Ginger Blaisdell

From: Sent:

Lois Epstein <loisepstein@gmail.com> Tuesday, February 10, 2015 12:39 PM

To:

Ginger Blaisdell

Subject:

Mega-project hearings

Attachments:

easytostartupdfin14.docx; easytostarttablefin14.docx

Hello Ginger. My name is Lois Epstein and I'm an engineer who has worked on a series of reports entitled Easy to Start, Impossible to Finish (I-III) that the Walker Administration and others have used as a resource on the financial and other impacts of the mega-projects. You may have seen them. I have attached the latest edition from last March and the post-session financial update to the report from September which I prepared for a Commonwealth North conference in October.

Additionally, I gave brief testimony last week on the Knik Arm Bridge at the hearing and will do so again on the Ambler Road on Thursday.

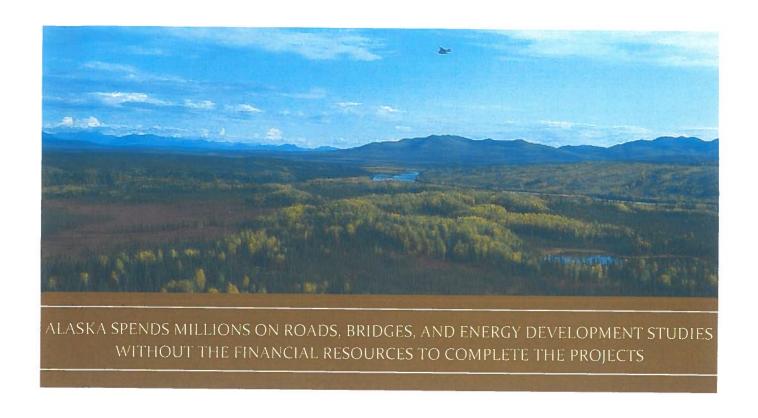
I'm writing you at this busy time to support Jill Yordy of the Northern Center as an invited witness for the Ambler Road hearing. She is very knowledgeable about the project and has the confidence of those in communities throughout the region who are concerned about the project and have raised important questions about whether the road should go forward.

If you would like to chat about the financial aspects of any of the mega-projects, please contact me on my cell at 907 748-0448. Thank you for holding these important hearings. By the way! think your boss did a good job running the Knik Arm Bridge hearing last week.

Best, Lois Epstein, PE



EASY TO START, IMPOSSIBLE TO FINISH III



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About the Author:

Lois N. Epstein, P.E., lois epstein@tws.org, has been Arctic Program Director at The Wilderness Society in Anchorage since August 2010. Previously, Lois directed the Alaska Transportation Priorities Project, a non-profit transportation watchdog organization. Before ATPP, Lois worked for Cook Inletkeeper in Anchorage for more than five years, a non-profit watershed protection organization, and for Environmental Defense Fund in Washington, D.C., for 13 years. Prior to these positions, Lois worked for two private consulting firms and the U.S. Environmental Protection Agency Region 9 Office of Water. Lois served on the Technical Advisory Committee for Anchorage Metropolitan Area Transportation Solutions, the city's Metropolitan Planning Organization.

Lois has presented invited testimony before the U.S. Congress on more than 10 occasions and has appeared on CNN, CBS Evening News, The NewsHour with Jim Lehrer and other media outlets, and is a licensed Professional Engineer in the State of Alaska. She has a master's degree from Stanford University in Civil Engineering with a specialization in environmental engineering and science, and undergraduate degrees from both Amherst College (in English) and the Massachusetts Institute of Technology (in mechanical engineering).

About the Organizations:

The Wilderness Society is the leading public-lands conservation organization working to protect wilderness and inspire Americans to care for our wild places. Founded in 1935, and now with more than 500,000 members and supporters, TWS has led the effort to permanently protect 110 million acres of wilderness and to ensure sound management of our shared national lands. www.wilderness.org. The Wilderness Society's Alaska office focuses on protecting special places in America's Arctic.

Alaska Public Interest Research Group is a non-partisan, non-profit, citizen-oriented statewide organization researching, educating and advocating on behalf of the public interest. AKPIRG exists to promote the public and consumer interests, especially when inconsistent with moneyed, powerful or other special interests. www.akpirg.org

The Northern Alaska Environmental Center promotes conservation of the environment and sustainable resources stewardship in Interior and Arctic Alaska through education and advocacy. NAEC has been at work protecting Alaska's clean air, land, water, and cultures since 1971. www.northern.org

The Southeast Alaska Conservation Council's mission is to protect the special places of the world's largest temperate rainforest, promote conservation, and advocate for sustainability in human use of natural resources. Inspired by the land, wildlife, cultures, and communities of Southeast Alaska, SEACC strives to ensure this interconnected whole exists for future generations. www.seacc.org

The author wishes to thank the following for their thoughtful edits of this document:

- -Pamela Miller and Jill Yordy of the Northern Alaska Environmental Center,
- -Jamie Kenworthy and Bob French of the (Knik Arm) Bridge Club,
- -John Gaedeke of the Brooks Range Council, and
- -The Susitna River Coalition.

EXECUTIVE SUMMARY

This third in a series of *Easy to Start, Impossible to Finish* reports analyzes 10 major transportation and energy projects in the planning stages in the State of Alaska. The 10 projects likely will cost approximately \$16.8 to \$17.7 billion with the state having in hand, at a maximum, only 8 percent of the money needed to build the projects. Funding all these projects would increase state debt service by nearly 300 percent, adding \$892 million per year, so state leaders should decide whether it makes fiscal sense to proceed with all of these expensive capital projects given their projected limited returns on investment.

