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EASY TO START, IMPOSSIBLE TO FINISH IV

DESPITE BUDGET TROUBLES, ALASKA CONTINUES TO SPEND MILLIONS ON QUESTIONABLE ROAD, BRIDGE AND ENERGY PROJECTS

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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 700,000 members and supporters, TWS has led the effort to permanently protect 109 million acres of wilderness and to ensure sound management of our shared national lands. The Wilderness Society's Alaska office focuses on protecting special places in America's Arctic. www.wilderness.org.

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

Cook Inletkeeper is a non-profit, membership-based organization dedicated to protecting the Cook Inlet watershed and the life it sustains. www.inletkeeper.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

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EXECUTIVE SUMMARY

This fourth in a series of *Easy to Start, Impossible to Finish* reports analyzes four major transportation and energy projects in the planning stages in the state of Alaska. Alaska Gov. Bill Walker stopped discretionary spending on these four projects – the proposed Ambler Road in the Arctic Interior, Juneau Access, the Knik Arm Bridge and the Susitna-Watana Dam – soon after he took office in 2014. During 2015, Gov. Walker reversed course and allowed these projects to continue spending money on studies. To date, more than $324 million in state and federal funds has been spent on studies supporting these projects.

As discussed in this report, there are strong reasons to question the decision to continue spending millions of state and federal dollars on three of the four projects; only Juneau Access appears to be moving toward shutdown in the near-term. With almost $8 billion needed to fully fund the capital costs of the projects and the 2016 Legislature making substantial cuts wherever it can, these four megaprojects are out of the state's financial reach for the foreseeable future. If all four projects were shut down now, their $263 million in unspent appropriations could provide significant *new revenue* for transportation and other important state programs that the Legislature otherwise would need to cut.

This report also provides a number of recommendations to ensure that future state expenditures on expensive infrastructure projects would not continue if projects cannot meet certain objective criteria at each phase of their development. Putting in place a rigorous, phased, project review structure, as is done by industry for many major infrastructure projects and as is the case for the Alaska Liquefied Natural Gas export project, would prevent unwarranted, continued expenditure of state funds on projects that ultimately must be cancelled.

INTRODUCTION

When Alaska Gov. Bill Walker took office on Dec. 1, 2014, the price of oil already had begun its steep drop the previous June. As a result of the state's declining oil revenues, Gov. Walker on Dec. 26 issued Administrative Order No. 271 (A.O. 271) which "halt[ed] to the maximum extent possible discretionary expenditures"[1] for the four projects analyzed in this report, plus the Kodiak Launch Complex and the Alaska Stand Alone Pipeline project.[2] Following issuance of A.O. 271, Gov. Walker authorized continuation of studies for the proposed Ambler Road in October 2015 and for Juneau Access, the Knik Arm Bridge and Susitna-Watana Dam in July 2015 (see the memos in Attachment A).

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[1] Governor Bill Walker, State of Alaska, Administrative Order 271, 26 December 2014, http://gov.alaska.gov/Walker_media/documents/20141226-administrative-order-271.pdf.

[2] The Alaska Stand Alone Pipeline project's data collection and analysis have, appropriately, been merged with the Alaska Liquefied Natural Gas export pipeline project.

Pat Pitney, director of the Alaska Office of Management and Budget sent the four memos in Attachment A to the state entities overseeing these four projects – the Alaska Industrial Development and Export Authority (AIDEA) for the Ambler Road, the Alaska Department of Transportation and Public Facilities (DOT) for Juneau Access and the Knik Arm Bridge, and the Alaska Energy Authority (AEA) for the Susitna-Watana Dam. In these brief memos, the Walker Administration provided direction for each of the projects without asking the Legislature for any new funds. The Findings section, below, discusses how only the Juneau Access project appears to be winding down.

The three previous *Easy to Start, Impossible to Finish* reports contain a similar emphasis on the high cost of continued studies of the state's "megaprojects,"[3] which do not have clear pathways for funding their even higher construction costs. These reports were issued in February 2010 (on five road and bridge megaprojects), March 2012 (on three Arctic "roads to resources" megaprojects), and March 2014 (on 10 road, bridge, and energy megaprojects).

As background, the state's budget of $9.8 billion for Fiscal Year 2016 contains both restricted ($4.9 billion, with $3.3 billion from the federal government) and unrestricted ($2.2 billion) revenues,[4] with most of the unrestricted revenues deriving from North Slope oil production. Restricted revenue has dedicated purposes under law and is unaffected by the drop in the price of oil. A good example is the approximately $500 million the federal government provides Alaska each year under the federal transportation law for transportation capital projects; for road and bridge construction, the state matches the federal money with 10 percent of its own money.[5] Unrestricted revenues can be used to meet any state need including salaries in the operating budget, capital projects, etc. With the drop in the price of oil by more than 70 percent from June 2014 to February 2016,[6] Alaska faces a dramatic loss in unrestricted revenue. Prior to the drop in the price of oil, revenue from North Slope oil production represented approximately 75 to 90 percent of the state's unrestricted revenue.

[3] We consider the projects in these reports to be "megaprojects" because of their high costs relative to other Alaska infrastructure projects. All four megaprojects in this report are controversial because of their questionable benefits to the state and their high costs. While their capital construction costs are high, each project also will have substantial, ongoing, operating and maintenance costs.

