

Port Mackenzie Rail Extension

New Transportation Infrastructure

Providing An Economic Engine for the State

A Presentation For House Finance
G.O. Bonds for Ports

April 5, 2012

The Project

Extending rail 32 miles from the Alaska Railroad mainline to Port MacKenzie to support the movement of bulk resources.

The Users to Date*

- Alutiiq Manufacturing
- Central Alaska Energy
- NPI
- PacArctic Logistics
- Quality Asphalt and Paving

* All users listed either have an existing lease or have applied for a lease adjacent to the rail alignment at Port MacKenzie

Port MacKenzie Rail Extension: Milepost and Segment Summary



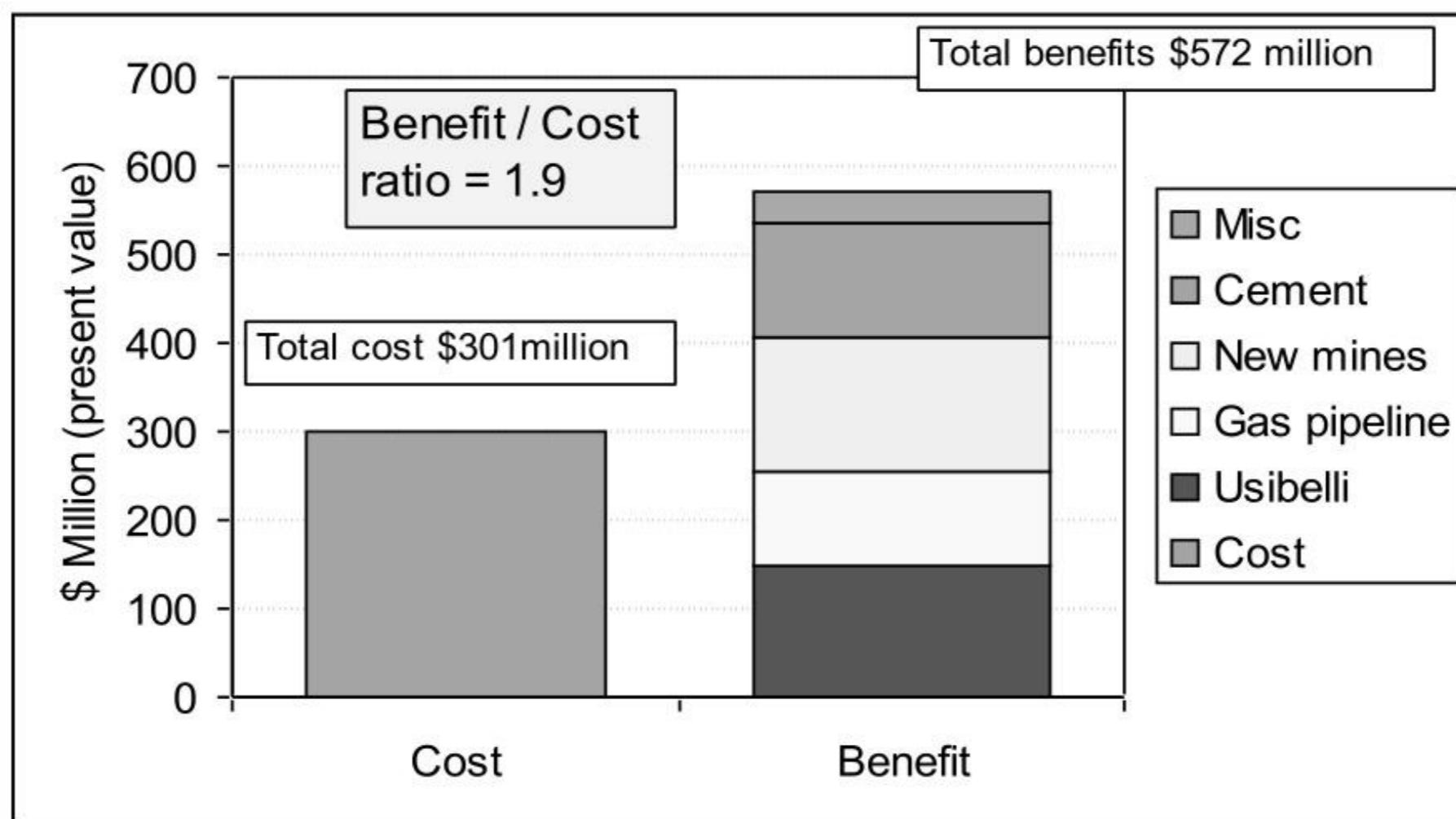
The Port

- Deep Water Port (-60 MLLW)
- The deepest draft bulk material vessel to dock in northern Cook Inlet was recently loaded here
- Accessible all year – winter and summer-no dredging required
- 485-foot trestle in place leading to a 1,200 foot dock face
- Barge dock area expanded to 15 acres in 2011
- Bulk material handling conveyor system in place
- Space for Commercial/Industrial Development – 8,940 Acres (14 Square Miles of Zoned Industrial Land)
- \$6.5 million AKDOT port access road grade reduction project to be completed in 2012

Business Plan

- Infrastructure has always played a leading role in economic development. If we can lower transportation costs, we will attract business investment, which in turn creates more jobs and more tax revenues. **This project links the existing rail main line to the closest port, shortening the transportation distance thereby lowering costs.**
- Transportation infrastructure projects across the United States and particularly in Alaska have been constructed or subsidized with State and/or Federal funds and have been the major stimulus for the growth of this state and this country, with no direct revenue return in most cases. **This project not only brings revenue to the state, but also has a benefit cost ratio, computed by ISER, of 1.9 (most projects have less than 1.0).**
- In the case of Port MacKenzie Rail, **the state is projected to receive on average \$300 million per year in mineral taxes, royalties and fees over 60 years. Users of the new rail extension will save \$572 million in reduced transportation costs** due to the shorter transportation route to tidewater (ISER). The rail extension would provide a significant stimulus to new mineral development within a 120-mile wide corridor surrounding the existing Railroad mainline, according to a detailed analysis by Paul Metz, 2007. Metz projects likely minerals developed with a cumulative gross metal value of \$173 billion.

