

Section 1:

Report to the conference from the office of
Senator Frank Murkowski

Rails to Resources

Bringing Alaska and the Yukon closer to the world



United States Senator Frank H. Murkowski

Alaska Canada Rail-Link Conference

January 20, 2000

Vancouver, British Columbia

Rails to Resources

Frank H. Murkowski, United States Senator

The following are excerpts of a speech given by Senator Frank H. Murkowski to the CANAM Border Trade Alliance on September 14, 1999. The opening section, which discussed the Canada-U.S. Interparliamentary Group, was not included.

I'm very happy to see you all. No bilateral relationship is closer than the one between Canada and the U.S. It deserves the care and feeding this group can give it, and I hope you never lose that sense of mission.

[Canada-U.S. Interparliamentary Group discussion]

Let me take just another few minutes to talk about something else of vital importance to us all.

I want you to imagine for a moment that Canada and the United States have suddenly been given an opportunity to jointly acquire a huge new territory — as big as the Yukon Territory and Alaska combined.

This splendid land is full of natural resources: gold, silver, lead, zinc, copper, and lesser metals; hardwood and softwood timber; fish, wildlife — and truly splendid vistas for the tourist.

Best of all, it is still largely untouched. All we have to do is reach out for it....

Wouldn't that be a wonderful opportunity for the growth of both our countries?

The fact is, we ALREADY have such a region. What we don't have is a fast and efficient way to get goods and people there and back again.

The Alaska Railroad cuts through the center of Alaska from the coast to Fairbanks, less than three hundred miles from the Canadian border.

In Canada, there are two sets of track running as far north as Fort Nelson on one route, and beyond Fort St. James on the other. In both cases, it would take only about 900 additional miles of track to reach Alaska.

I want to enlist the Canadian/American Border Trade Alliance in the growing movement to bring Alaska and the Yukon into the transcontinental rail system.

Senator Frank H. Murkowski of Alaska

The logical route through Canada passes through one of the richest mining districts on the continent, but one which is so remote that few people have ever visited it, and which will probably never be developed without rail transportation. The same goes for the area's timber resources. And it applies to areas of Alaska that also require rail transportation to reach their full potential.

One possible route, from Prince George, British Columbia to Fairbanks, was even surveyed by the U.S. Army Engineers in 1942. So this is not a new idea — it's a project that could have been done, and should have been done, but has been delayed for decades.

Let's resurrect it.

Yes, it would be expensive. Yes, it is visionary in a way that is seldom seen today. But do those things make it intrinsically a bad idea? I

don't think so.

Let's look at it with an open mind. The Interparliamentary group has discussed and understands the need for a whole series of north-south transportation corridors to facilitate the movement of goods and people within North America. This should be seen as a part of that concept.

For those from Canada, think of it as a revival and elaboration of the "Roads to Resources" initiative you had underway years ago. Call it "Rails to Resources." It was a good idea then, and it still is today.

I propose a public/private alliance to conduct a comprehensive feasibility study. Let's join forces to make a modest investment to examine this carefully.
- US Senator Frank H. Murkowski

The Alaska State Legislature recently reauthorized the acquisition of a right-of-way to the border. They haven't spent the money yet — they're just making sure their options remain open. I'd like to see the same thing done in Canada, at the Federal, provincial and territorial levels, as appropriate.

This isn't pie in the sky. We need to start with a cold, calculated look at the project's feasibility, and that's where you come in.

I propose a public/private alliance to conduct a comprehensive feasibility study. Let's join forces to make a modest investment to examine this carefully.

We should look at possible routes with several things in mind: maximizing potential traffic by building adjacent to the most valuable resources, minimizing costs by looking at the best terrain, maximizing potential passenger usage for tourism, and minimizing environmental impacts.

And when it comes to protecting the environment, let's also look at establishing a corridor large enough to accommodate future growth.

Doesn't it make sense to combine things like rail lines, major highways, electrical transmission lines and pipelines as much as possible, so that the rest of the countryside is affected as little as possible? I think it does.

When we're done, we should have in hand virtually everything necessary to move directly into preparing a detailed environmental impact statement for a specific proposal: a preferred route, knowledge of the engineering challenges and costs involved, an understanding of the potential for both freight and passenger movement.

So, here's the bottom line: business is business, and when the nation's business improves, your business improves.

When you leave this meeting, I want you to think seriously about this proposal. I want you to call your executive director, Jim Phillips, and tell him what you think. Write to me, and give me your thoughts. And I want you to write to your own Congressmen, MP's and Senators, and tell THEM why you think this will help both of our countries' economies.

With your support, I will introduce legislation to create and fund a joint public/private commission that will include federal, state, provincial and territorial representatives, First Nations and Alaska Native representatives, and business interests.

That commission will be responsible for identifying specific goals and objectives for the feasibility study I've talked about today, for getting the study underway, and for reporting back to Congress, the Parliament and the public on what we need to do next.

This project has been on the back burner for more than a half-century. Let's turn up the heat

The North American Rail System

From Real Horses to Real Horsepower

The first primitive "railroad" in the United States used horse-drawn cars on wooden rails, but experiments with steam locomotion began in the early 1800s, and in 1831, regular steam powered service began in South Carolina. Rapid expansion followed. Four years later, over 1,000 miles of track had been laid, and there were 200 railroad charters in eleven states.

Western development in the United States spurred even greater growth. By 1860, there were 11,000 miles of track. The westward expansion also prompted the first Congressional land grants to railroads. Government leaders felt that railroads would spur settlement, and the grants allowed companies not only to retain the rights of way for rail lines but to have saleable land to offset construction costs.

In the United States, four of the first five transcontinental railroads were largely made possible by such grants, along with a considerable number of smaller lines in the western United States. A total of 131 million acres of public land was appropriated to dozens of rail-lines. A receiving company was given the right-of-way along with alternate sections of land, with the Federal Government generally doubling the price of the sections it kept. In return, all rates were reduced by 50% for Federal traffic. From 1850 until the practice was ended in 1946, it is estimated that the government saved $900 million: a considerable deal considering that the land was only worth a total of $500 million at the time it was granted. After the Civil War ended, trackage grew from 35,000 miles to an all-time high of 254,000 miles in 1916.

Canada's first railroad began operations in 1836, but by the middle of the century, although some 40 companies had been granted government permission to build rail lines, only six had actually laid any track, totaling only 80 miles. In 1849, the government stepped in to help, offering to lend enough money to cover half the construction costs of any line longer than 74 miles (120 kilometers).

Companies proved eager to take Canada's offer. By 1860, Canada's rail lines reached more than 2,000 miles. The first east-west link was achieved in 1885 when the last spike in the Canadian Pacific Railway was driven. That set the tone, and in just 50 years, from 1850 to 1900, the miles of track available to Canada's railroads grew from 80 miles to 19,000.

Today, Canadian National operates about 17,000 miles of track in Canada and another 950 miles in the United States. The CN network serves all five of Canada's major ports: Halifax, Montreal, Prince Rupert, Thunder Bay, and Vancouver.

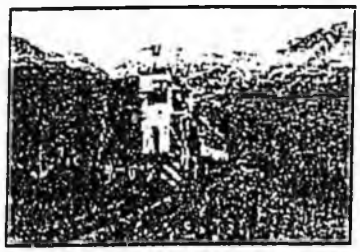
Meanwhile, Canadian Pacific operates a 15,000 mile network extending from Montreal to Vancouver and into the U.S. midwest and northeast. It serves ports on the east coasts of Canada and the U.S. and the Port of Vancouver.

Technological developments for rail lines rode the swelling tide of industrial change. Larger, more powerful locomotives, cars with larger capacities, improved couplers, the application of air-brakes, as well as adoption of standard gauge rail and standard time resulted in huge gains of efficiency and economic rail service. The development of national, rather than regional, economies in North America is owed in no small way to the influence of our railroads.

The Alaska Railroad

The history of the Alaska Railroad begins in 1903 with the Alaska Central Railway; a failed venture that managed to lay only 71 miles of track out of Seward, in an unsuccessful attempt to reach Anchorage.

But Congress still felt it was wrong that a territory twice the size of Texas had no rail system. The Alaska Railroad Organic Act of March 12, 1914 required incoming President Woodrow Wilson to construct a rail not to exceed 1,000 miles and, among other things, to "...best aid in the development of the agricultural and mineral or other resources of Alaska...and so as to provide transportation of coal for the Army and Navy, transportation of troops, arms, munitions of war, the mails, and for other governmental and public uses." The act gave the President broad powers to acquire land, operate terminals, or anything else that could help make the railroad a reality.



In 1915, the government purchased the remains of the Alaska Central for $1.2 million, and selected the current route northward. In 1917, it also bought the Tanana Valley Railroad, a narrow-gauge miners' line northwest of Fairbanks, for $300,000. These acquisitions formed the nucleus of the present system.

By the end of 1920, the Alaska Engineering Commission completed 382 miles of new track, and rebuilt the original 71 miles out of Seward and 32 miles in the Tanana Valley. The main obstacle for completion were bridges to span the Tanana River and Hurricane Gulch. The Tanana bridge had a 701 foot span, which at the time was the longest such in the United States. The Hurricane Gulch bridge spanned a total of 918 feet with a height of 296 feet.

Just before his untimely death, on July 15, 1923, President Warren G. Harding drove the golden spike officially completing the Alaska Railroad.

Military bases and construction projects starting in the 1930s spurred continued refinements to accommodate heavier loads and straighter hauls, and a large "picture postcard" terminal was built in Fairbanks. The assumption was that the latter would become the terminus for a railroad across British Columbia and the Yukon Territory to link Alaska with the railways of the lower 48 states.

World War II provided another influx of new equipment. Post-war rehabilitation encouraged passenger service and in 1946, a blue and gold streamliner, the AuRoRa, made its first run between Anchorage and Fairbanks. For military purposes, a spur to Whittier had been established by tunneling next to Portage Glacier in 1944.

Also during World War II, in 1942, U.S. Army Engineers surveyed a route that would have taken the railroad all the way from Fairbanks to Prince George, British Columbia, connection to the North American rail system there, and extended the Alaska portion of the line all the way to Teller, on the northwest coast.

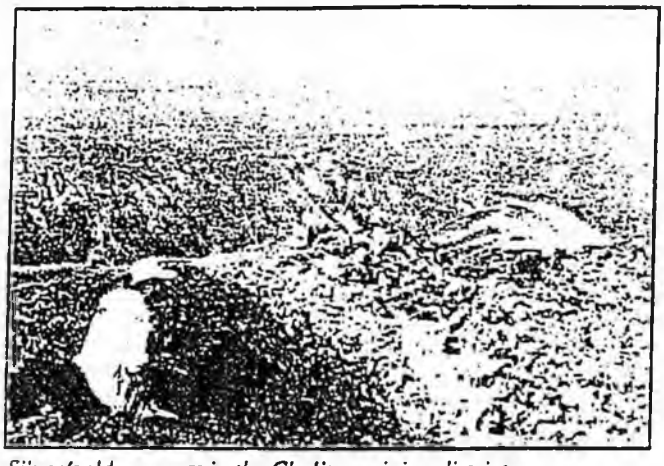
Although the latter parts of the once-planned system have not yet been built, the U.S. Department of Defense has consistently maintained that Alaska's strategic location remains critical, and that rail is an essential element of a comprehensive defense transportation system.

The Alaska Railroad was transferred from the Federal Government to the State of Alaska in 1983, and today it remains a great asset.

Proposed Railroad Corridor Resources

The Tanana uplands, which stretch over 250 miles from the Yukon Territory into Fairbanks, Alaska, appears to be rich in base metal potential (gold, silver, copper, lead, zinc, molybdenum, and tin). Because of the lack of infrastructure, there has been little detailed exploration for base metals other than gold in this region. With rail access, there is no question that significant new base metal deposits will be identified.

The Uplands have a history of incredible resource potential dating back to the gold rush days along the Yukon River. Today the area still remains mostly as it was then: inaccessible. In spite of this, one of the most productive gold mines in the United States, Fort Knox, operates just outside of Fairbanks and produces over 1,000 ounces of gold per day. Access is currently being worked out to reach the Pogo deposit, further to the east, which contains an estimated 5.2 million ounces of gold. Although gold is still a draw, the uplands contain tremendous amounts of silver, tungsten, copper, lead, zinc, and other minerals in identified deposits.



Silver/gold prospect in the Chulitna mining district.
-photo by K. H. Clautice

Further to the northwest lies the largest coal field in the United States near Point Lay. Not only is this coal very near the surface, but it is of exceptional quality averaging 12,000 BTUs and an extremely low sulfur content of less than 0.02%. Not far south from Point Lay is the Red Dog zinc mine, which last summer announced new finds. Unfortunately, the mine can only ship product for a few months of the year when pack ice retreats enough to allow barge traffic. The Matanuska-Susitna Valley region to the south hides yet another large, high quality coal deposit that already sits on the Alaska Railroad line. With the development of a connection, this would be available for shipment to the rest of the continent.

Claim staking activity in Alaska also has a traditional fall-off curve, but recent years have not seen that tradition followed. 1998 was the third $1 billion year for mining in Alaska. Staking continued strong through the summer of 1999 with results still being processed. Figure 1 shows a select list of Alaska mines near the railroad corridor.

On the other side of the border in the Yukon, active mining, approvals, and exploration are all ongoing, but with similar access problems as occur in Alaska. 1998 mineral production exceeded $100 million (Canadian), and the industry continues to play the largest role in the private sector economy of the territory. Recent exploration and development activity has reached a peak not seen since the Klondike Gold Rush. With a government committed to seeing a healthy investment climate for the mining industry combined with citizen support, mining potential for the Yukon has far to go. Figure 2 shows a few mines in the Yukon Territory near the proposed corridor.

Forestry information along the proposed corridor is similarly bright, but yet again with similar access problems. Within 15 miles of the corridor from the Yukon to Fairbanks lies 117 million cubic feet of hardwood pole timber and 141 million cubic feet of mixed pole timber. The Ladue River valley alone has the potential to create a chipping industry in Alaska even with its low-value fiber.

The forest products industry is still a fledgling in the Yukon Territory, but activity has developed throughout the last couple of decades in the Watson Lake area. Other potential areas include Mayo, Dawson City, Teslin, and Haines Junction. Timber supply shortages in the northwest combined with increased demand in Asian markets keep the future of this industry positive, but much of the territory has yet to be surveyed.

figure 1, mining data in Alaska

Alaska Mines	Ownership	Resource Information
Koyukuk-Huges mining district	production mostly from Alaska Gold Co.	231,000 oz Au produced 1930-1995
Innoko-Tolstoi mining district		Placer Au district; significant Au-Sb-Hg potential 706,267 oz Au produced through 1995
Hot Springs mining district	(numerous)	Placer Au-Sn district; 568,632 oz Au and 720,000 lb cassiterite produced through 1995
Fairbanks mining district	(numerous)	8,022,434 oz placer Au 1902-1995; 304,548 oz Au and over 4 million lbs Sb from veins and shear zones produced through 1990
Fort Knox	Kinross Gold Corp.	3,745,000 oz Au proven and probable reserves open at depth; 702,295 oz Au produced between 1996 and 1998
Ryan Lode	reclaimation by La Teko Resources Inc.	822,200 oz Au and 2.4 million oz Au in two shear zones
Grant Mine		212,000 tons of 0.36 oz/ton Au
True North	La Teko Resources Inc.	Estimated 1,314,000 oz Au
Gil Claims	Kinross Gold Corp./ Teryl Resources Corp.	Resource of 433,000 oz Au
Delta massive sulfide belt		40 million ton reserve containing percentages of: Cu, Zn, Pb, Ag,Au
Taurus		Cu-Au prospect; 140 million ton reserve containing percentages of: Cu, Au, Mo
Big Creek/Ladue		Pb-An-Ag massive sulfide prospects
Slate Creek	Slate Creek	55 million tons of 6.3% high quality chrysotile asbestos
Fortymile mining district	Kennecott Exploration Co.	Placer Au district; 534,974 oz Au produced 1883-1995
Pogo	Teck Corp./Sumitomo Metal Mining America Inc.	5.2 million oz Au reserves; exploration and development on-going
Red Dog Mine*	Cominco Alaska Inc.	157.8 million tons proven and probable reserves containing percentages of Zn, Pb, Ag; production and exploration on-going; over 1 million tons of concentrate produced in 1998

*Red Dog Mine, in Northwest Alaska, could become the terminus for a spur from Fairbanks to the Ambler mining district.

figure 2, mining data in the Yukon Territory

Yukon Mines	Ownership	Resource information
Brewery Creek Mine	Viceroy Resouce Corp.	613,000 contained oz Au; 1997-1998 production of 125,025 oz Au
Kudz Ze Kayah Property	Cominco Ltd.	13 million ton reserve containing percentages of: Cu, Pb, Zn, Ag, Au; final approvals expected in 1999
Sa Dena Hes Property	Cominco Ltd.	3.2 million ton reserve containing percentages of: Pb, Zn, Ag; opened in 1991 but closed in 1992 due to low prices
Wolverine Property	Boliden Ltd./Atna Resources Ltd.	6.237 million ton reserve containing percentages of: Cu, Pb, Zn, Ag, Au; further delineation planned
Minto	Asarco Inc./Minto Explorations Ltd.	7.2 million ton reserve containing percentages of: Cu, Ag, Au; production planned for late 2000
Carmacks Copper	Western Copper Holdings Ltd.	14.1 million ton reserve containing percentages of: Cu, Au; undergoing final stages of environmental assesment
Division Mt. Coal	Cash Resources	52.9 million ton resource at 9,328 BTU/lb and 0.43% Sulfer; under study with environmental assesement to begin next year
Wolverine	Atna Resources/ Expatriate Resources	6.2 million ton reserve containing percentages of: Zn, Cu, Pb, Ag, Au; metallurgical work planned
Wolf	Atna Resources/YGC Resources	4.1 million ton inferred resource containing percentages of: Zn, Pb, Ag; further exploration planned
Fyre Lake	Pacific Ridge Exploration	15.4 million tons preliminary resource containing percentages of: Cu, Co, Au; still in exploration

NEWS FROM THE OFFICE OF

FRANK MURKOWSKI

United States Senator • Alaska

For Immediate Release: Contact: Chuck Kleeschulte or Cindi Bookout
January 20, 2000 O (202) 224-9306; H (301) 283-4149; O 224-8767
(Email: chuck_kleeschulte@murkowski.senate.gov)

Embargoed until noon PST, Thursday, January 20, 2000

Murkowski Willing to Introduce Legislation to Create Commission to Study Alaska-Canada Railroad Extension

VANCOUVER, BC -- U.S. Senator Frank H. Murkowski today said he is willing to introduce legislation in Congress this year to create an impartial bilateral commission to study the economic, environmental and engineering feasibility of completing the trans-continental railroad linking Canada with Alaska.

