Alaska Canada Rail Link
Summary of Benefits to Alaska.

(Prepared and Revised by Paul Metz, July 26, 2006)
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1. Reduced transportation costs for mineral resource production from the interior of Alaska.

Mineral and solid fuel products are low unit value products that must be transported by bulk carriers such a rail, barge, or marine vessels. There are at least 588 known mineral occurrences within a 120 mile wide corridor from Fairbanks to the Canadian border. The Rail Link will reduce the transportation cost for these occurrences to one third the cost of transport by truck. It is estimated that at least six mineral occurrences in this corridor will become major mines over the next 30 years as a consequence of the reduced transportation costs. The expected economic impact on interior Alaska ranges from at least $4.2 billon to $41 billion.

2. Reduced transportation costs for forest products from interior Alaska.

Inventories of forest resources on State and Native Corporate lands from Fairbanks to the border indicate at least 1.6 billion board feet that can be produced on a sustainable yield at a rate of 30 million board feet per year. The gross value of this potential annual production at current market prices is $10 million and would provide for long term employment in rural communities east of Fairbanks. As in the case of minerals and coal, forest products are low unit value materials that require bulk transportation systems.

3. Commuter rail service to Alaska villages from Fairbanks to the Canadian Border.

Connecting the communities of Salcha, Delta Junction, Tanacross, Tok, and Northway with Fairbanks by commuter rail will decrease community re-supply costs and personal transportation costs as well as decrease the risk of travel during the periods of extreme cold and major snowfall. It will also give these residents an alternative to travel to nearby parts of Canada, as well as farther potential destinations in North America, Anchorage and Seward.

4. Commuter rail service from eastern Alaska communities to potential natural resource development projects.

Commuter rail service to new major resource development projects within the corridor will allow the workforce to come from existing communities thus reducing the capital costs of the projects related to employee housing and support services. Rail service from existing communities to mine or mill sites will also enhance the quality of life in existing communities by ensuring job opportunities, but at the same time not disrupting community relationships and life styles.

5. Alternate routes for bulk materials and military transport to and from Alaska.

Current bulk transport capability to Alaska is dependent on ports and rail/barge connections that are subject to major earthquakes such as the 1964 Alaska event. The proposed Rail Link connects Alaska to the ports of Skagway and Prince Rupert and the continental US over a tectonically stable route. The alternate port sites connect to the Inland Passage and thus can be used to avoid periods of extreme weather conditions in the Gulf of Alaska. The Fairbanks to Chicago route is 750 miles shorter than a Fairbanks, Seward, and Seattle to Chicago route. Thus the Rail Link will provide an alternate method of re-supply to and from Alaska in the event of a military crisis or major natural disaster.

6. Connection of Alaskan ports (Point Mackenzie, Anchorage, Seward, Whittier, and Skagway) to the manufacturing and population centers of the US and Canada.

   The proposed Rail Link connects all of Alaska's major ports to the manufacturing, surface transportation, and population center of the US and Canada. Port congestion on the West Coast of the US and Canada will continue as port sites are limited and as trade growth in the Pacific Rim is expected to continue for the foreseeable future. The Alaska port connection will help mitigate this congestion in the future. Speed and reliability are increasingly valuable in the just-in-time, global economy. This will also reduce costs and delays that result from land to sea, sea to land commodity transfers.

7. Enhanced economics for mineral and energy production in Alaska and thus development of medium sized deposits, as well as the large and high grade deposits, such as the Red Dog, Greens Creek, Pogo, and Donlin Creek Mines.

   Due to high costs of transportation and energy, only the largest and highest grade mineral deposits (those in the upper 90^{th} percentile of their type worldwide) have been developed in Alaska. With the synergistic effects of the Rail Link and multiple sources of energy (coal, petroleum, and natural gas), medium size deposits (those in the 50^{th} percentile and higher of their type worldwide) will be developed. With lower transport costs, marginal production is increased, so less valuable sections can be profitably developed. This will extend the life of many mines, increase job opportunities, and further diversify the economy of the state.

8. Potential for petrochemical production in Alaska and transport to the Chicago Hub as well as to Asian markets.

   The in-state utilization of the natural gas liquids from the North Slope will increase the value of these commodities and the natural gas pipeline to the State of Alaska by at least $1.0 billion per year. Initial demand for the estimated 13 million tons of Alaska's petrochemical products is projected to be in the Pacific Rim. However, with declining feedstock in the Gulf of Mexico, a demand shortage in the Midwest may be equivalent to half the annual production from Alaska within 15 years of the construction of the gas pipeline and the Rail Link. The shortest, fastest, and least hazardous method of shipment of these products to the Chicago Hub will be by the Rail Link.