ISER BENEFIT COST ASSESSMENT OF RAIL EXTENSION



Existing and Potential Users

A number of businesses have financially invested in the Port and included Port MacKenzie Rail in their business and development plans. Two other well-known companies have lease applications pending.

Long-term leases include:

- Alutiiq
- Central Alaska Energy*
- Klondike Concrete Co., Inc.
- NPI
- PacArctic/Koniag, Inc.

Two pending leases

- QAP
- Tri Metals

Additionally, two significant mining companies have stated in letters of support that Port MacKenzie Rail will make their businesses more competitive.

- **Sumitomo Metal Mining Pogo LLC**, brings freight inbound, 500 tons per week of Portland cement. The company states “Reducing the cost of importing the products we need for our operations will help us be more competitive in our markets and give us better opportunities for growth and longevity.” The company further states “...the rail extension to Port MacKenzie will provide more efficient transportation, staging, and storage of heavy equipment, chemicals, and fuel that will help not only our company, but all the mining, exploration and development companies as well as any other industrial or processing facilities near the Rail Belt.”
- **Kinross Gold USA, Inc.** owner of Fort Knox, The company states that Port MacKenzie Rail will help reduce the \$5 million in annual transportation costs for high volumes of inbound freight. “The Port MacKenzie Rail extension has the potential to reduce our operating costs and improve our ability to be competitive.”

*Central Alaska Energy, is developing a tank farm and designing a rail siding for the import and transport of ultra-low sulfur diesel and unleaded gasoline to the Interior.

Other Potential Users

Future Investment:

The Legislature has provided a \$500,000 match to **Accelergy Corporation** for coal certification. Accelergy is testing Alaska Cook Inlet coals as a feedstock for jet fuel to the US Air Force and US Army. Accelergy plans to build a \$5 billion Coal-To-Liquids plant for Western Cook Inlet. Their project “could hinge on the successful completion of this rail extension project,” according to the Alaska representative for Accelergy.

Other Activity:

Any **gas pipeline project** would benefit from lower transportation costs for heavy equipment and building materials. Northern Economics estimates **transporting pipeline materials by rail from Port MacKenzie would save \$100 million over other Ports**, March 2008. In addition, ISER projected that gas pipeline savings would include \$82 million NPV, (net present value), of avoided rail and road upgrade costs.