Murkowski, R-Alaska, chairman of the U.S. Senate Energy and Natural Resources Committee, said extending the Canadian rail system to link up with the Alaska Railroad might make both economic, strategic and environmental sense, helping greatly the economies and lifestyles of citizens of the Yukon Territory and Alaska.

"If there is a significant showing of support for an effort to look at rail options, I am willing to introduce legislation in Congress to establish the parameters for a bilateral U.S.-Canada commission to oversee a comprehensive feasibility study. Such a bill would establish a process for the appointment of commissioners and could also authorize funds for the commission's operations.

"This would get the ball rolling in the U.S., but reciprocal action also would have to be taken by the Government of Canada, because any commission clearly will have to be bilateral with equal representation from both nations," said Murkowski, in remarks prepared for delivery today during the Alaska-Canada Rail Link Conference being held in Vancouver, BC. The conference was sponsored by Alaska State Rep. Jeannette James, R-North Pole.

In remarks delivered by Murkowski's Transportation aide Bill Woolf, the senator said he envisions a commission made up of business leaders, academicians and representatives of the First Nations and Alaska Natives having sufficient expertise to "ensure that its consultants deliver the best in construction engineering, economics and environmental science."

Murkowski last year, after talks with Canadian Parliamentarians during the Canada-U.S. Interparliamentary Conference, later discussions with Canadian Ambassador Raymond Chretien and Canadian Minister of Transport David Collinette, and talks with the Canadian-American Border Trade Alliance, suggested it might make sense to reconsider the feasibility of building the roughly 1,200 miles of rail that would be needed to finish the railroad, last seriously considered in 1943.

The Alaska Railroad currently ends at Eielson Air Force Base, outside of Fairbanks, about

270 miles from the Canadian border, while the Canadian rail system ends at either Fort Nelson or beyond Fort St. James, about 900 miles from the Alaskan border.

Murkowski said the dawn of a new millennium may be the time to resurrect the railroad because both Alaska and the Yukon, while "land rich," are still "poor" in the amenities taken for granted in other areas of the two nations.

"One of the chief roadblocks to development of the north is the lack of adequate transportation. With all the talk about how the developed countries are moving from manufacturing to 'service' societies, the fact is that we are still dependent on getting material objects -- food, iron ore, lumber, other resources -- from one place to another. And because Alaska and the Yukon do not have the transportation infrastructure they need, both our nations are a little poorer than they have to be," said Murkowski.

He said the railroad's time may have come for several reasons.

He noted the line would allow economic development of the mineral resources of the Yukon-Tanana uplands that stretch from Faro, Y.T., north to Fairbanks. The zone, home already to the Fort Knox gold mine in Alaska and the future home of mines working the huge Pogo gold deposit, contains large amounts of silver, tungsten, copper, lead, zinc and other ores. On the Alaska side of the border there are already more than 14 major hard-rock deposits identified, while in the Yukon there are more than 10 major mineral deposits known. This does not include the Alaska coal deposits a line could move to market.

Murkowski added the railroad's likely corridor is also filed with timber. He said within just 15 miles of a likely railroad corridor, there are 1.4 billion board feet of hardwood pole timber and almost 1.7 billion board feet of mixed pole timber, not counting the possibility of agricultural development or of other Alaska freight that could to help fund the line's costs.

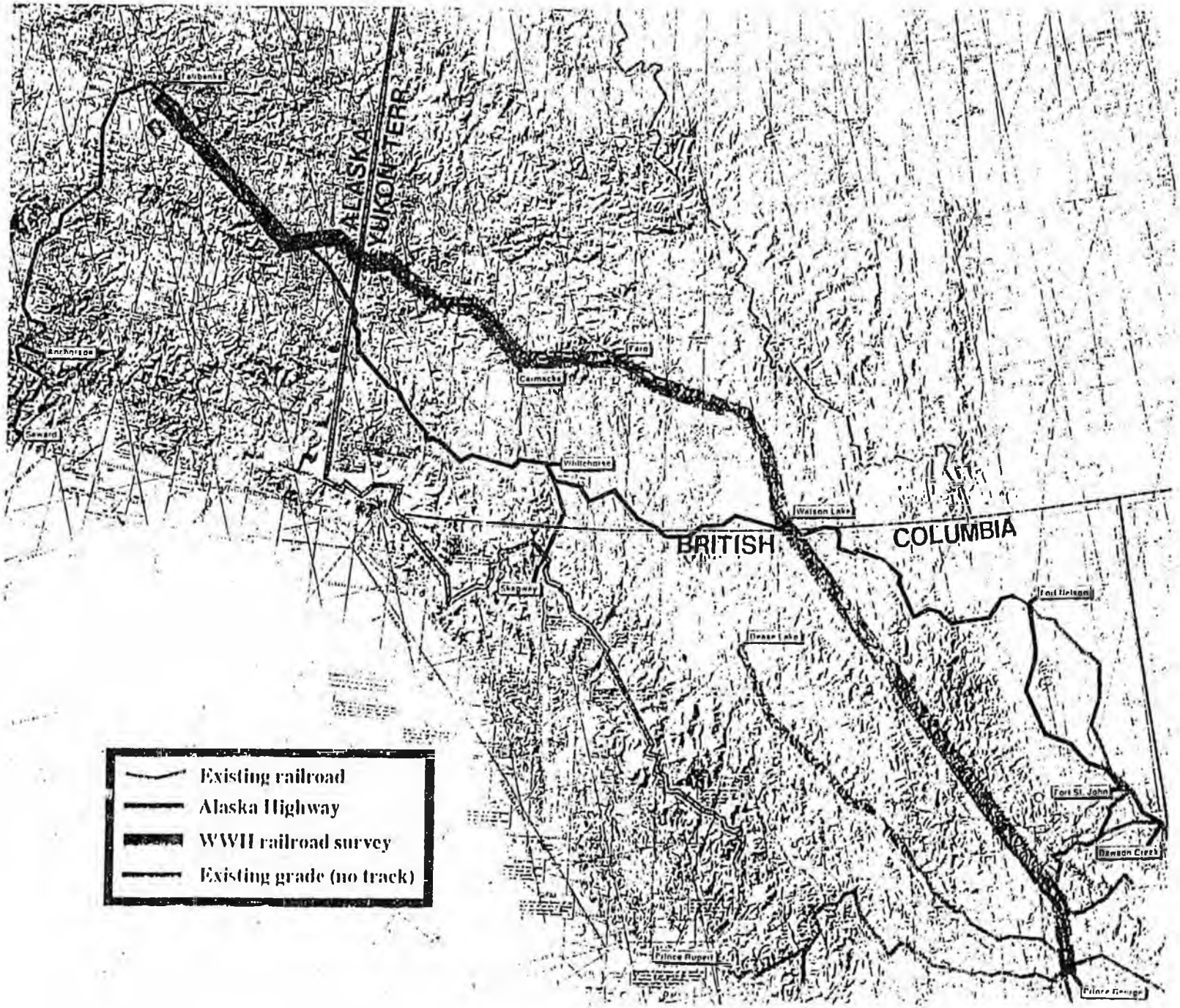
Murkowski, noting that testing is continuing on a North American anti-missile defense system, added that one of the prime sites under consideration for a missile intercepter base is at Delta in Alaska, which could well justify construction of the first 80 miles of the Alaska Railroad's extension toward the Canadian border.

And the U.S. Senator said a railroad corridor would encourage co-location of all pipeline and power transmission lines -- a process that makes environmental sense.

"A rail corridor offers controlled access that removes the environmental threat of uncontrolled development. Rail systems are the most energy efficient and emit the lowest levels of air pollution of any mode of freight transportation. Rather than cause environmental concerns, a railroad offers the best options to protect the environment." said Murkowski.

"We should not be afraid to think seriously about big projects. Just because they're big, doesn't make them bad. In this day and age of great concern for the environment: if one assumes -- as I do -- that the resources of the Yukon and Alaska interior will be developed, then rail is a very healthy way to make that possible." said Murkowski.

-30-


ALASKA
YUKON TERR
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Fort Nelson
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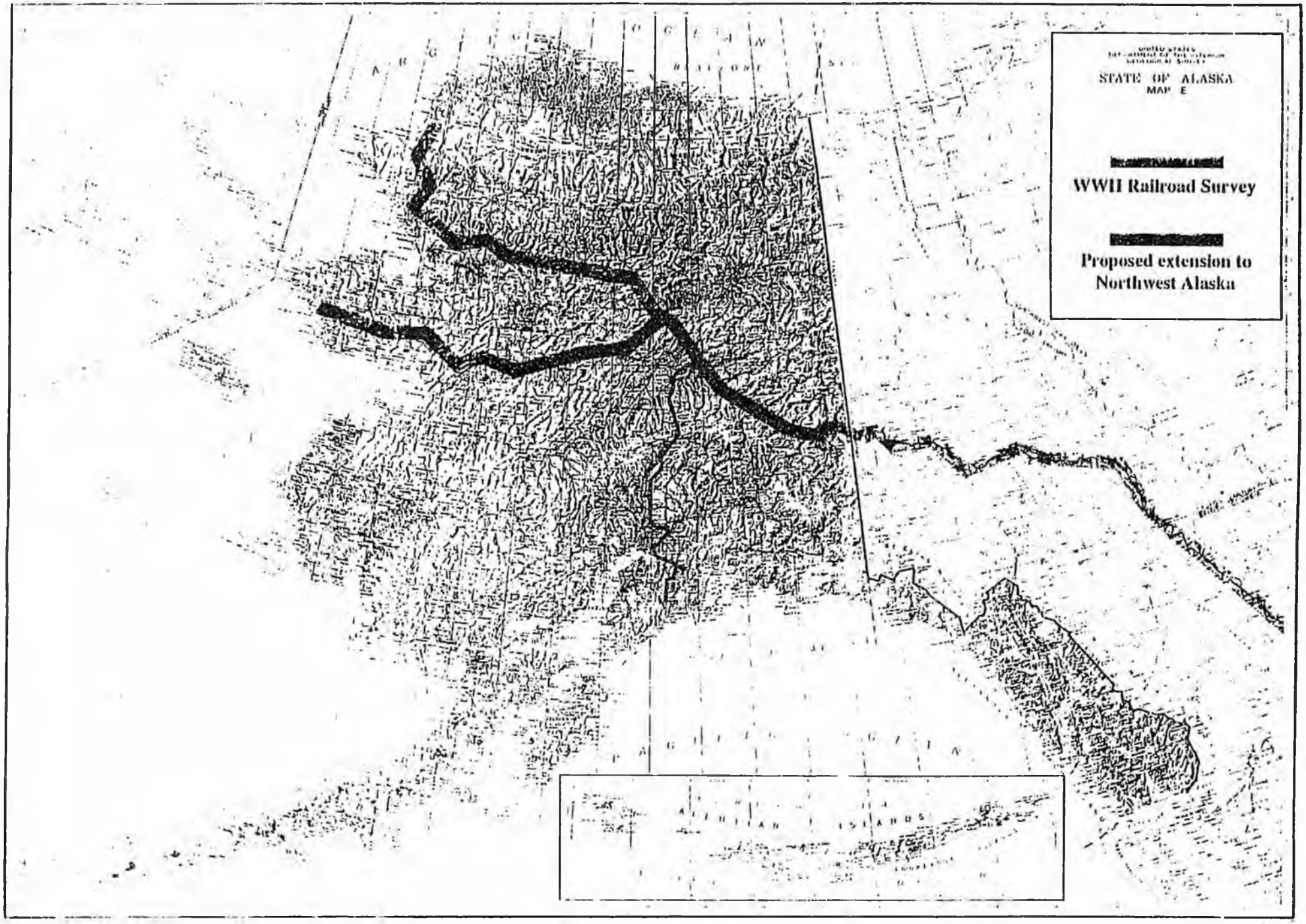
Fort St. John
Dawson Creek
Prince Rupert
Prince George
Existing railroad
Alaska Highway
WWII railroad survey
Existing grade (no track)


STATE OF ALASKA
MAP E
WWII Railroad Survey
Proposed extension to
Northwest Alaska

Prepared by the office of United States Senator Frank H. Murkowski. For further information, contact Chuck Kleeschulte, Press Secretary, at (202) 224-6665. Although every attempt has been made to assure the accuracy of the information in this packet, changing resource data prevents guaranteeing the authenticity of all the information.

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Section 2:

Remarks to the conference by **Gil Carmichael**,
director Intermodal Transport Institute,
University of Denver

Gil Carmichael

ITI
INTERMODAL
Transportation Institute

People

Meet the Members of the ITI Board of Directors

Gilbert E. Carmichael
Chairman of the ITI Board

Vice Chairman
MotivePower Industries
Meridian, Mississippi

Chairman
Amtrak Reform Council

Gilbert E. (Gil) Carmichael is a leading international authority on railroad and intermodal transportation policy and is committed to a seamless, safe and secure, efficient and economical, freight and passenger transportation system for the 21st century. Carmichael served as the US Department of Transportation Federal Railroad Administrator (FRA) in the administration of President George Bush from 1989 to 1993 and is currently on the Amtrak Reform Council. He is vice chairman of the Board of MotivePower Industries, the leading independent manufacturer of after-market locomotive component parts and the leading independent locomotive remanufacturer in North America.

In addition to managing the nation's rail safety and research programs as FRA Administrator, Carmichael supervised international railway technical assistance programs and sponsored the first World Railways Congress in 1991, which brought together senior government and railway officials from 60 nations. He also helped develop the national transportation policy to permit intermodal transportation initiatives and to formulate new federal policy toward the rail mode and Amtrak, the United States rail passenger system. He chaired the three-year, $29 million, National Maglev Initiative and was one of many contributors to the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), proposing a network of regional high-speed rail passenger corridors, now under development.

A graduate of Texas A&M University and a former Fellow in the Kennedy School of Government at Harvard University, he presents and publishes papers on the transportation industry, promoting the need for a North American and global intermodal freight and passenger system, utilizing the world's rail network. He is a contributing editor to *Progressive Railroading*. On 20 May 1999 Carmichael delivered a speech before the Road Gang, Washington DC's highway transportation fraternity. His address is entitled "The Case for Interstate II"

This paper especially prepared for

ALASKA / CANADA RAIL LINK CONFERENCE

January 20, 2000
Gilbert E. Carmichael
2209 Highway 45 N., Suite F
Meridian, MS 39301
601-483-9712/9711 fax

GIL CARMICHAEL
ADDRESS TO THE ALASKA/CANADA
RAIL LINK CONFERENCE
VANCOUVER, B.C., JANUARY 20, 2000

I welcome this opportunity. On several occasions I have accepted invitations to address audiences in Alaska concerning future options and opportunities as that state considers its 21st Century transportation needs. Strategies and intentions on the part of the people of British Columbia and the Yukon always have been important to any plans that Alaska might undertake, and I am pleased to know that opinion leaders in Canada have begun to consider what steps are appropriate for them.