[4] See https://www.omb.alaska.gov/ombfiles/16_budget/PDFs/Fiscal_Summary_6.30.15.pdf.

[5] Other uses of restricted federal revenues include paying for Medicaid and public and University of Alaska education.

[6] Clifford Krauss, "Oil Prices: What's Behind the Drop? Simple Economics," *New York Times*, February 16, 2016, http://www.nytimes.com/interactive/2016/business/energy-environment/oil-prices.html.

FINDINGS

As a result of the drop in the price of oil and after placing the four projects analyzed in this report largely on hold, the Walker Administration allowed each of the projects to proceed (see Attachment A), albeit in different ways that are summarized in Table 1. The third column in Table 1 describes whether the money the administration authorized to be spent was to shut down the project, to continue a project phase or to start a new project phase(s).

Table 1: Walker Administration Direction to each Megaproject

Project	Allowed Activities	Shut down, continue a phase, or start a new phase(s)?
Ambler Road	Initiate the Environmental Impact Statement scoping process	Begin a new phase for the project, allowing spending up to $3.6 million in state funds, and needing an additional appropriation of $4.2-$6.8 million in state funds to complete the EIS.
Juneau Access	Finish the Supplemental EIS and bring the project to a Record of Decision	Would shut down the road portion of the project if a marine alternative is selected. Can spend up to $900,000 in state and federal funds.
Knik Arm Bridge	Submit a Letter of Interest for a federal Transportation Infrastructure Finance and Innovation Act loan, apply for a Marine Mammal Protection Act permit, manage acquired rights-of-way, and obtain additional right-of-way at Joint Base Elmendorf Richardson	Start several new project phases, with unspecified new costs. The project has approximately $160 million in unspent, already-appropriated state and federal funds.
Susitna-Watana Dam	Pursue a Federal Energy Regulatory Commission license	Continue the current phase. The project can spend up to $6.6 million, the amount of unspent, already-appropriated state funds. Obtaining a license could cost an additional $100 million[7] in state funds.

As is clear from Table 1, three of the four projects analyzed in this report are spending money to continue the current study phase or start new project phases. Given that the state's Fiscal Year 2017 budget deficit is over $3.5 billion, spending additional money to continue a project phase or to start new project phases does not make sense when the state cannot fund construction in the near-term (roughly five to 10 years). If the projects were shut down or suspended instead, their unspent appropriations could provide significant *new revenue*.

[7] Pat Forgey, "Susitna dam, other Alaska megaprojects inch forward despite moratorium," *Alaska Dispatch News*, July 19, 2015, http://www.adn.com/article/20150719/susitna-dam-other-alaska-megaprojects-inch-forward-despite-moratorium.

As shown in Table 2, these four projects have spent more than $324 million and have more than $263 million in unspent appropriations. Juneau Access and the Knik Arm Bridge alone contain nearly $250 million in potential new revenue that can be re-appropriated to other federally-approved transportation projects. For comparison purposes, Gov. Walker's proposed state income tax likely would generate $200 million each year.

Table 2: Megaproject Appropriations and Dollars Spent, Unspent, and Total Cost Estimates[8]

Project	Appropriated[9]	Estimated Spent[10]	Estimated Unspent[11]	Estimated Total Cost
Ambler Road	$26.25 million (state)	>$18 million	>$8 million	>$430 million[12]
Juneau Access	$120.3 million (federal and state)	>$30 million	>$90 million	$574 million[13]
Knik Arm Bridge	$248.8 million (federal and state)	>$90 million	>$158 million	$1.17 billion[14]
Susitna-Watana Dam	$192.7 million (state)	>$186 million	>$6 million	$5.655 billion[15]
Total	**$ 588.2 million**	**>$324 million**	**>$263 million**	**>$7.83 billion**

[8] As of February 2016. These projects would have tolls for vehicles (Knik Arm Bridge) or industrial users (the Ambler Road), ferry fare revenues (Juneau Access), and dam power revenues to partially cover costs.

[9] Note that spent federal transportation funds do not have to be paid back if: 1) If an amount equivalent to the repayment requirement is spent by the state on other federally-approved transportation projects, or 2) A Supplemental Environmental Impact Statement selects a No Action/No Build alternative.

[10] Estimates of money spent are from www.knikbridgefacts.org for the Knik Arm Bridge, the February 26, 2015 Senate Finance Committee hearing for Juneau Access, the Attachment A memo for the Ambler Road, and Pat Forgey, op. cit. and the Attachment A memo for the Susitna-Watana Dam.

[11] Appropriated dollars minus the money spent.

[12] Department of the Army Permit Application, Ambler Mining District Industrial Access Project, POA-2013-396, prepared by Dowl (Anchorage, AK), Nov. 2015, p. 11.

[13] Alaska Department of Transportation and Public Facilities, Juneau Access Improvements Project: Draft Supplemental Environmental Impact Statement, Sept. 2014, p. 2-16, http://dot.alaska.gov/sereg/projects/juneau_access/assets/2014_DSEIS/Draft_SEIS_Text_Figures.pdf.

[14] Letter of Interest for a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan for the Knik Arm Crossing Project, July 14, 2015, p. 13, http://knikarmbridge.com/wp-content/uploads/2015/06/KAC-TIFIA-LOI-7-16-2015.pdf.

