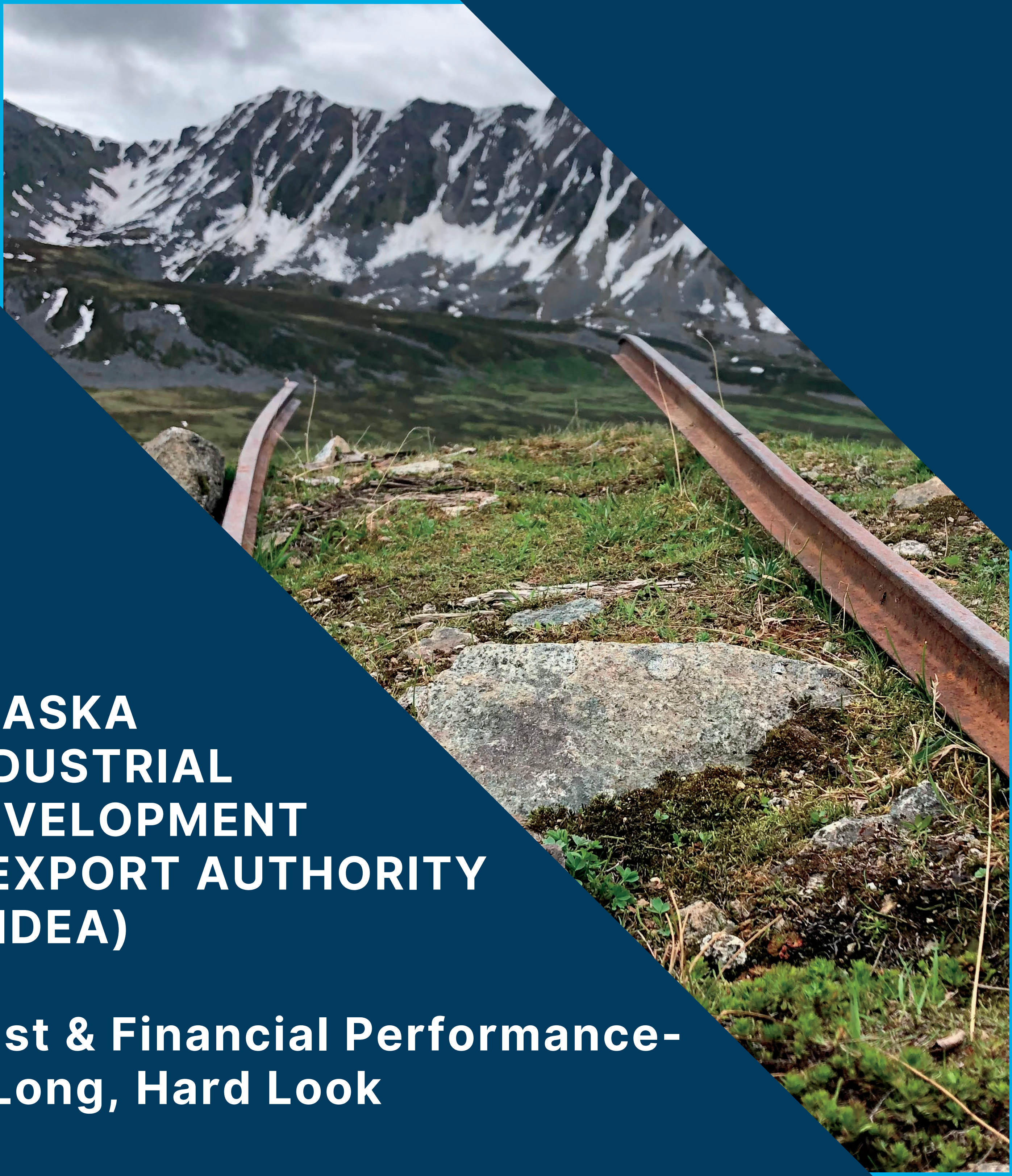

ALASKA INDUSTRIAL DEVELOPMENT & EXPORT AUTHORITY (AIDEA)

Cost & Financial Performance- A Long, Hard Look

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This report addresses the performance of Alaska Industrial Development and Export Authority (AIDEA), over the past 41 years. [1] In contrast to previous studies, the report includes a rigorous analysis of the often overlooked opportunity costs the state government and Alaska households have paid to support AIDEA's operations.

After establishing the real costs of AIDEA, the report turns to the benefits: Has AIDEA improved the economic well-being of Alaska households? If so, were the improvements sustainable? Were the benefits distributed fairly?

Finally, have the benefits been worth the costs? The report offers multiple perspectives on these questions, but it is not a "benefit-cost analysis" as that term is understood by economists. Economic analysts and accountants can help in framing questions and gathering evidence. This report is designed to provide such assistance, but the answers themselves turn on the values and judgments of individual Alaskans.

Key Findings & Recommendations

AIDEA is expensive

The costs of keeping AIDEA are substantial. Since 1980, AIDEA has received a net $301 million of public funds to subsidize economic development.