INTRODUCTION

This report assesses the near-term financial implications for the State of Alaska should it move forward with seven costly transportation projects and three expensive energy projects, including several major projects in the Arctic. These projects were included in this report because they have been in the planning stages for many years with little progress toward actual construction, a strong lack of consensus on the need, and a top-down, non-transparent process for continued state expenditures.

These ten projects generally would provide little revenue to the state. The state needs to perform its "due diligence" with these projects before proceeding, and to make tough political choices to cancel projects that do not warrant additional expenditures.

In February 2010, the Alaska Transportation Priorities Project, a non-profit transportation watchdog organization, issued *Easy to Start, Impossible to Finish: Alaska Spends Millions on Roads and Bridges without Financial Plans to Complete the Projects*. The report documented that the State of Alaska spent \$133.4 million of federal and state money planning five expensive and controversial road and bridge projects that have not been built (all five are updated in this report), and dedicated another \$205.2 million to these projects. Assuming no unexpected cost overruns, the state had in hand only 6 percent of the approximately \$5.4 billion needed to build the projects.

In March 2012, The Wilderness Society, the Alaska Conservation Alliance, and the Northern Alaska Environmental Center issued *Easy to Start, Impossible to Finish II: Alaska Spends Millions on Arctic Roads without Financial Plans to Complete the Projects*. The report focused on the status of three proposed, major Arctic road projects (all included in this report). These Arctic "roads to resources," i.e., the roads to Ambler, Umiat, and Nome, would use state funds to facilitate private resource development. Private industry has not contributed any funds toward these "roads to resources" projects.

FINDINGS

In this update, our organizations provide current appropriations and cost figures for the projects included in the previous two reports and some additional projects that the state has begun. Altogether, the 10 transportation and energy projects included in this report likely will cost approximately \$16.8 to \$17.7 billion with the state having in hand, at a maximum, only 8 percent of the money needed to build the projects (14 percent for the transportation projects, 7 percent for the energy projects, and 8 percent combined). The state has spent \$80.62 million to date on the three, Arctic "resources to resources" projects (i.e., Ambler, Umiat, and Nome/Tanana; see Attachment A).

Fiscally-conservative leadership for the state is critical but in short supply, with extensive planning money spent over many years with limited legislative oversight. Since the first *Easy to Start* report, only the road to Nome and the Gravina Island Access projects have been scaled back, and all the transportation projects analyzed in the two previous reports continue to move forward despite the lack of progress in identifying funding sources. Once begun, major projects gain a political and economic momentum which makes them hard to stop, short of a firm gubernatorial and/or legislative decision to do so, even when information becomes available which warrants cancellation. Examples of such adverse information include:

- the Knik Arm Bridge and Toll Authority's finding that it was a longer distance to Anchorage from Mat-Su Borough population centers via the proposed toll bridge than via the current route,²
- the inability of the Juneau Access project to build a road all the way to Skagway due to federal requirements to protect the Skagway and White Pass National Historic Landmark,³ and
- widespread public opposition to the Ambler Road expressed at community meetings and in community resolutions passed against the project.

With Alaska's revenue likely to decline substantially for at least the next few years because of the passage in 2013 of SB21 which cut state taxes on the oil industry, our organizations question whether it makes fiscal sense to proceed with these expensive capital projects given their limited returns on investment. Additionally, simultaneous construction of several major projects often leads to labor and materials shortages, which increase costs.

¹ The road to Nome, a 548-mile project, was quietly piecemealed by the state so that only the initial segment to Tanana will be built (not including a Yukon River bridge to reach the community), a 54-mile project in total – see the Alaska Department of Transportation & Public Facilities website at http://dot.alaska.gov/nreg/westernaccess/index.shtml. The Gravina Island Access bridge options in the recently-issued Draft Supplemental Environmental Impact Statement (June 2013) are somewhat cheaper than those included in the previously-issued Final Environmental Impact Statement (July 2004).

² Knik Arm Bridge: Preliminary Traffic and Toll Revenue Study, Wilbur Smith Associates, Nov. 2005, Figure 5, http://www.knikarmbridge.com/documents/FINALWilburSmithPrel.TrafficandRevenueStudyFinalReport112805.pdf.

³ Juneau Access Preferred Alternative Changed, Capital City Weekly, Aug. 17, 2005, http://www.capitalcityweekly.com/stories/081705/news 20050817003.shtml.

Table 1 shows the amounts appropriated to date by the state legislature and federal earmarks; the projects' estimated costs; and the approximate deficits ("Estimated Cost" minus "Money Appropriated"). The "percent in hand" represents the "Money Appropriated" divided by the "Approximate Deficit" in percent.

Table 1: Money available to construct major, proposed transportation and energy infrastructure projects vs. project costs

Project	Money Appropriated	Estimated Cost	Approximate Deficit		
Knik Arm Bridge	\$146.8 million (federal and state)	\$1.6 billion	\$1.45 billion		
Juneau Access	\$60.3 million (federal and state)	\$548.4 million (road costs only, i.e., no ferry costs)	\$487.6 million		
Gravina Island Access	\$264.1 - \$317.1 million for \$146.3 million (federal) a bridge, i.e., not a ferry, alternative ⁴		>\$117.8 million		
Ambler Road	\$17.8 million (state)	\$430 - \$990 million	>\$412.2 million		
Umiat Road	\$35.12 million (state)	\$357 - \$384 million	>\$321.9 million		
Road to Tanana (formerly the much- longer road to Nome)	ormerly the much- \$13.3 million (state)		\$55.7 million		
West Susitna Access	\$0.25 million (state)	\$216.9 - \$504.3 million	>\$216.7 million		
Total Transportation Projects	tal Transportation \$419.9 million		>\$3.1 billion (14 percent in hand)		
Susitna-Watana Dam	\$172.7 million \$5.2 billion \$5.2 billion		\$5.02 billion		
In-State Gas Line	\$355 million (2013, state)	\$7.6 billion	\$7.25 billion		
Interstate Gas Line (AGIA) ⁵	\$300 million (since 2008, state)	\$500 million ⁶	\$200 million ⁷		
Total Energy Projects	\$827.7 million	\$13.3 billion	>\$12.47 billion (7 percent in hand) >\$15.57 billion (8 percent in hand)		
Combined Total	\$1.25 billion	\$16.8 - \$17.7 billion			