The **Susitna Watana Hydro Dam**, now in the development stage, will require transport of heavy equipment and construction materials. As with any gas pipeline project this project will also benefit from reduced transportation costs from tidewater to the Interior via the Port MacKenzie Rail Extension.

Project Funding

- a. \$10 million – FY 2008 state appropriation for EIS
- b. \$17.5 million – FY 2009 state appropriation for project
- c. \$35 million – FY 2011 state appropriation for project
- d. \$30 million – FY 2012 state appropriation for project

Current Total Appropriations: \$92.5 million

Project Budget

(Mac Central/Houston South Route)

Environmental Impact Statement	\$10,000,000
ARRC Direct Labor Costs	3,541,148
Engineering	14,051,730
Environmental and Permitting	2,922,022
Construction	208,995,100
Construction Management	11,700,000
Environmental Mitigation	4,500,000
Right-of-Way	9,900,000
MSB Contracts	3,650,000
MSB Finance/Administration	3,250,000
Total Estimated Project Cost	\$272,500,000

Additional Funding Needed for Project Completion

Total Estimated Project Cost	\$272,500,000
<u>Project Funding To Date</u>	<u>92,500,000</u>

Additional Funding Required \$180,000,000

General Fund request \$60,000,000

GO Bond request \$120,000,000

Operations

- \$180 M in funding would allow ARRC rail operations to commence during 2015/2016.
- Maintenance Costs: There will be minimal maintenance costs for the first five years given this is a new facility. The maintenance estimate for operational rail traffic (track open year round) on the Rail Extension is approximately \$150,000 a year.

Rail Ext. Project & Port Status

Rail Extension:

- The Surface Transportation Board (STB) released its Final Environmental Impact Statement (EIS) on March 25, 2011 and approved the MacCentral/Houston South routing alternative for the rail extension.
- The STB released its Record of Decision (ROD) on the Final EIS on November 21, 2011 with an effective date of December 23, 2011. The ROD authorizes the ARRC to construct and operate a new rail line connecting Port MacKenzie to the ARRC existing main line near Houston, Alaska.
- The major permit to be acquired is the Corps of Engineers (COE) Section 404 permit. Application was made to the COE, the COE public notice period was completed, public comments were received by the COE, project staff responded to comments and submitted those comments to the COE, the COE received the STB's EIS ROD, and the COE has begun final preparation of the permit. Issuance of permit is expected in April 2012.
- The majority of other project permits have been received with the exception of the Coast Guard bridge permit for Segment 6 which is expected this month.
- The final EIS and release of the ROD allowed Right-of-Way (ROW) activities to be initiated. To date approximately 30% of the project ROW has been procured by the MSB with other required parcels at various stages of acquisition.

Port:

- The barge dock was expanded from 8 to 15 acres, providing significant staging and storage area for materials before exporting on ships, or for importing bulk materials such as pipe for the pipeline. Sealift modules can be constructed on the barge dock in Alaska rather than in the Lower 48. The Borough received a \$3 million grant from EDA, \$750,000 from AK Dept. of CCED, and \$1 million in materials match from the Borough to construct the project.
- Port: The access road to the Port, Don Young Road, is being upgraded by AKDOT. Contractors will complete work in July 2012 on the 1.3 mile-road reducing its maximum grade from 10% to 5% and diverting water flow. The \$6.5 million project is federally funded.

Schedule & Use of Additional Funds

Schedule

- Construction of Segment 1 embankment was bid in December 2011 and is underway.
- Invitation for bid for Segment 6 embankment construction was issued March 9, 2012

The remaining project schedule is totally dependent on financing. If a State General Fund appropriation of \$60 million is approved by the FY 2013 Legislature, two construction contracts for rail embankment (Segments 3 and 4) would be bid in August/September of 2012. In addition, ballast for the project would be manufactured by the ARRC in the Curry Pit.

Approval of a \$120 million General Obligation Bond by the FY 2013 Legislature and the voters in November 2012 would allow bidding the last two construction embankment contracts (Segments 2 and 5) in the spring of 2013 and the procurement of long lead-time, railroad-specific items, such as rails and ties. Segment 7 (sub-ballast and & ground settlement repair work) would be bid in the spring of 2014 along with Segment 8 (track work). This would allow project completion in the fall of 2015.

