Alaska Industrial Development and Export Authority (AIDEA)

Cost & Financial Performance -

A Long, Hard Look

MB Barker, LLC

Erickson & Associates

EcoSystems, LLC

Publication: September 27, 2022

Submission: April 29, 2022

Table of Contents

About the Authors

Milt Barker has worked as a fiscal, financial, and economic analyst in Juneau, Alaska since 1971 — first as staff for the Alaska State Legislature, Legislative Finance Division, then as Deputy Commissioner for Treasury, for the Alaska Department of Revenue, and subsequently as a consultant. While head of the State Treasury, Barker served on the Board of the Alaska Industrial Development and Export Authority, as the Commissioner of Revenue's designee.

Gregg Erickson is an economic consultant with offices in Juneau and Bend, Oregon. A graduate of West Anchorage High School, Erickson is a former staff member at the U.S. Senate's Permanent Subcommittee on Investigations, and a former Research Fellow with Resources for the Future in Washington, DC. He formerly served as the Alaska Legislature's Director of Research, as senior economist in the Office of the Governor, and headed the state's restoration efforts following the Exxon Valdez oil spill. In 1991 he co-founded the Alaska Budget Report, an award- winning weekly newsletter. Erickson frequently testifies as an expert witness, and in 2018 was elected to the board of the American Academy of Economic and Financial Experts.

Executive Summary

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 and Recommendations

Findings

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

[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.

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.

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;

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

   e. the cost and opportunity costs of the subsidies provided; and
   f. the value of the subsidies received by each principal class of beneficiaries;

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.

[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.

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;

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

[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.

AIDEA earnings would be a total of $3.0 billion more than what AIDEA's net worth was at that time.

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.

[6] Fay, *op. cit*.

TABLE 1

Megaproject & AIDEA Opportunity Costs ($ 000)

	Value of Project or AIDEA funds invested by APFC, as of 2003	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

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]

[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 for AIDEA's June 30, 2021 net assets of $1,407 million.

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.

---

[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] [*Emphasis added*.]

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. The biggest danger is

[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.

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.

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.

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.

---

[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.

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]
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,

[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.
[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.

- outside influence.

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

[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.

question of whether commercial mortgage loan participations are the best use of State funds, particularly in this modern age of CMBSs.

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.

---

[23] "Poe reflects on 2 years as AIDEA chief", *Alaska Journal of Commerce*, September 8, 2002.
[24] Fay, *op.cit.*

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,

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]

[25] Fay, *op.cit.*
[26] Legislative Finance Division, *Indirect Expenditure Report*, January 2021, at https://www.legfin.akleg.gov/IEBooks/2021IndirectExpenditureReport.pdf.
[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.

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.

[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.

Introduction

AIDEA is somewhere short of the economic development powerhouse Alaska State Senator George Hohman envisioned for an Alaska development bank when he introduced SB 1 in 1979. Recently, as of June 30, 2021, AIDEA's total assets[29] stood at $1,512.8 million, or roughly $1.5 billion, and its net assets, i.e., assets net of liabilities, were $1,407.5 million — $1.4 billion.

In comparison, the Alaska Permanent Fund stood at $81,896.8 million, or $81.9 billion. AIDEA's size is nowhere near the Permanent Fund because of the billions of dollars of dedicated oil revenue, as well as special appropriations for savings and inflation-proofing, that have been deposited into the Permanent Fund.

But, the Permanent Fund is vastly larger than AIDEA for another reason — much higher earnings on its investments. This report uses the Permanent Fund's rates of return to measure the costs and financial performance of AIDEA's economic development activities from the standpoint of the State of Alaska and Alaskans as a whole.

Homan's SB 1, as introduced, would have moved all existing State of Alaska loan programs to the Alaska Permanent Fund and created a host of new loan and loan guarantee programs and other economic development vehicles within the Fund. Homan's vision of the Alaska Permanent Fund as an economic development bank was in stark contrast to the idea of the Permanent Fund as a trust fund, managed according to fiduciary principles of prudence, diversification, and loyalty to the best interests of all Alaskans, both current and future residents.

> "Those arguing for a trust-like approach emphasized the need for prudent investment. Allowing the fund to be invested in shaky loans, social investments, or public projects would, they feared, invite a feeding frenzy among powerful political interests intent on getting their share. A key concern was that the fund's principal would be dissipated for the benefit of a favored few rather than all Alaskans."[30]

At least until recently, these fears have faded for the Permanent Fund.[31] However, they have always been present with AIDEA. Recently, AIDEA's involvement with distribution of CARES

---

[29] EideBailly, *op. cit.*

[30] Widerquist, Karl and Howard, M.W., *Alaska's Permanent Fund Dividend: Examining its Suitability as a Model*, bdpress, 2012, page 33, at https://works.bepress.com/widerquist/107/.

[31] See Kitchenman, Andrew, "Alaska lawmakers grill Permanent Fund Corp. chair Richards over firing of executive director Rodell" Alaska Public Media & KTOO, January 12, 2022, at https://www.ktoo.org/2022/01/18/alaska-lawmakers-grill-permanent-fund-corp-chair-richards-over-firing-of-executive-director-rodell/ and Brooks, James, "Permanent Fund is making its biggest investments within the state since the 1980s, but many details remain secret", *Anchorage Daily News*, March 21, 2022 at https://adn-ak.newsmemory.com/?selDate=20220321&goTo=A01&artid=2&utm_source=emailMarketing&utm_medium=email&utm_campaign=email+stats.

Act funds, the Mustang oil project on the North Slope, bidding on Arctic National Wildlife Refuge (ANWR) leases, a sole source contract, and other issues have heightened the level of concern.

The 1980 legislative session saw a momentous battle over the competing visions for Alaska's use of its surplus oil revenues. In the end, the 1980 Alaska Legislature adopted the trust fund model for the Alaska Permanent Fund, but also agreed to pursue the development bank model. It did so by appropriating a large part of the loans held by the State's existing loan programs to the Alaska Industrial Development Authority (AIDA), and giving AIDA expanded economic development powers.

1987 amendments to AIDA's statutes established a program of financial assistance for exports of raw materials and goods, and the rendering of services abroad by residents of the State. The amendments changed the Authority's name to the Alaska Industrial Development and Export Authority (AIDEA).

This report is, in some respects, a post-mortem, forty years on, of the wisdom of the 1980 Legislature's choices. Even if their Solomonic decision was a good one in times of North Slope plenty, is it still a good one when Prudhoe Bay is in the dawdling years of old age? Is it prudent, after a decade of multi-billion dollar State budget deficits, to dedicate $1.4 billion to economic development? At least, economic development as practiced by AIDEA?

Well, what has been AIDEA's financial performance? And, what have we gotten in terms of economic benefits? This report puts numbers on AIDEA's financial performance. It does not put numbers on the value of jobs and economic activity that may flow from AIDEA. Still, from the report's examination of AIDEA's activities, it sets some bounds on the degree to which AIDEA's benefits offset its costs.

Ultimately, we would like to answer the question, "In economic terms, does AIDEA provide more in benefits than it costs Alaskans"? Even if the answer is yes, there is a second question to be answered, "Are the benefits so limited to particular groups or individuals that most Alaskans would say, 'Let's have more dividends instead'"?

This report can inform the debate with those who believe AIDEA should be dissolved, its assets liquidated, and the proceeds deposited in the Alaska Permanent Fund's principal. It can also shed light on where AIDEA is most in need of reform, if AIDEA remains intact.

This report measures the cost of AIDEA as the amount the State could have earned on its contributions to AIDEA, if those dollars had been invested in the Alaska Permanent Fund, instead of being appropriated to AIDEA. This is called the opportunity cost of AIDEA. Net of the amount that AIDEA is actually worth today, the opportunity cost becomes the net cost, net present value loss, or simply "the cost" of AIDEA.

Not only is the opportunity cost a useful economic/financial yardstick when it comes to evaluating AIDEA, it is the cost of foregoing a real opportunity. The State has the power to liquidate, over time, AIDEA's loan and economic development project investments and transfer the proceeds to the APFC for investment in the same manner as all other funds deposited or retained in the Permanent Fund.

The lack of certainty about the benefit/cost ratio of AIDEA's activities is another sharp distinction between AIDEA and the Permanent Fund. With the Permanent Fund, the opportunity cost and the benefit are the same thing, the amount earned on its invested funds. The Permanent Fund's costs and benefits are both audited numbers, widely reported, reviewed, and discussed. Such clarity about the benefits versus costs is sorely lacking with AIDEA. This lack of clarity contributes to a lack of accountability and greater opportunity for political meddling, if not corruption, at AIDEA.

The clear standard for monitoring the Permanent Fund's performance would be a factor in its favor if one were evaluating whether to follow only one model — development agency or investment trust — for managing the State's savings.

Alaska Economic Development Challenges

As an economic development agency, AIDEA has had a challenging job, at least for megaprojects.

Alaska-produced products, and to many extents services, targeting customers and markets outside the state, face markedly lower cost competitors, even domestically (i.e., U.S. producers), not to mention internationally. Long distances to markets outside Alaska add to costs, for transport, and loss of sales due to time lags or gaps in availability. Constant or immediate availability can be critical for sales in the “just in time” world we have today.

These same cost and transport disadvantages are at work even if Alaska production is targeting Alaska customers. One only needs reminding of the cost of services and products in Bush Alaska. The costs are elevated not only by geographic distances, but often by lack of competition, even to the point of common transport modes being lacking. Southeast Alaska and the Bush have never had ground links to other markets. Moreover, the State’s current Dunleavy administration has devastated a main Southeast Alaska transport alternative — the Alaska Marine Highway System (AMHS).

In addition, for megaprojects, in-state sales face high hurdles because of the state’s small population. Essentially, this is what doomed the Juneau Access Improvements Project. A road project approaching a billion dollars in cost just didn’t make sense economically for an upper Lynn Canal population of less than 100,000.

For enterprises scaled to actual intrastate Alaska markets, their smaller scale can allow outside competitors of size to undercut the prices that Alaska producers need to make a profit. This happened in the 1950’s to Juneau’s local dairy producers and in later decades to the State’s major efforts to develop a dairy industry in the Railbelt.

All these disadvantages result in a lack of economic diversification within Alaska. This frequently includes a lack of vertical integration within industries. It is often cheaper to finish one or more stages of production outside Alaska, and from there transport the semi-finished or finished goods to the next producer, distributor, or final customer.

In Alaska’s major industries, this leads to limiting the state’s production role to resource extraction, be it oil, minerals, fish, or timber. But, resource extraction can be a difficult game to play, too. There is little or no product differentiation, making resources subject to commodity pricing over which producers have little or no control.

In some respects, ease of entry for competitors is facilitated by lack of any intellectual property rights (i.e., patents, trademarks, etc.) attached to commodities. On the other hand, the scale of operations often limit competition to major companies with significant financial, technical, and human resources, particularly in high-cost Alaska. Benjamin Johnson, president and CEO of BlueCrest Energy, has stated that

> "Investments in Alaska are daunting: it costs roughly three to five times as much to drill a well or build production facilities in Alaska as it does anywhere else in the U.S."[32]

BlueCrest Energy is a company AIDEA has invested in, as one of their development projects.

Scale of operations in resource extraction also has the effect of producing major price swings. In times of heightened demand for a product, prices will rise. But, the scale and complexity of additions to production capacity mean large time lags in meeting demand. And, free markets for raw materials usually mean many competitors will jump into expanding production, in response to a price rise. By the time new production comes online, it may entail more supply of product from more suppliers than even a boom will absorb. The excess capacity then leads to a price crash.

Commodity price cycles are exacerbated by their typically low marginal costs of production. When suppliers have excess capacity, it will make sense to keep producing, as long as prices are above marginal costs. Doing so contributes something towards covering large, fixed costs and minimizes losses. But, it pushes prices down, until some producers shut down or exit the market.

The high costs of production in Alaska mean that an Alaska venture is often one of the first to exit the market during a downturn. Witness the Usibelli coal or Nikiski liquified natural gas (LNG) export departures.

The Usibelli coal exports stopped

> "… in 2016, when the railroad decided to shutter the facility indefinitely after years of coal export declines. By that time, exports had decreased about 95 percent from a peak of 1.1 million metric tonnes in 2011 to 68 tonnes in 2016, only serving one ship as opposed to the 18 required in 2011.
>
> Cheaper coal from Indonesia and Australia pushed down the market price, cheaper natural gas entered the scene and the U.S. dollar was very strong, making it harder for Usibelli's export business to pencil out."[33]

AIDEA provided a loan to the coal purchaser, Suneel Alaska Corporation, for installation of conveyor and loading systems at the Seward Coal Facility dock, built by the State of Alaska Department of Transportation & Public Facilities (DOT&PF) in 1984. AIDEA acquired a 49

---

[32] Johnson, Benjamin, "COMMENTARY: Veto of tax credit payments damages Alaska", July 13, 2016, *Alaska Journal of Commerce*, Anchorage, AK.