WHAT ABOUT REVENUES ASSOCIATED WITH THE PROJECTS?

Some of these projects may have tolls for vehicles (Knik Arm Bridge, Gravina Island Access) or for industrial users (roads to Ambler, Umiat), or ferry fare revenues (Juneau Access, Gravina Island Access).

⁴ Includes \$41.1 million spent to build the Gravina Island Highway, completed in 2008, and meant to connect to a bridge to Ketchikan.

⁵ This item will need to be updated if changes are made to the Alaska Gasline Inducement Act (AGIA) legislation via SB 138 during the 2014 legislative session.

⁶ This figure reflects the maximum state commitment under AGIA. The amount would rise substantially if SB 138 passes in 2014.

⁷ This amount would rise substantially if SB 138 passes in 2014.

The energy projects would have user revenues. This update does not address revenues except to note that:

- 1. The state has had problems projecting traffic and revenue previously. The Whittier Tunnel, for example, requires more than a \$2 million subsidy *each year* to cover operating costs beyond toll revenues; that's over \$20 million per decade for this comparatively small compared to the Knik Arm Bridge toll project,
- 2. The pro-bridge Knik Arm Bridge and Toll Authority generated "unreasonably optimistic" toll and revenue projections according to a Legislative Budget and Audit Committee report, 8
- 3. Industrial users to date have not committed to pay for both capital and operating costs for the "roads to resources" projects, and
- 4. Ferry fares do not fully cover ferry operating costs.

WON'T THESE PROJECTS BE FUNDED OVER MANY YEARS?

These projects would not be fully funded before construction begins. Similar to buying a house, the projects would be paid for over many years using bonds and other financing mechanisms. If we assume, conservatively, that \$15.57 billion (see Table 1) in additional funds is needed to pay for all the projects over a 30-year period at an interest rate of 4 percent, that means the state would pay \$74.34 million per month in principle and interest payments (i.e., debt service) for these projects, or approximately \$892 million per year. State debt service in the enacted Fiscal Year 2014 budget is \$300.1 million, 9 so funding all these projects would increase state debt service by 297 percent.

For context, in a February 2013 presentation entitled *Maximum Sustainable Yield: Wealth Management for the "Owner State,"* Scott Goldsmith of the University of Alaska Anchorage's Institute for Social and Economic Research determined that Alaska General Fund expenditures should be approximately \$5.5 billion per year over the long-term. For Fiscal Year 2013, the state spent \$7.6 billion from the General Fund which means that the state needed to cut spending by at least \$2.1 billion in Fiscal Year 2013 to ensure maximum sustainable yield (this was not done), **not to increase infrastructure project spending by roughly \$892 million each year.**

⁸ SUMMARY OF: A Special Report on the Department of Transportation and Public Facilities, Knik Arm Bridge and Toll Authority Knik Arm Crossing Project, Alaska Division of Legislative Audit, Report Conclusions, April 2013, http://www.legaudit.state.ak.us/pages/digests/2013/30068dig.htm.

⁹ See http://omb.alaska.gov/ombfiles/14 budget/PDFs/2 Enacted 2014 Fiscal Summary.pdf.

¹⁰ See http://www.iser.uaa.alaska.edu/Publications/presentations/2013 02 27-OwnerStateSustainableSpending-CommonwealthNorth.pdf.

NOTABLE CONCERNS WITH AND DETAILS OF THE INFRASTRUCTURE PROJECTS

TRANSPORTATION

Knik Arm Bridge – The proposed Knik Arm Bridge project¹¹ would consist of a toll bridge across Cook Inlet's Knik Arm from Anchorage to virtually-unpopulated Point MacKenzie in the Matanuska-Susitna Borough, and numerous miles of access roads on both sides of the bridge that have not been included in the project's budget. The bridge would not reduce the time or distance to Anchorage for drivers from Wasilla or Palmer, the Mat-Su Borough's largest communities.¹²

Until the governor unveiled his Fiscal Year 2015 budget on Dec. 12, 2013, the Knik Arm Bridge and Toll Authority (KABATA) planned for the bridge to be built using a public-private partnership (P3), with the State of Alaska providing annual, contractual "availability payments" to private investors to pay for bridge construction, maintenance, and operations, plus an annual fixed-percentage return on investment. According to an Alaska Division of Legislative Audit report issued in April 2013, KABATA's "toll and revenue projections are unreasonably optimistic, and the projected cash flows to the State are likely overstated as a result. These are important considerations for policymakers since the P3 compensation arrangement requires KABATA to make payments to the private partner regardless of the project's ability to generate toll revenues." In the governor's Fiscal Year 2015 budget, the state abandoned its public-private partnership approach and now plans to utilize direct public funding for the bridge.