> *Had those funds been appropriated to and their earnings retained in the Alaska Permanent Fund, the State savings account would be richer by $11.4 billion.*

AIDEA has a net worth of $1.4 billion. The $10.0 billion difference is the measure of what AIDEA has cost the state.

> *Had the $301 million been appropriated to the Permanent Fund, and a portion of the earnings distributed to Alaskans as Permanent Fund Dividends (PFDs), recipients would have collected $1.3 billion more in their PFD checks.*

Economic development, as practiced by the State of Alaska, is very expensive.

Another $27.8 billion could have been added to the Permanent Fund balance if monies spent on non-AIDEA State of Alaska megaprojects, reviewed in Alaska Megaprojects Update, [2] had been appropriated to, and retained in, the Permanent Fund. Together with the $11.4 billion foregone on the AIDEA money, the Permanent Fund would have been $39.1 billion larger, almost half again its $81.9 billion size on June 30, 2021.

[1] The Alaska Industrial Development Authority was created in 1967, but until 1980 the Authority could only issue revenue bonds that put no AIDEA or other state assets at risk.
[2] Fay, Ginny, Alaska Megaprojects Update, Ecosystems, LLC, March 31, 2022.

AIDEA makes economic development expensive in part because of the poor financial performance of AIDEA's economic development investments.

Since 1980, AIDEA earned an average annual 3.8 percent on its investments. The Permanent Fund, by comparison, earned 9.4 percent.

This disparity is due to two factors:

1. the large proportion of its assets AIDEA has kept in low-earning cash assets; and,
2. the sub-par performance of its allocations to loans and development projects.

In the 35 years since AIDEA's first development project, AIDEA's cash generated better nominal returns than its loans or development projects — cash averaged 5.2 percent during FY 1987–2021, loans averaged 4.6 percent, and project investments were money-losers, with a negative 2.6 percent average annual return.

Less than half of AIDEA's projects have made permanent additions to Alaska's economy.

AIDEA has only had 26 projects in the 38 years since it was first authorized to own or operate development projects. Four are no longer operating, seven were acquisitions of existing properties or operations, and three are still in the planning stages.

Significant portions of AIDEA's loan investments are for refinancings or acquisitions of existing facilities, neither of which has direct impact on the Alaska economy.

Of the 39 AIDEA loan participations funded in the 16 months prior to October 31, 2020, 48 percent of the dollars were for loans that added no permanent jobs, and 65 percent entailed no construction jobs.

Because half of projects and half of loans produce no increased economic activity, half of AIDEA's $10.0 billion in FY 1981–2021 subsidies were wasted.

Even worse than half of AIDEA projects and loans failing to increase economic activity is the likelihood that many of AIDEA's loan participations would have been financed anyway, either by the participating bank or by other secondary mortgage market buyers. To the extent that is the case, then more than half of the $10.0 billion in loan and project subsidies produced no net economic development benefits. What the subsidies did do is boost the incomes of project developers, resource owners, AIDEA's loan participation borrowers, participating banks, and the ratepayers in the case of regulated utilities.

AIDEA-subsidized projects frequently flounder or founder.

AIDEA's investments in projects are more likely than not to cost, rather than make, money. High-profile failures include the Healy Clean Coal project, Alaska Seafood International, the Seward Coal Facility, the Skagway Ore Terminal, and, most recently, the Mustang oil production venture.

In the 35 years since AIDEA's first project investment, AIDEA projects have lost a total of $233.3 million.

Projects lost money in 17 of those 35 years. Of the $682 million AIDEA invested in subsidizing projects since 1987, $294 million has been written off as worthless by AIDEA's board; further write-offs are possible, if not likely.

Projects that don't flounder often would have proceeded without AIDEA investment.

The Red Dog Mine in Northwest Alaska is the Authority's poster child for the use of subsidies to jump-start a big industrial mine and generate jobs in a rural area where jobs are badly needed. Yet AIDEA's own consultants concluded that the project would go forward regardless of whether subsidies were offered or not.

Benefits from AIDEA subsidies are narrowly distributed.

If the AIDEA subsidies to the Red Dog project failed to add any jobs to those that would have come anyway, it was nevertheless a success for the project promoters, whose profits and royalty revenues were increased by the state's subsidy.

Political influence plays an outsized role in project selection.

According to AIDEA's 2007 analysis of the Red Dog project, coordinated lobbying was essential to securing subsidies for the project.

> "Early on, NANA and [Cominco subsidiary] Teck cooperatively established key relationships with the Alaska Legislature, Governor Sheffield's administration, and federal representatives [and] stakeholders. These relationships supported the project and helped secure important elements of the project's financing…." [3]

Recommendations

Regardless of whether AIDEA is reformed, totally reorganized, or left as is,

1. **An initial set of third-party ex post audits of AIDEA should be performed.** The audits should independently determine:
    a. whether projects would have been undertaken or the loans financed without AIDEA's involvement;
    b. the number and duration of jobs created by each project or loan;
    c. the share of those jobs filled by residents and non-residents;
    d. the geographic distribution of the jobs;
    e. the cost and opportunity costs of the subsidies provided; and
    f. the value of the subsidies received by each principal class of beneficiaries.