Right-of-Way (ROW)

The MSB is managing all ROW acquisition for the project. All properties acquired are being titled to the MSB. After the acquisition of the required ROW has been completed, a Port MacKenzie rail extension corridor will be provided by the MSB to the ARRC for operation and maintenance of the rail extension. The Bi-Modal rail loop in the MSB Port District will remain under the management and control of the MSB.

Budget for \$60 million FY2013 General Fund Request

ARRC Direct	\$1,000,000
Engineering	250,000
Environmental	250,000
Construction (Segments 3,4, ballast)	52,000,000
Construction Management	4,500,000
Mitigation (STB)	1,000,000
MSB (PM, Consultants, MSB Direct)	1,000,000

Conclusion

- The Port MacKenzie Rail Extension is providing current benefits through the establishment of new lessees/businesses at Port MacKenzie which will bring new import & export activity to the region.
- The project will also bring future economic benefits to the state with the creation of:
 - 3,000 Construction Jobs
 - 4,000 Mining Related Jobs
- \$300 million per year in mineral taxes, royalties and fees over 60 years.
- Users of the new rail extension will save \$572 million in reduced transportation costs
- Mineral development opportunities along Alaska's Interior rail corridor.

Additional Reference Material

Budget Summary - Funded to Date

January 1, 2012

Activity	Budgeted	Expended	Available
EIS	10,000,000.00	9,695,250.73	304,749.27
ARRC Direct	1,041,148.00	292,412.07	748,735.93
Engineering (TNH,Hanson)	13,051,730.00	7,211,758.79	5,839,971.21
Environmental (HDR)	1,922,022.00	892,055.41	1,029,966.59
Construction	46,085,100.00	9,943,315.02	36,141,784.98
Construction Management	3,600,000.00	900,000.00	2,700,000.00
Mitigation (COE and other)	2,500,000.00	0.00	2,500,000.00
ROW	9,900,000.00	2,175,415.16	7,724,584.84
MSB (Consultants: PM, Legal, ROW)	1,150,000.00	456,277.00	693,723.00
MSB Finance/Administration (5%)	3,250,000.00	3,250,000.00	0.00
Total	92,500,000.00	34,816,484.18	57,683,515.82

Budget Summary - Funding Required For Completion (180 million)

Activity	Budgeted	Expended	Available
	0.00		
ARRC Direct	2,500,000.00	0.00	2,500,000.00
Engineering (TNH,Hanson)	1,000,000.00	0.00	1,000,000.00
Environmental (HDR)	1,000,000.00	0.00	1,000,000.00
Construction	162,900,000.00	0.00	162,900,000.00
Construction Management	8,100,000.00	0.00	8,100,000.00
MSB (Consultants: PM, Legal, ROW)	2,500,000.00	0.00	2,500,000.00
Mitigation (STB and others)	2,000,000.00	0.00	2,000,000.00
Total	180,000,000.00	0.00	180,000,000.00

Project Budget Summary--Total Project

Activity	Budgeted	Expended	Available
EIS	10,000,000.00	9,695,250.73	304,749.27
ARRC Direct	3,541,148.00	292,412.07	3,248,735.93
Engineering (TNH,Hanson)	14,051,730.00	7,211,758.79	6,839,971.21
Environmental (HDR)	2,922,022.00	892,055.41	2,029,966.59
Construction	208,985,100.00	9,943,315.02	199,041,784.98
Construction Management	11,700,000.00	900,000.00	10,800,000.00
Mitigation (COE and STB)	4,500,000.00	0.00	4,500,000.00
ROW	9,900,000.00	2,175,415.16	7,724,584.84
MSB (Consultants: PM, Legal, ROW)	3,650,000.00	456,277.00	3,193,723.00
MSB Finance/Administration (5%)	3,250,000.00	3,250,000.00	0.00
Total	272,500,000.00	34,816,484.18	237,683,515.82