[33] Earl, Elizabeth, "No plan for Seward coal terminal three years after last shipment", *Alaska Journal of Commerce*, May 8, 2019, at https://www.alaskajournal.com/2019-05-08/no-plan-seward-coal-terminal-three-years-after-last-shipment.

percent interest in the Seward Coal Facility from Suneel in 1995. In 2003, AIDEA sold its interest to the Alaska Railroad Corporation, which received a federal grant to enable the purchase.[34]

Public funds built the Seward Coal Facility and public funds bought it back. It might make one think that government should stick to essential public services and leave economic development to the private sector.

Privatize economic development programs? Would that be a better way? One could envision that project selection and financial returns might improve. But, it could be more difficult to give emphasis to projects with higher labor content — more jobs — if it meant lower financial returns. Privatized economic development would also lean toward short-term profits, as opposed to long-term development. Environmental stewardship could be sacrificed.

ConocoPhillips stopped LNG exports from its Nikiski plant in 2017. In 2018, the plant was purchased by Andeavor, who was subsequently acquired by Marathon. In December 2020, Marathon received FERC approval to convert the plant to an LNG import facility. Marathon is planning to use imported LNG to fuel its crude oil refinery next door.[35]

There is some irony in an Alaska export project being turned into a gateway for outside competition to enter the Alaska market. The export stoppage, and now the backflow, are both creatures of the same market conditions — Alaska is the high cost producer in a market filled with low cost competition.

[34] "Seward Loading Facility, Facility Facts", Alaska Railroad Corporation, August 2015, at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj69sy9xsv2AhXlGTQIHS2JASQQFnoECBEQAQ&url=https%3A%2F%2Fwww.alaskarailroad.com%2Fsites%2Fdefault%2Ffiles%2Fakrr_pdfs%2F2015_08_05_Seward_Coal_Loading_Facility_FS_PROJ.pdf&usg=AOvVaw3R0KGRIS2acJqAFw2dqCL3.

[35] "Marathon gets green light to reopen LNG plant — this time, to imports", KDLL, December 21, 2020, at https://www.kdll.org/local-news/2020-12-21/marathon-gets-green-light-to-reopen-lng-plant-this-time-to-imports.

Who are the Job Creators?

The most important information bearing on the balance between AIDEA's benefits and costs is whether economic activity in which AIDEA is involved would occur anyway, even if AIDEA were not involved.

This is fundamentally unknowable to all but AIDEA loan applicants and project sponsors. Generally, applicants and sponsors would have a vested interest in asserting that business activity or project development is dependent on AIDEA's support, or at least limiting disclosure of intentions to move ahead without AIDEA.

AIDEA itself has an institutional stake in proclaiming that its financings and other involvement results in boosts in business and projects in Alaska. That spells success for AIDEA as an economic development agency. It could mean higher status, job security, and compensation for AIDEA staff, at AIDEA or at succeeding career positions following AIDEA.

AIDEA Loan Participations

On June 30, 2021, AIDEA held $445.3 million in loan participations. The participations were 93.9 percent of AIDEA's $474.0 million in non-project loans on that date.

In these investments, AIDEA buys up to 90 percent "participations in loans secured by real property or tangible personal property made by commercial banks or other financial institutions. Nearly all of them relate to real property."[36]

Real property means that almost all loan participations are mortgages. There is generally no shortage of mortgage lenders or capital in this country, or in Alaska, outside of rural areas. Alaska banks and credit unions that don't want to hold onto commercial mortgages they've originated can sell them, or pieces of them, to other banks, mortgage lenders, or institutional investors such as pension funds or insurance companies, in addition to AIDEA.

Since AIDEA's founding, this secondary market for mortgage loans has grown to include commercial mortgage-backed securities (CMBSs). Alaska commercial mortgages can be sold to banks, investment banks, or government agencies that package them into CMBSs for sale to public investors. Private-sector CMBS issuance in the United States totaled $109.1 billion in 2021.[37]

AIDEA has stated that they have an initiative for

[36] EideBailly, *op. cit.*, page 43.
[37] "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.

> "Securitization to optimize AIDEA's capital and balance sheet efficiency to enhance liquidity for reinvestment back into economic development opportunities."[38]

AIDEA's loan participations are investments that in many cases would occur anyway. They just would cost the borrower more without AIDEA, because AIDEA's terms are easier than the participating commercial lender's. Sometimes however, there will be investments which won't pencil out without AIDEA's better terms.

How often is this the case? It is beyond the scope of this report to say. But sometimes one gets a peek behind the curtain.

Indeed, minutes from the October 23, 2019 meeting of AIDEA Board Members contain the admissions of a recent loan applicant that his company would get a loan and proceed with business development, even if AIDEA declined to participate in the financing.

Chris Anderson, AIDEA's Commercial Finance Director, explained that the loan

> "proceeds would pay off FNBA's (*First National Bank Alaska's*) construction loan and closing costs. The project is the 80-room Seward Gateway Hotel located in Seward. There are 30 construction jobs affiliated with the project and 35 new jobs created…Staff recommends the loan for approval."
>
> "Vice-Chair Karl inquired if the lender would still have completed the project if this reasonable loan was not available from AIDEA. Tim Redder, FNBA, agreed and commented FNBA has approved the construction and permanent financing for this project."
>
> "Deputy Commissioner Samorajski asked Mr. Tougas (*the loan applicant*) to characterize the motivation for seeking AIDEA's participation in the loan. Mr. Tougas … noted AIDEA's financing opportunities are attractive. Mr. Tougas informed he is on the Board of Directors of FNBA and could have received a loan through FNBA, but decided to pursue financing with AIDEA because of the general condition of interest rates, the stability of the fixed rate, and the term of the loan."[39]

AIDEA's 90/10 loan participation was at a 3.41% fixed interest rate for 25 years. FNBA was participating at an approximate variable blended rate of 4.2% for 20 years. Normally, a lender, in AIDEA's position, would require a higher interest rate on a longer term loan (or a portion of one).

[38] Memorandum to Board Members, "AIDEA Investment Portfolio and Economic Exposure Analysis to Financial Entities with Anti-Arctic Development Policies", Alan Weitzner, Executive Director, December 1, 2021 at https://www.aidea.org/About/Board-Members/Board-Meeting-Archives#2021.

[39] October 23, 2019 AIDEA Board Meeting Draft Minutes, page 5 of 15.

Moreover, fixed rates are normally higher than variable rates. Variable rates can be lower because they remove the risk that a bank will be earning less than it has to pay out in interest on accounts, CD's, and borrowings from other banks or the Federal Reserve for the funds it needs.

The Board unanimously approved Loan Resolution No. L19-11, authorizing AIDEA's participation in the loan.

After the loan was funded on March 31, 2021, AIDEA's "Loan Dashboard Report" showed it "supported" 16 construction and 8 permanent jobs. Though this was less of a job gain than presented to the AIDEA Board at its October 23, 2019 meeting, why were any jobs being claimed as AIDEA's doing?[40]

It raises the question of how valid are AIDEA's job claims. Are greater definition, transparency, and authentication needed?

This example also provides an idea of the potential upside of AIDEA's more relaxed financing terms. The total Seward Gateway Hotel loan was for $8,754,000. AIDEA's 90 percent participation was $7,878,600.

The borrower's monthly payments over 25 years on AIDEA's portion at AIDEA's 3.41% fixed rate would be $39,063. The present value of the payments to AIDEA, discounted at the bank's 4.2 percent (assuming the variable rate stays constant), is $7,248,060. This means AIDEA will receive loan payments worth $630,540 less than what it gave the borrower.

In other words, AIDEA's terms could provide a subsidy of $630,000 on a $7,878,600 loan, an 8 percent subsidy. Over 25 years of payments, the borrower would save $1,017,500 in actual loan payments, versus payments at the bank's 4.2 percent rate, if he could get 25 years from the bank.

Unlikely, but if he could, the rate would be sure to be somewhat higher than 4.2 percent. All in all, the 8 percent subsidy and $1 million plus in payment savings are likely the outside limit of subsidy and savings because variable rate mortgages usually get refinanced at lower fixed rates at an early opportunity.

AIDEA Refinancings et al

There are several types of AIDEA loan participations that do not necessarily create or retain jobs, or boost economic development —

[40] Loan applicant Seward Wildlife Cruises, LLC, "AIDEA Loans Funded & Jobs Supported as a Result of Loan Participations 7/1/20 - 3/31/21 for the 5/19/2021 Board Meeting", AIDEA Board Meeting, June 23, 2021, AGENDA, Finance Dashboard and Commercial Loan Reports, May 2021, at HTTP://www.aidea.org/Portals/0/Meeting%20Docs/2021BoardMeetings/062321/06.23.21%20AIDEA%20Agenda%20Rev1.pdf, accessed December 3, 2021.

- acquisitions;
- loan assumptions;
- equity extraction; and,
- refinancings.

One thing refinancings and equity extractions do do is boost borrower or project sponsor cash flow or profits.

It may be concern about diluting AIDEA's economic impact that led to the following inquiry at an October 27, 2016 AIDEA Board meeting:

> "Chair Pruhs asked if AIDEA has policies concerning the amount of the portfolio assigned to refinancing endeavors versus new construction projects. Ms. Anderson stated there is no AIDEA policy regarding portfolio allocations. She noted staff has been tracking portfolio diversification since 2010, and specifically, in the last four years, 18.54% of AIDEA's participations have been refinances. The refinancing trend has increased, but is not at a worrisome level. AIDEA's internal cost of doing business for new construction and for refinancing is the same."[41]

Recent portions of AIDEA's "Loan Dashboard Reports" make one wonder how much AIDEA's loan participations have become more an income distribution program for business owners, as opposed to being a force for economic development.

[41] October 27, 2016 AIDEA Board Meeting Minutes, page 4 of 8.