To date, \$146.8 million¹⁴ has been appropriated toward the bridge, with more than \$80 million¹⁵ spent. Gov. Parnell's proposed budget includes an additional \$55 million. The Alaska Division of Legislative Audit, using KABATA's data, documented that the proposed bridge would cost \$1.6 billion.¹⁶

¹¹ See http://www.knikarmbridge.com/.

¹² Knik Arm Bridge: Preliminary Traffic and Toll Revenue Study, Wilbur Smith Associates, Nov. 2005, Figure 5, http://www.knikarmbridge.com/documents/FINALWilburSmithPrel.TrafficandRevenueStudyFinalReport112805.pdf.

¹³ SUMMARY OF: A Special Report on the Department of Transportation and Public Facilities, Knik Arm Bridge and Toll Authority Knik Arm Crossing Project, Alaska Division of Legislative Audit, Report Conclusions, April 2013, http://www.legaudit.state.ak.us/pages/digests/2013/30068dig.htm.

¹⁴ See http://www.knikarmbridge.com/documents/KnikArmCrossingFY2013-2014TIFIALOIFINAL 001.pdf, July 2012, p. 12 (\$145 million) plus a \$1.8 million operating budget for state Fiscal Year 2014.

¹⁵ See http://www.knikbridgefacts.org.

¹⁶ Alaska Division of Legislative Audit, op. cit., p. 18, http://www.legaudit.state.ak.us/pages/audits/2013/pdf/30068rpt.pdf, using data from the KABATA Dec. 2012 Financial Plan. Changing from a public-private partnership to direct public funding would require \$300 million in federal/state transportation money to start the project (see the Financing Plan for Knik Arm Bridge memo from First Southwest to Angela Rodell, Commissioner of Revenue, Nov. 11, 2013, http://media.adn.com/smedia/2013/12/20/19/08/q9i30.So.7.pdf#storylink=relast). The \$300 million needed is not reflected in any current Alaska Department of Transportation & Public Facilities financial plans.

For more information about the Knik Arm Bridge, see www.knikbridgefacts.org.

Juneau Access – The proposed Juneau Access road/ferry project¹⁷ would consist of 51 miles of new road from Echo Cove approximately 40 miles north of Juneau, to the undeveloped Katzehin River via the east side of Lynn Canal. It also would include a new ferry terminal at the Katzehin River 90 miles



from Juneau, and shuttle ferries to Skagway (pop. 961 as of July 2012) and Haines (pop. 2,620 in the Borough as of July 2012). Currently, a larger ferry serves these two communities, which operates from a terminal 13 miles from downtown Juneau. Because of concerns expressed by the National Park Service, in 2005 the Federal Highway Administration dropped its plan to build a road from Juneau to Skagway and instead adopted the road/ferry combination.

An extremely steep section of the proposed route.

The Juneau Access road would be constructed at the base of very steep, wooded terrain subject to frequent snow avalanches. Construction and maintenance costs would be unusually high, and transfers of drivers and cargo onto ferries still would be required. Additionally, projected traffic on the road would be low: average daily traffic projections for the road would be only 380 vehicles per day during the opening year, and 670 vehicles per day after 30 years.¹⁸

To date, the state has appropriated \$60.3 million for the project, with \$35.8 million prior to 2011 and \$10 million in 2014 (approximately 90 percent of those dollars coming from federal transportation funds) plus a \$14.5 million earmark from the federal government. Gov. Parnell's proposed capital budget for Fiscal Year 2015 includes an additional \$35 million. The estimated cost of the road portion of the project is \$548.4 million, ¹⁹ and the cost of the shuttle ferries from the road terminus to Skagway and Haines would be approximately \$130 million additional.

¹⁷ See http://dot.alaska.gov/sereg/projects/juneau_access/index.shtml.

¹⁸ See *Juneau Access Improvements Final Environmental Impact Statement*, Alaska Department of Transportation & Public Facilities, 2006, p. 4-162, http://dot.alaska.gov/sereg/projects/juneau access/assets/FEIS 06/FEIS wfigures.pdf.

¹⁹ \$521.1 million from the 2013-2015 Alaska Statewide Transportation Improvement Program, Amendment 8, Dec. 6, 2013, http://www.dot.state.ak.us/stwdplng/cip/stip/assets/STIP.pdf, plus \$28.3 million spent as of Nov. 2013 (personal communication between Mike Vigue, Alaska Department of Transportation & Public Facilities and James Sullivan, Southeast Alaska Conservation Council on Feb. 13, 2014).

Gravina Island Access – The proposed Gravina Island Access project²⁰ would connect the Ketchikan area (pop. 13,938 as of July 2012) to virtually undeveloped Gravina Island via Pennock Island across Tongass Narrows. Currently, a ferry running two roundtrips each hour connects Ketchikan and Gravina Island. Gravina Island includes Ketchikan International Airport and has a small number of residents.

The Alaska Department of Transportation & Public Facilities (DOT) spent \$41.1 million²¹ to construct the Gravina Island Highway on Gravina Island in anticipation of this "highway" connecting to a bridge to Ketchikan. The Alaska Division of Legislative Audit said that Alaska DOT did not comply with all state and federal laws by speeding up a contract solicitation for the Gravina Island Highway so it could be signed before Gov. Frank Murkowski left office in December 2006. The audit also said that "the decision to proceed with the highway construction was not in the public's best interest given the lack of congressional financial support for the bridges and the significant increase in estimated cost." The audit also said that "the decision to proceed with the highway construction was not in the public's best interest given the lack of congressional financial support for the bridges and the significant increase in estimated cost."