[15] Susitna-Watana Hydro, Alaska Energy Authority, Engineering Feasibility Report, Dec. 2014, p. ES-11, http://www.susitna-watanahydro.org/wp-content/uploads/2015/01/Section-00-Executive-Summary.pdf.

Shutting down these projects would save almost $8 billion in construction costs, plus the high cost of operating and maintaining the projects over the long-term. Additionally, by not pursuing these projects, the state would have substantially lower state debt service because there would be no need for bonding or other financing mechanisms to fund construction. With an assumed interest rate of 3.5 percent and a 30-year term, the state would pay more than $35 million per month in principle and interest payments (i.e., debt service) for these projects, or approximately $422 million per year. State debt service in the enacted Fiscal Year 2016 budget is $278.1 million,[16] so funding these four projects would increase state debt service by 52 percent.

In summary, with almost $8 billion needed to fully fund these projects and the 2016 Legislature making substantial cuts wherever it can, these four megaprojects are out of the state's financial reach for the foreseeable future. With the state contemplating a variety of tax increases, it would be far better to stop spending millions of dollars on the three ongoing projects immediately rather than continuing current, or starting new, project phases.

HOW CAN ALASKA MAKE WISE EXPENDITURES ON MEGAPROJECTS IN THE FUTURE?

Project Phasing. Extensive planning money has been spent over many years on these four megaprojects with limited executive branch and legislative oversight. New project phases have been undertaken and more money appropriated without analyzing at the completion of important phases whether the projects should proceed and whether they would provide the investment returns expected.

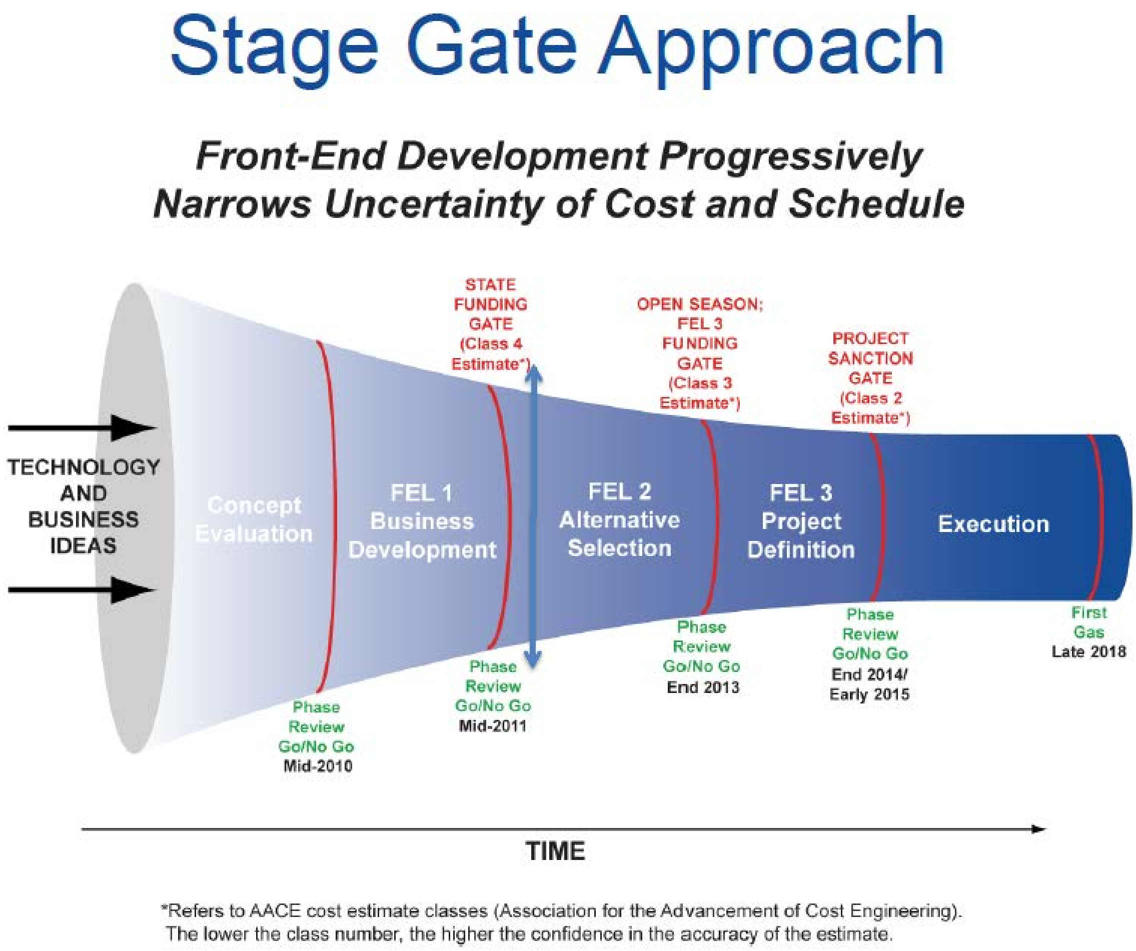
In contrast, industry and the Alaska Liquefied Natural Gas export pipeline project use a phased approach, evaluating each phase prior to proceeding with additional project investment including addressing uncertainties early in the project development process. Figure 1 graphically depicts the type of phased approach needed for megaproject development, with multiple funding gates and increasingly reduced uncertainty in cost and schedule as time goes on.