AIDEA Loans Funded & Jobs Supported as a Result of Loan Participations

7/1/19 - 10/31/20 for the 12/9/2020 Board Meeting

Applicant Name	Originator	Total Amount	AIDEA Portion	Funded	Project Location	Construction Jobs Supported	Permanent Jobs Supported
SETTLER'S BAY CENTRAL LAND, LLC	NORTHRIM BANK	$2,443,000	$2,198,700	7/2/19	WASILLA	0	3
H3 INVESTMENT GROUP, LLC	NORTHRIM BANK	$1,943,250	$1,748,925	7/11/19	WASILLA	0	42
C SYCKS, LLC	NORTHRIM BANK	$3,300,000	$2,970,000	8/9/19	ANCHORAGE	0	25
MARTORELL, LLC	FIRST NATIONAL BANK ALASKA	$600,000	$480,000	9/26/19	WASILLA	7	17
RSD PROPERTIES, LLC - LAKE OTIS	ALASKA USA FCU	$3,650,000	$3,285,000	10/8/19	ANCHORAGE	0	0
RSD PROPERTIES, LLC - N ST	ALASKA USA FCU	$2,350,000	$2,115,000	10/8/19	ANCHORAGE	0	0
RSD PROPERTIES, LLC - W 2ND AVE	ALASKA USA FCU	$1,940,000	$1,746,000	10/8/19	ANCHORAGE	0	0
MT FOUR, LLC - R/E	NORTHRIM BANK	$20,377,500	$16,302,000	10/10/19	ANCHORAGE	0	0
MT FOUR, LLC - EQUIP	NORTHRIM BANK	$1,380,000	$1,104,000	10/10/19	ANCHORAGE	0	0
DELKER PROPERTIES, LLC	FIRST NATIONAL BANK ALASKA	$1,312,500	$1,050,000	11/13/19	SOLDOTNA	25	4
NARINO INVESTMENTS, LLC	NORTHRIM BANK	$472,500	$425,250	11/21/19	WASILLA	0	8
ALYESKA REALTY ADVISORS, INC - 200 2ND AVE	FIRST NATIONAL BANK ALASKA	$1,352,000	$1,216,800	12/19/19	SKAGWAY	0	0
ALYESKA REALTY ADVISORS, INC - 240 2ND AVE	FIRST NATIONAL BANK ALASKA	$2,210,000	$1,989,000	12/19/19	SKAGWAY	0	0
ALYESKA REALTY ADVISORS, INC - 280 2ND AVE	FIRST NATIONAL BANK ALASKA	$622,000	$559,800	12/19/19	SKAGWAY	0	0
VANTAGE POINT VIEW, LLC	NORTHRIM BANK	$825,000	$742,500	1/8/20	WASILLA	15	5
NEWBY REVOCABLE TRUST	FIRST NATIONAL BANK ALASKA	$1,950,000	$1,755,000	1/16/20	HOMER	75	33
KG ENTERPRISES, LLC	FIRST NATIONAL BANK ALASKA	$1,875,000	$1,687,500	1/16/20	PALMER	100	20
R&D INVESTMENTS, LLC	FIRST BANK	$862,500	$776,250	1/24/20	KETCHIKAN	0	3
MAPLE SPRINGS PALMER MOB, LLC	WELLS FARGO NA	$4,200,000	$3,780,000	1/31/20	PALMER	40	25
HAE WON SHIMCHUNG, LLC	FIRST NATIONAL BANK ALASKA	$840,000	$672,000	2/12/20	EAGLE RIVER	0	6
SLEEK, LLC	FIRST NATIONAL BANK ALASKA	$360,000	$288,000	3/18/20	WASILLA	50	0
TAG DEVELOPMENT, LLC	ALASKA USA FCU	$1,100,000	$990,000	4/7/20	ANCHORAGE	0	0
BILIKIN PROPERTIES, LLC - BRAGAW	NORTHRIM BANK	$1,555,000	$1,399,500	4/13/20	ANCHORAGE	0	0
BILIKIN PROPERTIES, LLC - SOLDOTNA	NORTHRIM BANK	$620,500	$558,450	4/17/20	SOLDOTNA	0	1
VALKYRIE COMMERCIAL REALTY, LLC	ALASKA USA FCU	$1,431,000	$1,287,900	5/5/20	PALMER	20	2
DIMOND MINI STORAGE, INC - R/E	NORTHRIM BANK	$2,000,000	$1,800,000	5/11/20	ANCHORAGE	0	0
DIMOND MINI STORAGE, INC - EQUIP	NORTHRIM BANK	$450,000	$405,000	5/11/20	ANCHORAGE	0	0
CLYDE V. BRUMMELL, LLC	FIRST NATIONAL BANK ALASKA	$1,796,000	$1,616,400	5/12/20	ANCHORAGE	0	1
LAND'S END ACQUISITION CORP.	NORTHRIM BANK	$4,700,000	$4,230,000	7/2/20	SEWARD	48	8
SUN MTN DEVELOPMENT GROUP, LLC - SONIC	NORTHRIM BANK	$1,130,000	$1,017,000	7/6/20	WASILLA	115	65
SUN MTN DEVELOPMENT GROUP, LLC - PLANET FITNESS	NORTHRIM BANK	$4,275,000	$3,847,500	7/8/20	WASILLA	125	25
ISLAND HOLDINGS, LLC	FIRST NATIONAL BANK ALASKA	$7,036,937	$6,333,243	7/30/20	KODIAK	10	0
ALASKA RED DOG SALOON, LLC	NORTHRIM BANK	$2,322,000	$1,741,500	7/30/20	KETCHIKAN	0	0
SUN MTN DEVELOPMENT GROUP, LLC - KRISPY KREME	NORTHRIM BANK	$2,383,000	$2,144,700	7/31/20	WASILLA	150	60
SALMON LANDING OUTLET BUILDING, LLC	NORTHRIM BANK	$1,516,400	$1,364,760	7/31/20	KETCHIKAN	0	0
ROYAL BLUE ALASKA, LLC	FIRST BANK	$1,186,000	$948,800	8/3/20	KETCHIKAN	0	0
DEAN INVESTMENTS, LLC	FIRST NATIONAL BANK ALASKA	$2,200,000	$1,980,000	8/28/20	WASILLA	3	8
EBH INVESTMENTS	NORTHRIM BANK	$2,705,000	$2,434,500	9/25/20	ANCHORAGE	0	0
DEBORA, LLC	NORTHRIM BANK	$3,345,000	$3,010,500	10/30/20	EAGLE RIVER	0	2
	Totals:	$96,617,087	$84,001,478			783	363

In the page above, from AIDEA's "Loan Dashboard Report" as of October 31, 2020, 48 percent or $46,715,900 of the $96,617,087 total amount of loans funded over the prior 16 months is for loans with no permanent jobs; 65 percent or $62,338,650 is for loans with no construction jobs.

Or, take the page below, from AIDEA's "Loan Dashboard Report" as of October 31, 2021, a year later. Only two of eight loans to be funded have any new construction involved. Seven out of the eight loans are for refinancing or acquisitions.

Some refinancings may result in freed up funds or cash flow that would be used for business expansion or create new jobs. But others will be simply taking advantage of lower interest rates to increase profitability.

AIDEA Anticipated Fundings as of : 10/31/21
For the 12/1/2021 Board Meeting

Key	
ACQ	Acquisition
ASSUM	Assumption
EQU EX	Equity Extraction
NEW CONST	New Construction
REFI	Refinance

Applicant Name	AIDEA Portion	Anticipated Funding	Funding Expiration Date	Project Description (see Key)	Project Location	Participation %
SPECIAL EVENTS ALASKA LLC	$972,000	11/15/21	1/12/22	REFI TO EXPAND WAREHOUSE	WASILLA	90%
BROOKS PROPERTIES, LLC	$777,600	11/15/21	2/11/22	REFI MEDICAL OFFICE BLDG	PALMER	90%
TUNDRA MOUNTAIN HOLDINGS, LLC - 910 OLD STEESE HWY	$1,687,500	11/19/21	4/7/22	REFI RETAIL BUILDING	FAIRBANKS	90%
TUNDRA MOUNTAIN HOLDINGS, LLC - 2375 UNIV S. AVE	$877,500	11/20/21	4/7/22	REFI OFFICE WAREHOUSE BUILDING	FAIRBANKS	90%
2 G, LLC	$869,400	11/30/21	12/6/21	REFI OFFICE/WAREHOUSE	ANCHORAGE	90%
BENSON BASE CAMP LLC	$560,250	11/30/21	2/28/22	ACQ OFFICE BUILDING	ANCHORAGE	90%
HOOLIGAN HOLDINGS, LLC	$1,350,000	12/26/21	3/11/22	NEW CONST OF ADDTL RETAIL SPACE	HOMER	90%
K & G ENTERPRISES	$1,198,125	12/28/21	12/29/21	ACQ RETAIL STRIP MALL	WASILLA	90%
Grand Total:	$8,292,375					

If 18.54 percent of AIDEA's loans being refinancings is "not at a worrisome level", is 75 percent?

One of the main benefits of all the refinancing and property acquisition loans is supporting real estate market values. While this may benefit property owners, it may do nothing for economic development. In fact, lower property values are what would be a stimulus to economic development.

One of AIDEA's practices when refinancing its own debt, has been to share the interest savings with the borrowers whose AIDEA loan participations had been funded with proceeds of the bonds AIDEA is refunding. Other lenders do not initiate reductions in borrowers' mortgage payments when interest rates drop — at least not without a refinancing and earning new origination fees, all over again.

Table 3, below, summarizes the savings on AIDEA refundings for which documentation appears in AIDEA's annual financial statements.

TABLE 3

AIDEA Refunding Savings
($ 000)

AIDEA Refunding Bonds	Date	Reduction in Debt Service[1]	Present Value of Savings[1]
Series 1993A	5/1/1993	11,000	4,800
Series 1994A	3/1/1994	36,563	2,900
Series 1995B	5/1/1995	2,500	1,400
Total		50,063	9,100

1. Note 10, Notes to Combined Financial Statements, *Alaska Industrial Development and Export Authority Revolving Fund, Combined Financial Statements, June 30, 1993 and 1992; June 30, 1994 and 1993; and June 30, 1995 and 1994* , KPMG Peat Marwick.

The official statements (bond prospectus) for each of the series of bonds in Table 3 contain the statement,

> "A portion of the savings will be passed on to the underlying borrowers in the loan participations originally purchased with the proceeds of the Refunded Bonds in the form of reduced interest rates on the Authority's participation in such loans."

AIDEA justifies its existence by claiming its financing activities result in Alaska jobs and economic development that would not otherwise occur. These claims are questionable if for no other reason than the hyper-developed state of today's capital markets.

But, even at the time of AIDEA's first and most successful project, Red Dog, it appears that financing would have come from somewhere, if not from AIDEA.

AIDEA's Red Dog "Success Story"

If there is a poster child for AIDEA playing an active role in financing economic development, it is Red Dog Mine, a large lead-zinc mine in a remote corner of northwest Alaska.

Among AIDEA's many failed or problematic development projects, Red Dog stands out as a successful business enterprise. It is one of the few where facts can be adduced to support the story that AIDEA's financial support was crucial to bringing the mine into production and propelling the economic progress of the region that followed.

Opening the mine had a positive impact on the small regional economy. According to a recent AIDEA "Fact Sheet," Red Dog produced over 500 regular full-time positions in mine and port operations, 100 seasonal jobs and more than $120 million of annual royalty payments to NANA and other Alaska Native corporations.[42]

An economic consultant report prepared for the Alaska Miners Association highlighted. the profound effect Red Dog's start-up had on the economy of the Northwest Arctic Borough (NAB).[43]

> "Prior to Red Dog Mine's opening, wages in the Borough were well below the statewide average, but just one year after the mine became operational, the local average wage rose above that of the state. The median household income in the Northwest Arctic Borough grew by about 87 percent ($17,756 to $33,313) from 1979 to 1989 … according to US Census data."[44]

Would these positive economic changes have occurred without the $285 million AIDEA spent on subsidizing the project's essential infrastructure?[45] In the hundreds of press reports, consultant studies, and other writings about Red Dog, that question has to our knowledge never been publicly addressed, notwithstanding that a consultant, in a 1985 study prepared for AIDEA, concluded that that Red Dog would likely be developed regardless of AIDEA's financial involvement. "[W]e question the need for a substantial State subsidy in financing the proposed transportation system." [46]

The Menlo Park, California-based consultant, SRI International (SRI), made an exhaustive survey of the costs faced by existing producers of lead and zinc concentrates, and processed that

[42] AIDEA, "Project Fact Sheet", Feb. 2022. NANA, formerly the Northwest Alaska Native Association, is an Alaska Native corporation, formed under provisions of the 1971 federa1 Alaska Native Claims Settlement Act (ANCSA).

[43] Red Dog is in the Northwest Arctic Borough (analogous to a county in other states). The sparsely populated borough is roughly the size of Indiana, with a population density of 0.19 persons per square mile.

[44] McDowell Group, Inc., "The Economic Impact of Mining on Alaska," prepared for the Alaska Miners Association (February 2006). In terms of real purchasing power, the increase in the first period was 31 percent, less than half the nominal increase cited, but still dramatic. In the following decade, 1989 to 1999, McDowell cited a 38 percent increase in median household income, but failed to note that the real increase was a modest 3 percent.

[45] The infrastructure, known as the DeLong Mountain Transportation System, consists of a 52-mile road from the mine to the Chukchi Sea, the docks, conveyors, and facilities for storing the mineral concentrates, and everything else needed to turn an uninhabited arctic beach into a port, including "a 40-bed mancamp, all necessary utilities, and other supporting infrastructure to support continuous concentrate storage and port operations." AIDEA, *Delong Mountain Transportation System Asset Management Review*, Dec. 2007.

[46] SRI International for AIDEA, *Economic Evaluation and Finance Plan for the Proposed DeLong Mountain Transportation System*, July 1985, p. II-1.

data using SRI's proprietary Mine Cost Model. Their conclusion: "[Red Dog] is expected to be a very low-cost mine and should thus become one of the most important zinc/lead operations in the world."[47]

"Red Dog's operating costs should be below the median of those for the western world at any point in the foreseeable future."[48] Their analysis showed Red Dog's expected production costs to be lower than 63 percent of the then-current lead supply and 57 percent of the zinc supply.[49]

In terms of capital costs per ton of output, Cominco's existing mines were among the world's lowest cost. SRI found that the addition of Red Dog to the company's portfolio would further lower the firm's investment per ton. "The [Red Dog] capital cost per ton for the mine and the mill complex is $135 [per dry short tons (dst)]. … The Cominco Polaris mine in Canada, completed in 1983, was developed at a capital cost of $145/dst."[50]

Evaluated on a stand-alone basis, the SRI consultants expected the mine to be highly profitable even under the unrealistic assumption that it would be wholly financed with private equity. They found that opening the mine would produce an ancillary benefit for Cominco by maintaining the profitability of its downstream operations through "continued high utilization of existing facilities."[51]

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*…."[52] [*Emphasis added*.]

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.[53] In July 2009, China Investment Corporation bought a 17% stake in Teck for C$1.74 billion.[54]

AIDEA's Red Dog "success-story" omits the inconvenient fact that the project would likely have gone forward anyway. Even so, there is little doubt that the AIDEA subsidy *was* a "success" for

---

[47] SRI International, *op. cit.*, p. VII-1.
[48] SRI International, *op. cit.*, p. II-1.
[49] SRI International, *op. cit.*, p. VII-2.
[50] SRI International, *op. cit.*, p. IV-2.
[51] SRI International, *op. cit.*, p. II-1.
[52] AIDEA, *Delong Mountain Transportation System Asset Management Review*, Dec. 2007, p. 7.
[53] http://www.companieshistory.com/teck-resources/.
[54] https://en.wikipedia.org/wiki/Teck_Resources.

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.

AIDEA's Ambler project and Red Dog

The Red Dog "success-story" has become a key part of AIDEA's efforts to mobilize political support for the Ambler Access Project. Like its Red Dog precursor, AIDEA would build a private-access industrial road that AIDEA says would enable mining developments on privately owned mineral resources in the Ambler district in northwest Alaska.