As an outsider, it is not proper for me to come here and lecture you about what you should do. But I do have experience which I believe is worth sharing.

A North American Rail System Has Evolved

One of the developments that stimulated this meeting is the growing recognition that remarkable changes in recent years have transformed the main-line railroads of North America into a unified operating network. This North American rail system carries profound...and positive implications for the economies, societies, environmental concerns, and mobility needs of the people who live in Canada, Mexico and the United States.

There actually is a lengthy history of cross-border operations involving our railroad companies. For many decades tracks of the Canadian-owned Soo Line ranged throughout the United States midwest to destinations as far away as Cincinnati and Kansas City. The Grand Trunk, a long-time subsidiary of Canadian National, operated to Detroit and Chicago. United States railroads controlled routes in southern Ontario. Burlington Northern has served Vancouver and Winnipeg for many years. Amtrak operates to Montreal, Toronto and Vancouver. In the early decades of the 20th Century United States rail companies controlled affiliates within Mexico, and later Mexico's national railway system held interests in a key route in Texas.

One important legacy of cross-border ownership and operation is a continental rail system with common and standardized track, equipment, and operating practices. Locomotives, freight cars and passenger equipment can operate freely over routes in all three nations.

The basic pattern of a North American rail system has been in place for a century. Unfortunately, it suffered along with the fortunes of the rail industry in the post-World War II era,

when public policy in the United States favored transportation solutions involving highways and commercial aviation, and was content to allow rail transportation to languish. That finally changed in 1980 when Congress adopted the Staggers Act and conferred a greater degree of economic deregulation upon the industry.

The result of Staggers was "staggering." A sick industry was restored to health. During the past 20 years more than 60 billion dollars of private capital investment has flowed to new equipment, better track, and innovative technology. United States railroads are profitable again. Light-density lines have been spun off to hundreds of local and regional carriers who have preserved and improved freight service. Policy in Canada meanwhile allowed the nation's federally-chartered company, Canadian National, to divest itself of uneconomic lines and dramatically improve its balance sheet. Mexico restructured its rail system through a privatization plan that now stands as a world model. Private companies with joint Mexican-US ownership now operate routes throughout that nation and have developed improved high-performance corridors which link the interior of Mexico with freight customers as far away as Montreal and Vancouver.

Today, the North American Rail System serves 90 states and provinces--almost 400 million people--with 240,000 miles of routes. Main-line routes connecting major cities utilize heavy-duty welded rail and are in better operating condition than at any time in the industry's history.

A Global Intermodal Network Is in Place

Meanwhile, another innovation has taken place over the past 20 years, and it has profoundly altered transportation. Intermodal transportation has become the global standard for moving freight---using a system which is sharply focused on speed, safety, reliable scheduling, and economic efficiency. "Intermodal" is to transportation what the "internet" is to communications.

Today, the intermodal network emphasizes moving freight in North America and passengers in Europe and Asia. It is beginning to include passenger service in the United States.

The global high-speed intermodal freight system builds on the strengths of each mode--who have become partners in offering service. Key to its success is the versatility of the cargo container. Cargo ships and airplanes span the oceans. The freight railroad is the high-speed, long-distance, transportation artery for container movement on the land. The truck provides local feeder service at origins and destinations. Cargo airplanes deliver high-value and specialized freight. This

system works--but it urgently needs dramatic improvements to its land component in order to handle growing volumes of containers delivered by ship and airplane.

Modern, strategically located, high-efficiency, high-capacity intermodal terminals are key to the system, providing almost "seamless" interchange of containers. Secondary rail and highway routes support the intermodal system and connect cities, rural regions, and individual freight customers to the main-line corridors.

Today, a doublestack train leaving a coastal port like Vancouver can replace 280 trucks, run at speeds up to 90 miles an hour on the western railroads, and afford as much as nine times the fuel efficiency of an 18-wheel trailer rig on the highway. Overall, the operational and economic efficiency of freight's intermodal network conserves fuel, reduces other environmental impacts, and is significantly safer. It represents the most economically and environmentally "sustainable" approach to transportation services. These are especially critical elements for the pristine nature of Northwest Canada and Alaska.

A Rail Corridor Offers Many Advantages

The time has come, it seems to me, for the people of northwestern Canada and the state of Alaska to consider the benefits of being connected to the huge North American Rail System and the global intermodal network--whose long-distance land component is the railroad. Experience elsewhere demonstrates that efficient transportation service brings down the cost of transporting goods and passengers. The people of Alaska, British Columbia and the Yukon are consumers of goods and are far removed from the sources of manufacture.

Other important trends are in place which suggest to me the advantages of a British Columbia-to-Alaska rail linkage. I recognize that some people would argue that vast sections of this region be preserved in pristine condition. However, construction of the Alaskan Highway more than a half-century ago opened northwest Canada and Alaska to development. In retrospect, we would have been better off if a railroad line had been built instead. But that is a bit of history that we cannot erase.

During the post-World War II era, Alaska's population has grown by roughly 100,000 each decade. That trend is firmly in place. Northern British Columbia and the southern Yukon have been opened to mineral extraction. At the same time the entire area is attracting the interest of tourists. They are coming. They will continue to do so.

I am convinced that a policy of "selective expansion" of transportation connections, based upon the railroad, will be

preferable to annual invasions of sport utility vehicles rambling willy-nilly over environmentally-sensitive land--such as Alaska's Denali National Park.

The Unique Benefits of Railroads

For this part of the North American continent, rail service offers several advantages over highways.

The railroad operates over a narrower right-of-way, and leaves a smaller footprint upon the land. Construction activity is less disruptive of natural surroundings. Research undertaken in Russia suggests that a rail corridor has far less impact in regions of permanent frost because track ballast absorbs much less radiant heat from the sun than a highway surface. Research conducted by Alaska's Department of Transportation found that it actually raised the freeze line.

Railroad design allows heavier weights to be transported with little effect upon the land surface. This takes on special importance in regions of unstable soil conditions, and those climates subject to frequent freezing and thawing. By contrast, even the best-designed interstate highways built over stable terrain are being repaved at nearly twice the rate originally projected, because heavy trucks cause so much damage.

Railroad operations are more environmentally benign as well. Trains are more fuel efficient and emit lower levels of pollution. Pollution levels can be reduced even further through the use of locomotives powered by natural gas--or ultimately by electrification at some point in the future. The "occasional train" is less intrusive than a constant procession of highway vehicles. They also afford all-weather capabilities. I am told that one railroad track has capacity equal to eight lanes of highway.

Rail transportation offers a particular benefit in accommodating tourism business. Train travel by itself can be part of the tourism experience, and moving tourists by train permits controlled access to scenic areas, as the Alaska Railroad has proved for years. When people leave the train, they can move in groups via shuttle buses, which cause fewer problems than a herd of private vehicles operating independently. No matter how carefully we plan roadways to minimize environmental concerns, when people visit your scenic wonders by SUV, they will be inclined to roam wherever their personal fancies impel them.

I already have noted the lower-cost transportation that railroads can provide versus truck or air cargo. But a rail-based tourism system also will allow for the expansion of a jobs-producing tourist economy in an environmentally sustainable way.

It Is Time to be Visionary

I have presented my case for connecting northwest Canada and Alaska to the North American Rail System and the global intermodal transportation network. It is not my intent to recommend a particular route alignment, and I am aware that preliminary studies already have taken place. Obviously, a rail line through northwest Canada logically would connect with the Alaska Railroad. I also believe that consideration should be given to "multi-modal" rail corridors. It is an easy matter to establish a buried fiber optics cable in the process of building a railroad line. This would connect remote regions to the continent's main-line telecommunications system. Portions of the corridor may make sense for energy pipelines as well. Rail corridors can easily move freight, passengers, fuel and information.

The specific route--its components and capabilities--rightfully belongs as a decision to be made by the people of British Columbia, Alaska and the Yukon. Part of the decision process should include the feasibility of private investment to defray a portion of the costs. By working with its congressional delegation and the U.S. Department of Transportation, I believe that Alaska can make a strong case that segments of this rail project to be built in that state should qualify for funding under the recent surface transportation reauthorization law.

I recognize that Alaska, British Columbia and the Yukon represent special places whose priorities sometimes are different from those considered elsewhere. Distance. Remoteness. Climate. Environment. The status of native inhabitants. Natural resources. Scenery. Wilderness.

Growth is taking place, and will continue. Alaska's rate of population increase during the past 50 years is exceeded only by that of Arizona, Florida and Nevada. Tourists arrive in greater numbers each year to Alaska and northwest Canada. In the "lower 48" states, the 20th Century was a period in which we accomplished much in transportation, but the landscape is littered with the debris of our mistakes. We became over-reliant upon the highway and the airport. We allowed our railroads to founder for 80 years until the choices were stark ones--deregulation or nationalization. Many local and intercity rail passenger services were left to die. Our transportation policies led to the withering of small towns and the crowding of new suburbs. We brought smog and highway gridlock to our large cities.

You people have the opportunity to capture the benefits of the 21st Century's transportation system without repeating our mistakes of a century that has just passed into history. You have the freedom to design a system for your use that qualifies as "ethical." Ethics may seem to be a strange word to apply to

something as commonplace as transportation, but it is a concept that I have argued for more than a quarter-century. When I speak of an ethical transportation system, I mean one that is economically-efficient, safe, environmentally-benign, and energy-conserving, but also meets the mobility needs of the people who live here--or come to visit.

We now know that highways and airways cannot solve the transportation problems facing us. They cannot meet the freight and passenger growth that we confront. I encourage you be visionary. If you plan carefully, you can maintain the best possible quality of life for your citizens.

Thank you.

Sponsors

Alaska Canada Rail Link Conference

January 20, 2000
Vancouver, B.C. Canada

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Northwest Cruise Ship Association (reception)

Section 3:

Remarks to the conference by **Steve Hites,**
owner Skagway Streetcar Company

Steve Hites

SKAGWAY STREET CAR COMPANY, INC.

270 SECOND AVENUE, P. O. BOX 400
SKAGWAY, ALASKA 99840
TELEPHONE (907) 983-2908 FACSIMILE (907) 983-3908

Steve Hites has been in the entertainment business in the North since 1972, when he left his home in Colorado and came to Skagway, Alaska, seeking a job with the White Pass & Yukon Route narrow gauge railroad. While working his way through the company as a brakeman, conductor, train dispatcher, and passenger agent, he performed in local theaters and saloons, and wrote dozens of songs about the Klondike Gold Rush and the history of Alaska and the Yukon. These songs formed the basis of his first album, **"Yukon Legacy"**, which was recorded live at the Red Dog Saloon in Juneau, Alaska, and released in 1978. It was the first record album ever produced in Southeast Alaska.

Hites has toured throughout the North over the last 27 years, and in addition to hundreds of stage, television, film, and radio performances, he has released two more albums: **"Inside Passage"** (1992, 1996), and **"Life on the Railroad"** (1993). His original songs have appeared on several albums by other northern artists. He has also produced three professional multi-media programs, a stage play, and written and published a book on the White Pass & Yukon Railroad, "Scenic Railway of the World."

During his railroad career in Alaska, Hites worked as Director of Rail Operations for Tour Alaska, Inc., pioneering the use of privately-owned vista dome passenger cars on the Alaska Railroad. He was Manager of Passenger Operations for the successful reopening of the White Pass & Yukon Route as a summer-only passenger excursion railroad. This line passes through the Klondike Gold Rush National Historical Park as well as the Tongass National Forest, and carried over 285,000 people in 1999. Hites continues to work in a consulting capacity for Tri-White Corporation, the Toronto owner of the White Pass & Yukon.

With the rapid growth of the Alaska cruise industry, Hites and his wife, Gayla, concentrated their efforts on recreating the **Skagway Street Car Company**, a sightseeing operation in Skagway which uses a fleet of eleven antique automobiles

from the 1920's and ' 30's to show visitors around the historic community and all its points of interest. Hites calls the tour "theater without walls", and dresses up in a 1890's- style black three- piece suit with gold watch and derby hat. "We get to tell old Skagway stories on every tour," he says. "It's great fun."

The company also operates a fleet of modern 27-passenger minibuses, providing short sightseeing tours up to the US/Canadian border, and longer day trips into the Yukon Territory. The majority of the company's tours are sold on cruise ships.

In 1996 the company opened a new entertainment complex in Skagway. The three-story building houses the 160-seat **Club House Theater**, the 2,000 square foot **Skagway Mercantile** specialty retail store, and the **Excelsior Cafe & Bakery**, as well as providing the company with offices, storage, and staff apartments. The building was inspired by the 1899 architect's drawings of the original Club House of the Arctic Brotherhood, a Klondike Gold Rush social organization. The new building, which was built in the Skagway Historic District in the Klondike Gold Rush National Historical Park, incorporates all of the period elements of a structure which would have been built in Skagway in 1899. It is Skagway's largest historic-styled building.

Steve Hites's stories, songs, and original music can be heard daily each summer when he performs at the Club House Theater, or at some 300 special concert performances which he contracts to do aboard the cruise ships which call in at Skagway throughout the season.

Hites has a degree in History and Education from Whitworth College. He served on the Skagway City Museum Board for ten years, and was elected to a seat on the Skagway City Council from 1991 through 1994. During his term the Council voted the Guidelines for the Skagway Historic District into law. These guidelines, which are part of the Skagway City Code, are used to direct development in the Skagway Historic District, where architecture and signage must reflect the period of the Alaska - Yukon Gold Rush of 1896 - 1910. Most of this district in downtown Skagway is also part of the Klondike Gold Rush National Historical Park's Skagway Unit.

Steve Hites and his wife Gayla have one grown son, Ryan.

Tourism & Recreational Railroads:
A Northern Glimpse into the 21st Century

The first railroad in the Far North, the White Pass & Yukon Route, was built one hundred years ago with British financing, American engineering, and Canadian contracting. I wrote a song to honor Micheal J. Heney, the energetic young Canadian contractor who helped to build the WP&YR.

"Big Mike Heney"

I was born one cold gray morning on the Overland Express;
the brakeman was the midwife, the conductor was impressed.
They knew I was a railroad man from the chew tucked in my cheek;
I shrieked like a locomotive, had a spike between my teeth.
(He shrieked like a locomotive, had a spike between his teeth.)

Before I was old enough to walk they had me layin' track
crawlin' along, ties under my arm, a rail across my back
I warmed my bottle on the firebox, I helped to shovel coal
While the engineer would take his nap, I made the engine roll
(While the engineer would take his nap, he made the engine roll)

Drillin' tunnels through the Rockies, drinkin' whiskey during the day
I grew up on the CPR, Van Horn a leadin' the way
We laid track so fast we never looked up ' til a fish swam by to say
"you've laid the railroad over a cliff into Vancouver Bay"
(Yes, you've laid the railroad over a cliff into Vancouver Bay)

As I was there treadin' water, another fish passed by to say
"They've found gold up in the Klondike two thousand miles away"
So I hitched a ride on a humpback whale right up to Skagway town
The gold rush needed a railroad, I started breakin' ground

(The gold rush needed a railroad, he started breakin' ground)

With picks and shovels and powder, and a wild-eyed gang of men
we blasted into the mountains and blasted them down again
I used spiderwebs for trestles, fought with grizzly bears as well
"Give me dynamite and snooze, I'll build a railway straight to Hell."
(Give him dynamite and snooze he'll build a railway straight to hell.)

I went on to other exploits, built a railroad to the Pole
a railroad to Hawaii, trains to Singa por and Seoul
but a man like me just can't sit back as I gaze up at the stars
I'll build a railroad up to Jupiter, a shortline on to Mars
("He'll build a railroad up to Jupiter, a shortline on to Mars.")

All that talk about the last century has got me going. Let's build a Time Machine, get in it together, set the old "Way Back Dial" (remember the Way Back Machine from the "Rocky and Bullwinkle Show", with Sherman and Mr. Peabody?), and hang on!

It is the late 1960's. Trains Magazine editor David P. Morgan writes a cover story which asks, "Who Killed the Passenger Train?" Privately operated North American passenger trains are dying off, victims of the interstate, the automobile and the airplane.

Let's go on forward a bit. It is the mid 1970's. The lives of quasi-government corporations Amtrak and Via Rail hang in the balance as government committees drag these skeletal rail services through the hot coals of debate on "public need" vs. "public dollars" spent on passenger trains.

Whoa. That's enough of that. Let's jump forward again.

It is the mid 1980's. Union Stations in major cities are turned into shopping malls, hotels, and restaurants. The last American private passenger train, the Rio Grande Zephyr, is allowed to suspend service. The passenger train has finally reached the end of the line.

Not good scenery here. Seems the farther ahead we go, the worse it gets. But being optimists (and everyone in this room is an optimist, or you wouldn't be here, talking about construction of the last link in the transcontinental railroad), we want to see where all this ends up.