The critical questions that should be asked at the completion of each phase are:

- Have any of the fundamental assumptions regarding the project changed including the scope of work, capital and operating cost estimates, revenue projections, project schedule, regulatory environment, technical feasibility, and stakeholder support?
- Are there external factors that could change the rationale for the project such as technologies reducing the need for vehicles, changes to the related resource or power-production projects, etc.
- Is this the best use of state/federal money at this point in time?

[16] See https://www.omb.alaska.gov/ombfiles/16_budget/PDFs/Fiscal_Summary_6.30.15.pdf.

Figure 1: A Phased Approach for Alaska Pipeline Megaproject Development[17]



- Is there a viable business case or a clear path forward to obtain one?
- Have project risks been identified and mitigation plans put in place?
- Is there a solid basis for the project's capital costs and have they been benchmarked with other similar projects? Has there been an independent capital cost estimate?
- Has the work done in the previous stage been fully documented and been peer reviewed?
- Does the project team have a robust plan of work with clearly specified deliverables and a budget in place for the next stage of work?
- Is the project still consistent with the long range plans of the State of Alaska?

These are tough questions which should challenge project teams and provide project transparency for decision makers and the public.[18] The questions are best asked by a review team that is wholly independent and has experience with similar projects.[19]

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[17] ASAP Project Update, Fairbanks Alliance Industry Update, Alaska Gasline Development Corporation, September 28, 2012, slide 11.

[18] Lack of rigor in project management is a common problem by governments around the world. Recognizing this problem, the UK government recently established a Major Projects Authority to provide oversight and transparency on some $750

Identify significant issues early. Additionally, it is critically important to identify major project issues early and address them or, if they cannot be addressed, to shut down projects. When significant problems were identified that could not be addressed at early stages for each of these four projects, the projects nevertheless were allowed to continue. These significant problems are:

- The Knik Arm Bridge and Toll Authority's finding that it is a longer distance to Anchorage from Mat-Su Borough population centers via the proposed toll bridge than via the current route. This was discovered in 2005, just two years after the Legislature authorized the project,[20]
- The Juneau Access project is unable to build a road all the way to Skagway because of federal requirements to protect the Skagway and White Pass National Historic Landmark. This problem also was discovered in 2005,[21] and
- Widespread public opposition to the Ambler Road is expressed at virtually all community meetings and in community resolutions passed against the project.[22] Broad public opposition also exists to the Susitna-Watana Dam. [23]

Board of Director conflicts. Conflicts of interest for boards of directors need to be recognized during project decision making. Often many, if not all, board members will have a direct interest in moving a project forward, which generally will result in downplaying project problems.

Lack of critical re-evaluation at each project stage before proceeding with additional investment, ignoring significant project problems, and not addressing board conflicts greatly harm project outcomes. To make matters worse, once begun, Alaska's projects gain political momentum which makes them hard to stop short of a firm gubernatorial and/or legislative decision to do so.

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billion worth of projects. See https://www.gov.uk/government/groups/major-projects-authority and the agency's transparent annual report at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/438333/Major_Projects_Authority_Annual_Report_2015.pdf.

[19] Independent Project Analysis (http://www.ipaglobal.com/), a global company with a worldwide database of thousands of projects, is an example of a company that could provide needed project evaluation. IPA conducted such an evaluation of the Alaska Stand Alone Gas Pipeline in July 2011, for example. See http://asapgas.agdc.us/pdfs/documents/ES4_AGD0201PACESETTER.pdf.

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

[21] "Juneau Access Preferred Alternative Changed," *Capital City Weekly*, Aug. 17, 2005, http://www.capitalcityweekly.com/stories/081705/news_20050817003.shtml.

[22] Links to multiple village resolutions, including the Tanana Chiefs Conference, opposing current plans to build the Ambler Road are available here: http://www.brooksrange.org/documents-media/.

[23] See, for example, the Susitna River Coalition website: http://nosudam.org/.

RECOMMENDATIONS

When the state decides to spend money on projects, it is essentially deciding that is the best possible use of the money. Money spent on these projects in the past could have been saved,[24] applied to other projects, or used to pay operating costs.

The recommendations from the first *Easy to Start, Impossible to Finish* report from 2010 still apply. The bracketed sections below elaborate on these previous recommendations. 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 [and shut down] projects when adverse facts become available. [Before proceeding with a new phase of a project and additional investment, thoroughly evaluate what has been learned and what conditions have changed that could affect the project.]
3) Develop state and local transportation revenue sources [to ensure that those closest to projects have "skin in the game" rather than moving projects forward because they will receive 90 percent of their funds from the federal government].
4) Pursue projects which address critical transportation needs, e.g., increasing safety, reducing congestion, fixing deteriorating infrastructure, and addressing air quality problems.[25]

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.[26] Projects should be subject to unbiased cost benefit analyses before proceeding [to the next phase. Is there a positive "business" case that can be made by the state to support proceeding? Will industry or the bond markets pay for the projects if they are so essential?]

[24] "[I]f the money spent on the 1980s megaprojects had been invested in the Permanent Fund, the fund would be larger by $14.9 billion today, according to Ginny Fay, an economist with the UAA Institute of Social and Economic Research who wrote a report on the subject [A History of Alaska's Mega Projects (June 2003)]. That's enough to spin off $1.2 billion a year for the budget, a third of our deficit and six times the amount of the proposed income tax." Charles Wohlforth, op. cit.