As with Red Dog, the Ambler project would benefit a foreign owned mining company and the Alaska Native corporations that own much of the mineral rights. Ambler Metals, a firm controlled by Canadian and Australian mining interests, paid $110,000 to former Interior Secretary David Bernhardt's firm to lobby on its behalf during the second quarter of 2021.[55] Through 2021, the Alaska legislature had authorized AIDEA to spend $24 million furthering the project, mostly for road design and environmental studies.[56]

The proposed road would be four times longer than Red Dog's.[57] Although supported by the Native corporations owning mineral rights in the area, the Ambler project is vigorously opposed by nearby Native villages and a major Interior Alaska Native tribal organization, the Tanana Chiefs Conference.[58]

Opponents of the Ambler project point to the history of Red Dog, focusing on Red Dog's long record of environmental transgressions. In 2006, Anchorage US District Court Judge John Sedwick found Red Dog guilty of more than 600 Clean Water Act violations,[59] and in 2019 the U.S. Environmental Protection Agency released a report naming Red Dog as a major source of unpermitted chemical releases in the agency's Region 10, covering Alaska and the Pacific Northwest.[60]

One danger is that a successful project like Red Dog will be paraded by developers and mineral interest owners as a model for Ambler, simply to enrich their take, whether or not State subsidies are needed. The biggest danger is that Red Dog's success will be attributed to the financing model, not Red Dog's world-class resource, diverting AIDEA's or the State's attention from the economics and financial feasibility of Ambler projects.

---

[55] Federman, Adam, "How Joe Biden's Green Agenda Threatens the Alaskan Wilderness", *Politico Magazine*, Sept. 17, 2021,

[56] AIDEA, "Predevelopment Projects Quarterly Report: Project Status Reports", January, 2022.

[57] AIDEA, "2021 Annual Report: Investing in Alaskans", (no date).

[58] Trustees for Alaska, "Interior seeks pause on Arctic road litigation, threat to people, land remains", Oct. 15, 2021.

[59] Institute for Agricultural and Trade Policy, "World's largest lead and zinc mine (Red Dog mine) found in violation of Clean Water Act", August 3, 2006.

[60] Associated Press, "EPA report: Red Dog Mine is major chemical release source", Mar. 9, 2010.

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."[61]

are unlikely to hold for the Ambler District. With a road four times the length of Red Dog's, Ambler mines' success may be very sensitive to road costs and the mutual success of most, or all, Ambler projects. Failed mines could produce the greatest financial and environmental costs of all.

Even if Ambler mines are successful, they do not guarantee the favorable economic impacts that Red Dog has had. Metal mining

> "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."[62]

It bears noting that AIDEA's original bonds for the Red Dog project, the DeLong Mountain Transportation Project, Series 1987A Revenue Bonds, were revenue bonds, not general obligations of AIDEA. Admittedly, a December 31, 1986 balance of $120.5 million of State of Alaska loan program loans, along with additional cash, that had been appropriated to AIDEA by the State to back the Red Dog bonds,[63] made them revenue bonds that were not entirely reliant on project revenues.

Nevertheless, the SRI report strongly suggests:

- that the Red Dog project could have been financed as purely project revenue bonds, and, by implication,
- that being the case, the main beneficiaries of the State's subsidies were:
    - Cominco;
    - NANA;

[61] SRI International, *op. cit.*, p. VII-4.
[62] Power, *op. cit*.
[63] *Official Statement, $103,250,000 Alaska Industrial Development Authority, DeLong Mountain Transportation Project Revenue Bonds, Series 1987A*, Goldman, Sachs & Co. and Prudential-Bache Capital Funding, February 25, 1987, at ftp://aidea.org/RFI%20-%2011-13-19/1987-02-01-DMTS-Rev.Bonds-Series1987-A.pdf.

- other Alaska Native Claims Settlement Act (ANCSA) Regional and Village Corporations and at-large shareholders under ANCSA's 7(i) and 7(j) revenue sharing provisions;
- NAB, under Teck payments in lieu of tax (PILT);
- NAB villages, under Village Investment Fund, proposed by Teck in 2017.

AIDEA's $1.4 billion of net assets are essentially held in common by Alaskans. Access to them can be more open, or less open, as AIDEA and the State respond to development proposals.

"Red Dog" is in danger of being an "open sesame" to AIDEA's vault, if its success is misconstrued as an economic development success that can be replicated wherever a metal mine is opened, rather than an income distribution success for the development interests.

What Megaprojects & AIDEA Cost Alaska

Ginny Fay, in her review of State of Alaska megaprojects, *Alaska Megaprojects Update*, found that diverting the amounts spent on the megaprojects reviewed in her study, to investment in the Permanent Fund would have enlarged the Permanent Fund by some $30.2 billion by June 30, 2021.[64]

Removing AIDEA projects from her megaprojects review, to avoid double-counting, makes Fay's non-AIDEA megaprojects total opportunity cost $27.8 billion. State money plowed into non-AIDEA megaprojects and AIDEA together could have made the Permanent Fund $39.1 billion bigger.

Table 1 (*redux*), below, shows the summation of AIDEA and megaprojects' opportunity costs, with the elimination of double-counting of AIDEA projects.[65]

$39.1 billion is the size of an additional piggy bank Alaska could have had if all these economic development funds had been managed by the Alaska Permanent Fund Corporation (APFC). To reach $39.1 billion in size, no appropriations for paying dividends to Alaskans or funding the State budget could have been made from this second savings account before June 30, 2021.

This lost $39.1 billion reveals the serious costs paid by Alaskans for the State's efforts at economic development.

[64] Fay, Ginny, *Alaska Megaprojects Update*, Ecosystems, LLC, March 31, 2022, at https://static1.squarespace.com/static/61df37a8ba8bd33d942ff3ed/t/62730139342195200b32661c/1651704136485/Alaska+Megaprojects+Update.pdf.

[65] AIDEA provided the Four Dam Pool Power Agency up to $82,100,000 purchase-money financing on January 31, 2002, to acquire the Four Dam Pool Project from AEA. The loan was paid off in October 2004. See Note 8 to the June 30, 2005 AIDEA financial statements. The 2003 megaprojects in Table 1 (*redux*) include $9,445.8 million in opportunity costs as of June 30, 2021, for the Four Dam Pool, but this is attributable to the State funds used for construction and does not double-count the cost of AIDEA's financing.

TABLE 1 (*redux*)

Megaproject & AIDEA Opportunity Costs ($ 000)

	Value of Project or AIDEA funds invested by APFC, as of	
	2003	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

Opportunity Costs of AIDEA

The costs of keeping AIDEA as a state-owned public corporation have been and continue to be substantial. Since 1980, AIDEA has received a net $301 million[66] of public funds to capitalize its economic development efforts. Had those resources been appropriated to and retained in the Alaska Permanent Fund, the State's premier savings account would be richer by $11.4 billion.

Had the State's contributions to AIDEA been invested by the APFC and been subject to the PFD statutes, dividend recipients would have received an additional $1.3 billion during the years

[66] Net of amounts AIDEA returned to the State as "dividends" or other payments.

PFDs were paid according to the statutory formula[67] — 1983–2015. Alaskans that were recipients in every one of those years would have received $2,248 in additional dividends.

Table 4 - AIDEA opportunity costs and allocation with PFDs.

Table 4 summarizes the economic cost of AIDEA to the State of Alaska over its 41-year life, as well as over more recent 30, 20, and 10 year periods. If the State had deposited its contributions to AIDEA with the APFC instead, those contributions would be worth $11.4 billion at the end of FY 2021. On that date, June 30, 2021, actual AIDEA assets, net of liabilities, were $1.4 billion. The difference in these figures, $10.0 billion, is the economic cost, or the net present value (NPV) loss to the State, of AIDEA at that point.

The NPV of AIDEA over the more recent 30, 20, and 10 year periods is the net financial loss to the State of leaving AIDEA net assets in AIDEA and continuing to make contributions to AIDEA. If instead, AIDEA's assets were shifted to APFC at the beginning of those periods and all further contributions were directed to APFC, those State monies would be worth the amounts shown under the "Opportunity Cost" column in Table 4.

The opportunity cost and net cost (NPV) figures are what the AIDEA assets and contributions would come to if all earnings under APFC were reinvested. Under current law, a portion of Alaska Permanent Fund earnings are to be paid to all Alaska residents as Permanent Fund dividends (PFDs). Since 2015, the amounts paid as PFDs have been less than the formula specified in AS 37.13.140 and 145.

[67] As specified in AS 37.13.140 and 145. After 2015, gubernatorial vetoes and legislative appropriations cut dividends short of what the statutory formula would provide.

TABLE 4

AIDEA
Opportunity Costs
& Allocation with PFD's
($ 000)

	Opportunity Cost 6/31/21 Value if Invested by APFC	6/31/21 AIDEA Net Assets	Net Cost
Total Opportunity Cost			
41 Years, FY 1981–2021	11,377,714	1,407,468	(9,970,246)
30 Years, FY 1992–2021	6,908,553	1,407,468	(5,501,085)
20 Years, FY 2002–2021	3,437,424	1,407,468	(2,029,956)
10 Years, FY 2012–2021	2,694,489	1,407,468	(1,287,021)
Allocation of AIDEA Opportunity Costs with PFD's			
Total opportunity costs over 41 Years, FY 1981–2021			
PFD's not paid	1,286,938		(1,286,938)
PFD recipients' lost opportunities[1]	6,966,760		(6,966,760)
Total PFD recipients' opportunity costs	8,253,698		(8,253,698)
6/30/21 remaining AIDEA balance with APFC	3,124,017	1,407,468	(1,716,549)
Total opportunity cost	11,377,714	1,407,468	(9,970,246)
Opportunity costs realizable in cash			
PFD's not paid	1,286,938		(1,286,938)
6/30/21 remaining AIDEA balance with APFC	3,124,017	1,407,468	(1,716,549)
Total cash opportunity costs	4,410,954		(3,003,486)

1. Assumes PFD recipients' investment earnings were at APFC rates of return. Unrealistic without innovations such as individual recipient accounts at APFC invested as an APFC-managed common fund.

If we assume AIDEA monies placed with APFC are not segregated and the earnings thereon are also subject to the PFD, then the great majority of the opportunity or economic costs fall on individual Alaskans as recipients of PFDs. The lower half of Table 4 shows how the opportunity and economic costs of AIDEA would be apportioned between PFD recipients and the State proper.

Realizing any of Table 4's $7.0 billion in PFD recipients' lost investment opportunities[68] would have required the State to defer payment of PFDs or create a mechanism for PFD recipients to invest at APFC rates of return. Otherwise, the $8.3 billion in PFD recipients' opportunity costs could instead be considered as the State's opportunity cost for the PFD program. Either way, the State and PFD recipients are largely the same group of people, and bear the same opportunity cost of $8.3 billion to have kept AIDEA in business the last 41 years.

Table 5 - AIDEA opportunity cost and net present value

Table 5, below, shows the year-by-year calculation of Table 4's AIDEA opportunity costs and NPV's over the four time periods:

- FY 1981–2021 (41 years)
- FY 1992–2021 (30 years)
- FY 2002–2021 (20 years)
- FY 2012–2021 (10 years).

The opportunity costs are figured on the AIDEA net assets at the start of each period, plus subsequent net appropriations to AIDEA, compounded at each year's actual APFC rate of return on investments.[69]

Table 5's AIDEA net assets are from AIDEA's audited financial statements. The table's AIDEA net appropriations are derived from audited financial statement amounts shown in Table 9. The net appropriations figures are the sum of Table 9's capital contributions, capital grants, and transfers from the State of Alaska, net of dividends and transfers paid by AIDEA to the State.

[68] The $7.0 billion in lost investment opportunities, plus the $1.3 billion in cash that would have been paid in PFD checks, equals PFD recipients' total $8.3 billion loss, on account of AIDEA.
[69] "Alaska Permanent Fund - Historical Values by Fiscal Year", Paulyn Swanson, Communications Director, Alaska Permanent Fund Corporation, email to Gregg Erickson, October 26, 2021.