The City of Ketchikan and the Ketchikan Gateway Borough now support enhanced ferry operations rather than a bridge to Gravina.²⁴ The draft supplemental Environmental Impact Statement issued in June 2013 contains two bridge options and several options to enhance ferry connections to Gravina Island. The final Environmental Impact Statement is expected to be issued in 2014.

To date \$146.3 million has been appropriated for the project, consisting of \$70.4 million in federal earmarks and \$75.9 million in "de-earmarked" money reserved for the Gravina Island Access project by Gov. Murkowski (he had the discretion to do that with the former federal earmark). Including the Gravina Island Highway, more than \$56.1 million has been spent as of May 2009, and more has been spent since. Depending on whether a bridge or ferry enhancements is selected, the additional cost for

²⁰ See http://dot.alaska.gov/sereg/projects/gravina access/index.shtml.

²¹ SUMMARY OF: A Special Report on the Department of Transportation and Public Facilities (DOTPF), Gravina Island Access Project (GIA), Alaska Division of Legislative Audit, Oct. 2009 (issued 1/10), p.22, http://www.legaudit.state.ak.us/pages/audits/2010/pdf/30050rpt.pdf.

²² Ibid., p. 23.

²³ Ibid., p. 17.

²⁴ New plans confirm Palin's 2007 decision to scrap Ketchikan's 'Bridge to Nowhere', Pat Forgey, Alaska Dispatch, Aug. 9, 2013, http://www.alaskadispatch.com/article/20130809/new-plans-confirm-palins-2007-decision-scrap-ketchikans-bridge-nowhere.

²⁵ Alaska Division of Legislative Audit, op. cit., p. 20.

²⁶ It is unclear if the state will need to reimburse the federal government for the approximately \$37 million in federal funds used for the Gravina Island Highway should that road not connect to a bridge to Ketchikan.

the project would range from \$23 million to \$276 million, according to the draft Environmental Impact Statement, with bridge costs from \$223 million to \$276 million.²⁷

Ambler Road – The proposed road to Ambler project, also known as the Ambler Mining District Access project, would consist of a 211- to 370-mile road from the mining district to a port in western Alaska or to a Dalton Highway connection. Until 2013, Alaska DOT led work on this project. In April 2013, NovaCopper²⁸ and the Alaska Industrial Development and Export Authority (AIDEA) signed a Memorandum of Understanding, effectively giving AIDEA the lead rather than Alaska DOT.²⁹ AIDEA³⁰ issues revenue bonds that must be paid back by industrial entities, however it is unclear if NovaCopper and other companies plan to pay for the entire cost of the road including its planning, construction maintenance, and operating costs. AIDEA currently is focused only on the shortest, cheapest road route which connects to the Dalton Highway.

The primary financial beneficiary of the road to Ambler would be the mining industry which provides a very small amount of state revenue. The industry provided \$60.8 million in state revenue in Fiscal Year 2013,³¹ representing less than 1 percent of the unrestricted tax revenue received by the Tax Division of the Alaska Department of Revenue (oil and gas represents 92 percent of that revenue).³²

http://www.marketwatch.com/story/novacopper-signs-memorandum-of-understanding-with-the-alaska-industrial-development-export-authority-to-permit-and-develop-an-industrial-access-road-to-the-ambler-mining-district-2013-04-30-61733117.

²⁷ Gravina Access Project, Draft Supplemental Environmental Impact Statement, Summary, Alaska Department of Transportation & Public Facilities, June 2013, p. 8, http://dot.alaska.gov/sereg/projects/gravina_access/assets/Summary.pdf.

NovaGold, the parent company of NovaCopper, built the Rock Creek mine outside of Nome. The State of Alaska spent \$7 million (see http://omb.alaska.gov/ombfiles/05 budget/Trans/Amend/2005proj38570.pdf) to realign and reconstruct Glacier Creek Road outside of Nome to help facilitate mining by NovaGold. The Rock Creek mine operated for two months, from September to November 2008. NovaGold sold the Rock Creek property to the Bering Straits Native Corporation in 2012 (http://www.marketwired.com/press-release/novagold-completes-divestiture-of-rock-creek-project-in-alaska-tsx-ng-1720806.htm). Bering Straits Native Corporation is reevaluating the feasibility of the project before commencing final (Phase II) reclamation (see http://dnr.alaska.gov/mlw/mining/largemine/rockcreek/). State of Alaska road upgrades were not reimbursed by NovaGold.

NovaCopper Signs Memorandum of Understanding With the Alaska Industrial Development Export Authority to Permit and Develop an Industrial Access Road to the Ambler Mining District, Market Watch, Market Watch, Wall Street Journal, April 30, 2013,

³⁰ To date, AIDEA has not participated in statewide transportation planning, which means there has not been statewide public involvement in Ambler Road decision-making. This is important because any state funds dedicated to Ambler likely would come at the expense of other state transportation projects.

³¹ Revenue Sources Book, Fall 2013, Alaska Department of Revenue, pp. 8-9, http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?1022r.

³² Ibid.

To date, \$17.75 has been million appropriated for the project. Gov. Parnell's proposed capital budget for Fiscal Year 2015 includes an additional \$8.5 million and he expects to propose another \$8.5 million in FY2016 and \$7 million in FY2017, not including construction costs. The range of road construction costs estimated by DOWL HKM is from \$430 million to \$990 million.³³

The proposed routes raise concerns about degradation of subsistence resources including moose, caribou whose migration might be altered with a long east-west road and increased non-local hunting, adverse impacts to fish including tributaries supporting Yukon River salmon, increased traffic access to this remote region with a strong wild lands tourism-based economy, and decreased quality of life. Parts of the area have gravel and rock containing asbestos, a concern during road construction and for dust generated during road usage.