[3] AIDEA, Delong Mountain Transportation System Asset Management Review, Dec. 2007, p. 7.

2. **The State should consider extracting AIDEA from the commercial mortgage loan market.** The market has evolved to include commercial mortgage-backed securities (CMBSs), in addition to the traditional secondary market participants such as banks, pension funds, and insurance companies that were around in 1981, when AIDEA first began its loan participation program. Private-sector CMBS issuance in the United States totaled $109.1 billion in 2021.

3. **The State should consider restricting AIDEA project financing to revenue bonds paid solely from project revenues or assets.** AIDEA's unrestricted net assets could then be considered for reappropriation to the State general fund, the Alaska Permanent Fund, or other purposes. AIDEA's current lack of outstanding general obligation (GO) debt could provide an opportunity for a faster, simpler transition.

State support of future development projects would then depend on upfront appropriation of necessary State contributions, reserves, or collateral. Appropriations to AIDEA should lapse back to the State upon project termination, retirement of debt, or divestment of ownership interests by AIDEA.

On a continuing basis, the following recommendations could help AIDEA perform more as owners of capital than as mere stewards of other peoples' money, [4] much less as captives of outside interests:

4. **AIDEA's books and audited financial statements should allocate or pro-rate all assets, liabilities, income, and expenses to loans, projects, or cash.** This would provide management, the State, and the public the ability to better gauge the deployment, allocation, and performance of AIDEA's assets.

5. **AIDEA should report the number and dollar amounts of loan participations in the following categories,** along with the construction and permanent jobs attributable to the financings:

   a. refinancings;
   b. acquisitions;
   c. assumptions;
   d. equity extraction; and,
   e. new construction.

6. **AIDEA commitments of funds to a loan or project should include dollar and rate of return subsidy estimates of:**

   a. AIDEA's subsidy costs;
   b. the State's opportunity costs; and,
   c. the value of the subsidies to major project participants and beneficiaries.

7. **The subsidy estimates should be**

   a. available to AIDEA Board Members considering loan or project approval;
   b. summarized in AIDEA's budget documents, annual reports, and financial statements;
   c. included in the Commissioner of Revenue's (AS 43.05.095) and the Legislative Finance Division's (AS 24.20.235) reports of revenue loss and indirect expenditures; and,
   d. included in the annual audits or reports that the Legislative Budget and Audit Committee are to provide under AS 24.20.201(a)(12) and AS 24.20.206 (3) and (6), below.

[4] Agents in contractual relationships assume there is a divergence in interests with the contracted party. Stewards assume a convergence of interests. Van Slyke, David M., "Agents or Stewards: Using Theory to Understand the Government-Nonprofit Social Service Contracting Relationship", Journal of Public Administration Research and Theory, September 14, 2006.

8. **The Legislative Budget and Audit Committee should either carry out or repeal its responsibilities to:**

   a. provide for annual post audits of AIDEA (AS 24.20.201(a)(12));
   b. report annually AIDEA's lending and investment plans, performance, and policies (AS 24.20.206(3)); and,
   c. provide for an annual operational and performance evaluation of AIDEA's
      i. effect on various sectors of the economy by public and private lending;
      ii. effect on resident and nonresident employment;
      iii. effect on real wages; and,
      iv. the effect on state and local operating and capital budgets (AS 24.20.206(6)).

Report Summary

The following summarizes AIDEA's cost and financial performance, our observations regarding AIDEA's benefits, and our examination of some of Alaska's megaprojects.

What is AIDEA? It's a state government corporation whose governing statutes enable it to do three things:

- create jobs and economic development;
- invest state funds; and,
- distribute income through below-market financing rates.

This review of AIDEA has been prompted by a number of recent events:

- AIDEA's foreclosure on $68.2 million of loans on the failed North Slope Mustang oil development project, along with AIDEA's purchase of a $16.4 million Department of Revenue (DOR) loan made to the project. The DOR loan is the subject of the Division of Legislative Audit's July 24, 2020 report, A Special Review of the Department of Revenue (DOR), Mustang Operations Center 1 LLC (MOC 1) Loan;
- AIDEA's bidding on Arctic National Wildlife Refuge (ANWR) oil leases; and,
- ethical controversies regarding AIDEA's distribution of CARES Act funds, award of a sole source contract, and other issues.

How much has AIDEA cost Alaska?

Since AIDEA was first capitalized in FY 1981, [5] it has cost the State and its residents $10.0 billion.

If the State's net contributions to AIDEA had been invested and saved in the Alaska Permanent Fund, they would have been worth $11.4 billion on June 30, 2021, instead of AIDEA's actual net worth on that date of $1.4 billion. Ergo, $10.0 billion left on the table.