TABLE 5

Opportunity Cost & Financial Net Present Value of AIDEA Net Assets & Net Appropriations[1] over the Last 41, 30, 20 and 10 Years ($ 000)

Fiscal Year	AIDEA Net Assets (June 30)	AIDEA Net Appropriations	Permanent Fund Rate of Return	Opportunity Cost at June 30 Cumulative Value of AIDEA Net Assets & Net Appropriations if Invested in Permanent Fund since				Financial Net Present Value at June 30 of AIDEA Net Assets & Net Appropriations since			
				FY 1980	FY 1991	FY 2001	FY 2011	FY 1980	FY 1991	FY 2001	FY 2011
1980	158										
1981	197,230	180,588	16.0%	209,666				(12,436)			
1982	226,263	8,000	15.1%	250,534				(24,270)			
1983	248,840	0	12.8%	282,502				(33,662)			
1984	274,778	668	10.9%	314,007				(39,229)			
1985	305,074	544	25.6%	395,013				(89,939)			
1986	488,571	143,511	23.1%	662,708				(174,138)			
1987	519,673	8,000	7.6%	721,816				(202,144)			
1988	520,847	0	5.4%	761,083				(240,236)			
1989	542,630	0	12.2%	853,783				(311,153)			
1990	572,029	0	9.3%	932,843				(360,814)			
1991	643,802	26,823	9.2%	1,047,475				(403,673)			
1992	693,180	6,883	11.5%	1,175,399	725,384			(482,218)	(32,204)		
1993	738,085	8,522	12.7%	1,333,686	826,745			(595,601)	(88,660)		
1994	775,487	4,870	1.5%	1,358,367	843,923			(582,880)	(68,436)		
1995	771,136	(41,812)	14.5%	1,507,587	918,497			(736,451)	(147,361)		
1996	845,386	31,349	13.4%	1,745,615	1,077,410			(900,228)	(232,024)		
1997	916,190	27,924	17.1%	2,076,281	1,294,014			(1,160,091)	(377,824)		
1998	975,883	8,408	16.4%	2,425,536	1,515,368			(1,449,653)	(539,485)		
1999	846,577	(16,000)	9.5%	2,638,201	1,641,658			(1,791,624)	(795,081)		
2000	856,174	(26,000)	9.2%	2,852,001	1,763,975			(1,995,827)	(907,801)		
2001	871,069	(18,500)	(3.3%)	2,741,129	1,688,573			(1,870,060)	(817,504)		
2002	799,589	(16,848)	(2.2%)	2,663,257	1,634,278	835,086		(1,863,668)	(834,689)	(35,497)	
2003	822,229	(20,038)	4.5%	2,761,106	1,686,235	851,400		(1,938,877)	(864,006)	(29,171)	
2004	822,886	(17,969)	14.2%	3,133,486	1,905,661	952,028		(2,310,600)	(1,082,775)	(129,142)	

TABLE 5

Opportunity Cost & Financial Net Present Value of AIDEA Net Assets & Net Appropriations[1] over the Last 41, 30, 20 and 10 Years ($ 000)

				Opportunity Cost at June 30 Cumulative Value of AIDEA Net Assets & Net Appropriations if Invested in Permanent Fund since				Financial Net Present Value at June 30 of AIDEA Net Assets & Net Appropriations since			
Fiscal Year	AIDEA Net Assets (June 30)	AIDEA Net Appropriations	Permanent Fund Rate of Return	FY 1980	FY 1991	FY 2001	FY 2011	FY 1980	FY 1991	FY 2001	FY 2011
2005	841,006	(15,966)	10.4%	3,442,677	2,086,790	1,033,693		(2,601,671)	(1,245,784)	(192,687)	
2006	855,587	(6,494)	11.0%	3,813,476	2,308,712	1,139,985		(2,957,889)	(1,453,125)	(284,398)	
2007	898,664	(4,865)	17.1%	4,458,360	2,696,884	1,328,772		(3,559,696)	(1,798,220)	(430,108)	
2008	945,942	1,200	(3.6%)	4,299,016	2,600,953	1,282,093		(3,353,074)	(1,655,011)	(336,151)	
2009	974,526	(17,562)	(18.0%)	3,512,505	2,119,414	1,037,421		(2,537,979)	(1,144,888)	(62,895)	
2010	1,012,182	(21,768)	11.7%	3,899,851	2,343,490	1,134,688		(2,887,669)	(1,331,308)	(122,506)	
2011	1,039,527	(13,716)	20.6%	4,685,125	2,808,775	1,351,444		(3,645,598)	(1,769,248)	(311,917)	
2012	1,075,656	(6,051)	(0.0%)	4,678,606	2,802,444	1,345,258	1,033,373	(3,602,950)	(1,726,788)	(269,602)	42,283
2013	1,164,945	63,989	10.9%	5,260,960	3,179,734	1,563,278	1,217,303	(4,096,015)	(2,014,789)	(398,333)	(52,358)
2014	1,270,762	70,551	15.5%	6,158,962	3,754,729	1,887,399	1,487,729	(4,888,200)	(2,483,967)	(616,637)	(216,967)
2015	1,290,538	3,368	4.9%	6,464,900	3,942,620	1,983,604	1,564,310	(5,174,362)	(2,652,082)	(693,066)	(273,772)
2016	1,311,769	(16,105)	1.0%	6,514,573	3,966,565	1,987,567	1,563,997	(5,202,804)	(2,654,796)	(675,798)	(252,228)
2017	1,317,607	(3,956)	12.6%	7,329,002	4,460,709	2,232,951	1,756,138	(6,011,395)	(3,143,102)	(915,344)	(438,531)
2018	1,328,645	(8,663)	10.7%	8,106,543	4,930,196	2,463,177	1,935,154	(6,777,898)	(3,601,551)	(1,134,532)	(606,509)
2019	1,374,903	(2,008)	6.3%	8,616,742	5,239,650	2,616,715	2,055,321	(7,241,839)	(3,864,747)	(1,241,812)	(680,418)
2020	1,419,473	(6,015)	2.0%	8,783,802	5,338,831	2,663,175	2,090,497	(7,364,329)	(3,919,358)	(1,243,702)	(671,024)
2021	1,407,468	(13,499)	29.7%	11,377,714	6,908,553	3,437,424	2,694,489	(9,970,246)	(5,501,085)	(2,029,956)	(1,287,021)

1. Net assets are total assets, net of liabilities and deferred inflows of resources. Net appropriations are appropriations and other capital contributions to AIDEA, net of AIDEA dividends and transfers paid to the State.

Table 6 - PFD costs of AIDEA net appropriations

Table 6, below, shows the year-by-year calculation of the foregone amounts of PFDs attributable to the State's funneling of money to AIDEA. The table shows both:

- the total additional amount that would have been appropriated and paid to Alaskans for PFDs in each year ("Total PFD Increase"); and,

- the additional amount that would have been included in each person's PFD check each year ("PFD Check Increase"), based on the number of PFD applicants that were determined to be eligible each year.

Table 6 shows that an additional $1.3 billion would have been paid out in dividends over the life of AIDEA, if AIDEA monies had been diverted to the Permanent Fund. This diversion would have added $2,248 to the checks received by Alaskans who qualified during each of the years 1983 through 2015.[70] After 2015, gubernatorial vetoes and legislative appropriations cut dividends short of what the statutory formula would provide. Hence, additional investment earnings would not have increased PFD amounts.

In addition, Table 6 shows the AIDEA or PF balance under APFC investment management would have wound up at $3.1 billion at the end of FY 2021. This would be $1.7 billion more than AIDEA's actual June 30, 2021, net asset balance of $1.4 billion, even after paying out dividends. See Table 4.

The $1.3 billion of PFD increases, plus the $3.1 billion balance with APFC, or $4.4 billion, would have had a total value of $3.0 billion more than AIDEA's actual June 30, 2021 net asset balance of $1.4 billion. See Table 4.

The PFD amounts in Table 6 do not account for the exclusion of unrealized gains and losses from Permanent Fund "net income", as defined in Permanent Fund statutes.[71] The statutory formulas for each year's PFD amount are tied to this statutory definition of Permanent Fund "net income".[72]

We use APFC total rates of return, which include unrealized gains and losses, to estimate the net income upon which PFD amounts would be figured. This introduces a potential error in our PFD estimates, but we judge it not material: over time, and with the five-year averaging of "net income" used for calculating dividends, unrealized amounts are realized or offset by subsequent

---

[70] The first PFD was paid in 1982. Legislation fixed the individual amount at $1,000, as a back-up alternative to residency-based amounts that were held unconstitutional by the Alaska Supreme Court. Thereafter, until 2016 PFD amounts were established by formulas contained in AS 37.13.140 and 145 and AS 43.23.025 and 045.

[71] AS 37.13.140.

[72] AS 37.13.140, AS 43.23.025, and AS 43.23.045.

unrealized gains or losses, tending to cancel out short-term errors in the estimates of PFD increases.

TABLE 6

Total and Individual PFD Costs of AIDEA Net Appropriations FY 1981–2021

	($ 000)						
Fiscal Year	AIDEA Net Appropriations	Permanent Fund Rate of Return	PF Earnings on AIDEA Net Appropriations	Total PFD Increase[1,2]	Cumulative AIDEA Net Appropriations & PF Earnings, net of PFD Increases	Number of PFD Applicants Paid[3]	PFD Check Increase
1980	0						
1981	180,588	16.0%	28,894		209,482	0	
1982	8,000	15.1%	32,840	0	250,322	470,897	0
1983	0	12.8%	31,941	15,613	266,651	458,213	34
1984	668	10.9%	29,111	15,348	281,082	482,135	32
1985	544	25.6%	72,040	19,483	334,183	519,413	38
1986	143,511	23.1%	110,156	27,609	560,242	533,315	52
1987	8,000	7.6%	43,300	30,088	581,455	530,594	57
1988	0	5.4%	31,631	30,055	583,031	519,724	58
1989	0	12.2%	71,013	34,455	619,589	508,710	68
1990	0	9.3%	57,374	32,915	644,048	498,447	66
1991	26,823	9.2%	61,385	27,794	704,462	512,764	54
1992	6,883	11.5%	81,662	31,822	761,185	523,099	61
1993	8,522	12.7%	97,368	38,724	828,351	528,399	73
1994	4,870	1.5%	12,332	32,563	812,989	535,178	61
1995	(41,812)	14.5%	111,898	38,288	844,787	542,397	71
1996	31,349	13.4%	117,665	44,197	949,604	546,651	81
1997	27,924	17.1%	166,864	53,143	1,091,249	555,289	96
1998	8,408	16.4%	179,794	61,798	1,217,652	565,657	109
1999	(16,000)	9.5%	114,037	72,477	1,243,212	573,324	126
2000	(26,000)	9.2%	111,740	72,460	1,256,492	583,633	124
2001	(18,500)	(3.3%)	(40,359)	55,868	1,141,765	586,848	95
2002	(16,848)	(2.2%)	(25,198)	35,701	1,064,018	590,031	61
2003	(20,038)	4.5%	46,561	21,712	1,068,829	596,176	36
2004	(17,969)	14.2%	149,537	25,440	1,174,958	599,992	42

TABLE 6

Total and Individual PFD Costs of AIDEA Net Appropriations FY 1981–2021

	($ 000)						
Fiscal Year	AIDEA Net Appropriations	Permanent Fund Rate of Return	PF Earnings on AIDEA Net Appropriations	Total PFD Increase[1,2]	Cumulative AIDEA Net Appropriations & PF Earnings, net of PFD Increases	Number of PFD Applicants Paid[3]	PFD Check Increase
2005	(15,966)	10.4%	120,883	26,400	1,253,475	597,639	44
2006	(6,494)	11.0%	136,919	45,014	1,338,886	595,166	76
2007	(4,865)	17.1%	227,584	71,556	1,490,049	600,278	119
2008	1,200	(3.6%)	(53,685)	61,030	1,376,534	616,484	99
2009	(17,562)	(18.0%)	(244,071)	19,701	1,095,199	624,888	32
2010	(21,768)	11.7%	125,806	20,218	1,179,020	637,873	32
2011	(13,716)	20.6%	239,586	30,998	1,373,892	644,959	48
2012	(6,051)	(0.0%)	(137)	7,087	1,360,617	641,644	11
2013	63,989	10.9%	155,709	29,074	1,551,241	634,366	46
2014	70,551	15.5%	251,702	81,130	1,792,364	637,289	127
2015	3,368	4.9%	88,170	77,178	1,806,725	641,561	120
2016	(16,105)	1.0%	18,264		1,808,884	638,178	0
2017	(3,956)	12.6%	226,879		2,031,807	633,005	0
2018	(8,663)	10.7%	217,286		2,240,430	639,247	0
2019	(2,008)	6.3%	141,468		2,379,890	633,243	0
2020	(6,015)	2.0%	47,715		2,421,590	630,937	0
2021	(13,499)	29.7%	715,925		3,124,017	643,000	0
Total	301,362		**4,109,592**	**1,286,938**			**2,248**
Additions	595,197						
Reductions	(293,835)						

1. PFD amounts do not take into account exclusion of unrealized gains and losses from net income under AS 37.13.140. Over time, and with the five-year averaging of net income used for calculating dividends, unrealized amounts are realized or offset by subsequent unrealized gains or losses, limiting the errors in these estimates of PFD increases.

2. Chapter 28, Session Laws of Alaska 1986, effective July 1, 1986, changed the formula for income available for distribution under AS 37.13.140 from the average, to 21 percent, of the previous five years net income.

3. 1982-2020 from Permanent Fund Dividend Division, Department of Revenue, State of Alaska, at https://pfd.alaska.gov/Division-Info/summary-of-dividend-applications-payments, on 12/29/2021. 2021 applicants from Andrew Kitchenman, "The final number for Alaskans' PFD this year is $1,114", Alaska Public Media & KTOO, September 30, 2021, at https://www.ktoo.org/2021/09/30/alaska-2021-pfd-amount/.