9. Passenger and freight service from Fairbanks to Chicago in 150 hours or less.

   The Rail Link is being designed as a 79 mile per hour passenger service line. The Rail Link will be capable of transporting freight between Chicago and Fairbanks in 150 hours or less. Current freight shipments by rail/barge systems require up to 14 days or nearly 2.5 times longer.

10. Enhance tourism from the continental US overland through the Canadian Rockies to Fairbanks and connection to multiple cruise ship ports-of-call.

    More than 1.8 million tourists visit Alaska each year. The majority of the tourist visits to the state are by a combination of air and cruise ship transport. Although the cruises generally originate or end on the West Coast of the US and Canada, visitors come from many locations in North America, Europe, and the Pacific Rim. In addition, approximately 500,000 of those tourists ride the Alaska Railroad. With increasing fuel costs, air transport to and from Alaska as well as to and from the port-of-call for the cruise will result in higher costs per visit. Increased fuel costs will have similar effects on automobile and recreation vehicle trips to Alaska. A Rail Link from Alaska to the population centers of North America will provide for an unprecedented scenic experience and for lower transportation costs to and from the state. This will significantly enhance the tourism industry in Alaska.

11. Energy conservation through increased use of more energy efficient rail transportation versus trucks and buses.

    Rail is the cheapest form of ground transportation. A ton of freight can be transported by rail for one third the fuel needed to transport the same material by truck. With energy costs increasing, more freight and passengers will be transported by rail in North America in the future.

12. Many environmental advantages will be realized.

    The rail service alternative will reduce environmental impacts associated with town-site development and road construction and road maintenance. Trains are a more energy efficient form of transportation. Heavier weights can be transported with little effect on the land surface. Occasional trains are less intrusive than constant highway traffic. Railroads offer controlled access to resources and remove the environmental threat of uncontrolled development. Trains have a smaller right-of-way than roads, leaving a smaller footprint on the land. Potential collocation of the gas pipeline, train, telecommunication and power lines further mitigates construction impact.

13. Increase in the value of the US dollar due to decreased energy and mineral imports.

    Mineral concentrate production from Alaska is currently exported overseas for processing and then the higher unit value metals are imported back into the US. The Rail Link will allow mineral commodities to be processed directly into metals and then transported directly to the manufacturing centers of North America. As noted above, the more energy efficient rail system will decrease the demand for imported fuels.- In fact, at some point in time when the volume of rail freight becomes large enough to warrant electrification of the Alaska Railroad, petroleum based fuels may be replaced with electricity generated by coal, hydro, wind, geothermal, tidal, or some other cost effective local source. Increasing the value of exports from Alaska and decreasing the value of imports will strengthen the US dollar, thereby benefiting every consumer in the country.

14. The opportunity of constructing a value-added mineral concentrate facility (a smelter refinery complex) in the state will be enhanced.

    The United States is desperately in need of mineral concentrate treatment facilities and refining capacity. Due to the reduced transport cost to the center of commerce of the contiguous states, the likelihood of a smelter-refinery being built in Alaska is greatly improved.

15. The military can benefit in numerous ways.

    Sensitive military equipment or troops can be transported safely and discretely. Construction costs will be reduced for any future projects, such as the recent national defense project at Fort Greely, the Donnelly and Tanana Flats Training Areas, and Allen Airfield. Opperational costs would decline for routine transport and military exercises. A new form of transport would be available in a defense emergency or time of war.

16. Public safety is enhanced.

    Moving larger amounts of cargo and people by rail will result in less congestion and less accidents on our highway system.

17. Road maintenance costs will be reduced.

Railroads are more durable and can handle heavier loads. There will be dramatic long term cost savings for Department of Transportation repair and repaving budgets when more volume is handled by train.

Notes: 1. The above estimated benefits are based on the assumption that the Rail Link will be completed after the construction of the Alaska Natural Gas Pipeline. If the Rail Link is completed prior to the gas pipeline, there will benefits associated with the logistics for the pipeline construction. Logistic costs for the pipeline are estimated at 5 percent of the total estimated cost of construction which is currently $25 billion. Thus the total cost of logistics is estimated at $1.25 billion. Rail transportation costs are estimated at 1/3 and 1/4 the cost of truck transport thus the net savings from the Rail Link are estimated to range between $833 and $938 million. In addition, the Rail Link will result in reduced costs of damage to the Richardson and Alaska Highways during pipeline construction. This cost savings is estimated to range between $300 and $500 million.

2. Total capital cost of the Rail Link from Fairbanks to the Canadian border is estimated at $1.825 billion.