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Business Plan

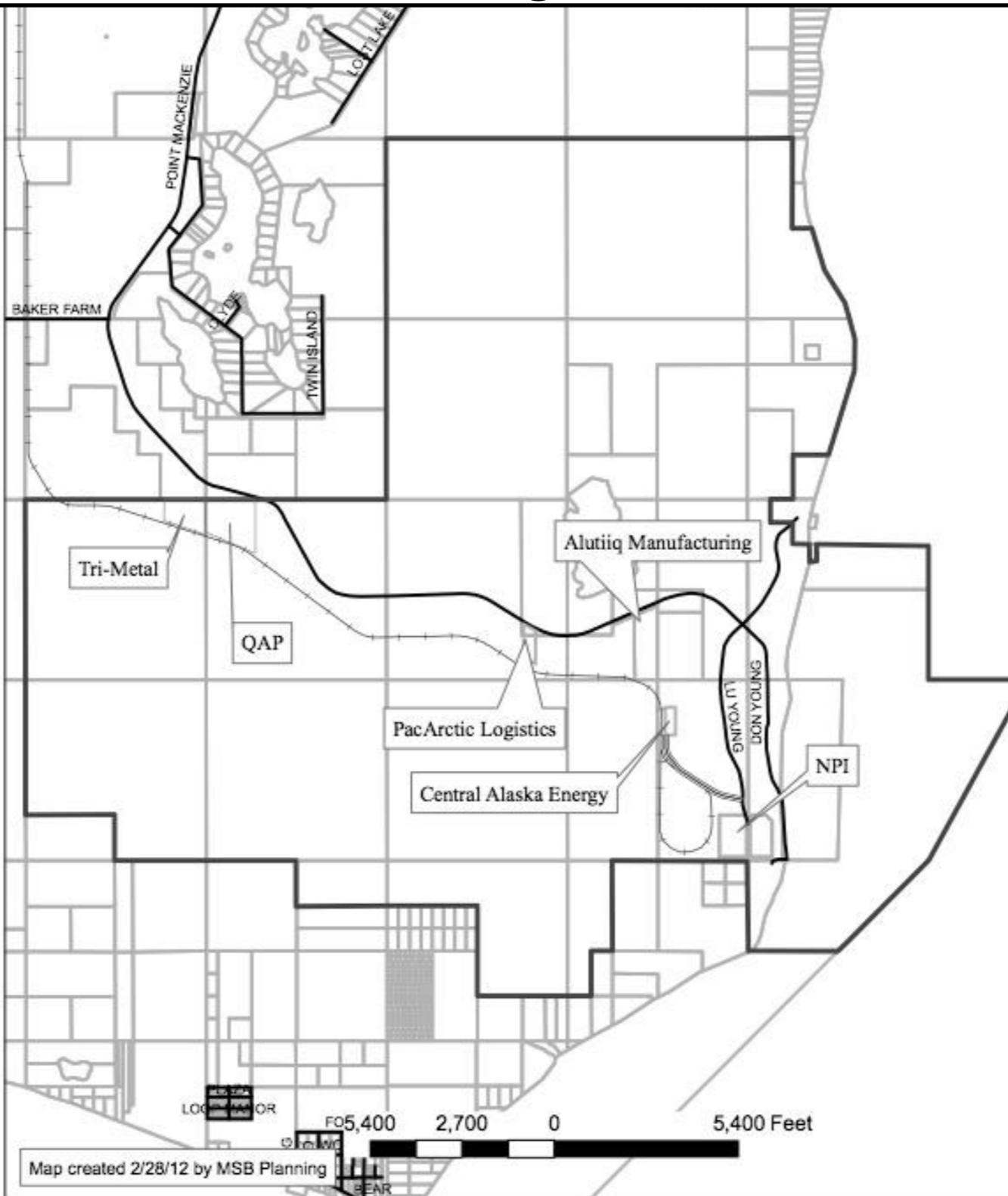
The table below indicates the potential freight tonnage of minerals and other bulk commodities that could be transported over the first thirty years of rail extension operation.