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

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

It is our hope that, with the state's current fiscal situation, ongoing expenditures on these four megaprojects will be discontinued, and the resulting savings of more than a quarter-billion dollars already-appropriated will be used to prevent cuts in other important state programs and projects.

NOTABLE CONCERNS WITH AND DETAILS OF THE INFRASTRUCTURE PROJECTS

TRANSPORTATION

Ambler Road – The proposed Ambler Road project, also known as the Ambler Mining District Industrial Access project,[27] would consist of a road 211 miles or more long—depending on the results of an Environmental Impact Statement—from the Dalton Highway to a proposed mining district. Until 2013, Alaska DOT led work on this project. In April 2013, NovaCopper[28] and AIDEA[29] signed a Memorandum of Understanding giving AIDEA the lead rather than Alaska DOT.[30]

AIDEA issues revenue bonds that must be paid back by industrial entities. The Ambler Road cost would be at least $430 million depending on the route selected.[31] NovaCopper has not committed to pay for the entire cost of the road including its planning, construction, maintenance and operating costs. NovaCopper's 2013 report on its Ambler mining district work by its contractor Tetra Tech states:

> *Tetra Tech has not estimated the road toll cost that NovaCopper will pay to use the [Ambler Mining District Industrial Access Road] proposed to be built by the Government of Alaska. Since this cost is determined by confidential negotiations between NovaCopper and the AIDEA, a State-owned private corporation, Tetra Tech has relied on NovaCopper management to provide the road toll cost. For the purposes of this [Preliminary Economic Assessment] study, it has been assumed that a toll would be paid based on a $150 million 30-year bond at a 5% interest rate, which would result in the Arctic Project paying approximately $9.7 million each year for its 12-year mine life. The toll payments are assumed in the PEA to commence when the Arctic Project has reached commercial production.*[32]

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[27] See http://www.aidea.org/Programs/InfrastructureDevelopment/AmblerMiningDistrictIndustrialAccess.aspx.

[28] 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 (see http://www.marketwired.com/press-release/novagold-completes-divestiture-of-rock-creek-project-in-alaska-tsx-ng-1720806.htm). State of Alaska road upgrades were not reimbursed by NovaGold.

[29] 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.

[30] Memorandum of Understanding between the Alaska Industrial Development and Export Authority and NovaCopper US Inc., April 5, 2013, 9 pp.

[31] Department of the Army Permit Application, Ambler Mining District Industrial Access Project, POA-2013-396, prepared by Dowl (Anchorage, AK), Nov. 2015, p. 11. Note that, unlike Juneau Access and the Knik Arm Bridge, this cost estimate has not been independently verified.

[32] Tetra Tech, Preliminary Economic Assessment Report on the Arctic Project, Ambler Mining District, Northwest Alaska, Sept. 2013, p. 1-13 ff., http://www.novacopper.com/i/pdf/reports/2013_Arctic_PEA_FINAL.pdf.

In other words, NovaCopper has committed to pay only $116.4 million, or $9.7 million annually over 12 years, to cover the hundreds of millions of dollars in costs for the Ambler Road, assuming they do not walk away from the project. No other mining operators have committed to make up the remaining funds needed to build the project, nor has the region's resource potential (or lack of potential) been fully documented.

The Red Dog mine, like the Ambler Mining District, needed a road for access, however its arrangement with AIDEA was very different. As reported by Charles Wohlforth in the Alaska Dispatch News:

> *Red Dog, with the richest zinc deposit in the world, needed a 54-mile road and a port, which AIDEA agreed to build only <u>after</u> the mine owner guaranteed the first five years of operation with a letter of credit, said Bert Wagnon, who was then the agency's executive director. That deal also built in a profit for the state.*[33] *(emphasis added)*

There is no similar agreement to pay for the Ambler Road's cost between the state and NovaCopper.

The primary financial beneficiary of the road to Ambler would be the mining industry, not nearby villages, which would not be connected to the road. The mining industry provides a very small amount of state revenue. The industry provided $55.6 million in unrestricted state revenue in Fiscal Year 2015, representing less than 2.5 percent of the unrestricted revenue received by the Tax Division of the Alaska Department of Revenue.[34] The mining industry also provided the state in Fiscal Year 2015 with $6.0 million in restricted revenue.[35]

The Legislature has appropriated $26.25 million in state funds for the project. In its memo to AIDEA in October 2015 (see Attachment A), the Office of Management and Budget allowed AIDEA to spend up to $3.6 million to begin the scoping process for an Environmental Impact Statement (EIS) involving the Bureau of Land Management, the National Park Service, the U.S. Army Corps of Engineers, and the U.S. Coast Guard. As of March 2016, AIDEA filed preliminary applications and all four agencies have sent letters to AIDEA identifying substantial deficiencies in those applications.

The proposed routes raise concerns about degradation of subsistence and other resources including moose; caribou whose migration might be altered with a long east-west road and increased non-local

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[33] Charles Wohlforth, "Locals fight 211-mile arctic road as megaproject spending continues, *Alaska Dispatch News*," February 3, 2016, http://www.adn.com/article/20160203/locals-fight-211-mile-arctic-road-megaproject-spending-continues.

[34] Alaska Department of Revenue, Revenue Sources Book, Fall 2015, pp. 5-6, http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?1240r.