If PFDs were paid on the AIDEA earnings, the "AIDEA account" at the Permanent Fund would have been $1.7 billion more than AIDEA's actual net assets on June 30, 2021, but Alaskans would have received an additional $1.3 billion in PFDs by that date. The PFDs and extra AIDEA earnings would be a total of $3.0 billion more than what AIDEA's net worth was at that time.

[5] Effective July 1, 1980, AIDA was capitalized with legislative appropriations of $15 million in cash, $166 million of loans held by the State of Alaska, Department of Revenue and Department of Commerce and Economic Development, and $2,554,055 in net assets of the Alaska State Development Corporation, the Small Business Development Corporation, and the Alaska Toll Bridge Authority, as reported in Alaska Industrial Development Authority, Financial Statements, June 30, 1981, Peat, Marwick Mitchell & Co., July 29, 1981.

The other $7.0 billion of what AIDEA has cost Alaskans is what Alaskans could have earned if they each had an individual account at the Permanent Fund and left their PFDs invested there, or if the payment of all dividends and earnings thereon had been simply deferred until June 30, 2021.

These are the opportunity costs, the opportunities foregone with the money the State gave to AIDEA. It is hard to appreciate how much the opportunity costs have come to. All the more so, when we consider a broader tally of the State's economic development efforts that includes many of the megaprojects the State has undertaken outside of AIDEA.

How much have megaprojects and AIDEA cost Alaska?

Table 1, below, provides an unduplicated tally of the opportunity costs of the non-AIDEA megaprojects that are documented in the Alaska Megaprojects Update, [6] combined with the $11.4 billion opportunity cost of AIDEA.

The $39.1 billion combined opportunity cost is an amount that was only surpassed by the Permanent Fund balance in 2011.

One major megaproject not included in this tally is Alaska's perennial North Slope gasline project. Even so, the $39.1 billion opportunity cost is just under half the $81.9 billion FY 2021 size of the Permanent Fund. AIDEA and megaprojects could have been Permanent Fund, Jr.

TABLE 1

Megaproject & AIDEA Opportunity Costs ($ 000)

	Value of Project or AIDEA funds invested by APFC, as of 2003	Value of Project or AIDEA funds invested by APFC, as of 6/30/2021
Megaprojects (including 2003)		30,210,853.2
AIDEA Megaprojects		
Ketchikan Shipyard		(810,288.3)
Ambler Mining Road		(51,592.9)
2003 Megaprojects	6,399,400.0	27,794,505.5
AIDEA 2003 Megaprojects		
Healy Clean Coal	(95,200.0)	(413,482.0)
Alaska Seafoods	(269,900.0)	(1,172,256.3)
Non-AIDEA Megaprojects		27,763,233.7
AIDEA		11,377,714.3
AIDEA and Non-AIDEA Megaprojects		39,140,948.0

[6] Fay, op. cit.

Those who sported the "Oh Lord, please give us another $900 million. We promise not to p— it away." bumper sticker, in the years after the State spent the $900 million Prudhoe Bay oil lease bonus money, hadn't seen the half of it. They may feel the State didn't get its money's worth out of the $900 million in spending, but there's something more than forty times that in the $39.1 billion that the State never even got to spend. [7]

What benefits has Alaska gotten from AIDEA?

The key question, if one wanted to compare AIDEA's cost to its benefits, is how many of the loans and projects AIDEA invested in would have found other financing if there were no AIDEA? Would minerals have been left in the ground, concentrates trucked to the lower 48, cargo aircraft not maintained? Would Alaska's economy be 10 percent, 15 percent, smaller? Or, as the late Scott Hawkins once said, arguing against State gasline subsidies, "We think it's clear that the economy marches to its own drummer." [8]

Loans

On June 30, 2021, AIDEA's $445.3 million in loan participations were 29.4 percent of AIDEA's total assets. These loans were already underwritten by banks or credit unions before showing up at AIDEA's door. Probably most of them would have been funded by the banks or credit unions if AIDEA hadn't bought in.

Even without AIDEA loan participation, banks could have still sold these loans. There was a $109.1 billion CMBS market in the U.S. in 2021, [9] in addition to traditional secondary market mortgage buyers like other banks, government agencies, pension funds, and insurance companies.

AIDEA does not fill any void in the commercial lending market. What AIDEA does do is provide below-market financing rates and terms. There is no capital shortage. But, there is always a shortage of free goods.

Moreover, it appears a high percentage of loan participations are for refinancings involving no new construction, and for acquisitions — 6 out of 8 loans presented at a December 1, 2021 AIDEA Board meeting were refinances. [10]

Of 39 loan participations AIDEA funded in the 16 months prior to October 31, 2020, 48 percent of the dollars were for loans that added no permanent jobs, and 65 percent of the loan dollars entailed no construction jobs. [11]

Such loans may do nothing more than elevate commercial real estate prices — not necessarily a stimulus to economic activity. Or, AIDEA's cheaper financing may simply allow banks to charge higher fees or interest rates on their portion of a loan.