Now, it is the year 2000. It is now thirty-five years after the "official death" in the press of the passenger train. And we look out across a very different landscape.

Rail travel is booming. It is not traditional rail travel by any means. It is a new type of experience: recreational rail travel, leisure rail travel, maybe, even, perhaps, rail cruising. The phenomena is still new enough that workable labels have yet to be attached. But whatever you want to call it, the recent popularity of recreational rail travel begs comparison with the rise in popularity experienced in the cruise industry. And with tourism predicted to become the largest industry in the world during this century, business and industry leaders should look closely at these parallels to better understand present and future opportunities.

Into our Time Machine again! Back again to the ' 60's.

The Jet Age arrives. The remaining transatlantic ocean liners are doomed. Some survive by trying to transform themselves into warm-water party vessels, offering leisurely cruises around the Caribbean. They don't really go much of anywhere, there isn't much to do on board (shuffle board and gambling), and even the entertainment is sophomoric. But it keeps several companies afloat. Entrepreneurs like Miami's Ted Arison charter laid-up ships on the cheap from the likes of Canadian Pacific, fill them with discount cruisers, bring them home happy, and do it again. Wanting to find a name that tells potential customers what he is selling, Arison chooses ""Carnival" for the atmosphere on board, and tags his vessels "The Fun Ships". (Carnival's "Fun Ships" now comprise the largest and most profitable cruise line in the world.) Stan McDonald charters the CPR's "Princess Patricia", and starts Princess Cruises. Chuck West starts Westours, a cruise and land package operator to Alaska. (For a detailed study of this fascinating transition period, read Carnival Cruise Line's President's Bob Dickenson's 1997 book, "Selling the Seas: The Creation of the Modern

Cruise Industry").

Wow! What's happened here? An outdated transportation mode whose fleets are ready for the scrapper is repackaged and becomes a leisure mode. The ship becomes the vacation. The means becomes the end, and the journey becomes the vacation.

Let's pop back to the present, because this is exactly what has happened with the passenger train.

Successful examples of this change are all around us.

Excursion railroads like the White Pass & Yukon Route, and the Durango & Silverton;

"Day trains" like The Rocky Mountaineer, and the Sierra Madre Express in Mexico's Copper Canyon, who overnight their passengers in hotels along the rail route;

"Cruise trains" like the American Orient Express

Private car "trains" like the Princess' Tour's Midnight Sun Express, and Holland America Line Westours' McKinley Explorer;

Dinner trains like the "Spirit of Washington" running in the Seattle metropolitan area, and BC Rails' dinner train to Squammish;

Combinations of the above like the Napa Valley Wine Train;

Excursion trains used as substitutes for automobiles like the Grand Canyon Railway:

Ski trains like the one out of Denver, Colorado to Winter Park on the old D&RGW;

Steam excursion trains operating over regular roads, like BC Rail's popular "Royal Hudson".

There are many others, but these show the diversity of products available to the 21st Century recreational railroad passenger in North America.

These new products all have several things in common:

--They do not primarily serve the public as a means of getting from A to B
(This is even true with the Denver Ski Train. The customer is buying the skiing experience packaged with the train, not the transportation service.)

--They provide what the customer wants (as to a variety of services)

--They do it at a price which is acceptable to the market

--They make money, or they aren't around anymore. Not one of these operations is subsidized by a government. My personal rule of thumb: railroad operations should pay their own way.

Recreational rail travel needs to be looked at as a for-profit enterprise. For most common carriers, passenger revenues have never been more than incremental, an "add on" to freight revenues. And, in the Far North, with it's light population density, local passengers have never been a major part of a railroad's revenue. So, these revenues need to be generated from elsewhere.

The first revenue train operated by the first railroad in Alaska was a July 21st, 1898 passenger excursion train from Skagway to the end-of-track on the White Pass and Yukon Route. Four flat cars were jammed with local politicians, businessmen, writers from Seattle, and from the towns three newspapers. Shortly after the road's completion in 1900, the White Pass rolled out it's timeless slogan, "Scenic Railway of the World," which it carries to this day.

WP&YR maintained a Passenger Office in Chicago, Illinois. White Pass salesmen like Herman Weig carried their bulky "magic lantern" show out on the road. The marvelous hand-tinted photo transparencies held audiences in awe, and Weig lectured throughout the country to church groups and service clubs on the glories of leisure travel in the mysterious Land of the Midnight Sun.

Canadian Pacific put together complete vacation packages to Alaska and the Yukon early on, using their fleet of coastwise steamships. Northern Pacific followed, partnering with the Alaska Steamship Company. With the opening of the Copper River & Northwestern, circle tours could be booked all the way through to Fairbanks, with rail from Cordova to Chitna, thence overland to the Chena River, and connecting

with river steamers back up the Yukon itself and back out at Skagway. The completion of the U.S. Government Railroad in 1923 created yet another circle tour loop, from Seward to Anchorage, and on to Fairbanks, now entirely by train.

Seventy- six years after U.S. President Warren G. Harding drove the ceremonial last spike at Nenana, two railroads in the Far North survive. Passenger revenues are essential to both, but they are generated by tourism to Alaska. Neither survives on ticket sales generated along the route of its line.

The Alaska Railroad is a full service common carrier running over the same route opened by President Harding. It operates year-round passenger service on its own trains. During the busy summer tourist season, the ARR express trains between Anchorage and Fairbanks offer private car haulage rates to Princess Tours and Holland America Line Westours, whose private fleets now total over two dozen full-dome railcars. These luxurious vista domes are carried on the tail end of the trains behind the regular Alaska Railroad coaches. In addition, the ARR has recently purchased a new full-domed trainset which can be used for service on the popular scenic run from Anchorage to Seward, Alaska.

The White Pass & Yukon Route, which suspended operations for five and a half years between 1982 and 1988 due to the closure of its principle shipper, the Cyprus Anvil lead-zinc mine, reopened in May 1988 as a passenger-only summer excursion railroad. Cashing in on the rapid growth of the cruise market, the WP&YR carried 36,000 riders its first season back in business, hit 100,000 by the fourth season, and carried an astounding 278,000 revenue passengers in 1999. With its 40-mile round-trip ride sold as a Shore Excursion on every cruise ship calling on Skagway, operating up to nine trains per day, many to sold-out crowds, it is one of the most profitable of all excursion railroads, commanding one of the highest rates per passenger mile operated anywhere in the world. Its Toronto owner, Tri-White Corporation, plans to grow an even larger leisure services company from within the WP&YR. They have no plans to change the profitable 100 year old narrow gauge railroad, but President Fred McCorriston has repeatedly said that White Pass will look at any reasonable business proposal that can make money for his company.

So much for the present. What will the future of rail cruising look like? How will it look in the Far North? We do have several clues.

One of the least heralded and most dramatic changes which has come about has been the complete redesign and re-engineering of the passenger car.

Tom Rader, founder of Colorado Railcar Manufacturing in Ft. Lupton, Colorado, began the re-invention of the vista dome in 1988 with the introduction of the "Ultradome" on the Midnight Sun Express between Anchorage and Fairbanks. Rader continued engineering the concept with the "Ultradome II" series, and now builds completely new "from the ground up" full-dome railcars, in both a double-decked (bi- level) and single level version (new sills, new trucks, brand new everything). Customers for the Rader domes include Princess Tours, Peter Armstrong's Rocky Mountain Rail Tours, and the British Columbia Railway. The Alaska Railroad purchased a full trainset of Rader-built equipment from First American Railways defunct "Florida Fun Train". (For answers as to why that failed, see me after the conference: we'll have a drink and talk about where not to locate one's terminals, and how you really need to have a solid market your product before you start running it.)

Rader threw the old Pullman Standard-type construction concepts out the window, and literally built a new window. Using modern materials and techniques, he created the largest viewing areas ever built into rail equipment. With their rooftops made entirely out of specially strengthened, tinted, bowed glass, these versatile and lightweight cars offer passengers unprecedented scenic viewing opportunities.

Many railroads run through spectacular scenery, but without a platform from which to view that scenery, the ability to experience that beauty is diminished, or even lost. If what the railroad has to sell is its scenery, it must find the best way to serve that product up for the viewing customer. The new dome design has provided one way.

And they are just a box, waiting to be made into something.

Just like aboard the cruise ships, the interior spaces of the new rail cars are being re-shaped by the customer as well. To rise like a Phoenix from the ashes, the concept of the ocean liner had to re-invent itself. On Royal Caribbean International's new Voyager of the Seas, old-time shuffleboard has been replaced by ice skating rinks, golf courses, in-line skating arenas, rock climbing walls, and multiple themed restaurants. Similarly, the tired railroad day coach has become the interactive video arcade car, a bi-level atriumed dance lounge, a two- tiered themed dining room, or a solarium car with retractable roof fully equipped with weight room, saunas, and multiple hot tubs.

Sleeping accommodations no longer need to be crammed into dark narrow spaces with the bathroom down the hall, or perhaps under the seat of your tiny roomette. Guests on the cruise train of the 21st Century will lie down in comfortable double beds under their section of the full dome, reaching from one side of the car to the other, falling asleep under a canopy of stars, and in the morning awake - not to an Amtrak Deluxe Bedroom commode/shower all-in-one combination plastic molds- but to their own full-sized washroom with separate in-room shower bath. When not enjoying the on-train activities (lectures in the library, a piano concert or dance band in the Showroom), they can watch television or videos in their suite, or let the countryside roll by outside while they listen to the music of their choice on their state-of-the-art in-room stereo sound system.

To be fair, some of this is already being done on the beautifully refurbished 1950's era equipment of the American Orient Express. But no matter how you clean it up, the platform being used by the AOE still dates from the 1950's: tiny rooms, bathrooms down the hall or retrofitted, and a high price tag for the pleasure (between $500 and $1,000 per person per day).

With no real competition in the luxury end of the market, the AOE has done well. But any train which utilizes the new car technology will provide more of the creature comforts the customer wants, and will capture the market in short order.

The cruise trains of the 21st Century will be what the market demands. Any railroad wanting passenger revenues will need to use the most modern platforms available to get a piece of that market. They will present new and different itineraries to lure more people to try the cruise train product: ski cruises, Civil War theme cruises, The American Southwest cruises, "the best Capital cities of America" cruises, and "National Parks of the West". The possibilities are endless. And the proposed transcontinental link between Canada and Alaska, with its scenery and sweep, is a natural for the new trains.

Cruise lines, tour companies, and travel wholesalers could offer packages with a cruise ship one way, and a rail return on the "cruise train" back again in the opposite direction. Stopping along the way for historical, cultural, or natural points of interest, the cruise train itinerary, like that of a cruise ship, would allow passengers the opportunity to get out and experience the areas along the route first hand. Off-train excursions into the countryside, like Shore Excursions on ships, would allow for more in depth exploration.

Pretty cool stuff. But as we enter this new era, for businesses that really want to be a part of it and participate, the sky literally has to be the limit. The market demographics tell us that the leisure traveler of 2000 is younger, more educated, more sophisticated, more well-traveled, more active, and more financially secure than ever before. They are far more demanding, but they will pay the fare for a perceived value. They like nice things.

I recall the middle-aged Texan who was riding with his family and a small group of escorted tour passengers on the original Midnight Sun Express back in 1984. He was wearing a leisure suit with an open-necked shirt, and several gold chains hung around his neck. As we glided into the Nenana River Canyon southbound, we decided to treat the small group to something special, and served brunch up topside in the dome. Sipping his fresh Bloody Mary, savoring the perfect unbroken hollandaise sauce on his Eggs Benedict, listening to the tastefully muted classical music floating over the sound system, he leaned back, looked at me and said, "Ya' know, son, I like nice things. This is a nice thing."

The passenger trains which will be placed into service on the proposed last great transcontinental link between Canada and Alaska will have to be cut of that kind of cloth.

The cruise trains of the next century must be "nice things". If they are, long distance rail travel will most certainly "make its own way", finding a comfortable niche in the leisure market of the future.

One last element to consider. Beyond the statistics and market information, beyond the geography and the engineering, there is the adventure of what is being proposed here today. The doing of something never before done, of participating in something important, something great. No one put that feeling into words in a better way than Gordon Lightfoot did in 1967 with his wonderful song about the very first Canadian Transcontinental railroad, the "Canadian Railroad Trilogy".

(CANADIAN RR TRILOGY).

Note: The above paper was presented by Steve Hites at the Alaska Canada Rail Link Conference, January 20, 2000, Vancouver, B.C.

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Remarks to the conference by, and written material from **Hal Cooper** of Cooper Consulting Company, Kirkland, Wash.

MARKET DEVELOPMENT POTENTIAL

for the

COMMODITY CARGO TRANSPORT

between

ALASKA, CANADA AND THE NORTHERN TIER

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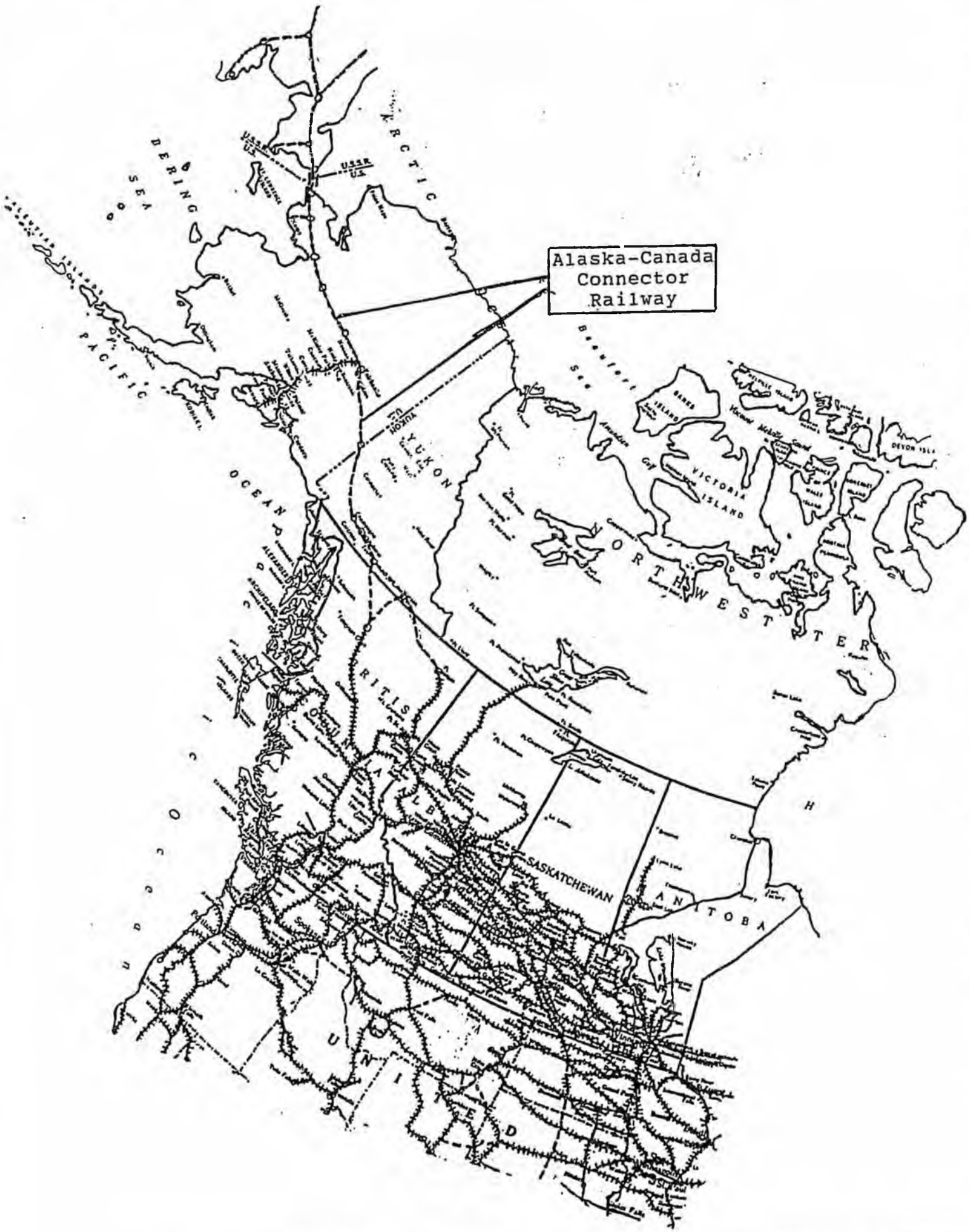
Sponsored by:

The Alaska State Chamber of Commerce
and the
Vancouver Board of Trade

January 20, 2000

EXISTING AND PROPOSED RAILROAD LINES IN ALASKA AND CANADA AND NORTHERN TIER



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INTRODUCTION

There is renewed interest in the connection of the Alaska Railroad with the rest of the North American rail network (Ref. 1). The economy of Alaska is becoming increasingly intertwined with the rest of the United States as a north-south orientation. In addition, the Canadian provinces are becoming more interconnected to their southern neighbors in the United States and Mexico as north-south interlinkages become greater. The completion of the railway link between Alaska and British Columbia is the one major element in the completion of the North American rail network, as shown in Figure 1.