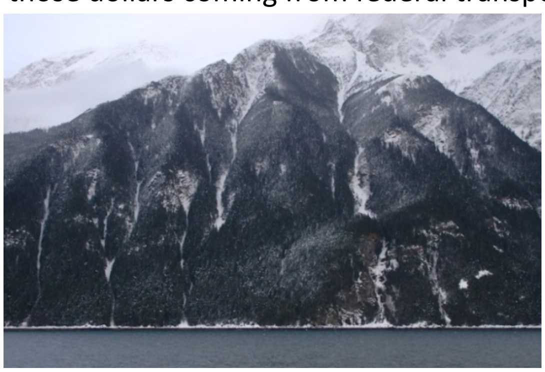
[35] Ibid., p. 56.

hunting; adverse effects on fish, including those in 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 that would be created by the project. As of March 2016, there are seven resolutions of opposition from affected communities scattered across the affected region, as well as a resolution by the Tanana Chiefs Conference opposing the road and requesting more formal agency consultation with tribes in the region.

Juneau Access – The proposed Juneau Access road/ferry project[36] would consist of 51 miles of new road from Echo Cove (approximately 40 miles north of downtown Juneau) to the undeveloped Katzehin River via the eastern 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. 1,040 as of 2015) and Haines (pop. 2,493 in the borough as of 2015). 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/shuttle ferry combination.

The Legislature has appropriated $120.3 million for the project, with approximately 90 percent of those dollars coming from federal transportation funds, plus a $14.5 million earmark from the federal government. In September 2014, Alaska DOT issued a draft supplemental EIS on the project.[37] Projected traffic on the road/shuttle ferry system would be low.[38]



An extremely steep section of the route.

If it were built, the Juneau Access road would be constructed at the base of very steep, wooded terrain subject to frequent snow avalanches. Plans call for five costly tunnels and/or snowsheds and construction of

[36] See http://dot.alaska.gov/sereg/projects/juneau_access/index.shtml.

[37] Alaska Department of Transportation and Public Facilities, Juneau Access Improvements Project: Draft Supplemental Environmental Impact Statement, Sept. 2014, http://dot.alaska.gov/sereg/projects/juneau_access/assets/2014_DSEIS/Draft_SEIS_Text_Figures.pdf.

[38] Maximum projected summer capacity would be only 848 vehicles per day. Ibid., p. ES-16. Many analysts question whether this number is achievable.

several of the longest bridges in the state. Construction and maintenance costs would be very high, and transfers of drivers and cargo onto ferries still would be required. Juneau has been deeply divided over the project for decades; Haines and Skagway have consistently supported marine transportation over road construction.

The estimated construction cost of the road/shuttle ferry system project is $574 million.[39] In its memo to Alaska DOT (see Attachment A), the Office of Management and Budget allows Alaska DOT to spend up to $900,000 to finish the Supplemental EIS and bring the project to a Record of Decision. If the state selects a non-road alternative in the final Supplemental EIS as the Preferred Alternative, Alaska DOT would not be required to pay back the federal government for the federal money expended.

Knik Arm Bridge – The proposed Knik Arm Bridge project[40] would consist of a toll bridge across Cook Inlet's Knik Arm from Anchorage to sparsely populated 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.[41] This bridge was deemed a "bridge to nowhere" by many, including as part of a cover story in Parade magazine in November 2005. Additionally, independent analyses have shown implausible projections by the Knik Arm Bridge and Toll Authority/Alaska DOT for Mat-Su Borough growth and bridge usage.[42]

Until 2015, the Knik Arm Bridge and Toll Authority (KABATA) planned for the bridge to be built using a public-private partnership, or 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, however, 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."[43] In June 2014, Gov. Sean Parnell signed a bill abandoning KABATA's public-private partnership in favor

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[39] Ibid., p. 2-16.

[40] See http://www.knikarmbridge.com/.

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

[42] See www.knikbridgefacts.org.

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

of direct public funding for the bridge. This bill also merged nearly all of KABATA's functions into Alaska DOT, essentially eliminating KABATA as an independent entity.

The current cost estimate for the proposed bridge is $1.17 billion,[44] nearly double the $600 million assumed in the December 2010 Record of Decision by the Federal Highway Administration. The state plans to build the bridge with $405 million in federal transportation funds, a federal low-cost Transportation Infrastructure Finance and Innovation Act (or TIFIA) loan plus interest totaling $402 million, $19 million in state match funds, state-issued bonds plus interest totaling $312 million, plus some small amounts from other sources.[45]

The Legislature has appropriated $248.2 million toward the bridge, with approximately $90 million[46] spent. In its memo to Alaska DOT (see Attachment A), the Office of Management and Budget allows Alaska DOT to start several new project phases/activities, i.e., to submit a Letter of Interest for a federal TIFIA loan, apply for a Marine Mammal Protection Act permit, manage acquired rights-of-way, and obtain additional rights-of-way at Joint Base Elmendorf Richardson. The memo says "[t]hese activities ensure the state will have 20 years to address the project and will not have to repay the federal investment."

Undertaking more bridge-related expenditures is not the only option the state has to avoid repaying the federal investment, however. There are two other options to avoid repayment: 1. The federal government allows the state to utilize repayment funds for other eligible transportation projects.[47] This would allow the state to, for example, move up the timelines for needed safety or congestion reduction projects, which would provide clear benefits for Alaska, and 2. The state could request that the Federal Highway Administration initiate a Supplemental EIS to address the changed cost and demographics of the project. This multiyear process could, if a No Action alternative is selected as the Preferred Alternative, ensure that the state does not have to pay back the federal government for funds expended.