[7] The State has spent or can spend just short of $3 billion of the $39.1 billion opportunity cost — $1,589 million spent on non-AIDEA megaprojects, plus AIDEA's June 30, 2021 net assets of $1,407 million, a total of $2,996 million. See Fay, Alaska Megaprojects Update, Tables 1 and 2 for the $1,589 million total of non-AIDEA megaproject appropriations/expenditures. See Table 14 in full report for AIDEA's June 30, 2021 net assets of $1,407 million.
[8] Stapleton, Rob, "New group builds change in AGIA views", Alaska Journal of Commerce, June 14, 2008.
[9] "CMBS Issuance Explodes in 2021, Hits Levels Not Seen in 14 Years", Trepp CMBS Research, February 1, 2022, at https://www.trepp.com/trepptalk/cmbs-issuance-explodes-in-2021-hits-levels-not-seen-in-14-years.
[10] AIDEA's "Loan Dashboard Report" as of October 31, 2020.
[11] Ibid.

Projects

Less than half of AIDEA's projects have made permanent additions to Alaska's economy. AIDEA has only had 26 projects in the 38 years since it could own or operate development projects. Four are no longer operating, seven were acquisitions of existing properties or operations, and three are still in the planning stages.

Many new operating enterprises, funded with AIDEA loans or project financing, would likely still be in operation if funding had come from another source.

If there is a poster child for AIDEA playing an active role in financing economic development, it is the Red Dog Mine. But, an AIDEA consultant for the project, SRI International, expected the mine to be highly profitable even under the unrealistic assumption that it would be wholly financed with private equity.

Although the SRI study concluded that Red Dog would go forward regardless of AIDEA's financial help, why did the legislature and state administration nevertheless approve the state subsidy? According to AIDEA, the answer was in large part due to a joint effort by Cominco and NANA, the for-profit Native regional corporation that owns the mineral rights to the Red Dog deposit.

> "Early on, NANA and [Cominco subsidiary] Teck cooperatively established key relationships with the Alaska Legislature, Governor Sheffield's administration, and federal representatives/stakeholders. These relationships supported the project and helped secure important elements of the project's financing…." [12]

AIDEA's Red Dog "success-story" omits the inconvenient fact that the project would likely have gone forward, even without AIDEA's subsidies or involvement. Even so, there is little doubt that the AIDEA subsidy was a "success" for Cominco and NANA, the entities that paid for the intense lobbying efforts in 1983-85 that preceded the legislature's approvals of AIDEA's Red Dog plans. Had the mine been developed absent state financing, mineral royalties to NANA and profits to Cominco would have been significantly smaller.

The extra profits contributed to Cominco by AIDEA's participation largely left Alaska. Cominco is a Canadian corporation with international investments in the Americas. Red Dog is its only investment in Alaska. Teck Resources Ltd. acquired 100 percent of Cominco in July 2001. [13] In July 2009, China Investment Corporation bought a 17% stake in Teck for C$1.74 billion. [14]

One danger is that a successful project like Red Dog will be paraded by developers and mineral interest owners as a model for Ambler or other projects, simply to enrich their take, whether or not State subsidies are needed to make the project economically viable.

[12] AIDEA, Delong Mountain Transportation System Asset Management Review, Dec. 2007, p. 7.
[13] http://www.companieshistory.com/teck-resources/.
[14] https://en.wikipedia.org/wiki/Teck_Resources.

The biggest danger is that the success will be attributed to the model, rather than Red Dog's world-class resource, diverting AIDEA or the State's attention from the economics and financial feasibility of projects and setting them up for failure.

SRI's Red Dog findings that

> "Surprisingly, Cominco Alaska's ROI appears relatively insensitive to many of the factors pertinent to its proposal (i.e., the broad range of user fees considered and, by extension, the amount of State subsidy required, if any). Potential increases in the amount of capital investment required for the road and port facilities or the possible contribution of other users of the transportation system also appear to have only limited effect on mining return." [15]

are unlikely to hold for the Ambler District, with a road four times the length of Red Dog's. Road tolls far greater than Red Dog's could be a death knell for Ambler mines, or bankruptcy for AIDEA, during a severe crash in mineral prices. Higher fixed costs for road amortization means higher risk for the mines and for AIDEA.

AIDEA's financial performance

How would the State or Alaskans have been $10.0 billion better off without AIDEA? Simply by letting the Alaska Permanent Fund Corporation (APFC) manage the investment of the money the State has contributed to AIDEA. Since 1980, Permanent Fund investments averaged a 9.4 percent compound annual rate of return on investments, compared to 3.8 percent for AIDEA.

AIDEA's returns have not done much more than keep pace with inflation. The Authority's real rate of return, after netting out inflation, averaged 1.3 percent since 1980, but has been even less, about 0.8 percent, over the last 30, 20, and 10-year periods.