Estimated Port MacKenzie Rail Extension Freight Tonnages*
During First 30, Years of Operation

Product	Annual Tonnages in years (1-5)	Annual Tonnages in years (6-10)	Annual Tonnages in years (10-20)	Annual Tonnages in years (20-30)
Coal Exports	1,000,000-2,000,000	2,000,000-3,000,000	3,000,000	3,000,000
Aggregates (sand and gravel)	100,000	100,000	100,000	100,000
Lime	50,000	50,000	50,000	50,000
Wood Products	60,000	60,000	60,000	60,000
Petroleum Products	200,000	300,000	400,000	400,000
Natural Gas Pipeline	0	960,000**	0	0
Mineral Concentrates	365,000	365,000	1,679,000	1,879,000
Total	1,775,000-2,775,000	3,835,000-4,835,000	5,289,000	5,489,000

* Economic Analysis of Rail Link—Possible Rail Extension Users, analysis by Paul Metz, Ph.D., updated 2/2011.

Existing Leases and those being processed at Port MacKenzie needing Rail Access



Exports: Commodities exported via the Rail Extension to Port MacKenzie include fuel, hard-rock minerals, aggregate, timber, cement, riprap, woodchips, housing modules.

-Coal to Korea, Chile, Japan via Usibelli,

Port MacKenzie will complement the growth exports of coal to the Seward Port. Usibelli said it needs two ports for growth exports. Usibelli has said it seeks to increase its capacity from 1.8 million tons to 3-4 million tons a year. The Borough anticipates up to 2 million tons per year, or 50 percent of the market will utilize Port MacKenzie.

-Minerals including copper, lead, molybdenum, and silver are found in the 1,000 mineral occurrences along the Alaska Railroad Mainline and could be developed. The transportation efficiencies are expected to stimulate these new mines in the Interior. Dr. Metz with UAF estimates that even if only three mines are developed, it could result in \$172 billion in estimated gross metal value of mineral production.

-Aggregate, Gravel, Western Alaska has a shortage of gravel but the area around Port MacKenzie has an abundance of gravel. Port MacKenzie is the only port with a conveyor built to load gravel. In 2008, 183 barges of gravel were transported to Anchorage for its port project.

-Woodchips, Increased wood chip production and export is anticipated by developing the resources of the Susitna Forest

Imports: Commodities either already imported or projected to be imported through the port to Southcentral and the Interior include:

-Cement, Klondike concrete already imports cement, see freight chart.

-Alutiiq oil field modules to Interior

-Armour stone by PacArctic

-Steel

-Machinery

-Construction equipment

Port MacKenzie

Freight Volume Data
2005 Through 2011

Product	Destination	Total to MSB
68 houses	to the Bush	
Heavy Equipment		\$2,297.50
Heavy Equipment		\$1,447.50
Birch Aspen	S. Korea	
Birch Aspen	S. Korea	\$52,071.08
Spruce	Japan	\$14,312.00
Log	Port Mac	\$15,197.76
Lightered	POA	\$368.00
Spruce Logs	Port Mac	\$1,200.00
Chips	Japan	\$12,195.07
Parking	POA	\$0.00
Parking	POA	\$0.00
Birch Aspen	S. Korea	\$34,754.30
Spruce	Japan	\$22,397.35
12 Pump Modules	Alyeska	\$0.00
2 Electrical Modules	BP	\$0.00
Birch Wood	Taiwan	\$42,071.63
Gravel	Anchorage	\$563,772.81
Equipment	Beluga	\$452.50
Equipment	Beluga	\$1,070.00
Cement/Rebar	Port Mac	\$41,501.73
Cement	Port Mac	\$33,096.00
Scrap Metal	Tacoma	\$3,054.86
Coal	Japan	\$1,632.50
Cement	Port Mac	\$26,720.03
Equipment	Port Mac	\$175.00
		\$912,927.90

Port MacKenzie Rail Line Extension/BiModal Facility January 1, 2012

Budget Status:

FY 2008 State Grant (Environmental Impact Statement)

Activity	Approved Revised Budget	Expended	Available
ARRC Direct	1,146,170.00	1,037,911.82	108,258.18
Engineering (TNH,Hanson)	1,168,880.00	1,168,880.18	(0.18)
Environmental (HDR)	1,757,905.00	1,757,905.09	(0.09)
Outside Counsel (Mayer-Brown,Dorsey)	698,262.00	598,262.03	99,999.97
STB/EIS Contractor (ICF/HDR)	4,700,307.00	4,700,306.81	0.19
RSA (DNR/BLM)	173,476.00	142,698.80	30,777.20
MSB (PM, Consultants)	295,800.00	289,286.00	6,514.00
MSB Finance/Administration	59,200.00	59,200.00	
Total	9,940,800.00	9,695,250.73	245,549.27