There are several reasons why the completion of the railway from Canada to Alaska would be beneficial for all of the affected regions. The completion of the railway line from Canada to Alaska would reduce the transportation costs of goods hauled to Alaska. The result would be a reduction in the cost of living to Alaska residents. It would then become easier and cheaper to export raw materials from Alaska to Canada and the Lower 48 States of the United States. Fuel and mineral resources produced in Alaska would then become more competitive from a price standpoint in the lower 48 states as compared to alternative sources.

The completion of the construction of the railway from Canada to Alaska can also influence trade patterns in North America and throughout the World. The recent passage of the North American Free Trade Agreement (NAFTA) between Mexico and the United States in 1993 has led to a major expansion in north-south trade between the three countries. It has been estimated that the volume of north-south trade in North America has increased by 5.0 percent per year from 1993 to 1999. The total volume of the east-west trade in North America during the same period has only increased by 1.5 to 2.0 percent per year.

There is the potential for extending the North American railway network to the south from Mexico to South America by way of Central America (Ref. 2). There have been proposals advanced to develop a unified rail, road, air and marine transportation system among all of the nations of North and South America. The Western Hemisphere Transportation Ministers' conference held in New Orleans in December 1998 agreed to begin the planning for such a unified transportation system as a part of a future trade area of the Americas (Ref. 3). The route layout for a proposed Western Hemisphere rail network is illustrated in Figure 2.

There is also the possibility of increases in east-west trade by way of Alaska to Asia and Europe. A recent article by Gillespie (Ref. 4) in 1998 in the Alaska Business Journal described the possibility of completing an underground railroad tunnel beneath the Bering Strait. There have been a number of proposals made to build a railroad tunnel under the Bering Strait, but have so far been unrealized (Refs. 5,6,7,8). The construction of a railroad tunnel under the Bering Strait would allow a Worldwide railroad network to be developed as shown in Figure 3. Alaska and neighbor Chukotka would then become the American and Asian World trade centers for a future Worldwide rail network connecting all continents.

Figure 1

CONNECTING RAILROAD ROUTE NETWORK TO THE BERING STRAIT RAILROAD TUNNEL 5

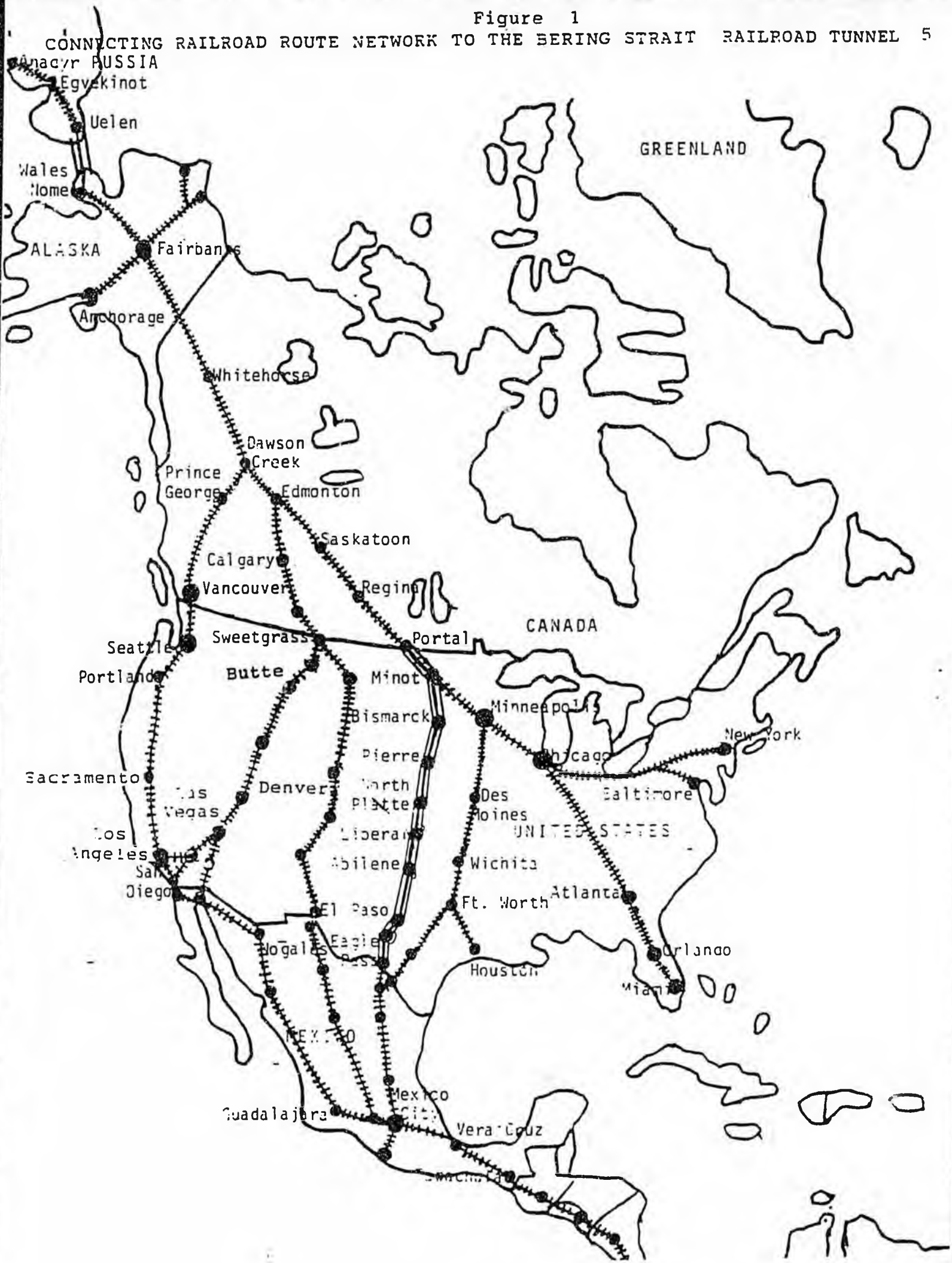
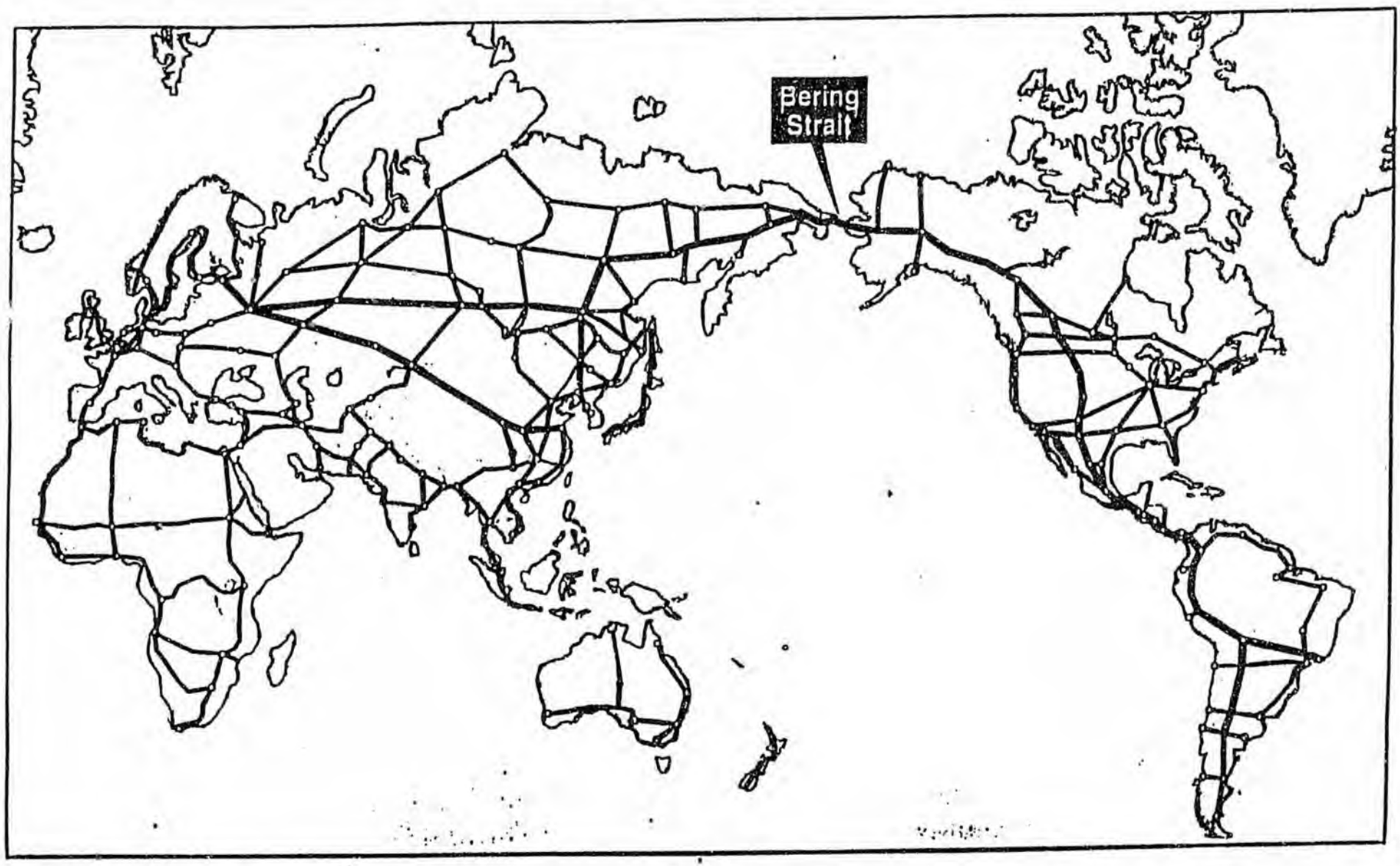


Figure 2

PROPOSED INTERAMERICAN RAILROAD LINE BETWEEN NORTH AND SOUTH AMERICA

Figure 3

ROUTE LAYOUT OF THE PROPOSED WORLDWIDE RAILROAD NETWORK TO ALL CONTINENTS(Ref.9).



BACKGROUND

The earliest efforts to develop a railway line between Alaska and Canada with the Lower 48 States were actually a part of early proposals to develop a Worldwide railroad network. There were reported but unsubstantiated reports of a proposed as early as the late 1860's after the Civil War to build a railway line from Denver to Paris by way of Alaska and Russia (Ref. 9). This railway project was to be a part of the efforts to construct the Trans-Siberian Railway being constructed under the direction of Count Sergei Witte (Ref. 10). However, these efforts never came to fruition because other railroads needed to be built in more populated areas.

The completion of the Trans-Siberian Railway from Moscow to Port Arthur in 1903 and to Vladivostok in 1908 led to the formation of a company in the State of New Jersey in 1906 (Ref. 6). The purpose of this railway was to connect Paris and Moscow with New York plus Fort Nelson and Edmonton in Canada to Chicago and New York. This company was incorporated with $6 million U.S. in equity capital with French, Russian and American investors with the purpose of operating both freight and passenger service. This project was halted by the onset of World War I (Ref. 11) and was not restarted.

After World War II, there were extensive surveys of railway line development under the direction of Joseph Stalin in Russia. These efforts led to the surveying and grading of the entire Northern Arctic railway along the Arctic Ocean from Vorkuta to Egvekinot over 4,000 miles. In addition, route surveys and engineering designs were conducted of the 2,500 mile long rail corridor from Yakutsk in the Sakha Republic to the Bering Strait (Ref. 12). These efforts were suspended upon Stalin's death but reappeared in a book by Chersakov in Russia in 1993 to build a railway from Moscow to New York, as shown in Figure 4 (Ref. 13). In the United States there were also efforts made by the Czech engineer George Koumal, who proposed building a tunnel under the Bering Strait (Ref. 5).

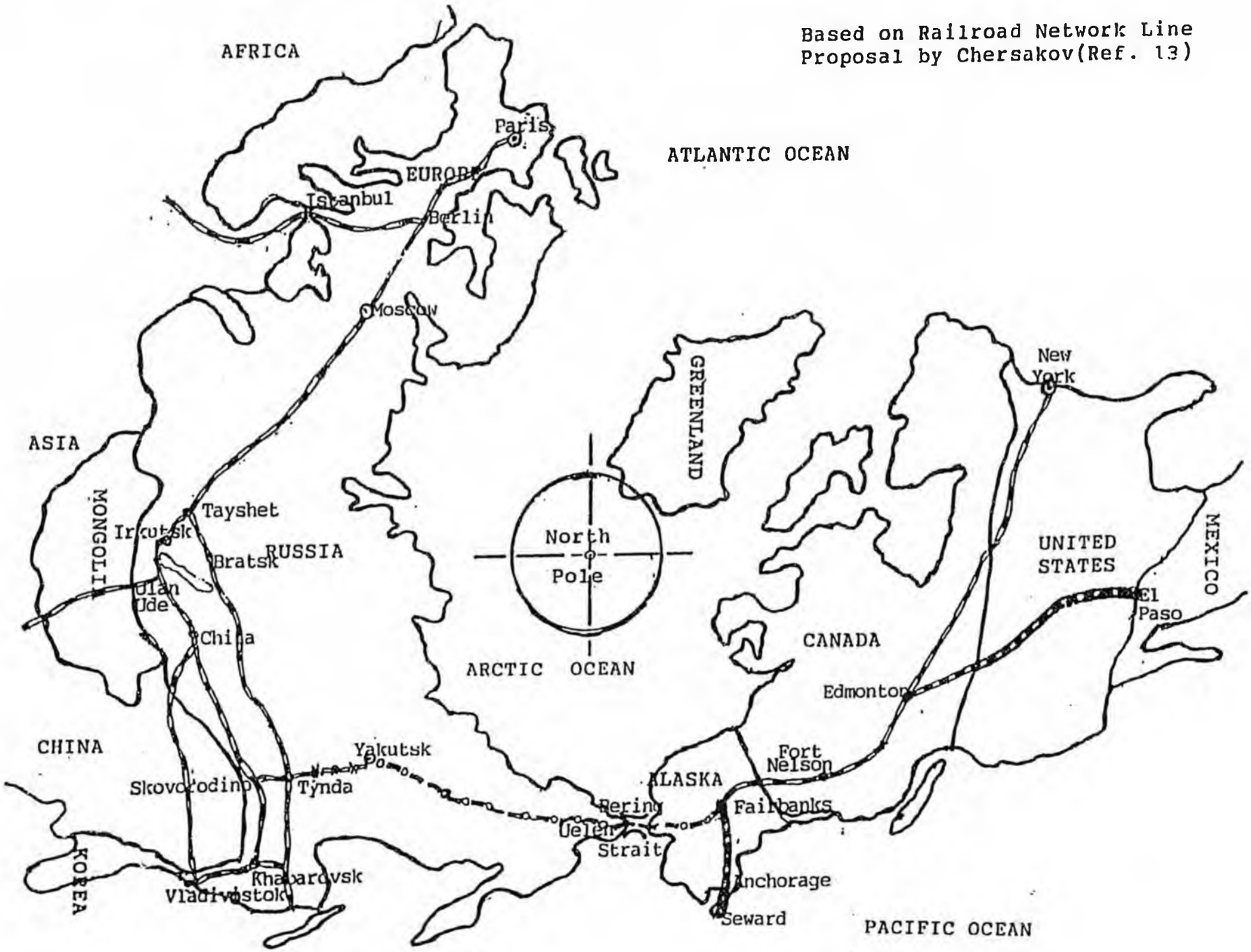
The concern about the possibility of constructing a railway line to Alaska began with the purchase of Alaska and the Aleutian Islands from Russia in 1867. Russia at that time sold Alaska to the United States in part because it lacked the transport infrastructure to maintain these remote regions. The initial development of Alaska began in the 1890's with the discovery of gold, but did not become significant until the onset of World War II in 1941.

A number of military facilities were built in Alaska during World War II to begin the development of its infrastructure. One of the major projects was to connect Alaska with Canada by either a highway or rail line. The roadway was built as an alternative to the railway because of its lower initial cost and shorter construction time. In addition, the initial street shortage during World War II resulted in a greater priority being given to tanks and artillery than a railway at that time (Ref. 34).

The Alaska Railroad was originally chartered as an initial part of this infrastructure by the United States Congress in 1912 through the establishment of the Alaska Railroad Commission. The authorization of $35 million U.S. for railroad construction by the U.S. Congress in 1912 was approved by President Wilson in 1914 to make it possible to begin layout, design and construction. The legislation approved called for the construction of 1,000 miles (1,600 km) of

Figure 4

PROPOSED RAILROAD NETWORK LINKAGE BETWEEN THE EURASIAN AND NORTH AMERICAN CONTINENTS



railroad lines in Alaska from the interior to an ice-free port along the Pacific Ocean at the Southern end of the Kenai Peninsula.