AIDEA's assets are held in three types of investments — loans, projects, and cash:

- loans consist mostly of loan participations, in which AIDEA purchases up to 90 percent of a bank or credit union commercial mortgage loan to an Alaska business. Loans also include a small amount of direct small business loans, most of which are administered by the Alaska Department of Commerce, Community, and Economic Development;
- projects are AIDEA's economic development projects, including those accounted for as loans and capital assets. For this analysis, projects also include the small venture capital investment, $6 million, AIDEA's board authorized in February 1990; and,
- cash is cash, cash equivalents, and marketable securities.

[15] SRI International, op. cit., p. VII-4.

AIDEA's first development project (as defined in AS 44.88.900) was Red Dog in 1987. Before 1987, AIDEA held only loan and cash assets. Before 1987, loan income was not segregated from cash income in AIDEA's audited financial statements.

From FY 1987 on, AIDEA's financial statements segregate loan, project, and cash assets and income. This enabled the calculation of AIDEA's rates of return on its asset classes, as shown in Table 2, below, for the 35 years from 1987 on.

TABLE 2

AIDEA Rates of Return
FY 1987–2021

	Loan	Project	Cash	Total
Average of Annual Returns	4.9%	(3.0%)	4.7%	3.1%
Compound Annual Return[1]	4.6%	(2.6%)	**5.2%**	**3.1%**
Compound Real Return[2]	2.4%	(4.6%)	3.0%	0.9%

1. Dollar-weighted compound rate of return, weighted by fiscal year average net assets.
2. Compound return net of inflation, as measured by the Urban Alaska (Anchorage) CPI-U.

AIDEA's loans have earned about a half a percent less than its cash investments. But, AIDEA's projects have been a money loser. Not just on average, as shown in Table 2, but almost as an even bet. Projects have lost money in 17 out of the last 35 years. See Table 16 or 19 in full report.

If we consider real income, after netting out inflation, projects are a long shot, having made money in only five of the last 35 years. See Table 18 in full report.

AIDEA's cash flow

Over the 35 years for which we can separate AIDEA's loan, project, and cash performance, the Authority has earned a total of $950.8 million in net income. $705.8 million, or 74.2 percent, of this net income is attributable to earnings on AIDEA's cash. Barely 25 percent of AIDEA's net earnings has flowed from its twin economic development engines — loans and projects.

If loans were AIDEA's only economic development tool, their 35 years of net income from 1987 on — $478.3 million — would have come to half of that time period's $950.8 million total net income.

Instead, because projects lost money over the last 35 years — $233.3 million — loans' and projects' combined contribution to AIDEA's bottom line was only $245.1 million over the 35 years.

AIDEA's debt-free status

Loans, projects, and cash all serve as collateral and sources of income for making debt service payments on AIDEA's bonds. Cash gets special focus from credit rating agencies, bond buyers, and bond covenants because of its liquidity.

This was underscored in 2019 when gubernatorial and legislative proposals were made to transfer up to $254 million from AIDEA to the State's general fund. The result was a downgrade in AIDEA's credit rating by Moody's. [16], [17] AIDEA avoided a downgrade from S&P by defeasing [18] all of its outstanding GO debt.

So, currently as of April 2022, AIDEA has no outstanding GO debt. This renders bond covenants ineffective until additional bonds are issued. AIDEA currently has legislative authorizations to issue up to $485 million in bonds. [19]

The defeasance presents a rare window of opportunity to reappropriate AIDEA assets to the State general fund, Permanent Fund, or other purposes, before new AIDEA bond issues resuscitate bond covenant restrictions. Depending on the amount of assets repatriated to the State, it could forestall further bond issuance, force reliance on revenue bonds, or require new appropriations to AIDEA to enable additional bonds to be issued.

If AIDEA does issue new bonds, it is always possible to return AIDEA to a bond covenant-free state of affairs with a new defeasance, as long as there are enough cash assets to do so.

AIDEA project losses and plans

At the end of FY 2021, projects were AIDEA's smallest asset class, and cash was the largest.

This is because AIDEA has written-off $294.1 million of project assets since 1999 [20].

[16] © 2022 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.
[17] Memorandum, "Resolution No. G19-20 Authorizing Defeasance and Redemption of Outstanding Revolving Fund Bonds", to Board Members, AIDEA, from Tom Boutin, Executive Director, September 18, 2019, at http://www.aidea.org/Portals/0/Meeting%20Docs/2019BoardMeetings/091819/7A-MemoResolutionG19-20Escrow_GOBondDefeasance.pdf.
[18] Bonds are defeased when a bond issuer deposits sufficient cash and marketable securities with an escrow agent to pay the debt service and redemption amounts on the defeased bonds until they come due or can be called. Because the cash and marketable securities will be earning income until paid as bond principal or interest, the amount of cash and securities to be deposited is normally less than the outstanding principal amount of bonds to be defeased.
[19] EideBailly, Financial Statements, June 30, 2021, Alaska Industrial Development and Export Authority, December 2, 2021, pages 25 and 26, at http://www.aidea.org/Portals/0/Meeting%20Docs/2021BoardMeetings/120121/Alaska_Industrial_Development_2021_Financial_Statements_FINAL.pdf.
[20] The write-offs, or write-downs, are generally recorded as "impairments" in AIDEA's financial statements. They are reductions in the value of a project's assets."Write-offs" do not necessarily imply that a project is not operating or that it has been liquidated or sold.