Table 7 - PFD Costs of AIDEA by Borough or Census Area

Table 7, below, shows the lost PFD cash payments by borough or census area, attributable to AIDEA. The amounts lost are shown for 2015 and for the entire 1983–2015 period. The losses are estimates based on the distribution of 2020 PFD payments by ZIP code, provided by the State of Alaska, Permanent Fund Dividend Division.[73]

The losses assume that the geographic percentage distributions of eligible applicants were the same in all years as they were in 2020. Data on the geographic distribution of PFD recipients for each year from 1983 through 2015 would change individual borough or census area estimates, but not the totals.

[73] Alaska Department of Revenue, Permanent Fund Dividend Division, Microsoft Excel file "2020 Payment Breakdown by AK Zip Code 01.25.22.xlsx". According to the Division, the reported number of recipients may change slightly as delayed 2020 dividend applications are reviewed, and as the Division processes applications from newly eligible applicants whose parent or guardian failed to apply for their PFD when they were a child.

TABLE 7

2015 and 1983–2015 PFD Opportunity Costs of AIDEA by Borough or Census Area

	2020 PFD Applicants			
Brorough or Census Area	Number	Percent	2015 PFD Dollars Lost	1983 - 2015 PFD Dollars Lost
Aleutians East	1,128	0.2%	138,601	2,311,154
Aleutians West	2,737	0.4%	336,304	5,607,827
Anchorage	250,433	39.9%	30,771,533	513,111,011
Bethel	16,945	2.7%	2,082,088	34,718,532
Bristol Bay	466	0.1%	57,259	954,785
Denali	1,615	0.3%	198,440	3,308,966
Dillingham	4,459	0.7%	547,892	9,136,024
Fairbanks North Star	78,107	12.4%	9,597,266	160,033,070
Haines	2,280	0.4%	280,151	4,671,481
Hoonah-Angoon	1,762	0.3%	216,503	3,610,154
Juneau	28,726	4.6%	3,529,659	58,856,568
Kenai Peninsula	40,872	6.5%	5,022,078	83,742,451
Ketchikan Gateway	12,359	2.0%	1,518,591	25,322,298
Kodiak Island	18,109	2.9%	2,225,113	37,103,446
Kusilvak	8,080	1.3%	992,816	16,555,074
Lake And Peninsula	1,536	0.2%	188,733	3,147,103
Matanuska-Susitna	96,625	15.4%	11,872,634	197,974,514
Nome	8,889	1.4%	1,092,221	18,212,631
North Slope	6,648	1.1%	816,862	13,621,056
Northwest Arctic	7,189	1.1%	883,336	14,729,509
Petersburg	2,919	0.5%	358,667	5,980,726
Prince of Wales–Hyder	5,460	0.9%	670,888	11,186,969
Sitka	7,164	1.1%	880,264	14,678,286
Skagway	923	0.1%	113,412	1,891,130
Southeast Fairbanks	6,691	1.1%	822,145	13,709,159
Valdez-Cordova	8,458	1.3%	1,039,263	17,329,557
Wrangell	1,995	0.3%	245,132	4,087,546
Yakutat	512	0.1%	62,911	1,049,034
Yukon-Koyukuk	5,026	0.8%	617,561	10,297,748
Total	**628,113**	**100.0%**	**77,178,327**	**1,286,937,810**

AIDEA Total Rates of Return

Table 8 - AIDEA vs. Alaska Permanent Fund rates of return

Table 8, below, shows AIDEA's and APFC's average rates of return on their net assets over the last 41, 30, 20, and 10 years. Three different measures of rate of return are shown in the table:

- average of annual returns – this is the arithmetic average of the annual returns for each period;

- compound annual return – this is the rate that would produce the June 30, 2021 ending asset balance for each period, if the rate were earned throughout the period;

- compound annual return after inflation – this is the compound annual return, net of inflation. This is also called the real rate of return. Inflation is calculated in Table 11, based on the U.S. Bureau of Labor Statistics, Consumer Price Index (CPI) for Urban Alaska (formerly the Municipality of Anchorage CPI).

Chart A provides a graphic comparison of AIDEA's and APFC's annual rates of return, unadjusted for inflation. The unadjusted rates are also called the nominal rates of return. Chart B compares AIDEA's and APFC's real rates of return.

As Table 8 and Charts A and B indicate, APFC rates of return have fairly consistently, though not uniformly, exceeded those of AIDEA — and by large amounts. The differences give rise to the significant opportunity costs of running the AIDEA program, shown in Tables 4 and 5.

Table 8 and Charts A and B also reveal a pattern in AIDEA's rates of return — higher rates of return during its first 11 years of existence, followed by a lower plateau in rates over the next twenty years, and still lower rates in the most recent 10-year period.

However, the lower average rate for the last 10 years is due to lower inflation. Table 8 and Chart B show that in real terms, AIDEA's average rates of return have been flat over the last 30 years.

TABLE 8

AIDEA vs. Alaska Permanent Fund Rates of Return

	AIDEA	Permanent Fund	Difference
Average of Annual Returns			
41 Years, FY 1981–2021	4.3%	10.0%	**5.7%**
30 Years, FY 1992–2021	2.9%	8.7%	**5.8%**
20 Years, FY 2002–2021	2.8%	8.0%	**5.2%**
10 Years, FY 2012–2021	2.3%	9.4%	**7.1%**
Compound Annual Return[1]			
41 Years, FY 1981–2021	3.8%	9.4%	**5.6%**
30 Years, FY 1992–2021	2.9%	8.4%	**5.5%**
20 Years, FY 2002–2021	2.8%	7.5%	**4.7%**
10 Years, FY 2012–2021	2.3%	9.1%	**6.8%**
Compound Annual Return after Inflation[2]			
41 Years, FY 1981–2021	1.3%	6.7%	**5.4%**
30 Years, FY 1992–2021	0.8%	6.1%	**5.4%**
20 Years, FY 2002–2021	0.7%	5.3%	**4.6%**
10 Years, FY 2012–2021	0.8%	7.5%	**6.7%**

1. Dollar-weighted compound rate of return, weighted by cash flows to and from AIDEA (net appropriations).

2. Inflation measured by the Urban Alaska (Anchorage) CPI-U in Table 11.

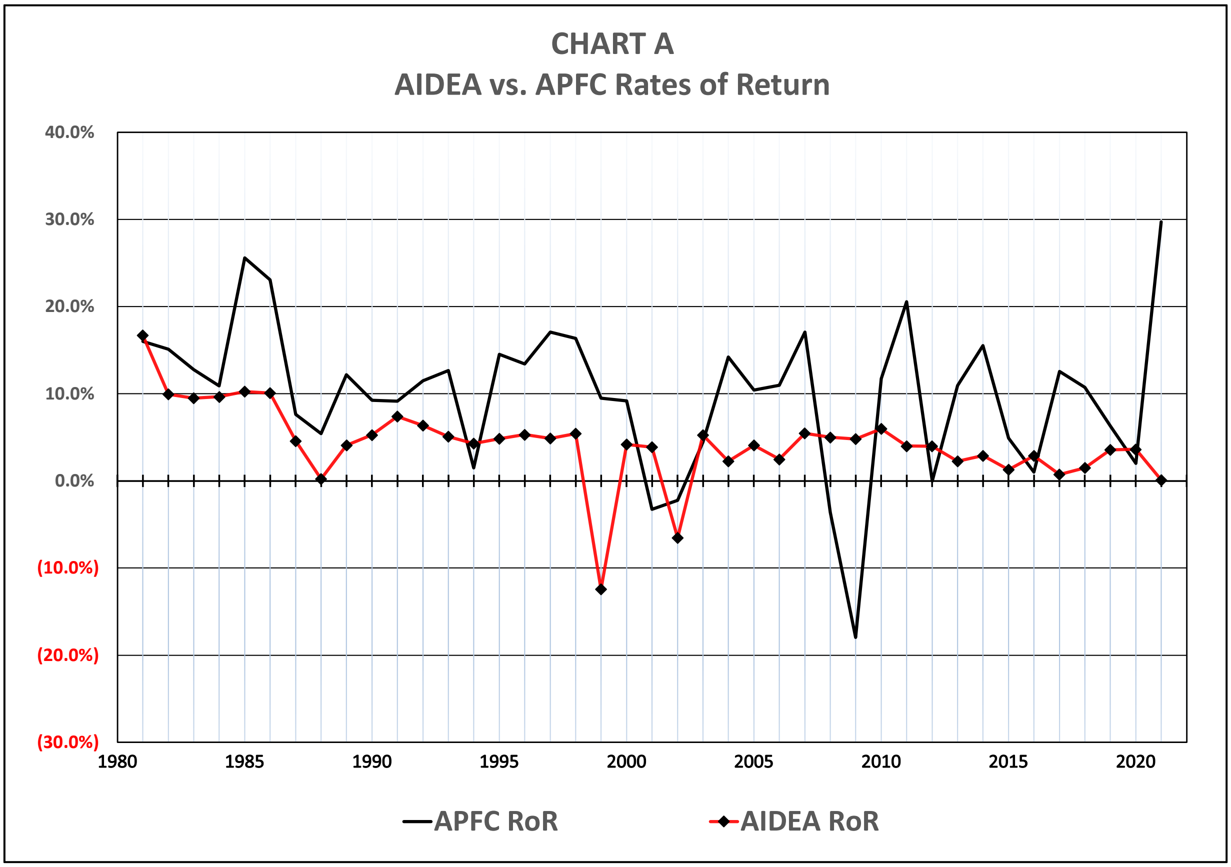


CHART A
AIDEA vs. APFC Rates of Return
40.0%
30.0%
20.0%
10.0%
0.0%
(10.0%)
(20.0%)
(30.0%)
1980
1985
1990
1995
2000
2005
2010
2015
2020
APFC RoR
AIDEA RoR

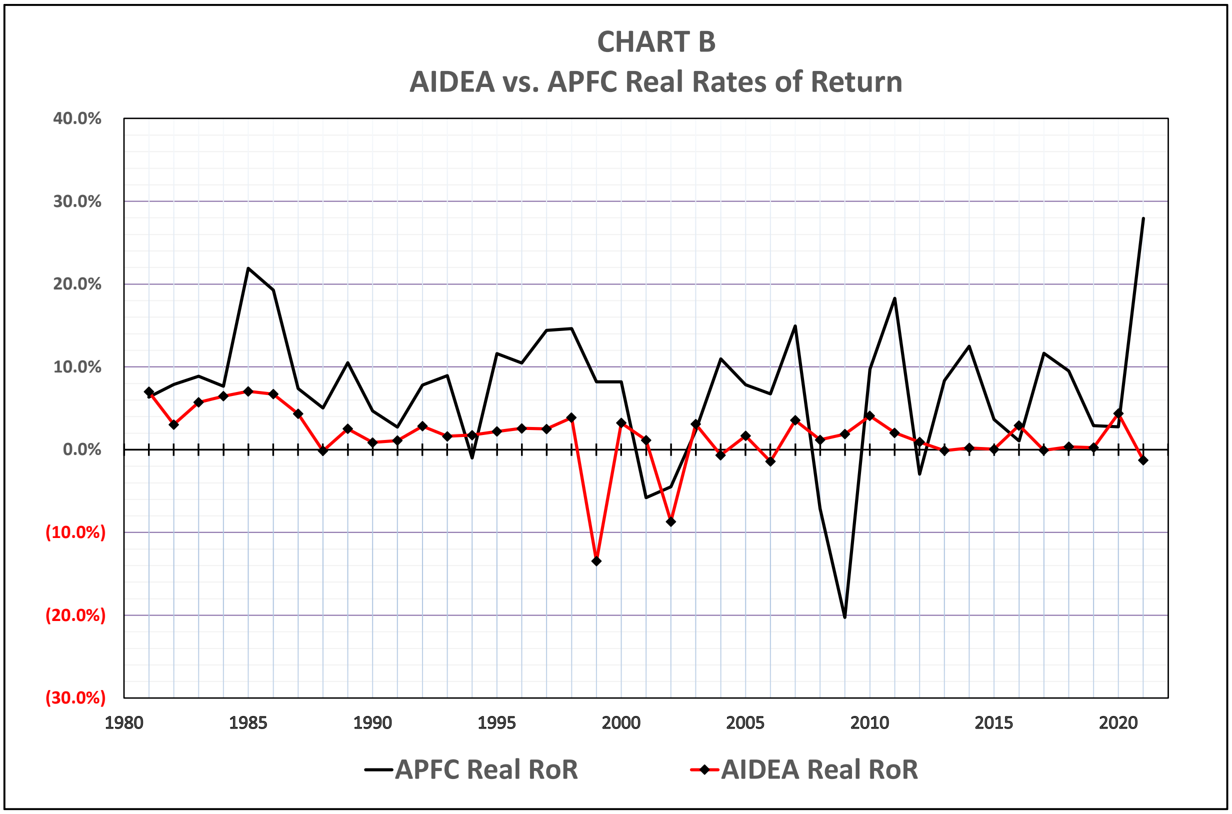


CHART B
AIDEA vs. APFC Real Rates of Return
40.0%
30.0%
20.0%
10.0%
0.0%
(10.0%)
(20.0%)
(30.0%)
1980
1985
1990
1995
2000
2005
2010
2015
2020
APFC Real RoR
AIDEA Real RoR

Table 9 - AIDEA rate of return on net assets, FY 1981–2021

Table 9, below, calculates the annual nominal and real rates of return AIDEA earned on their net assets in three steps:

- net earnings are calculated as the change in net assets, from year to year, adjusted to eliminate additions or subtractions arising from transfers of assets between AIDEA and third parties. The transfers are mainly between AIDEA and the State of Alaska, but include some local and federal monies;

- AIDEA's nominal rate of return is calculated by dividing net earnings by the average of AIDEA's beginning and ending net assets during the fiscal year; and,

- AIDEA's real rate of return is calculated by factoring out the rate of inflation during the fiscal year. Inflation rates are figured in Table 11.