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[44] Letter of Interest for a TIFIA Loan, op. cit.

[45] Ibid. Since this submittal, the federal transportation law was reauthorized in December 2015 and the amount of TIFIA loan money available was dramatically reduced, plus additional types of projects are now eligible for TIFIA loans. As a result, the likelihood of the state receiving a TIFIA loan has decreased significantly. The Knik Arm Bridge has been turned down several times previously for a TIFIA loan.

[46] See http://www.knikbridgefacts.org.

[47] Federal Highway Administration Memo 5020.1, U.S. Department of Transportation, Repayment of Preliminary Engineering Costs, April 26, 2011, https://www.fhwa.dot.gov/legsregs/directives/orders/50201.cfm.

As a result of the recent drop in the price of oil, Knik Arm Bridge user projections need to be changed to take into account likely changes in the state's economy, including probable lower growth in the Mat-Su Borough. Updated projections would, presumably, adversely affect the already poor likelihood of obtaining both TIFIA and state bond funding. For more information about the Knik Arm Bridge, see www.knikbridgefacts.org.

ENERGY

Susitna-Watana Dam – The Susitna-Watana Hydroelectric Dam project[48] would build the fifth-highest dam in the United States (705 feet), and provide an annual average of 2800 gigawatt hours of renewable, low-carbon 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.

The projected cost of the project is $5.655 billion.[49] The Legislature has appropriated $192.7 million in state funds and over $6 million remains unspent. In its memo to AEA (see Attachment A), the Office of Management and Budget allows AEA to spend its remaining money to pursue a Federal Energy Regulatory Commission license through 2017, even though approximately $100 million in additional funds are needed to complete the licensing process.[50]

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 high risks downstream in this earthquake-prone region.
Since the state began pursuing this project, there has been extensive and vocal opposition, as well as substantial growth in Railbelt natural gas power production that undercuts the need for this new source of power. See http://nosudam.org/ for more information about the Susitna River Coalition, which consists of more than 16,000 individuals, groups, and businesses from across Alaska and the nation who support a free-flowing Susitna River and the healthy communities it sustains.

Susitna River below the proposed dam site. Photo by Paul Roderick, Talkeetna Air Taxi

[48] See http://www.susitna-watanahydro.org.

[49] Susitna-Watana Hydro, Alaska Energy Authority, Engineering Feasibility Report, Dec. 2014, p. ES-11, http://www.susitna-watanahydro.org/wp-content/uploads/2015/01/Section-00-Executive-Summary.pdf. Others have suggested significantly higher estimated costs: See http://www.adn.com/article/20141218/manager-says-increasingly-expensive-susitna-dam-could-help-salmon. The Alaska Energy Authority estimated cost of the dam does not include the cost of interest payments, upgrades to transmission lines, fish passage, and decommissioning.

[50] Pat Forgey, op. cit.

ATTACHMENT A
Walker Administration Memoranda to AIDEA, Alaska DOT, and AEA

State of Alaska

Bill Walker, Governor

Office of Management and Budget
PO Box 110020
Juneau AK 99811-0020
(907) 465-4660, fax 465-3008

MEMORANDUM

Date: October 15, 2015

To: John Springsteen, Executive Director,
Alaska Industrial Development and Export Authority

From: Pat Pitney, Director, Office of Management and Budget Pat K Pitney

Subject: Ambler Mining District Industrial Access Road

On December 26, 2014, the Governor issued Administrative Order 271. With regards to the Ambler Mining District Industrial Access Road (project), the Governor directed departments involved with the project to cease all discretionary spending, and not to incur new or additional expenses or obligations or enter into or amend existing contracts. The administrative order also directed the Departments not to spend unobligated or unencumbered funds, and to submit a status report of the project to the Office of Management and Budget.

Based upon our project review, we concur that non-discretionary expenditures includes funds needed in order to initiate the Environmental Impact Statement (EIS) specifically to undertake the scoping portion of the EIS process. The scoping portion is deemed necessary for the state to preserve the value of the studies that have been completed to date, and to determine the most appropriate access route for the project.

Therefore, AIDEA, as the project leader, is hereby directed to initiate the EIS process within existing appropriations for this project, and expend up to $3.6 million for the purpose of filing an EIS application and undertake the scoping portion of the EIS process. Existing appropriations are estimated at $8.1 million. We understand that an additional appropriation of approximately $4.2 million to $6.8 million would be needed to complete the EIS, should a decision to complete the process be made.

Once the EIS application is filed, work will include: conducting public outreach meetings, meet with tribes, local communities, evaluate road routes, and examine the merits of all transportation modalities, including rail. Once completed, the EIS will provide options for accessing the Ambler Mining District, along with the potential impacts of the options and associated mitigations.

Let me know if you have any questions. Thank you for your efforts with regard to this project.

