



# Port MacKenzie Rail Extension

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## Summary

The Matanuska-Susitna Borough is building a 32-mile rail extension that would link Port MacKenzie to the existing rail system in Alaska. With state funding, the project could have been originally due to be completed in 2014 at a capital cost of around \$300 million, plus \$1.5-2 million per year in maintenance costs. Controversy about the project centers primarily on economic issues. Proponents rely on hard-to-quantify benefits that include future usage of the rail extension by three hypothetical new mines (not based on any existing mineral prospects), a hypothetical new cement plant, and transportation of materials for a potential North Slope gas pipeline.

## Background and Proposed Rail Extension

Port MacKenzie, located across Knik Arm from Anchorage, is a deepwater port that mainly serves industrial customers. It is owned and operated by the Matanuska-Susitna Borough and

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has been in operation since 2001. In 2005, a new deep-draft dock was completed, allowing larger export ships to use the facility. Currently the port is accessed via a 40-mile road running from the highway in Wasilla.

The proposed rail extension would run 32 miles from south of Houston to Port MacKenzie (<http://www.portmacrail.com/documents/FinalMarch25Railps.pdf>). It may also include a loading/unloading loop at the rail terminus to facilitate bulk commodity transport. In addition to the railway, the port itself would need to be improved to accommodate the expected flow of additional goods.

## Economics

The total cost of the railway extension is projected to be around \$275-\$300 million (<http://www.portmacrail.com/cost.html>) (in 2007 dollars). Ongoing operations and maintenance (O&M) costs for the rail spur are estimated at \$1.5-2 million per year ([http://www.matsugov.us/docman/doc\\_download/2981-economic-effects-of-sc-rail-extension.pdf](http://www.matsugov.us/docman/doc_download/2981-economic-effects-of-sc-rail-extension.pdf)), with additional O&M costs associated with the port itself.

As of early 2012, \$92.5 million has been appropriated for this project from the state budget, with the majority of the funding occurring during FY 2011 and FY 2012. An additional \$23.5 million has been approved for FY 2013 from the General Fund, along with \$30 million raised from the sale of general obligation bonds ([http://en.wikipedia.org/wiki/General\\_obligation\\_bond](http://en.wikipedia.org/wiki/General_obligation_bond)).

The potential economic benefits of the railway extension, including reduced transportation costs and increased economic activity, are more difficult to quantify. One example where lower transportation costs are expected is the case of Usibelli Coal Mine Inc., which would see a clear savings over its current costs for rail export of coal via the Seward Coal Terminal. However, the other examples used in the published cost-benefits analysis ([http://www.iser.uaa.alaska.edu/Publications/PMK\\_RailExtension.pdf](http://www.iser.uaa.alaska.edu/Publications/PMK_RailExtension.pdf)) are hypothetical. These include transporting construction materials for a yet to be determined gas line from the North Slope, ore from unspecified new mines, and cement from a hypothetical new plant near Fairbanks. Assuming that all these developments actually occur, the cost-benefit ratio of the project (attributable to reduced transportation costs alone) was estimated at 1.9. This means that the total economic benefits would be about twice the cost of the project. If there is no gas line, no new mines, and no cement plant, then the cost-benefit ratio falls well below 1 and the rail extension would in effect subsidize the export of Usibelli coal.

Even harder to quantify are the total benefits to be derived from new developments stimulated by the existence of the rail extension. These benefits have been estimated as high as \$4.4 billion, bringing the cost-benefit ratio of the project to 40. However, the vast majority of this benefit assumes the development of all three new mines, construction of a new gas line, and development of a large cement plant in the Interior.

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These hypothetical mines would all be located within 120 miles of the railway running from Port MacKenzie to Eielson AFB near Fairbanks. The largest of these mines is expected to produce 1.7 million tons of ore concentrate per year. This calculation is based on a hypothetical mineral deposit, assumed to be half the size of the largest copper deposit in the world ([http://www.matsugov.us/docman/doc\\_download/1637-metz-phase-ii-possible-rail-ext-users-analysis-report-.pdf](http://www.matsugov.us/docman/doc_download/1637-metz-phase-ii-possible-rail-ext-users-analysis-report-.pdf)). For comparison, Red Dog Mine, currently the largest mine in Alaska, produced only 1.4 million tons of ore concentrate in 2011 ([http://www.aidea.org/PDF%20files/PFS\\_DMTS.pdf](http://www.aidea.org/PDF%20files/PFS_DMTS.pdf)).

For these mines to be considered part of the cost-benefit calculation of the railroad, it must also be assumed that their existence is attributable to the rail extension. In reality, metals exploration is occurring at an unprecedented rate all over the state due to current high metal prices, and infrastructure is only a secondary (though still important) consideration. At present no deposits of any significant size are being explored in the regions used in the cost-benefit analysis for the rail extension.

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**PORT MACKENZIE** — This port along the north coast of Knik arm across from Anchorage has been the recipient of state funds for expansions. — Get Photo (/photos/port-mackenzie/)

## Controversy

Controversy over the proposed rail extension mainly centers around the economics, with some additional concerns about the environmental and social impacts (<http://www.portmacrail.com/Issues.html>) of both the railway and port expansion. There is environmental concern about the potential impact to wetlands from the numerous crossings that will be required by the proposed route. Local citizen concerns are centered on the noise created by the railroad traffic and the potential release of coal dust from railcars.