Since the state began pursuing this project, there has been extensive and vocal local opposition. See http://www.brooksrange.org for information about the Brooks Range Council and its opposition to the regional industrialization which would be created by the project. As of March 2014, there are six resolutions from individual affected communities scattered across the impacted region opposing the project, as well as a resolution by the Tanana Chiefs Conference opposing the road and requesting more formal agency consultation with local groups.

Umiat Road – The proposed road to Umiat project, also known as the Foothills West Transportation Access project, ³⁴ would consist of an 85-mile road to the Gubik Gas Fields from the Dalton Highway, and a 15-mile road beyond to Umiat including a bridge across the Colville River to provide all-season access connecting the National Petroleum Reserve – Alaska (NPR-A) to the Trans-Alaska pipeline. The U.S. Army Corps of Engineers (Corps) recently suspended work on the Environmental Impact Statement for this project pending a decision by Alaska DOT on whether to proceed. ³⁵

This project does not yet have a preferred route, and a route proposed during the scoping process (Meltwater, heading south from North Slope oil fields) would be analyzed by the Corps should the project move forward. Proposed routes from the Dalton Highway just north of the Brooks Range require four to six bridges across major rivers. The state would like to build an 18-foot wide, permanent gravel road.

³³ Ambler Mining District Access: Summary Report, DOWL HKM, September 2011, p. III.

³⁴ See http://foothillsroad.alaska.gov/.

³⁵ See http://www.foothillswesteis.com.

Linc Energy is exploring for oil in the NPR-A³⁶ using snow and ice roads to haul in equipment. Should Linc Energy succeed in its exploratory work, it would move to production. Notably, it is possible to build and operate a transmission pipeline from Umiat to the trans-Alaska pipeline without a companion road. There are two long-distance transmission pipelines in the Arctic without companion roads, from Alpine to Kuparuk (34 miles) and from Badami to the Endicott Pipeline (25 miles).

To date, \$35.1 million has been appropriated for the project.³⁷ In 2010, the state estimated this project would cost \$357 million to \$384 million.³⁸

As of February 2014, this project has not been formally transferred to AIDEA from Alaska DOT though that may occur, with similar financial and statewide public involvement implications to AIDEA overseeing the Ambler Road. The Road to Umiat has strong local opposition from tribes and communities on the North Slope. "I have not heard more opposition to any road to anywhere in my 12 years of being down [in Juneau] on this Finance Committee," said state Sen. Donny Olson at a legislative hearing in 2012.³⁹

Road to Nome's first stage, the Road to Tanana – The road to Tanana ⁴⁰ would link Manley Hot Springs to the Yukon River without a bridge across the Yukon to Tanana. Access to the community of Tanana (pop. 246 as of April 2010) would need an ice bridge in the winter and a summer ferry, with no plans announced yet to build or fund either one. The planned 16-foot wide, one lane road would cost approximately \$69 million to construct. ⁴¹ If the state decides to proceed at a later date with the rest of the road to Nome project, the total construction cost is estimated to be more than \$1.1 billion. ⁴²

To date \$13.25 million has been appropriated for the project. Gov. Parnell's proposed capital budget for Fiscal Year 2015 includes an additional \$6 million.

³⁶ See http://www.lincenergyumiat.com/.

³⁷ See http://omb.alaska.gov/ombfiles/13 budget/Trans/Proposed/2013proj50844.pdf.

³⁸ Interim Corridor Analysis/Matrix, Foothills West Transportation Access, Alaska Department of Transportation & Public Facilities, May 2010, http://www.foothillsroad.alaska.gov/files/interim-corridor-analysis-matrix.pdf.

³⁹ Umiat, Tanana road plans raise ire of Arctic senators, Russell Stigall, Juneau Empire, Feb. 19, 2012, http://juneauempire.com/state/2012-02-19/umiat-tanana-road-plans-raise-ire-arctic-senators#.UyC8lz9dWAg.

⁴⁰ See http://dot.alaska.gov/nreg/westernaccess/.

⁴¹ Western Alaska Access Planning Study: Corridor Staging and Alternatives Report, Dec. 2011, p. V, http://dot.alaska.gov/nreg/westernaccess/documents/corridor staging alternatives report.pdf.

⁴² Ibid., (road plus bridges).

West Susitna Access – The proposed West Susitna Access project⁴³ begun in early 2013 is an effort to evaluate the possibility of road and bridge access to resource development west of the Susitna River in Southcentral Alaska. A \$250,000 report issued in January 2014 identified five routes that offer access to a variety of resources including coal, hardrock mining, oil and gas, and alternative energy. The preliminary costs for the five routes range from \$216.9 to \$504.3 million,⁴⁴ which represent costs of \$4.0 million to \$6.3 million per mile.

ENERGY

Susitna-Watana Dam – The Susitna-Watana Hydroelectric Dam project⁴⁵ would build the second tallest dam in the United States (735 feet), and provide an annual average of 300 megawatts of electricity to the "Railbelt" from Fairbanks to Homer. The dam would result in a 42-mile reservoir, and it would connect to Railbelt utilities via transmission lines and a road.

Gov. Parnell's proposed Fiscal Year 2015 budget includes significant cuts to the project largely because the Alaska Energy Authority has not obtained access for licensing studies to lands near the dam site owned by several Alaska Native corporations.⁴⁶



The Susitna River below the proposed dam site.

Photo by Paul Roderick, Talkeetna Air Taxi

The Susitna River flows unimpeded for 300 miles, and supports thriving salmon runs. The project would disrupt intact winter and summer riverine ecosystems by controlling water flow, and would pose relatively high risks downstream in this earthquake-prone region.