It was originally decided to build the Alaska Railroad from the ice-free Port of Seward at the South of the Kenai Peninsula to the Fairbanks area via Anchorage with a total length of 515 miles (825 km). This original section of the Alaska Railroad was finally completed in 1923 at a cost of $60 million and was dedicated by then President Warren Harding. The Alaska Railroad was extended for an additional 20 miles (38 km) in Eielson during the 1950's as a part of its rebuilding and expansion to serve Eielson Air Force Base as a new facility with a total length of 535 miles (860 km). As a result, there are 465 miles (745 km) of railroad line, which remain unbuilt by the Federal Government in Alaska under the terms of this originating legislation passed in 1912 (Ref. 14), which could be constructed in the future.

The Alaska Railroad as an operating railroad line was owned by the Federal Government, but had relatively little traffic upon its initial completion so that it required an annual Congressional appropriation until 1938. The line's traffic greatly increased during World War II and thereafter so as to never again require an operating subsidy. The line was rebuilt during the early 1950's at a cost of $100 million U.S. so as to be able to handle the increasing traffic demands associated with the Korean War and then the Cold War. The Alaska Railroad was finally sold by the Federal Government to the State of Alaska in 1984 for $23 million U.S. and continues to be under the present ownership by the State of Alaska under profitable operation today.

One of the main reasons for the development of the military infrastructure in Alaska was to allow for supplies to be transported to Russia to assist in its war effort with Germany during World War II. The development of the civilian infrastructure of Alaska began in earnest after the end of World War II. The economic growth of Alaska greatly accelerated following the development of the Prudhoe Bay oil field on the North Slope after 1975 with the construction of the pipeline to Valdez to facilitate crude oil shipments to the West Coast of the United States.

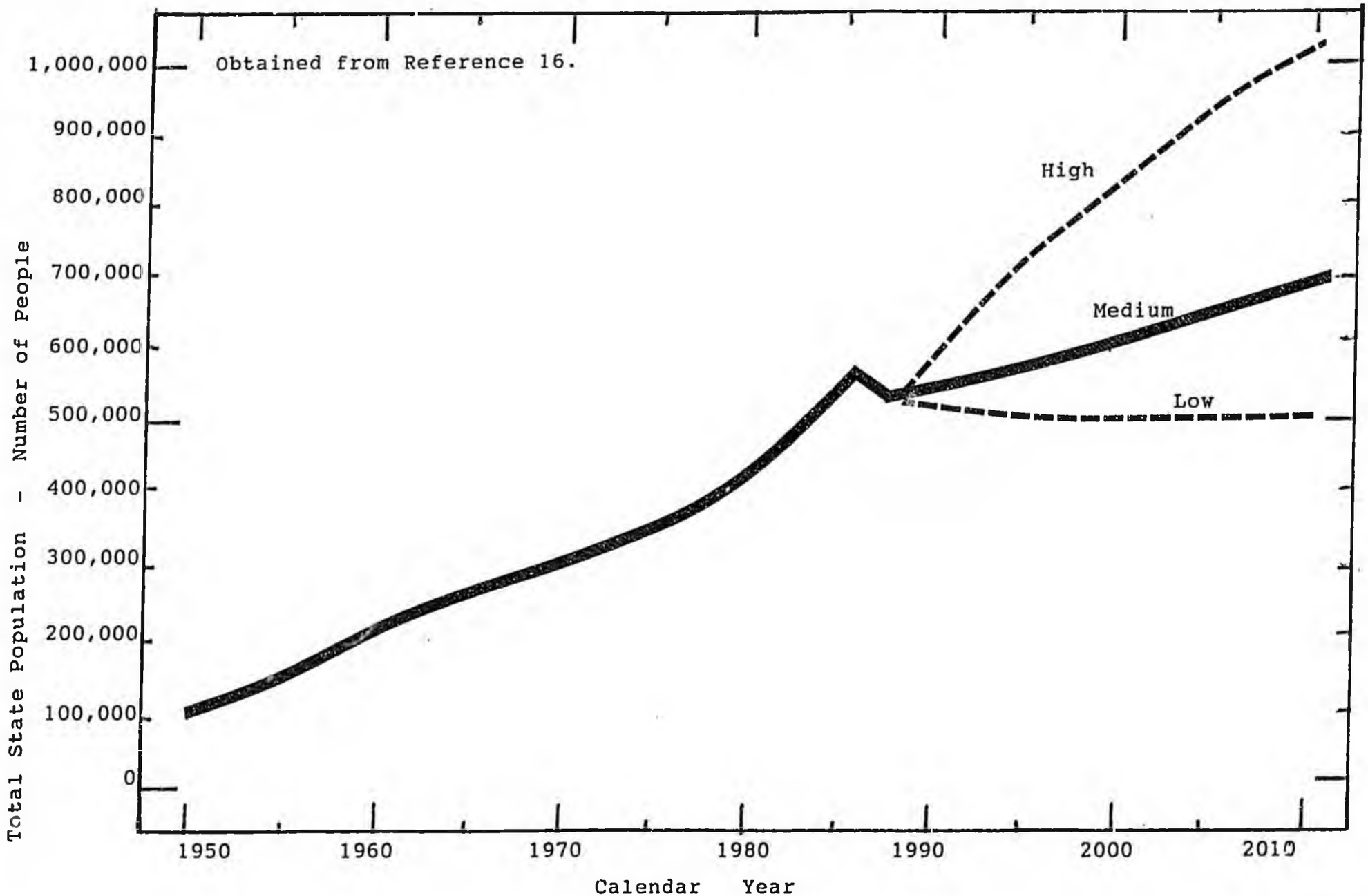
As a result, the population of Alaska has grown from 100,000 in 1950 to 500,000 in 1990 and to an estimated 600,000 in 2000. The population of Alaska could reach 700,000 to 1,000,000 by 2010, as shown in Figure 5 (Ref. 15). The population growth of Alaska appears to be closely following the medium scenario for development at an estimated rate of increase of 1.4 to 1.5 percent per year. In excess of 70 percent of the total population of Alaska lies within the so-called "Rail Belt" between Seward, Anchorage, Denali and Fairbanks.

INFRASTRUCTURE

There is a parallel need to develop the railroad infrastructure of the Northwestern part of North America in order to provide a suitable degree of economic integration with the railroad systems of Canada, the United States and Mexico and eventually to Asia. Railroads generally provide the most suitable means for land-based transportation of large quantities of freight and even passengers in the far Northern climates of Canada and Alaska. These superior characteristics of railroads over highways occur because of their relative ease of maintenance with respect to frost heaves in permafrost, their greater resistance of materials to extremely cold temperatures, and their inherently greater energy efficiencies and lower land use requirements.

Figure 5

PAST, PRESENT AND FUTURE TRENDS IN POPULATION FOR THE STATE OF ALASKA



The railroad network in Alaska is relatively minimal at the present time with only a single North-South corridor in the South-Central part of the state known as the "Rail Belt". There is a 535 mile long railroad line from Seward at the Southern end of the Kenai Peninsula through Anchorage on the Cook Inlet to the North as far as Fairbanks in the central interior of Alaska and then East to Eielson Air Force Base, as shown in Figure 6. There is also a branch line from Portage to Whittier, which allows access to boat traffic to Southeastern Alaska. A rail-barge service connects from Whittier to Prince Rupert in British Columbia and to Seattle, Washington in the Northwest corner of the Lower 48 States to and from the Port of Whittier. There are also several small branch lines to specific industries and mining operations on the route to the coal mine at Healy, the gravel mine at Palmer and others.

These railroad operations in Alaska are all owned and operated by the Alaska Railroad Corporation. The Alaska Railroad Corporation is owned by the State of Alaska with its headquarters in Anchorage. The Alaska Railroad hauls considerable amounts of petroleum products, coals, gravel, wood, chemicals and intermodal freight. The overall freight traffic level on the Alaska Railroad was 5.1 million short toms (4.6 million metric tons) hauled in 1991, as shown in Table 1. This level of railroad freight traffic is expected to grow significantly in the future, as illustrated in Figure 7 (Ref. 16).

The total revenue produced from the hauling of this 5.1 million short tons of freight in 1991 was $48.0 million U.S. The Alaska Railroad also hauled 471,217 passengers in 1991, which has divided between the regular coach and tour business, to produce a revenue of $16.4 million. The total revenue on the Alaska Railroad in 1991 from the combined freight and passenger services was $68.3 million U.S. as compared to expenses of $63.9 million U.S. to result in a net profit of $4.4 million U.S. as shown in Table 2 (Refs. 17,18,19).

The total freight traffic on the Alaska Railroad was estimated as approximately 9.5 million short tons (8.6 million metric tons) in 1998 and 11.5 million short tons in 1999(10.4 million metric tons) based on data reported in the Alaska Business Journal (Ref. 20). Railroad passenger traffic was estimated as 550,000 per year in 1998 and 600,000 per year in 1999 with the continuing growth of Alaska's tourist trade. The total revenues for the Alaska Railroad were expected to have exceeded $95 million U.S. in 1999 with $75 million U.S. from freight and $20 million from passengers with a net income of $8 million U.S.

The other railroad is the White Pass and Yukon Railroad in the extreme Southeastern corner of Alaska from Skagway to Whitehorse in the Yukon Territory of Canada. This railroad is a 111-mile long narrow gauge line as compared to the standard gauge Alaska Railroad. This railroad formerly hauled copper, lead and ore concentrates from mines in the interior to the coast for shipment by boat to smelters located elsewhere. This rail line now operates exclusively as a primarily Summer passenger tourist operation with little if any freight service (Ref. 21).

There are also railroad lines in the adjacent provinces of Alberta and British Columbia, which would be important as the connecting links to the proposed Alaska-Canada connector railroad project. In British Columbia, the British Columbia Railway presently operates a 460-mile (740-km) line from Vancouver in the Lower Mainland to Prince George in the interior. Branch lines

Figure 6

LOCATIONS OF THE EXISTING AND PROPOSED ALASKA RAILROAD LINES IN THE RAILBELT

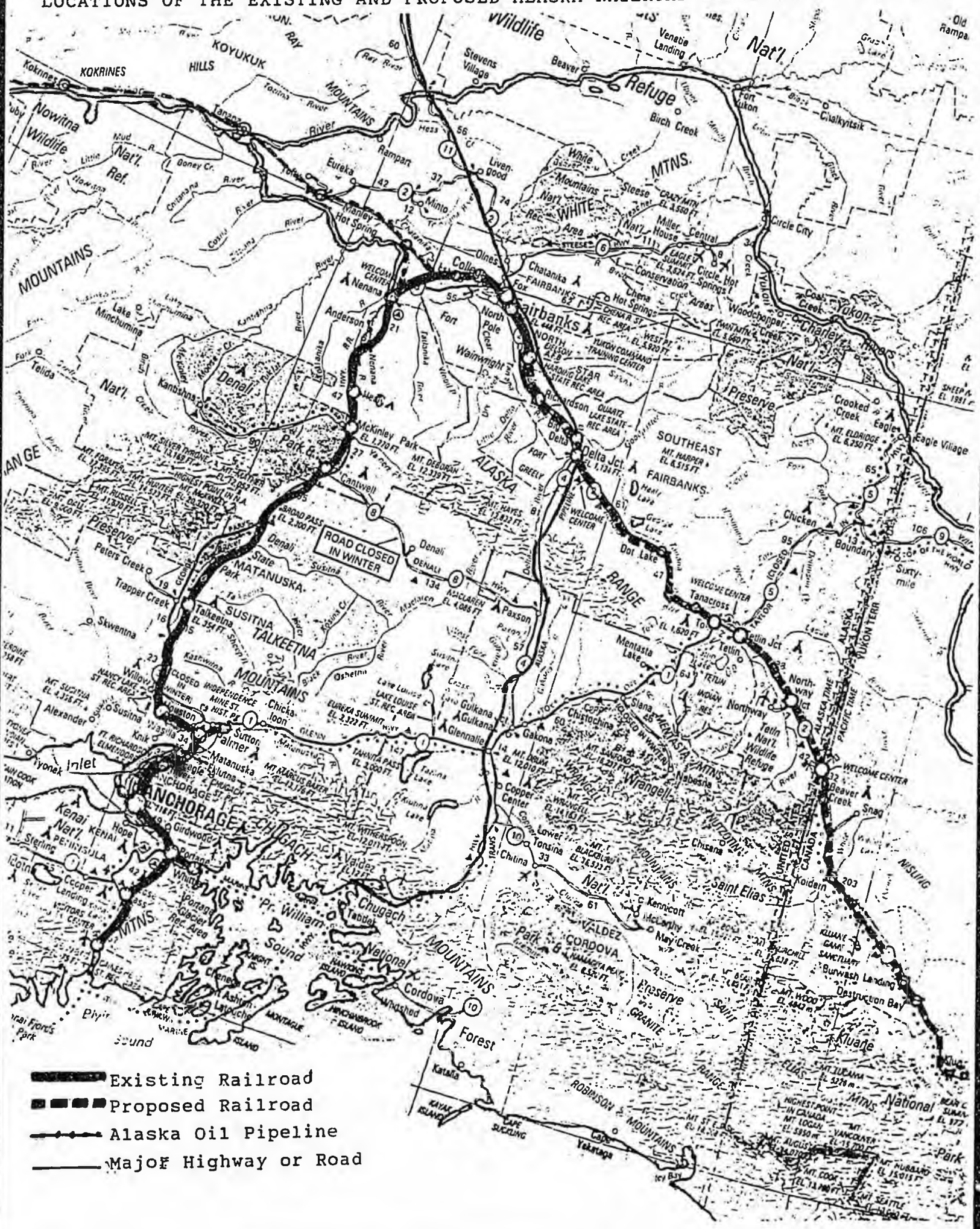


Table 1

OBSERVED FREIGHT TRAFFIC LEVEL TRENDS ON THE ALASKA RAILROAD (REFS. 17, 18)

Specific Commodity	Freight Traffic Level-Million Net Short Tons/Year		
	1980	1985	1991
Gravel	1.00	1.00	1.80
Coal	0.60	1.50	1.60
Petroleum	0.15	0.20	1.40
Intermodal	0.10	0.20	0.20
Other	0.25	0.40	0.10
Total	**2.10**	**3.30**	**5.10**

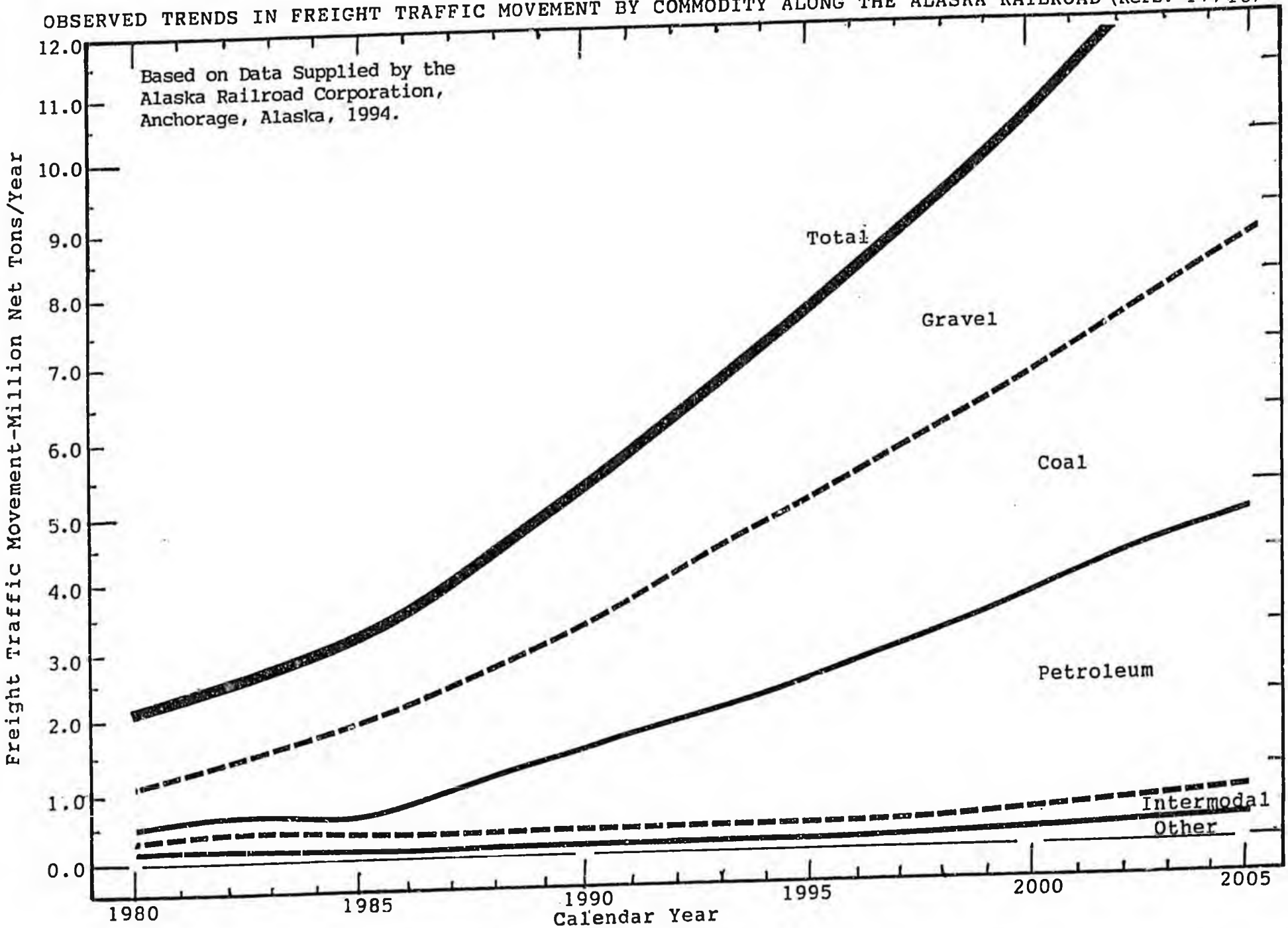
Table 2

TRAFFIC LEVELS AND REVENUE LEVELS FOR THE ALASKA RAILROAD IN 1991 (REFS. 18, 19

Specific Commodity	Freight Traffic Level-Million Net Short Tons/Year		
	Haul Distance Miles	Quantity Tons/Year	Revenue $/Year
Petroleum	356	1,400,000	$19,000,000
Coal	358	1,600,000	$12,000,000
Intermodal	356	200,000	$6,500,000
Gravel	35	1,800,000	$3,000,000
Other	356	100,000	$7,500,000
SubTotal	-	**5,100,000**	**$48,000,000**
Passenger	515	471,217	$16,400,000
Leases	-	-	$4,000,000
SubTotal	-	**471,217**	**$20,600,000**
Total	-	-	**$68,600,000**