So, instead of $682.0 million in project net assets, AIDEA had only $387.9 million at the end of FY 2021.

That first write-down, in 1999, of $150.4 million for the Healy Clean Coal project was more than half of AIDEA's total project net assets of $290.2 million at the beginning of 1999, which included, among other things, the Red Dog mine.

This vividly illustrates the risks megaprojects harbor. Not only may they carry great risk in terms of chances for failure, but their very scale can deal a severe financial blow to economic development programs if they do fail.

With the current Dunleavy administration having "a potential AIDEA investment target estimated at approximately $1 billion" for 15 development projects, with another 12 projects under review, [21] AIDEA will have to improve markedly from its past track record to stave off bankruptcy, much less show sparkling returns on the State's investments.

Since AIDEA's first project, Red Dog, went into operation in 1991, AIDEA's project net assets at fiscal year-end have averaged $225.2 million. The fact that AIDEA has written off more project net assets, $294.1 million, than they have owned, on average, could make one think that AIDEA's investments in projects are more likely than not to cost, rather than make, money.

AIDEA's project failures have lost almost as much money as the $301.4 million in net contributions the State has made to AIDEA.

Why is AIDEA's performance so poor?

AIDEA's decision-making process for projects appears to have fundamental flaws, including:

- insufficient or unattractive deal flow;
- overly generous subsidies; and,
- outside influence.

[21] State of Alaska, FY2023 Governor's Operating Budget, Department of Commerce, Community and Economic Development, AIDEA Component Budget Summary, released December 15, 2021, available at https://omb.alaska.gov/ombfiles/23_budget/DCCED/Proposed/26_comp1234.pdf.

Deal flow

AIDEA's deal flow and quality may suffer from not just a scarcity of good projects in Alaska, but the problems of adverse selection and elevated demand due to underpriced capital. The latter problem is simply that "there is always a shortage of free goods". The private market's response to adverse selection — pricing for it — should help with both problems. In other words, shrink the subsidies. Or eliminate them. Market pricing by AIDEA could be the next best thing to a market test.

Subsidies

The cost of AIDEA's subsidies is essentially the other side of the coin of AIDEA's $10.0 billion in opportunity costs over the 1981–2021 period. If AIDEA's borrowers and developers had paid AIDEA another $10.0 billion over the same period, there would be no opportunity cost, and no subsidies.

We can approximate where the subsidies went based on average loan, project, and cash assets and their rates of return.

During the 35 years since AIDEA's projects began, FY 1987–2021, loans were subsidized $2.9 billion and projects $4.1 billion, or 41.3 percent and 58.7 percent, respectively, of total subsidies in that period.

Since AIDEA was first capitalized in 1981, $5.8 billion, or 58.5 percent of the total 41 years' $10.0 billion of subsidies went to loans.

All subsidies during FY 1981–1986 were loan subsidies, before AIDEA's inaugural project in 1987, Red Dog. The above subsidy calculations — $5.8 billion for loans and $4.1 billion for projects — allocate opportunity costs attributable to AIDEA's cash, to loans and projects. That's where the subsidies go.

This means the breakeven rate of return on AIDEA's loans or projects over the 35-year, 1987–2021 period would be 11.4 percent, to equal, along with AIDEA's actual returns on cash, the 8.4 percent the Permanent Fund earned during this period.

For projects, an estimated $4.1 billion in subsidies since 1987 may be a decent estimate of their value to project borrowers and sponsors, besides being their cost to Alaska. Since 1950, the average annual nominal compound rate of return on equities in 16 developed countries has been 10.26 percent. [22] This is somewhere between the 9.4 percent (40-year) to 11.4 percent breakeven rates (35-year) used in computation of subsidy costs.

For loans, 11.4 percent would price AIDEA out of the market for most commercial mortgages. On average, fixed-income mortgage rates are not going to be within striking distance of what are largely equity rates of return, being earned at the Permanent Fund. This just accentuates the question of whether commercial mortgage loan participations are the best use of State funds, particularly in this modern age of CMBSs.

[22] Jorda, Oscar et al, "The Rate of Return on Everything, 1870–2015", The Quarterly Journal of Economics, Volume 134, Issue 3, August 2019, Pages 1225–1298, at https://academic.oup.com/qje/article-pdf/134/3/1225/28923338/qjz012.pdf.

Outside influence

Outside influence has undoubtedly played a role in some of AIDEA's project failures and overall performance. A former executive director has said as much. [23] One of the more recent AIDEA "projects" that has been cited as an example of outside influence is AIDEA's bidding on ANWR oil leases.