The projected cost of the project is \$5.19 billion.⁴⁷

⁴³ See http://dot.alaska.gov/westsusitna/index.shtml.

West Susitna Access Reconnaissance Study, West Susitna Access to Resource Development, Transportation Analysis Report, prepared for the Alaska Department of Transportation & Public Facilities, Jan. 2014, p. 5-12, http://dot.alaska.gov/roadstoresources/assets/WSSARS/WestSusitna TAR w Appendix.pdf.

⁴⁵ See http://www.susitna-watanahydro.org.

⁴⁶ Governor cuts funding to Susitna dam over problems with Native land access, Zaz Hollander, Anchorage Daily News, Jan. 7, 2014, http://www.adn.com/2014/01/07/3262512/governor-cuts-funding-to-susitna.html. Parnell asks for more dam money, The Associated Press, Feb. 21, 2014, http://juneauempire.com/state/2014-02-21/parnell-asks-more-dam-money-becky-bohrer#.UyDVkD9dWAg.

Since the state began pursuing this project, there has been extensive and vocal opposition. See http://www.susitnarivercoalition.org/ for information about the Susitna River Coalition, which supports developing sustainable sources of electricity that cumulatively would produce more energy than the Susitna-Watana Dam at far less cost and with none of the catastrophic risks.

In-State Gas Line – The In-State Gas Line also known as the Alaska Standalone Gas Pipeline (ASAP) project⁴⁸ or the "Bullet Line," would provide a natural gas supply from North Slope gas fields to Fairbanks and the Cook Inlet region via a 727-mile, small diameter, low-pressure pipeline with a 30-mile lateral line to Fairbanks. The 2010 legislative session created the Alaska Gasline Development Corporation (AGDC) as a subsidiary to the Alaska Housing Finance Corporation. The 2013 legislative session made AGDC a public corporation, with a legal existence separate from the State of Alaska.

According to AGDC's financial advisors, as of 2011 "ASAP has not progressed to the point of project definition such that private entities are likely to be willing to step up as sponsors. As a result, only the Public Ownership option has a high degree of execution probability at this time." In such a situation, the full cost of this project would fall to the State of Alaska.

The 2013 legislative session provided \$355 million⁵⁰ in funds to support this \$7.62 billion project.⁵¹ Both this project and the Susitna-Watana Dam project would provide electricity to the region; thus, legislators have raised concerns regarding overlapping project purposes.⁵²

Interstate Gas Line – The Interstate Natural Gas Pipeline⁵³ began with the Alaska Gasline Inducement Act (AGIA) in 2007. AGIA's intent was to encourage expedited construction of a large diameter natural gas pipeline that would:

- facilitate commercialization of North Slope gas resources;
- promote exploration and development of oil and gas resources on the North Slope;

⁴⁷ See http://www.susitna-watanahydro.org/project/project-description/.

⁴⁸ See http://www.agdc.us/.

⁴⁹ Alaska Gasline Development Corporation: Plan of Finance, Citigroup Global Markets, Inc. and Samuel A. Ramirez & Co., June 20, 2011, p. 3, http://asapgas.agdc.us/pdfs/documents/Citi-Ramirez-AGDC-v-final.pdf.

⁵⁰ See http://asapgas.agdc.us/history.html.

⁵¹ See http://asapgas.agdc.us/index.html.

⁵² Dam project draws attention to renewable goal, Becky Bohrer, Juneau Empire, Feb. 17, 2014, http://hosted2.ap.org/AKJUN/504f353a831b401ab784dcfd4a71bae7/Article 2014-02-17-Renewable%20Goal/id-f48605a0476e4dd9be9abb058daabd81.

⁵³ See http://www.arcticgas.gov/ and http://gasline.alaska.gov/ for more information.

- maximize benefits to the people of the state from the development of oil and gas resources in Alaska; and
- encourage oil and gas lessees and other persons to commit to ship natural gas from the North
 Slope to a gas pipeline system for transportation to markets in Alaska or elsewhere.

AGIA commits the state to spend up to \$500 million in state funds to offset some of the initial risk borne by a project developer.

On Jan. 24, 2014, Gov. Parnell asked legislators to pass a bill that would provide an equity interest for the state in the natural gas pipeline, potentially resulting in a troubling conflict of interest in that the state would be both regulated and a regulator.

RECOMMENDATIONS

The recommendations from the first Easy to Start, Impossible to Finish report from 2010 still apply:

State leaders should:

- 1) Not start or continue projects that do not have the financial resources to be finished. This includes preparing reasonable and credible financial plans for projects prior to construction to ensure that project scale and scope will be roughly within budget.
- 2) Not let project momentum obscure the need to re-evaluate projects when adverse facts become available.
- 3) Develop state and local transportation revenue sources.
- 4) Pursue projects which address critical transportation needs, e.g., increasing safety, reducing congestion, fixing deteriorating infrastructure, and addressing air quality problems.⁵⁵

The second *Easy to Start, Impossible to Finish* report in 2012 included an additional important recommendation that state leaders should:

5) Carefully analyze claims of state revenue benefits associated with building these projects.⁵⁶ Projects should be subject to an unbiased benefit cost analysis before proceeding.

As stated in the first report, "Gov. Parnell, [Alaska] DOT leadership, and state legislators should examine the funding prospects to complete these...projects, the ongoing expenses of the projects, and

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⁵⁴ AS 43.90.010.