Figure 7

OBSERVED TRENDS IN FREIGHT TRAFFIC MOVEMENT BY COMMODITY ALONG THE ALASKA RAILROAD (Refs. 17,18).



extend from Prince George to the North to Fort Nelson and to the Northwest at Jackson near Dease Lake, as shown in Figure 8. There is also a branch line to the coal mine at Tumbler Ridge, British Columbia which is electrified, and handles 5 million tons per year of coal.

There is a connection from the British Columbia Railway to the Canadian National Railway at Prince George with a line to Prince Rupert. There are also connections to both the Canadian Pacific and Canadian National Railways at Edmonton in Alberta from which connections to the Midwestern and North Central United States can be made by way of Montana, North Dakota and Minnesota. There is a recently privatized branch line from Peace River in northern Alberta to Fort Resolution in the Northwest Territories and from Edmonton to McMurray in the Athabasca tar sands region from north of Edmonton.

The British Columbia Railway carried 17.9 million net short tons (16.2 million metric tons of cargo in 1997, a 6.15 percent increase over 1996 with an average haul of 300 miles (480 km). The total revenues of the British Columbia Railway were approximately $275 million U.S. in 1997, a 1.91 percent increase over 1996. The net income of the British Columbia Railway was $50 million U.S. in 1997, a 10.7 percent increase over 1996 (Ref. 22).

The British Columbia Railway operates two lines, which may serve as useful interconnections to the Alaska Railroad. The 450-mile (720-km) long single-track line from Chetwynd to near Dawson Creek to Fort Nelson would serve as the access line to Edmonton and the Midwestern and Eastern United States. The 500-mile line (800-km) from Prince George to Summit Lake and Fort St. James along Takla Lake has a single track for 300 miles (480 km) to Chipmunk. The rail line has only bridges and grades with no tracks for the final 200 miles (320-km) to Dease Lake.

The Fort Nelson branch line through the Peace River Valley presently hauls grain, wood, oil, other minerals and foods and equipment with 2 to 4 trains per day. The Dease Lake line typically has one to two trains per day and handles almost exclusively logs for the pulp and paper mills at Prince George. The Fort Nelson line handles an estimated annual traffic flow of 3.5 to 7.5 million short tons (3.2 to 6.8 million metric tons) per year while the Dease Lake line handles 1.5 to 2.5 million short tons (1.35 to 2.25 million metric tons) per year of freight. The total freight traffic flow on the two lines is between 5.0 and 10.0 million short tons (4.5 to 9.0 million metric tons) per year, which approximates that of the Alaska Railroad.

The connection of the Alaska Railroad and the British Columbia Railway will require the construction of 880 miles (1,410 km) from Eielson to Dease Lake at a minimum. The connection of the two railroads between Eielson and Fort Nelson will require the construction of a total of 1,180 miles (1,895 km) of trackage. The connection of the Alaska Railroad at Eielson with the British Columbia Railway at both Dease Lake and Fort Nelson will require the construction of 1,360 miles (2,185 km) of track. The total estimated capital cost of constructing the entire railway connections is between $6.9 and $4.7 billion U.S. (Ref. 23).

The estimated route distances for the various railway line segments to connect the Alaskan and Canadian railway systems are listed in Table 3. The illustrations of the individual route distances for the interconnection of the Alaskan, Canadian and American railway networks is illustrated in Figure 9. It will then be possible to have trains running between Alaska and the United States

Figure 8

NETWORK CONFIGURATION OF EXISTING RAILROAD LINES IN ALBERTA AND BRITISH COLUMBIA (Ref. 16).

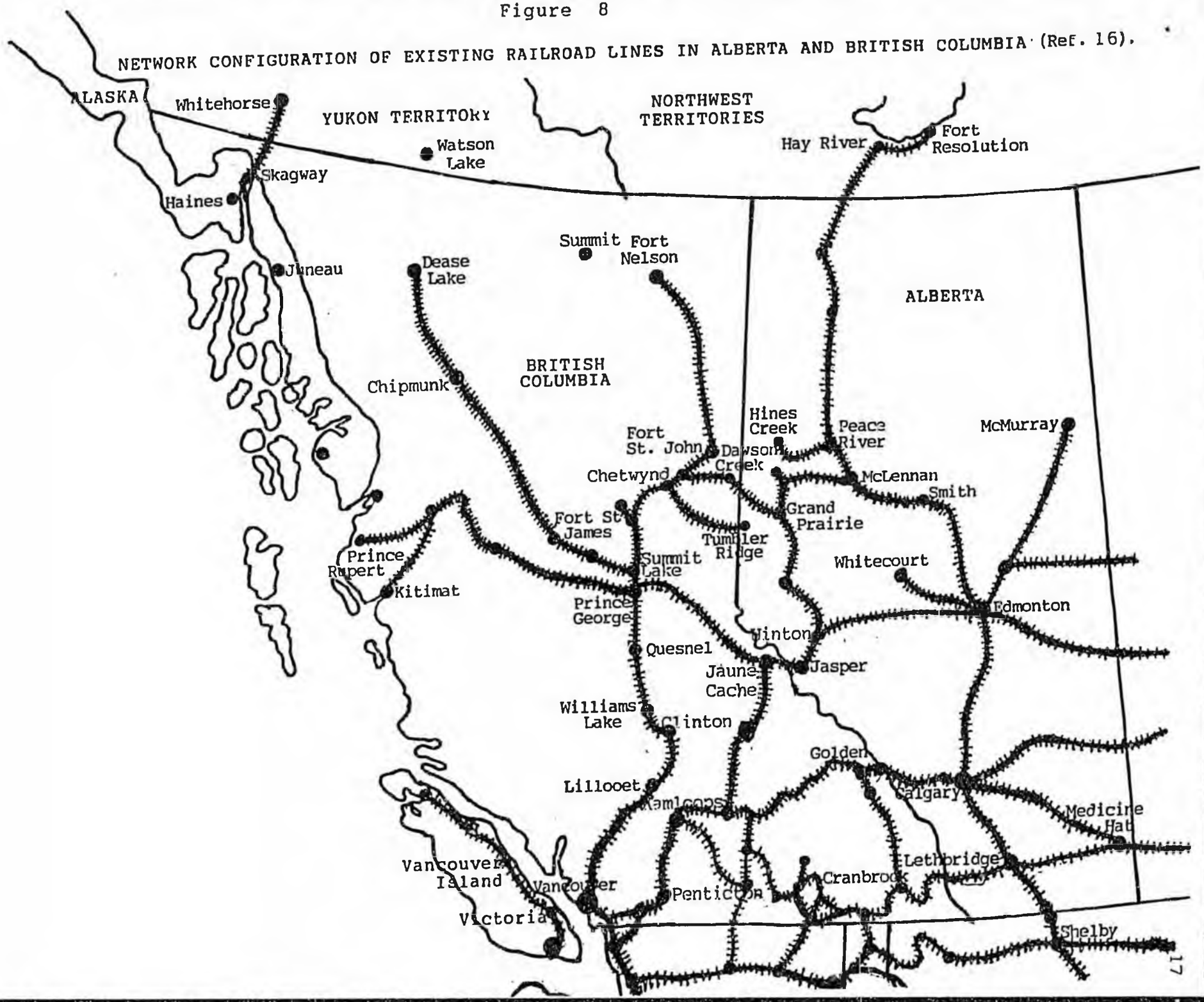


TABLE 3

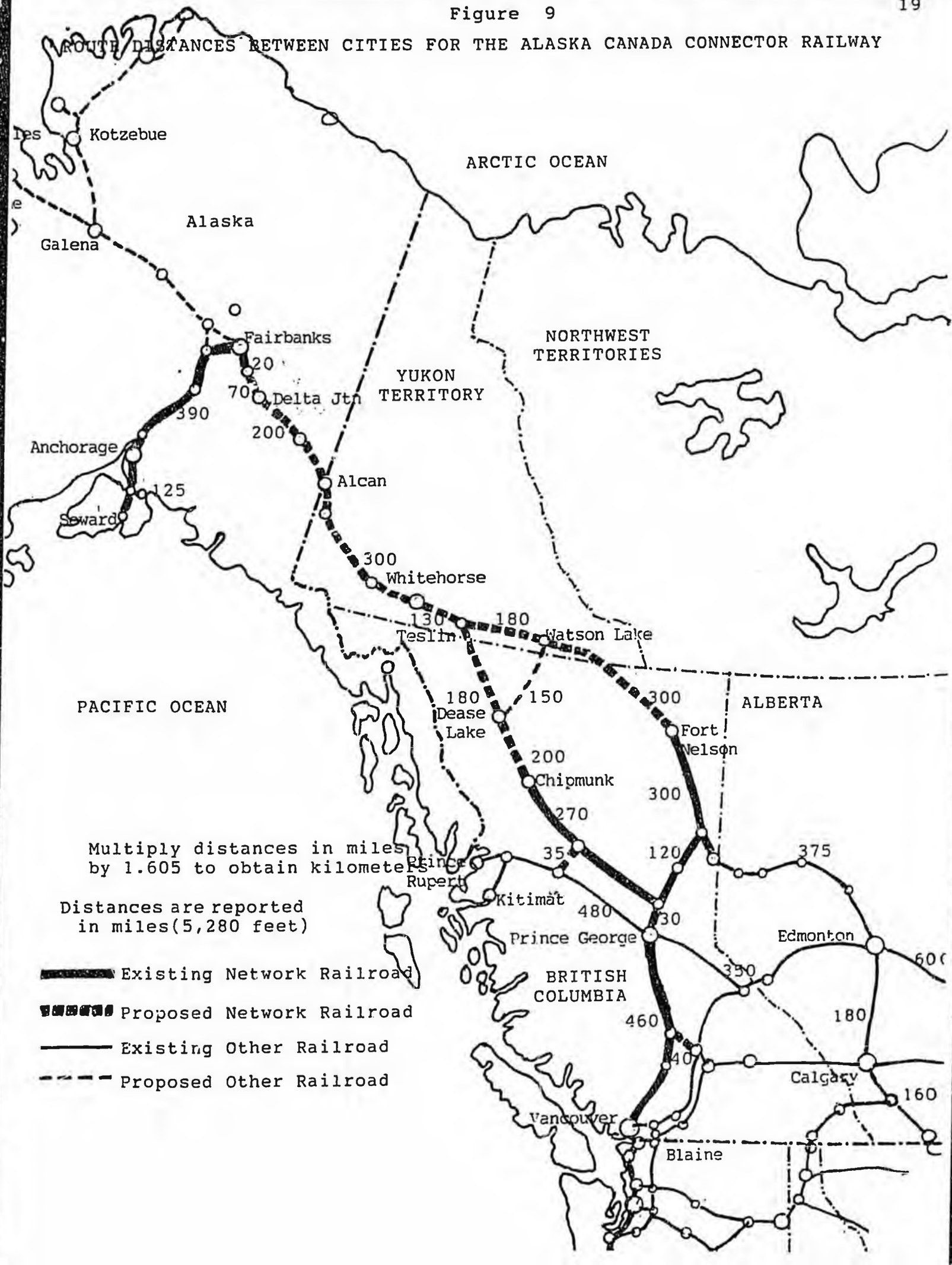
ESTIMATED ROUTE DISTANCES FOR RAILWAY CONSTRUCTION IN THE STATE OF ALASKA, THE YUKON TERRITORY AND THE PROVINCE OF BRITISH COLUMBIA (REF. 24)

Segment Category	Route Segment By City Pair	Route Distance		Affected Railroad	Present Status
		Miles	Kilometers		
Alaska-Canada	Fairbanks to Eielson	20	32	ARR	Existing
	Eielson to Delta Junction	70	113	ARR	Proposed
	Delta Junction to Alcon	200	320	ARR	Proposed
	Alcon to Whitehouse	300	480	TBD	Proposed
	Whitehouse to Teslin	130	210	TBD	Proposed
Dease Lake Connector	Teslin to Dease Lake	180	290	TBD	Proposed
	Dease Lake to Chipmunk	200	320	BCR	Graded
	Chipmunk to Summit Lake	270	435	BCR	Existing
	Summit Lake to Prince George	30	48	BCR	Existing
Fort Nelson Connector	Teslin to Watson Lake	180	290	TBD	Proposed
	Watson Lake to Dease Lake	150	240	TBD	Proposed
	Watson Lake to Fort Nelson	300	480	TBD	Proposed
	Fort Nelson to Chetwynd	300	480	BCR	Existing
	Chetwynd to Summit Lake	150	240	BCR	Existing
	Summit Lake to Prince George	30	48	BCR	Existing
Washington Connector	Prince George to Prince Rupert	480	770	CNR	Existing
	Prince George to Vancouver	460	740	BCR	Existing
	Vancouver to Blaine	30	48	BNSF	Existing
Montana Connector	Chetwynd to Edmonton	525	845	CNR	Existing
	Edmonton to Sweetgrass	340	545	CPR	Existing
	Prince George to Edmonton	350	560	CNR	Existing
North Dakota Connector	Edmonton to Saskatoon	250	400	CPR	Existing
	Saskatoon to Regina	130	210	CPR	Existing
	Regina to Portal	150	240	CPR	Existing
Alaska Railroad	Seward to Anchorage	120	195	ARR	Existing
	Anchorage to Fairbanks	415	665	ARR	Existing
	Fairbanks to Eielson	20	32	ARR	Existing

Abbreviations: ARR – Alaska Railroad; BCR – British Columbia Railway; CNR – Canadian National Railway; CPR – Canadian Pacific Railroad; BNSF – Burlington Northern Sante Fe Railroad; TBD – To be Determined.

Figure 9

ROUTE DISTANCES BETWEEN CITIES FOR THE ALASKA CANADA CONNECTOR RAILWAY



through Canada in an uninterrupted way. The commodities which could be hauled on this extension of the North American railway network, is the subject of the remainder of this paper.

ENERGY

Energy is a matter of critical concern with regard to the construction of the proposed railroad between Alaska, Canada and the Lower 48 States for several reasons. The United States is the World's largest consumer of energy, where Alaska has the Nation's largest untapped reserves of energy. The hauling of crude oil, petroleum products, natural gas or gas liquids and coal can be done either by the railroad itself or by parallel gas or oil pipelines. The future development of energy resources in either Alaska or northwestern Canada will require the transport of large amounts of equipment and materials for the energy production facilities and the required pipelines plus the provisions for workers at the production sites.