Whether it was outside influence or parallel thinking, the ANWR bids have thrown open the gates to activities that had been considered outside AIDEA's purview. Both AIDEA's statutes and internal project approval criteria would seemingly leave bidding on petroleum lease sales outside the fences that supposedly limit access to AIDEA's money. Whoever tears a hole in a fence rarely bothers to patch it back up. $1 billion plus in projects are gathering outside the fence.

Conclusion

Resource extraction

AIDEA currently has a focus on resource development, epitomized by its role in the State's "Roads to Resources" Program Initiative. [24] From a long-term perspective, much of AIDEA's resource development focus could be said to be "short-sighted", in that:

1. its emphasis on non-renewable, extractive industries means whatever economic development is generated will eventually wither away, possibly leaving major, uncompensated

    a. environmental remediation costs; and,
    b. perpetual or long-term damages to other resources or public health and well-being,

    which will have to be paid for or suffered by Alaskans;

2. extractive industries of whatever stripe, renewable or not, are localized. They are dependent on a particular resource in a particular location. As such, they cannot necessarily be replicated in other locations, either in Alaska or outside. So, not only will the benefits of such economic development fade with near certainty, they will have little upside potential. This is radically different than most manufacturing, wholesale and retail trade, finance, and information and technology-based industries. A successful Alaska business in these industries can grow within or beyond Alaska, to U.S. or even international markets.

    Essentially, each non-renewable, extractive, resource development project is a one-shot deal, of finite duration. Other industries that are more reliant on knowledge, technical skills, or human organization can grow and keep growing, whether it's a Tesla gigafactory or a Walmart store. Even without geographical spread, such industries can keep growing with technical advancements and innovations;

3. while extractive industries can be hugely profitable, mining does little to help State finances. The Alaska Megaprojects Update indicates that State mineral taxes amounted to only 2.3 percent of the value of mineral production in 2017. [25] The Legislative Finance Division's, January 2021, Indirect Expenditure Report recommends "reconsideration of the mining license tax structure in its entirety. Established pre-statehood, the effectiveness of the tax and exemptions may be obsolete;" [26] and,

[23] "Poe reflects on 2 years as AIDEA chief", Alaska Journal of Commerce, September 8, 2002.
[24] Fay, op.cit.
[25] Fay, op.cit.
[26] Legislative Finance Division, Indirect Expenditure Report, January 2021, at https://www.legfin.akleg.gov/IEBooks/2021IndirectExpenditureReport.pdf.

4. while mining has some of the highest wage rates in Alaska, the Megaprojects Update reported that more than one-third of Alaska's hard rock (metal) mining jobs, 38.6 percent, and their wages, 35.9 percent, went to non-Alaska residents in 2019. In the Rural Interior region of the state, non-residents made up over half, 52.7 percent, of all mining jobs (including oil and gas, quarrying, sand, and gravel).

Other economists have pointed out the shortcomings of metal mining as a road to economic development:

> Despite the high wages paid in metal mining, that industry is not usually associated with prosperous communities across the nation because (1.) metal commodity prices are unstable, causing instability in employment and payroll; (2.) the life of a contemporary metal mine tends to be relatively short, 5 to 15 years; (3.) the labor needs of metal mining operations are constantly falling as technological change displaces workers; only constant expansion of mine production can offset this; and (4.) environmental damage associated with metal mining discourages people and businesses from locating near mining operations." [27]

as has one of the authors of this report,

> "That earlier report also pointed out that mineral developments in isolated areas were unlikely to stimulate economic development in the area surrounding the mineral site because very few of the mineral development expenditures would flow through the local economy." [28]

Essentially, Alaska's subsidization of resource extraction is a major giveaway of its public resources to foreign multinational corporations and nonresident workers. It is doubly bad because no significant fiscal policies capture part of the mineral value for the State, or offset the cost of public services required by the businesses, their workforces, and families.

Fix or forget AIDEA?

AIDEA's dismal financial returns, project failures, and recent unconventional forays like Mustang and ANWR make some feel that market discipline is lacking. That it should be enforced by taking back State assets or restricting AIDEA's financings to revenue bonds. Or that AIDEA itself has failed the market test and should be privatized or dissolved.

Yet, given the State's track record, it is unlikely to refrain from throwing support to projects that promise jobs or economic development. The State may want a specialized, competent financing agency to which it can delegate the myriad details involved in the "public-private partnerships" it may underwrite.

If so, the State may need to rebuild the fencing or reduce the grazing rights at AIDEA's disposal. The State's assets held by AIDEA are slipping towards open access, common property, presaging a tragedy of the commons.

[27] Power, Thomas M., The Role of Metal Mining in the Alaskan Economy, Southeast Alaska Conservation Council and Northern Alaska Environmental Center, February 2002, at http://wman-info.org/wp-content/uploads/2012/08/The-Role-of-Metal-Mining-in-the-Alaska-Economy.doc.
[28] Ibid., citing Tussing, Arlon R., and Erickson, Gregg K., "Mining and Public Policy in Alaska: Mineral Policy, Public Lands and Economic Development", SEG Report No. 21, Institute of Social, Economic and Government Research , University of Alaska Fairbanks, June 1969.