The amounts in Table 9 for AIDEA's net assets and "adjustments to change in net assets" are taken from each fiscal year's audited financial statements.

TABLE 9

AIDEA
Rate of Return on Net Assets
FY 1981–2021

	($ 000)								
			Adjustments to Change in Net Assets						
Fiscal Year	Net Assets (June 30)[1]	Change in Net Assets	Capital Contributions	Capital Grants	Transfers from State of Alaska[2]	Dividends to State of Alaska[3]	Net Earnings After Adjustments	Rate of Return	Real Rate of Return
1980	158								
1981	197,230	197,071			(180,588)		16,483	16.7%	7.0%
1982	226,263	29,034			(8,000)		21,034	9.9%	3.0%
1983	248,840	22,577					22,577	9.5%	5.7%
1984	274,778	25,938			(668)		25,269	9.7%	6.5%
1985	305,074	30,296			(544)		29,752	10.3%	7.0%
1986	488,571	183,497			(143,511)		39,985	10.1%	6.7%
1987	519,673	31,102			(8,000)		23,102	4.6%	4.3%
1988	520,847	1,174					1,174	0.2%	(0.1%)
1989	542,630	21,783					21,783	4.1%	2.5%
1990	572,029	29,400					29,400	5.3%	0.9%
1991	643,802	71,773	(26,823)				44,951	7.4%	1.1%
1992	693,180	49,378	(6,883)				42,495	6.4%	2.9%
1993	738,085	44,905	(8,522)				36,383	5.1%	1.6%
1994	775,487	37,401	(4,870)				32,532	4.3%	1.8%
1995	771,136	(4,351)	(18,188)			60,000	37,461	4.8%	2.2%
1996	845,386	74,251	(31,349)				42,902	5.3%	2.6%
1997	916,190	70,804	(42,924)			15,000	42,880	4.9%	2.5%
1998	975,883	59,692	(24,408)			16,000	51,284	5.4%	3.9%
1999	846,577	(129,306)				16,000	(113,306)	(12.4%)	(13.5%)
2000	856,174	9,597				26,000	35,597	4.2%	3.2%
2001	871,069	14,895				18,500	33,395	3.9%	1.2%
2002	799,589	(71,480)			(652)	17,500	(54,632)	(6.5%)	(8.7%)
2003	822,229	22,640		(112)		20,150	42,678	5.3%	3.1%
2004	822,886	657		(85)	(122)	18,176	18,626	2.3%	(0.7%)

TABLE 9

AIDEA
Rate of Return on Net Assets
FY 1981–2021

	($ 000)								
			Adjustments to Change in Net Assets						
Fiscal Year	**Net Assets (June 30)[1]**	**Change in Net Assets**	**Capital Contributions**	**Capital Grants**	**Transfers from State of Alaska[2]**	**Dividends to State of Alaska[3]**	**Net Earnings After Adjustments**	**Rate of Return**	**Real Rate of Return**
2005	841,006	18,120	(5,658)		(376)	22,000	34,086	4.1%	1.7%
2006	855,587	14,581	(1,184)	(459)	(675)	8,812	21,075	2.5%	(1.4%)
2007	898,664	43,077	(1,886)	(3,893)	(6,006)	16,650	47,942	5.5%	3.5%
2008	945,942	47,278	(114)	(1,709)	(9,377)	10,000	46,078	5.0%	1.2%
2009	974,526	28,584		(3,836)	(2,402)	23,800	46,146	4.8%	1.9%
2010	1,012,182	37,656		(647)	(305)	22,720	59,424	6.0%	4.1%
2011	1,039,527	27,345		(7,533)	(2,174)	23,423	41,061	4.0%	2.0%
2012	1,075,656	36,129		(19,715)	(3,634)	29,400	42,180	4.0%	0.9%
2013	1,164,945	89,289		(5,115)	(79,274)	20,400	25,300	2.3%	(0.1%)
2014	1,270,762	105,817		(1,328)	(139,968)	70,745	35,266	2.9%	0.2%
2015	1,290,538	19,776		(25)	(14,008)	10,665	16,408	1.3%	0.1%
2016	1,311,769	21,231		(133)	(1,412)	17,650	37,336	2.9%	2.9%
2017	1,317,607	5,838	(295)		(2,077)	6,328	9,794	0.7%	(0.1%)
2018	1,328,645	11,038	(93)	(527)	(3,600)	12,883	19,701	1.5%	0.4%
2019	1,374,903	46,258	542	(29)	(3,297)	4,792	48,266	3.6%	0.3%
2020	1,419,473	44,570		(1,540)	(2,730)	10,285	50,585	3.6%	4.4%
2021	1,407,468	(12,005)	(239)	(405)	(332)	14,475	1,494	0.1%	(1.3%)
Total		1,407,310	(172,892)	(47,091)	(613,733)	532,354	1,105,948		

1. Net assets are total assets, net of liabilities and deferred inflows of resources. Depending on the fiscal year, AIDEA's audited financial statements also label net assets as "total equity" or "net position". Revised value is shown where net assets were retroactively revised.
2. FY 2009 includes $1,109 thousand in AIDEA's unfunded PERS liability assumed by the PERS under SB 125, effective April 9, 2008, page 38, FY 2010 audited financial statements.
3. FY 2014 dividend includes an additional $50,000 thousand transferred to the State.

Table 10 - AIDEA net assets & capital contributions, FY 1986–1990

In Table 10, below, AIDEA's net assets and capital contributions (from the State of Alaska) for FY 1986–1990 are totaled from the two different funds that made up AIDEA — the Enterprise Development Fund and the Economic Development Fund. During those years, separate audited financial statements were issued for the two funds, but not for AIDEA as a whole.

TABLE 10

AIDEA
Enterprise Development Fund and Economic Development Fund
Net Assets & Capital Contributions
for Fiscal Years with Separate Fund Reporting
FY 1986–1990
($ 000)

	Net Assets (June 30)			Capital Contributions		
Fiscal Year	Enterprise Development Fund	Economic Development Fund	Total	Enterprise Development Fund	Economic Development Fund	Total
1986	333,949	154,621	488,571	0	143,511	143,511
1987	355,426	164,247	519,673	8,000	0	8,000
1988	347,699	173,148	520,847	0	0	0
1989	361,540	181,090	542,630	0	0	0
1990	384,421	187,608	572,029	0	0	0

Table 11 - Inflation

Table 11, below, shows the calculation of each fiscal year's inflation rate in the Urban Alaska CPI. These rates are used to calculate AIDEA's and the APFC's real rates of return.

TABLE 11

Inflation

	Urban Alaska Consumer Price Index (CPI)[1]				
Year	Average Jan–Jun	Average Jul–Dec	Calendar Year Average Jan–Dec	Fiscal Year Average Jul–Jun	Inflation (Fiscal Year)
1979			77.6		
1980			85.5	81.6	
1981			92.4	89.0	9.1%
1982			97.4	94.9	6.7%
1983			99.2	98.3	3.6%
1984	102.7	103.9	103.3	101.3	3.0%
1985	104.7	106.9	105.8	104.3	3.0%
1986	108.3	107.4	107.8	107.6	3.2%
1987	108.3	108.1	108.2	107.9	0.2%
1988	108.4	108.9	108.6	108.3	0.4%
1989	110.9	112.5	111.7	109.9	1.5%
1990	116.9	120.4	118.6	114.7	4.4%
1991	123.3	124.7	124.0	121.9	6.2%
1992	127.3	129.1	128.2	126.0	3.4%
1993	131.5	132.8	132.2	130.3	3.4%
1994	134.3	135.8	135.0	133.6	2.5%
1995	138.2	139.5	138.9	137.0	2.6%
1996	141.8	143.7	142.7	140.7	2.7%
1997	144.1	145.4	144.8	143.9	2.3%
1998	146.7	147.0	146.9	146.1	1.5%
1999	148.6	148.3	148.4	147.8	1.2%
2000	150.0	151.9	150.9	149.2	0.9%
2001	154.4	156.0	155.2	153.2	2.7%
2002	157.5	159.0	158.2	156.8	2.4%
2003	161.1	163.9	162.5	160.1	2.1%
2004	165.6	167.8	166.7	164.8	2.9%
2005	169.6	174.1	171.8	168.7	2.4%
2006	176.7	177.9	177.3	175.4	4.0%
2007	179.4	183.1	181.2	178.6	1.9%
2008	187.7	191.3	189.5	185.4	3.8%
2009	190.0	193.5	191.7	190.7	2.9%
2010	194.8	195.5	195.1	194.1	1.8%
2011	200.3	202.6	201.4	197.9	1.9%
2012	205.2	206.6	205.9	203.9	3.0%
2013	210.9	213.9	212.4	208.7	2.4%
2014	214.8	216.8	215.8	214.3	2.7%
2015	217.1	216.7	216.9	217.0	1.2%
2016	217.0	218.7	217.8	216.9	(0.1%)
2017	218.6	219.1	218.9	218.6	0.8%
2018	223.1	228.0	225.5	221.1	1.1%
2019	228.9	228.5	228.7	228.4	3.3%
2020	225.0	227.3	226.2	226.8	(0.7%)
2021	232.7			230.0	1.4%

1. Consumer Price Index for Urban Alaska (formerly Municipality of Anchorage), Not Seasonally Adjusted, All Items, Urban Consumers at https://live.laborstats.alaska.gov/cpi/index.html.

Loans, Projects, and Cash

AIDEA's has two main avenues of economic development — loans and projects. On June 30, 2021, AIDEA had $447.2 million in loan net assets and $387.9 million in project net assets. Cash, cash equivalents, and marketable securities make up most of AIDEA's other assets. Cash and marketable securities are labeled "investments" in AIDEA's financial statements. In this report, we generally refer to them as "cash". On June 30, 2021, they totaled $572.3 million.

This evaluation of AIDEA sorts all AIDEA's assets into one of these three categories — loans, projects, or cash. These are the three types of AIDEA's activities that generate income for the corporation. Each has different sets of statutes, regulations, investment standards, guidelines, underwriting criteria, bond covenants, and other restrictions that govern AIDEA's investment decisions in these three areas.

This section of the report computes AIDEA's financial return from each of these three activities. Loan, project, or cash rates of return are computed as the net income from each activity in a given fiscal year, divided by the average net assets held during the fiscal year, attributable to that activity.[74]

Table 12 – AIDEA Total Assets

Table 12, below, shows the breakdown of AIDEA's total assets since 1980 into the loan, project, and cash categories. It also shows two other categories of assets — accrued interest receivable and general assets — that are not broken down into the loan, project, and cash categories in AIDEA's financial statements.

[74] Average net assets are estimated as the average of the beginning and ending net assets for the loan, project, or cash activity, for a fiscal year.