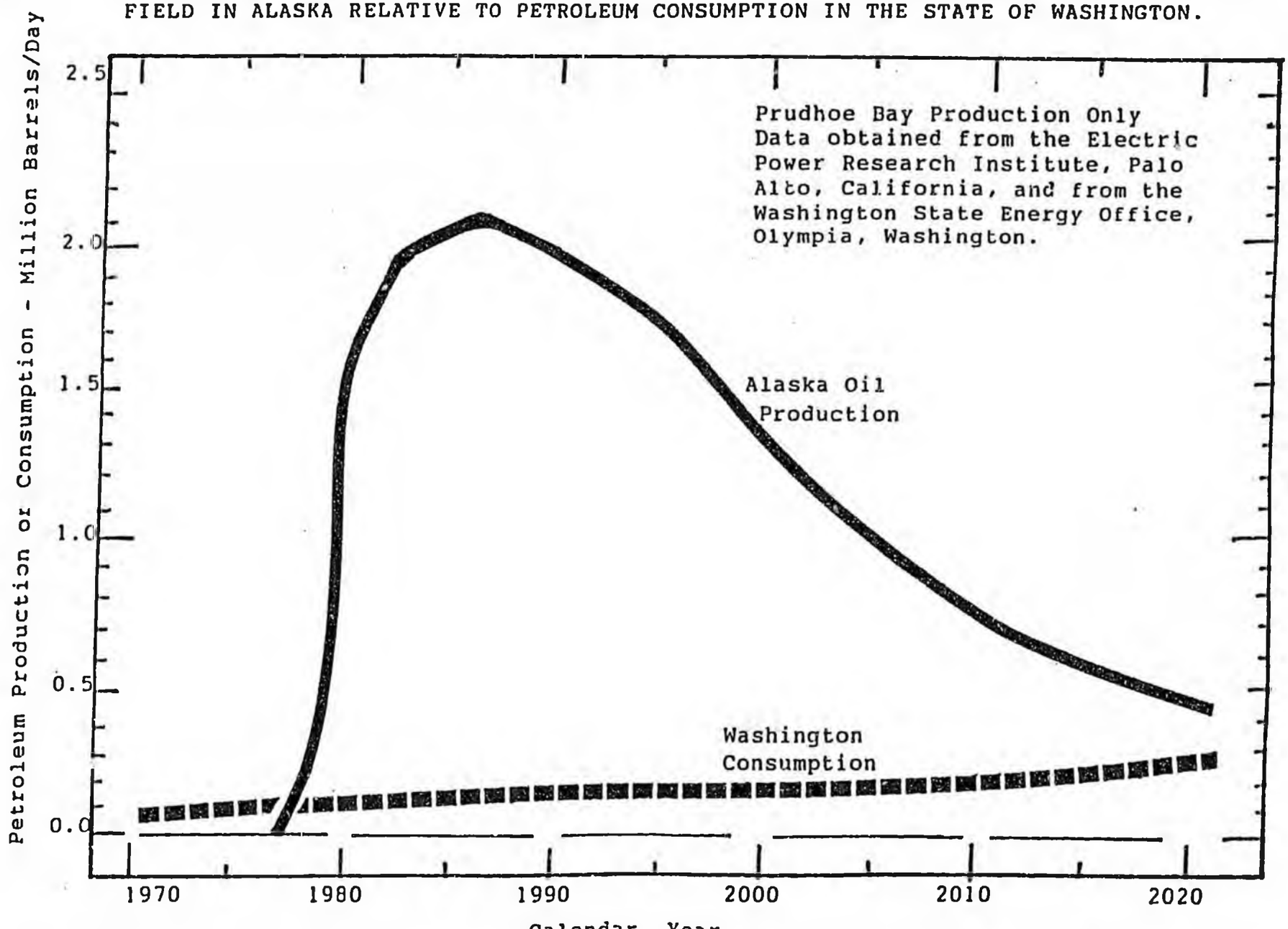
One of the main products being shipped by railroad in Alaska at the present time over the Alaska Railroad is either crude oil or petroleum products. The North Slop oil field at Prudhoe Bay has been the major oil producing field in Alaska since the late 1970's, which has taken up the slack in oil production in Texas by increasing oil production in Alaska, at least until recently. However, even the large Prudhoe Bay field in Alaska is now beginning to decline as well, as shown in Figure 10. The production out of the Prudhoe Bay field has declined from 2.1 million barrels per day (111 million metric tons per year) at its peak to 1.9 million barrels per day (101 million metric tons per year) in 1990 to 1.8 million barrels per day (95 million metric tons per year) in 1993.

There is also approximately 100,000 barrels per day produced from other oil fields in Alaska as well, which are located on the Kenai Peninsula of far southern Alaska for approximately 5.3 million metric tons per year. There is a large oil field adjacent to the Southwest of the existing Prudhoe Bay field of approximately equivalent size in the National Strategic Petroleum Reserve. There is also a large oil field within the Arctic National Wildlife Refuge (ANWR) to the East of the existing Prudhoe Bay field. The field to the Southwest of Prudhoe Bay could be developed under present conditions. However, it would probably be very difficult to develop the ANWR field to the East of Prudhoe because of environmental restrictions in a wildlife refuge area. The total untapped oil reserves in Alaska are in the range of 10 to 20 billion barrels or more or between 1.3 and 2.5 billion metric tons per year.

The limiting constraint to the future development of both petroleum and natural gas from the Prudhoe Bay area of the North Slope of Alaska may well be transportation in addition to environmental restrictions. The existing crude oil pipeline from Prudhoe Bay to Valdez is beginning to suffer from increasing maintenance problems because of electrolysis requiring greater cathodic protection. The Alyeska crude oil pipeline is also suffering increasing maintenance problems resulting from greater pump and pipe wear. The result is the necessity to periodically curtail oil throughout or to build bypasses in certain sections to correct these problems. There has also been a large oil spill on Prince William Sound in 1989 as well as smaller oil spills in recent years. These problems are expected to continue into the foreseeable future to at least some extent.

Figure 10

OBSERVED AND EXPECTED TRENDS IN TOTAL CRUDE OIL PRODUCTION FROM THE PRUDHOE BAY FIELD IN ALASKA RELATIVE TO PETROLEUM CONSUMPTION IN THE STATE OF WASHINGTON.



The result is that the existing Prudhoe Bay pipeline may not be able to handle the future crude oil flow requirements if the other field is developed from the area. As a result, there may be a need to develop additional transportation facilities for bringing crude oil out of the Prudhoe Bay field. The construction of a railroad line from Prudhoe Bay to Fairbanks to connect with the proposed Bering Straits connecting railroad would make it possible to transport crude oil to Washington, Montana and Minnesota over land without any pipeline maintenance problems. The needs for crude oil by refineries in the Midwestern and Eastern United States could then be readily met without any possibility of the reoccurrence of marine oil spills at Valdez on Prince William Sound, at Ferndale or Anacortes on Puget Sound or elsewhere.

There is also the need to build a natural gas pipeline out of the Prudhoe Bay area. The previous idea was to build the pipeline to Valdez and load liquefied natural gas onto ships for transport to major use points. However, the loading and unloading of liquefied natural gas may present some added safety risks and certainly adds some increased costs. A better alternative may be to build a natural gas pipeline from Prudhoe Bay to Fairbanks and then parallel to the proposed connecting railroad from Alaska through Canada to the Lower 48 States, as has been previously discussed.

The need for developing natural gas resources in Alaska and transporting them to the Lower 48 States is made especially great because of the expected growth in its use. Natural gas has been designated as the "environmental fuel of choice" by the Clinton Administration, and as a result its use is expected to grow by at least five percent per year over the next few years. Natural gas consumption has increased from 20 trillion cubic feet per year (565 billion cubic meters per year) in 1990 to 23 trillion cubic feet per year (650 billion cubic meters per year) in 1993 and is expected to reach 30 trillion cubic feet in 2000 as shown in Figure 11.

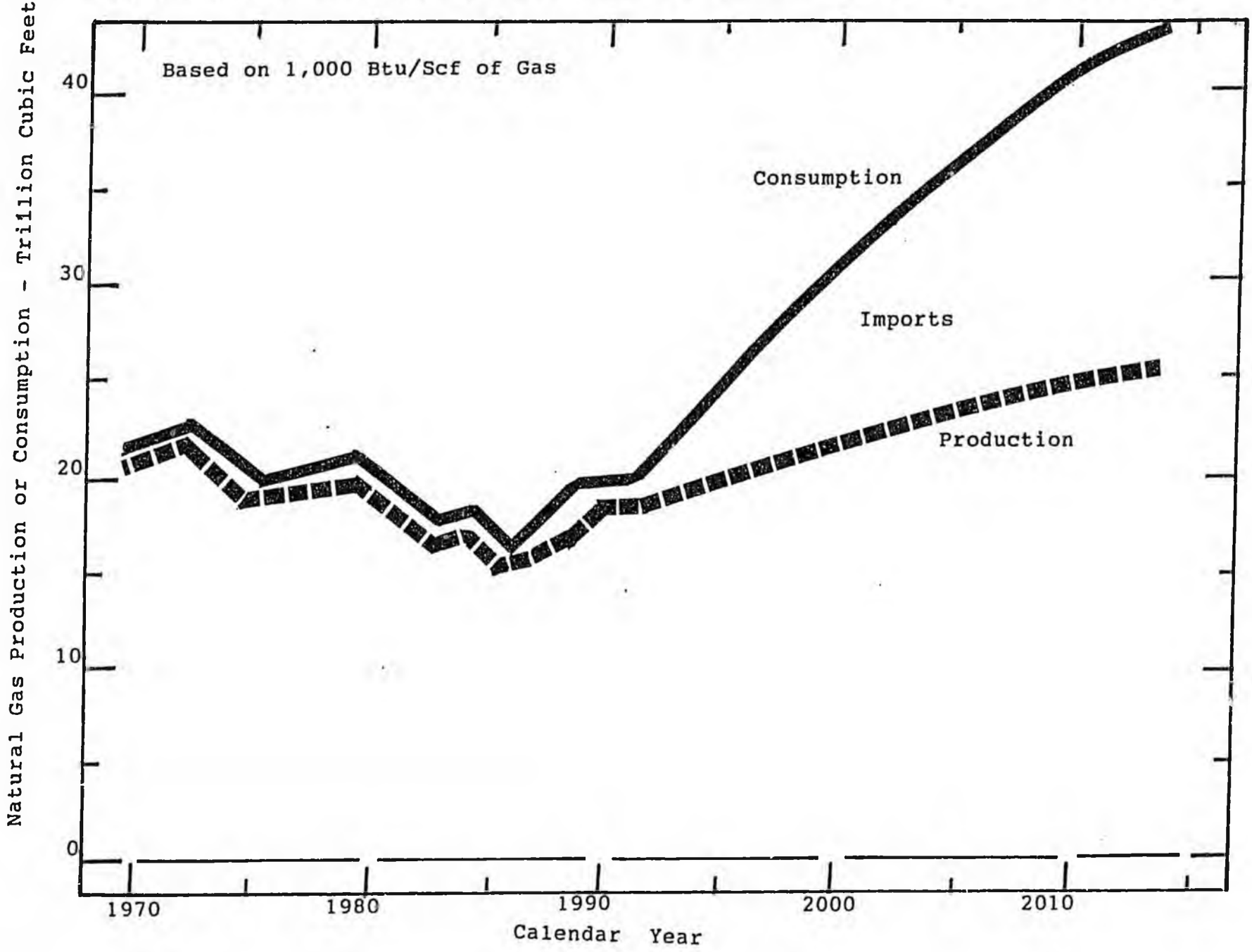
Natural gas consumption is expected to increase to 32 trillion cubic feet per year (905 billion cubic meters per year) by 2000 and 41 trillion cubic feet per year (1,160 billion cubic meters per year) in 2010 if present trends continue. Unfortunately, domestic natural gas production from the Lower 48 States is estimated to only increase from 18 trillion cubic feet per year (510 billion cubic meters per year) in 1990 to 25 trillion cubic feet per year in 2010. The result is that the amount of natural gas, which will need to be imported from outside of the Lower 48 States or from new fields is expected to increase from one trillion cubic feet per year (28 billion cubic meters per year) in 2000 to 20 trillion cubic feet per year (565 billion cubic meters per year) in 2010.

The potential sources for importing natural gas from other countries are more limited than for crude oil because of the need for cryogenic cooling, the safety concerns of storing and transporting liquefied natural gas, and the additional expense involved. As a result, the practical options for large-scale importation of natural gas are limited to pipeline transport from Mexico or Canada at the present time. The location of a natural gas pipeline parallel to the proposed Alaska connecting railroad would make it possible to transport natural gas from Alaska to the Lower 48 States or even from Canada on an enhanced economical basis.

The United States is the World's greatest energy consumer and is also the World's greatest energy importer. The United States consumes large amounts of petroleum, which is primarily used for transportation. The United States imported more than half of its total petroleum consumed this past year. The petroleum production in the United States is expected to continue

Figure 11

EXPECTED TRENDS IN NATURAL GAS PRODUCTION AND CONSUMPTION IN THE UNITED STATES



to decline while its consumption is expected to continue to increase, as shown in Figure 12 (Refs. 26, 27). Alaska has the greatest known reserves of untapped domestic petroleum in the United States, which reason and logic say need to be developed in order to reduce imports.

The United States has very limited amounts of oil and gas resources, but very large reserves of coal, as listed in Table 4 (Ref. 26) and illustrated in Figure 13 (Ref. 27) There are very large coal reserves located in Alaska, as shown in Table 5 (Ref. 28). There is a large coal field at Beluga on the Kenai Peninsula in Southern Alaska, which could be utilized, plus the Nenana field near Fairbanks in Central Alaska. There is another large coal field in the Colville Valley of Northwestern Alaska with a high heating value, which could also be developed in the future. The Arctic Slope low sulfur coal reserves of 20 billion metric tons or more are one of the World's largest deposits, but is limited in terms of development by transportation (Ref. 28). The coal reserves in Alaska constitute 20 to 25 percent of the total for the entire Nation and are between 500 billion and one trillion metric tons in magnitude (Ref. 29).

The Alaska coals tend to be of the bituminous and subbituminous grades with some lignites. The coal in Alaska tends to be very low in sulfur content with a minimal air pollution potential. The coal in the Colville Valley is high in heating value to make it desirable as either a utility or industrial fuel. Some of this coal has properties, which make it suitable for metallurgical coking as well as for utility steam coal. The coals from Alaska would have a particularly suitable market in Japan and Korea for steelmaking, as well as those from British Columbia, where these countries tend to have very little coal reserves of their own.

The expected coal use in Japan, Korea and Taiwan alone is expected to increase from 80 million metric tons per year in 1990 to 200 million tons per year by 2010. Some of this coal could be provided from Alaska and Siberia in the future. However, a considerable amount would still be expected to come from Australia, as it is generally the price leader for the Pacific region in terms of the present export market. There are presently about 700,000 short tons (600,000 metric tons) of coal shipped from the Usibelli mine near Healy to Seward over the Alaska Railroad and then by ship to Korea for use in electric power generation. There is also approximately 4.3 million short tons (3.9 million metric tons) of high grade bituminous coal shipped from the Tumbler Ridge mine in northeastern British Columbia by the British Columbia Railway to Vancouver for export to Japan and elsewhere in Asia.

One solid bulk energy fuel, which could be hauled on the connecting Alaska-Canada railroad is coal. As previously noted, Alaska has very large available resources of both utility steam coal and metallurgical coking coal. The State of Alaska is presently exporting approximately 0.75 million short tons per year of low sulfur coal to Korea to the Korean Electric Power Company. This coal is mined at the Usibelli mine near Healy to the South of Fairbanks and then transported on the Alaska Railroad to Seward. The coal is then loaded onto ships and taken to Korea for electric power generation. There is also another 0.75 million short tons per year hauled on the Alaska Railroad to local power plants in Alaska , which operated by local electric utilities, private industries, native corporations, and by the U.S. military bases.

The present coal hauling on the British Columbia Railway is 5.3 million short tons per year (4.8 million metric tons) from the Tumbler Ridge mine near Dawson Creek to Vancouver for export to

Table 4

COMPARISON OF TOTAL ENERGY RESERVES AND CONSUMPTION PATTERNS IN THE UNITED STATES IN 1991 (REF. 26)

Energy Resource	Total Energy Resources		Annual Energy Consumption	
	10^{15} Btu	% of total	10^{15} Btu/Year	% of total
Coal	75,000	61.7%	18.9	23.4%
Nuclear	46,000	37.8%	6.2	7.7%
Oil	350	0.3%	33.5	41.4%
Gas	300	0.2%	19.3	23.8%
Hydro	-	-	2.9	3.6%
Renewable	-	-	0.1	0.1%
Total	**121,650**	**100.0%**	**80.9**	**100.0%**

Table 5

ESTIMATES OF POTENTIAL COAL RESOURCES IN ALASKA (Ref. 28)

Coal Field	Measured Million Tons	Identified Million Tons	Potential Million Tons
Beluga	500	10,000	30,000
Nenana	175	6,200	9,500
Bering River	60	110	3,500
Wishbone Hill	40	120	350
Chickaloon	3	25	100
Anthracite Ridge	1	5	50