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While the initial and O&M costs of the railroad extension are well defined, the benefits remain open to interpretation. Proponents argue that Port MacKenzie has much more space to expand than other ports, that exporting from Port MacKenzie is much cheaper than from other competing ports, and that construction of the rail extension will create a surge of economic development in the region. Opponents argue (<http://www.alaskajournal.com/Alaska-Journal-of-Commerce/AJOC-March-4-2012/Environmental-groups-challenge-Port-MacKenzie-rail-plan/>) that many of the presumed benefits will never materialize and that the rail extension will not ultimately pay for itself. In July 2013, the borough began working (<http://www.adn.com/article/20131230/new-town-sites-are-being-planned-mat-su-end-knik-arm-bridge>) on a conceptual plan for a new town near the spur.

## Current Status

In October 2012, as construction was about to begin a court order temporarily halted ([http://newsminer.com/view/full\\_story/20340899/article-Court-temporarily-halts-Alaska-rail-extension?instance=home\\_news\\_window\\_left\\_bullets](http://newsminer.com/view/full_story/20340899/article-Court-temporarily-halts-Alaska-rail-extension?instance=home_news_window_left_bullets)) the project pending further environmental review. In November, the project was given approval (<http://juneauempire.com/state/2012-11-29/federal-appeals-court-allows-railroad-extension>) to proceed. Another attempt to halt construction was overturned (<http://www.railresource.com/content/?p=3352>) in February 2013. The official groundbreaking took place (<http://ktna.org/2013/06/04/mackenzie-rail-extension-groundbreaking-ceremony/>) in June 2013. As of September 2014 the project was both behind

[schedule and over-budget \(http://www.adn.com/article/20140807/cost-delayed-point-mackenzie-rail-spur-swells-300-million-plus\)](http://www.adn.com/article/20140807/cost-delayed-point-mackenzie-rail-spur-swells-300-million-plus). Work continued [until financial difficulties in 2015 \(http://www.alaskajournal.com/2015-09-23/port-mac-rail-almost-out-cash-amid-budget-crunch#.VlqS9L-GODU\)](http://www.alaskajournal.com/2015-09-23/port-mac-rail-almost-out-cash-amid-budget-crunch#.VlqS9L-GODU).

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## Further Reading

- > [Mat-Su Borough page on Port MacKenzie \(http://www.matsugov.us/Port/\)](http://www.matsugov.us/Port/)
- > ["Port MacKenzie Railroad Extension" \(Mat-Su Borough and Alaska Railroad\) \(http://www.portmacrail.com/\)](http://www.portmacrail.com/)
- > ["Benefits of the Southcentral Rail Extension to the Municipality of Anchorage" \(2010\) report prepared by the Institute of Social and Economic Research, University of Alaska, Anchorage \(http://www.iser.uaa.alaska.edu/Publications/Benefits2MOA\\_SC\\_Rail\\_Extension.pdf\)](http://www.iser.uaa.alaska.edu/Publications/Benefits2MOA_SC_Rail_Extension.pdf)
- > ["Cost Savings Related to Use of the Port MacKenzie Rail Extension to Support Alaska Gas Pipeline Construction" \(2008\) report by Northern Economics Inc. \(http://www.matsugov.us/docman/doc\\_download/1595-cost-savings-related-to-use-of-port-mackenzie-rail-ext.pdf\)](http://www.matsugov.us/docman/doc_download/1595-cost-savings-related-to-use-of-port-mackenzie-rail-ext.pdf)
- > ["Economic Analysis of Rail Link Port MacKenzie to Willow, Alaska" \(2007\) report prepared by Paul Metz \(http://www.matsugov.us/docman/doc\\_download/1636-metz-final-economic-analysis-of-rail-link-port-mac.pdf\)](http://www.matsugov.us/docman/doc_download/1636-metz-final-economic-analysis-of-rail-link-port-mac.pdf)



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- > "Economic Effects of the Southcentral Rail Extension" (2007) report by Northern Economics Inc. ([http://www.matsugov.us/docman/doc\\_download/2981-economic-effects-of-sc-rail-extension.pdf](http://www.matsugov.us/docman/doc_download/2981-economic-effects-of-sc-rail-extension.pdf))
- > "Benefit-Cost Assessment of the Port MacKenzie Rail Extension" (2008) report prepared by the Institute of Social and Economic Research, University of Alaska, Anchorage ([http://www.iser.uaa.alaska.edu/Publications/PMK\\_RailExtension.pdf](http://www.iser.uaa.alaska.edu/Publications/PMK_RailExtension.pdf))
- > Environmental Impact Statement for the Proposed Port MacKenzie Rail Extension (<http://www.stbportmacraileis.com/>)
- > "Economic Analysis of Rail Link Port MacKenzie to Willow, Alaska Phase II - Possible Rail Extension Users Analysis" (2007) report prepared by Paul Metz ([http://www.matsugov.us/docman/doc\\_download/1637-metz-phase-ii-possible-rail-ext-users-analysis-report.pdf](http://www.matsugov.us/docman/doc_download/1637-metz-phase-ii-possible-rail-ext-users-analysis-report.pdf))