Cc: Jim Whitaker, Chief of Staff, Office of Governor Walker
Mark Davis, Chief Infrastructure Development Officer, AIDEA
Mark Luiken, Commissioner, Department of Transportation and Public Facilities
Mark Myers, Commissioner, Department of Natural Resources
Brian Fechter, Budget Analyst, Office of Management and Budget

State of Alaska

Bill Walker, Governor

Office of Management and Budget
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MEMORANDUM

Date: July 6, 2015

To: Mark Luiken, Commissioner
Department of Transportation and Public Facilities

From: Pat Pitney, Director
Office of Management and Budget

Subject: Juneau Access Road – Administrative Order 271

On December 26, 2014, the Governor issued Administrative Order 271. With regards to the Juneau Access Improvement project, the Governor directed the Department of Transportation and Public Facilities (Department) to cease all discretionary spending, and not to incur new or additional expenses or obligations or enter into or amend existing contracts. The administrative order also directed the Department not to spend unobligated or unencumbered funds, and to submit a status report of the project to the Office of Management and Budget.

After reviewing this project, we would like the Department to proceed, within existing appropriations, to bring the project to a Record of Decision. The Department may expend up to $900,000 of existing general fund appropriations, and associated federal funds, only as needed in order to address the following items viewed as non-discretionary: (i) satisfy current obligations, (ii) complete the Supplemental Environmental Impact Statement, and (iii) conduct other activities necessary for the issuance of the Record of Decision regarding the Project. Reaching the Record of Decision ensures the state will not have to repay nearly $27 million in federal investment. As with the administrative order, the following provisions continue to apply to the project.

A. These activities must be funded with previously appropriated funds. No additional appropriations will be sought.

B. Reaching the milestone of the Record of Decision in this project preserves prior project investments, avoids federal funding repayment, and maintains the eight existing project alternatives, including the no action alternative.

C. After reaching the Record of Decision (expected in January 2016), the project will be evaluated and, based on the findings and state revenues, a decision will be made as to how to further proceed at that time.

I appreciate the time that you and your staff have devoted to this project. Please feel free to call me to discuss further.

Cc: Mary Siroky, Administrative Services Director, DOT/PF
Brian Fechter, Budget Analyst, Office of Management and Budget
Jim Whitaker, Chief of Staff, Office of the Governor

State of Alaska

Bill Walker, Governor

Office of Management and Budget
PO Box 110020
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MEMORANDUM

Date: July 6, 2015

To: Mark Luiken, Commissioner
Department of Transportation and Public Facilities

From: Pat Pitney, Director
Office of Management and Budget

Subject: Knik Arm Crossing Project – Administrative Order 271

On December 26, 2014, the Governor issued Administrative Order 271. With regards to the Knik Arm Crossing Project, the Governor directed the Department of Transportation and Public Facilities (Department) to cease all discretionary spending, and not to incur new or additional expenses or obligations, and not to enter into or amend existing contracts. The administrative order also directed the agency not to spend unobligated or unencumbered funds, and to submit a status report of the project to the Office of Management and Budget.

After reviewing this project, we would like the Department to proceed, within existing appropriations, to address the following items deemed as non-discretionary activities: seek federal Transportation Infrastructure Finance and Innovation Act (TIFIA) loan approval, advance Marine Mammal Protection Act (MMPA) permitting, and pursue limited right of way requirements. These activities ensure the state will have 20 years to address the project and will not have to repay the federal investment.

The Department may:

A. Advance the TIFIA loan letter of interest to complete financial due diligence and confirm eligibility and credit worthiness of the project;

B. Pursue final requirements of the National Marine and Fisheries Service to obtain the necessary Marine Mammal Protection Act (MMPA) Permit;

C. Manage state owned or controlled properties in the best interest of the state, minimizing financial risk; and

D. Pursue right of way requirements pertaining to the Joint Base Elmendorf Richardson (JBER).

Once these activities are complete, we will revisit the project within the context of the fiscal environment and other competing major capital projects.

I appreciate the time that you and your staff have devoted to the project. Please feel free to call me to discuss further.

Cc: Jim Whitaker, Chief of Staff
Mary Siroky, Administrative Services Director, DOT/PF
Brian Fechter, Budget Analyst, Office of Management and Budget

State of Alaska

Bill Walker, Governor

Office of Management and Budget
PO Box 110020
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(907) 465-4660, fax 465-3008

MEMORANDUM

Date: July 6, 2015

To: Sara Fisher-Goad, Executive Director
Alaska Energy Authority

From: Pat Pitney, Director
Office of Management and Budget

Subject: Susitna Watana Hydroelectric Project – Administrative Order 271

On December 26, 2014, the Governor issued Administrative Order 271. With regards to the Susitna-Watana Hydroelectric Project (Project), the Governor directed the Alaska Energy Authority (Authority) to cease all discretionary spending, and not to incur new or additional expenses or obligations or entering into or amending existing contracts. The administrative order also directed the Authority not to spend unobligated or unencumbered funds, and to submit a status report of the project to the Office of Management and Budget.

Based upon our review of this project, we concur that non-discretionary expenditures would include those necessary to advance the Project to complete and preserve the value of Federal Energy Regulatory Commission (FERC) required studies; including those that are in process provided they are within existing appropriations. Incrementally advancing the project toward the FERC study plan determination is deemed non-discretionary activity. The Authority may utilize the remaining $6.6 million of the original $192 million appropriation to continue to move the project through 2017, at which time the project will be revisited in the context of the fiscal environment and other competing major capital projects.

I appreciate the time that you and your staff have devoted to this project. Please feel free to call me to discuss further.

Cc: Fred Parady, Deputy Commissioner, Department of Commerce Community and Economic Development

Arnold Liebelt, OMB Policy Analyst, Office of Management and Budget

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

MARCH 2016

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