⁵⁵ Easy to Start, Impossible to Finish: Alaska Spends Millions on Roads and Bridges without Financial Plans to Complete the Projects, Alaska Transportation Priorities Project, Feb. 2010, p. 6.

⁵⁶ Easy to Start, Impossible to Finish II: Alaska Spends Millions on Arctic Roads without Financial Plans to Complete the Projects, The Wilderness Society, Alaska Conservation Alliance, Northern Alaska Environmental Center, March 2012, p. 7.

new information developed since the projects began. Once this information has been analyzed and thoroughly reviewed, state decision-makers should reassess the status of each of these projects."⁵⁷

CONCLUSION

Should these projects move forward, state debt service would increase substantially and unsustainably at a time when state revenues from oil are highly uncertain and declining in the near term. The State of Alaska faces tough budget choices this year on priority issues such as education, and in coming years as oil markets worldwide undergo changes that likely will put downward pressure on oil prices. The 10 transportation and energy projects included in this report deserve increased scrutiny by legislators and a careful assessment by the governor and legislators of whether they warrant additional appropriations or should be stopped at this time.

Last, our organizations are concerned that AIDEA's involvement in roads to resources projects is outside the state's transportation planning processes, resulting in transportation planning decisions which do not reflect statewide priorities.

⁵⁷Easy to Start, Impossible to Finish: Alaska Spends Millions on Roads and Bridges without Financial Plans to Complete the Projects, op. cit.

ATTACHMENT A

Annual State Funding Detail for the Roads to Resources Projects (\$ millions)

Fiscal Year	<2011	2011	2012	2013	2014	2015 (proposed)	Totals
Ambler		4	1.25	4	8.5	8.5	26.25
Umiat (Foothills West)	9.12	8	8	10			35.12
Nome/Tanana (Western AK Access)	1	1	1.25	10		6	19.25
Total	10.12	13	10.5	24	8.5	14.5	80.62

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Cover Photo: Ambler Road Project Study Area, Alaska Department of Transportation & Public Facilities.

MARCH 2014



The table below updates the March 2014 document titled Easy to Start, Impossible to Finish III: Alaska Spends Millions on Roads, Bridges, and Energy Development Studies without the Financial Resources to Complete the Projects, available at http://bit.ly/1jnWxaU. The update includes changes made during the 2014 legislative session and new cost estimates.

Money available to construct major, proposed Alaska transportation and energy infrastructure projects vs. project costs (as of September 2014)¹

Project	Money Appropriated ²	Estimated State Cost ³	Approximate Deficit	
Knik Arm Bridge	\$203.5 million (federal and state)	\$1 billion ⁴	\$796.5 million	
Juneau Access	\$95.3 million (federal and state)	\$574 million ⁵	\$478.7 million	
Ambler Road	\$26.25 million (state)	\$430 - \$990 million	>\$403.8 million	
Umiat Road	\$35.12 million (state)	\$357 - \$384 million	>\$321.9 million	
Road to Tanana (formerly the much- longer road to Nome)	\$19.3 million (state)	\$69 million (to Tanana without a Yukon River bridge)	\$49.7 million	
West Susitna Access	\$0.25 million (state)	\$216.9 - \$504.3 million	>\$216.7 million	
Total Transportation Projects	\$379.8 million	\$2.6 - \$3.5 billion	>\$2.3 billion (17 percent in hand)	
Susitna-Watana Dam	\$192.7 million (since 2008, state)	\$5.2 billion	\$5.01 billion	
In-State Gas Line	\$350.5 million (2013 with \$4.5 mill removed in2014, state)	\$7 - \$8 billion ⁶	>\$6.65 billion	
Interstate Gas/LNG Line (AGIA & the now- LNG export project)	terstate Gas/LNG (AGIA & the now- (since 2008, state)		>\$5.93 billion	
Total Energy Projects	\$863.4 million	\$ 18.5 - \$28.8 billion	>\$ 17.6 billion (5 percent in hand)	
Combined Total \$1.23 billion		\$21.1 - \$32.3 billion	>\$19.9 billion (6 percent in hand)	

¹ Some of these projects may have tolls for vehicles (Knik Arm Bridge) or industrial users (roads to Ambler, Umiat), or ferry fare revenues (Juneau Access) to partially cover costs. The energy projects would have user revenues though these will not cover all financing costs.

² All figures from Easy to Start, Impossible to Finish III: Alaska Spends Millions on Roads, Bridges, and Energy Development Studies Without the Financial Resources to Complete the Projects, March 2014, Table 1, http://bit.ly/1jnWxaU, adjusted with changes (+/-) from the FY2015 capital and operating budgets, as appropriate.

³ Non-footnoted estimates are unchanged from Table 1 in the Easy to Start, Impossible to Finish III study.

⁴ This estimate currently is being updated by Alaska Department of Transportation and Public Facilities and the federal government. Previous estimates included the higher costs of the Knik Arm Bridge and Toll Authority's proposed Public-Private Partnership, however the 2014 legislature voted against that plan.

⁵ Juneau Access Improvements Project, Draft Supplemental Environmental Impact Statement, AK DOT, Sept. 2014, p. 2-16, http://dot.alaska.gov/sereg/projects/juneau access/assets/2014 DSEIS/Draft SEIS Text Figures.pdf.

⁶ See Alaska Gasline Development Corporation, ASAP Fact Sheet, click on Cost+, https://www.agdc.us/facts.html.

⁷ This amount depends on the size of the Alaska's equity share and the state's borrowing arrangements. See http://lba.akleg.gov/download/presentations/by%20request%20of%20lbac/mayer tsafos alaska lng key issues march 18 %202014.pdf, p. 3 (bottom) for a summary table.