FY 2009 State Grant

Activity	Approved Revised Budget	Expended	Available
ARRC Direct	344,974.00	151,651.44	193,322.56
Engineering (Hanson)	4,347,904.00	4,325,544.62	22,359.38
Environmental (HDR, ICF)	422,022.00	367,170.78	54,851.22
Construction BiModal (Completed)	10,085,100.00	9,943,315.02	141,784.98
Construction Management	1,700,000.00	900,000.00	800,000.00
MSB (Consultants: PM, Legal)	600,000.00	456,277.00	143,723.00
Total	17,500,000.00	16,143,958.86	1,356,041.14

FY 2011 State Grant

Activity	Approved Revised Budget	Expended	Available
ARRC Direct	396,174.00	140,760.63	255,413.37
Engineering (TNH,Hanson)	6,203,826.00	2,886,214.17	3,317,611.83
Environmental (HDR)	1,500,000.00	524,884.63	975,115.37
Right-of-Way Consultant	1,900,000.00	713,415.16	1,186,584.84
Segment 1 Construction (Awarded)	19,000,000.00	0.00	19,000,000.00
Right-of-Way	4,000,000.00	1,462,000.00	2,538,000.00
MSB (Consultants: PM, Legal, ROW)	250,000.00	0.00	250,000.00
MSB Finance/Administration (5%)	1,750,000.00	1,750,000.00	0.00
Total	35,000,000.00	7,477,274.59	27,522,725.41

FY 2012 State Grant

Activity	Approved Budget	Expended	Available
ARRC Direct	300,000.00	0.00	300,000.00
Engineering (TNH,Hanson)	2,500,000.00	0.00	2,500,000.00
Mitigation	2,500,000.00	0.00	2,500,000.00
Construction Management	1,900,000.00	0.00	1,900,000.00
Segment 6 Construction (March 2012 Bid)	17,000,000.00	0.00	17,000,000.00
Right-of-Way	4,000,000.00	0.00	4,000,000.00
MSB (Consultants: PM, Legal, ROW)	300,000.00	0.00	300,000.00
MSB Finance/Administration (5%)	1,500,000.00	1,500,000.00	0.00
Total	30,000,000.00	0.00	28,500,000.00

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Construction Update

Bids were opened on December 6, 2011 and a construction contract awarded to Bristol Construction for the embankment for the first 5 miles of the rail extension (Segment 1), completion of the Bi-Modal Loop and the construction of an access road for the University of Alaska property. Segment 1 was scheduled to be constructed first due to settlement expected from high fills and wet, unstable ground conditions. Early completion will allow correction of any settlement prior to placing ties and track.

Engineering was completed on Segment 1 (construction contract awarded) and Segment 6 (bid March 9, 2012). The remaining segments are scheduled to be 95% designed by the summer of 2012.

Construction: Some of the original segment construction scheduling as a result of the finalization of the route for the rail line—geotechnical (soil) borings, and timing and availability of funding—have been revised. As previously stated, Segment 1 is currently under construction. Early completion of Segment 6, including rail, will benefit the project by providing train-accessible storage for ballast and other rail materials, which must be produced or procured early in 2013 to meet a project completion schedule of 2015. The ballast will be produced in the ARRC quarry in Curry, but storage space in Curry is not sufficient to store the required ballast. Track and associated work for Segment 6, next to the main ARRC line, will not be bid but will be accomplished on a time and material basis by ARRC crews. Funding is available to complete the Segment 6 work (both contract and ARRC work). The contract embankment and bridge work was bid on March 9, 2012.

The construction work underway for the Bi-Modal Facility by both Bristol Construction and Quality Asphalt Products (\$9.9 million) was completed. The bi-modal facility is now 2/3s complete with the last 1/3 under contract (segment 1) for completion in 2012.

Segment 1 Bids

COMPANY	TOTAL
Granite	\$29,941,850.00
Bristol	\$17,704,875.65
Cruz	\$34,022,709.03
Scarsella	\$29,945,085.82
AIC	\$28,360,447.28
QAP	\$23,375,044.50
Phillips & Jordan	\$35,718,485.45