TABLE 12

AIDEA Total Assets
($000)

		Project[2]						
Fiscal Year	Loan[1]	Loan & LOC[3]	Other	Total	Cash[4]	Accrued Interest[5]	General	Total Assets
1980							158	158
1981	164,627				49,657	3,192	79	217,555
1982	220,727				81,533	5,101	3	307,363
1983	257,828				88,171	4,289	10	350,298
1984	328,276				101,523	5,446	56	435,301
1985	375,669				140,630	8,083	481	524,863
1986	502,154				229,279	9,329	440	741,203
1987	441,843			16,550	416,550	12,646	474	888,062
1988	379,176			68,891	352,132	11,386	965	812,549
1989	354,645			125,221	330,774	9,868	196	820,704
1990	320,308			174,230	330,699	10,169	3,719	839,125
1991	285,693			210,096	412,770	10,782	270	919,612
1992	265,765			248,085	441,333	9,115	1,025	965,324
1993	265,178			278,884	463,406	8,643	2,702	1,018,813
1994	254,052			300,172	448,374	7,488	4,944	1,015,030
1995	270,034			337,663	387,355	8,013	3,602	1,006,669
1996	258,238			393,799	430,772	8,692	3,870	1,095,372
1997	254,593			480,370	508,272	8,446	7,009	1,258,689
1998	245,214			571,582	466,630	8,238	12,201	1,303,864
1999	228,996			561,811	455,959	6,923	13,068	1,266,757
2000	230,907			584,908	412,976	6,634	11,862	1,247,287
2001	207,195			576,587	456,950	7,585	9,784	1,258,101
2002	207,534	82,201	454,436	536,637	386,079	6,993	14,173	1,151,416
2003	220,529	80,379	449,075	529,454	394,318	4,818	10,269	1,159,388
2004	271,540	73,536	442,463	515,999	346,306	4,380	8,095	1,146,320
2005	326,777		412,915	412,915	399,031	4,760	7,719	1,151,202
2006	357,954		406,406	406,406	378,482	5,451	7,775	1,156,068
2007	385,590		417,310	417,310	371,894	5,959	15,380	1,196,133
2008	382,867		427,370	427,370	340,046	5,559	10,017	1,165,859
2009	369,431		423,801	423,801	375,252	5,980	9,051	1,183,515
2010	378,888		404,665	404,665	414,887	5,642	8,526	1,212,608
2011	479,526		380,510	380,510	372,541	5,053	11,475	1,249,105
2012	468,611		404,543	404,543	377,416	4,850	12,062	1,267,482
2013	435,445		441,089	441,089	512,757	4,543	8,089	1,401,923
2014	380,236	49	392,882	392,931	701,546	4,342	8,415	1,487,470
2015	367,151	20,924	391,345	412,269	703,104	4,243	8,035	1,494,802
2016	352,974	63,897	456,782	520,679	624,196	3,773	8,031	1,509,653
2017	405,108	65,997	437,358	503,355	582,548	4,049	8,580	1,503,640
2018	428,382	109,395	346,511	455,906	567,843	4,451	6,828	1,463,410
2019	443,147	205,904	266,875	472,779	576,976	5,435	2,804	1,501,141
2020	450,423	225,904	240,853	466,757	741,010	8,281	2,654	1,669,125
2021	463,382	204,253	266,403	470,656	570,675	5,365	2,726	1,512,804

1. Enterprise Development Account and Loan Fund loans, net of allowance for loan losses.
2. Includes venture capital investments.
3. A letter of credit (LOC) is an instrument that assures payments of debt obligations or commercial transactions, often in international trade. An issuer may guarantee a payment, make a payment, or allow a beneficiary to make draws from the bank for a payment, sometimes on a revolving basis.
4. Cash, cash equivalents, and marketable securities.
5. Accrued interest receivable.

AIDEA's role in some projects takes the form of loans or letters of credit (LOCs), but they are accounted for as projects in the financial statements, and in Table 12. AIDEA has more discretion in the decision to invest in projects structured as loans or LOCs, than in non-project investments in loans. Investments under the loan, as opposed to the project, category are either:

- predicated on bank underwriting, i.e., AIDEA purchases up to 90 percent of a loan originated by a commercial lender; or,

- subject to State or federal statutory or regulatory underwriting criteria for various specific loan programs, such as State fishing loans or U.S. Economic Development Administration (EDA) loan programs.

To get to net asset figures for loans, projects, and cash, the accrued interest and general asset amounts for each year are allocated to the loan, project, or cash categories as follows:

- accrued interest receivable is allocated pro-rata to the sum of:
    - loan;
    - project loan and LOC; and,
    - cash

  total assets; and,
- general assets are allocated pro-rata to the sum of:
    - loan; and,
    - project

  total assets.

Table 13 – AIDEA Liabilities

Table 13, below, shows the breakdown of AIDEA's liabilities since 1980 into the loan and project categories, as well as other liabilities not so categorized in AIDEA's financial statements.

TABLE 13

AIDEA Liabilities
($000)

	AIDEA Bonds Outstanding – General Obligation & Snettisham														Other Liabilities			
	Loan Participation				Project						Except Snettisham		Snettisham					
Fiscal Year	Goose Creek	1987 & prior	1993A, 1994A, & 1995A & B	Total	Red Dog	Healy	Unalaska Marine Center	Skagway Ore Terminal	FedEx	Total	Loan & Project Total	Total in Pay Status	Bonds	Other	Cares Act	Interest Payable[1]	General	Total Liabilities
1980																		
1981		18,804		18,804							18,804	18,804				627	895	20,326
1982		78,391		78,391							78,391	78,391				2,516	193	81,100
1983		98,086		98,086							98,086	98,086				3,073	299	101,458
1984		155,432		155,432							155,432	155,432				4,422	669	160,523
1985		213,482		213,482							213,482	213,482				5,431	876	219,789
1986		245,257		245,257							245,257	245,257				6,136	1,240	252,633
1987		252,645		252,645	103,250					103,250	355,895	252,645				9,306	3,188	368,390
1988		177,275		177,275	103,250					103,250	280,525	177,275				5,985	5,192	291,702
1989		165,135		165,135	103,250					103,250	268,385	165,135				5,668	4,021	278,074
1990		146,090		146,090	103,250					103,250	249,340	146,090				5,201	12,554	267,096
1991		133,270		133,270	103,250			24,390		127,640	260,910	260,910				5,365	9,534	275,809
1992		125,105		125,105	101,650		6,690	23,745		132,085	257,190	257,190				5,266	9,687	272,143
1993		85,835	25,265	111,100	99,965		6,365	23,060	28,000	157,390	268,490	268,490				4,897	7,340	280,727
1994		39,770	35,685	75,455	98,185		6,025	21,035	28,000	153,245	228,700	228,700				4,069	6,774	239,543
1995		26,380	45,040	71,420	96,300		5,670	20,255	27,225	149,450	220,870	220,870				3,717	10,946	235,533
1996		19,885	41,980	61,865	94,300		5,295	19,420	26,415	145,430	207,295	207,295				3,577	39,113	249,986
1997			38,650	38,650	150,000	85,000	4,900	18,530	25,565	283,995	322,645	322,645				4,574	15,280	342,499
1998			34,365	34,365	146,850	85,000	4,480	17,575	24,670	278,575	312,940	312,940				4,537	10,505	327,981
1999			27,990	27,990	143,445	83,410	4,035	16,555	23,725	271,170	299,160	299,160	100,000	8,817		4,346	7,857	420,180
2000			23,250	23,250	139,870	81,535		15,460	22,725	259,590	282,840	282,840	92,160	8,654		4,106	3,353	391,113
2001			19,425	19,425	136,115	79,575		14,285	21,665	251,640	271,065	271,065	91,140	8,519		3,945	12,363	387,032
2002			13,405	13,405	132,175	77,525			20,475	230,175	243,580	243,580	90,075	8,804		3,183	6,185	351,827
2003			5,155	5,155	128,015	75,385			18,930	222,330	227,485	227,485	88,960	9,648		3,187	7,879	337,159
2004			1,945	1,945	123,630	73,145			17,585	214,360	216,305	216,305	87,790	9,204		3,037	7,098	323,434

TABLE 13

AIDEA Liabilities
($000)

	AIDEA Bonds Outstanding – General Obligation & Snettisham														Other Liabilities			
	Loan Participation				Project						Except Snettisham		Snettisham					
Fiscal Year	Goose Creek	1987 & prior	1993A, 1994A, & 1995A & B	Total	Red Dog	Healy	Unalaska Marine Center	Skagway Ore Terminal	FedEx	Total	Loan & Project Total	Total in Pay Status	Bonds	Other	Cares Act	Interest Payable[1]	General	Total Liabilities
2005			525	525	119,005	70,795			16,185	205,985	206,510	206,510	86,560	8,137		2,904	6,085	310,196
2006					114,115	68,325			14,720	197,160	197,160	197,160	85,265	8,709		2,774	6,573	300,481
2007					113,095	65,735			13,185	192,015	192,015	192,015	83,905	9,382		1,378	10,789	297,469
2008					107,385				11,570	118,955	118,955	118,955	82,465	9,343		322	8,832	219,917
2009					101,335				9,885	111,220	111,220	111,220	80,945	9,216		156	7,452	208,989
2010					87,105				8,110	95,215	95,215	95,215	79,355	7,978		1,203	16,675	200,426
2011	14,470			14,470	81,020				6,240	87,260	101,730	101,730	77,685	8,650		1,278	20,235	209,578
2012	14,005			14,005	74,510					74,510	88,515	88,515	75,915	8,783		1,112	17,501	191,826
2013	13,525			13,525	67,565					67,565	81,090	81,090	74,045	8,451		1,021	72,371	236,978
2014	13,030			13,030	60,135					60,135	73,165	73,165	72,060	8,017		924	62,542	216,708
2015	12,515			12,515	52,185					52,185	64,700	64,700	69,955	8,464		819	60,326	204,264
2016	11,980			11,980	43,665					43,665	55,645	55,645	64,455	13,135		707	63,942	197,884
2017	11,425			11,425	34,565					34,565	45,990	45,990	62,160	12,415		588	64,880	186,033
2018	10,845			10,845	32,110					32,110	42,955	42,955	59,745	13,215		551	18,299	134,765
2019	10,245			10,245	29,475					29,475	39,720	39,720	57,210	11,572		511	17,225	126,238
2020													54,550	11,890	142,994		40,218	249,652
2021													51,750	12,203	816	1,258	39,309	105,336

1. Accrued interest payable. 2021 accrued interest payable is entirely Snettisham bonds. In prior years, Snettisham accrued interest payable was not itemized. Pre-2021 accrued interest payable was entirely for loans and non-Snettisham project AIDEA general obligation bonds.

Table 14 – AIDEA Loan, Project, and Cash Net Assets

After first allocating other liabilities to the loan, project, and cash categories, net assets by category are computed as each category's respective total assets minus the liabilities for that category.

Other liability amounts for each year are allocated to the loan, project, or cash categories as follows:

- Cares Act liabilities are allocated to cash;
- accrued interest payable is allocated pro-rata to the sum of non-Snettisham bonds payable at the end of the prior fiscal year for:
  - loan participations; and,
  - projects; and,
- general liabilities are allocated pro-rata to the sum of:
  - loan; and,
  - project

  total assets.

These allocations of liabilities and the resulting net assets for loans, projects, and cash are shown in Table 14, below.

TABLE 14

AIDEA Net Assets
Loan, Project, and Cash
($000)

	Loan					Project						Cash				
Fiscal Year	Total Assets	% of Loan, LOC & Cash[1]	% of Loan & Project[2]	Loan Bonds	Net Assets[3]	Total Assets	% of Loan, LOC & Cash[1]	% of Loan & Project[2]	Snettisham Bonds & Liabilities	Other Bonds	Net Assets[3]	Total Assets	% of Loan, LOC & Cash[1]	CARES Act Liabilities	Net Assets	Total Net Assets
1980												158			158	158
1981	164,627	76.8%	100.0%	18,804	146,833							49,657	23.2%		50,397	197,230
1982	220,727	73.0%	100.0%	78,391	143,355							81,533	27.0%		82,909	226,263
1983	257,828	74.5%	100.0%	98,086	159,576							88,171	25.5%		89,264	248,840
1984	328,276	76.4%	100.0%	155,432	171,969							101,523	23.6%		102,809	274,778
1985	375,669	72.8%	100.0%	213,482	162,242							140,630	27.2%		142,832	305,074
1986	502,154	68.7%	100.0%	245,257	256,367							229,279	31.3%		232,204	488,571
1987	441,843	51.5%	96.4%	252,645	183,784	16,550		3.6%		103,250	(86,798)	416,550	48.5%		422,687	519,673
1988	379,176	51.8%	84.6%	177,275	198,242	68,891		15.4%		103,250	(35,009)	352,132	48.2%		357,614	520,847
1989	354,645	51.7%	73.9%	165,135	186,121	125,221		26.1%		103,250	20,973	330,774	48.3%		335,536	542,630
1990	320,308	49.2%	64.8%	146,090	168,298	174,230		35.2%		103,250	67,867	330,699	50.8%		335,865	572,029
1991	285,693	40.9%	57.6%	133,270	148,754	210,096		42.4%		127,640	75,906	412,770	59.1%		419,142	643,802
1992	265,765	37.6%	51.7%	125,105	137,044	248,085		48.3%		132,085	109,113	441,333	62.4%		447,022	693,180
1993	265,178	36.4%	48.7%	111,100	152,937	278,884		51.3%		157,390	116,246	463,406	63.6%		468,903	738,085
1994	254,052	36.2%	45.8%	75,455	179,124	300,172		54.2%		153,245	143,210	448,374	63.8%		453,154	775,487
1995	270,034	41.1%	44.4%	71,420	197,441	337,663		55.6%		149,450	181,618	387,355	58.9%		392,077	771,136
1996	258,238	37.5%	39.6%	61,865	184,606	393,799		60.4%		145,430	224,574	430,772	62.5%		436,207	845,386
1997	254,593	33.4%	34.6%	38,650	215,348	480,370		65.4%		283,995	186,943	508,272	66.6%		513,899	916,190
1998	245,214	34.4%	30.0%	34,365	213,697	571,582		70.0%		278,575	290,155	466,630	65.6%		472,030	975,883
1999	228,996	33.4%	29.0%	27,990	204,423	561,811		71.0%	108,817	271,170	181,587	455,959	66.6%		460,567	846,577
2000	230,907	35.9%	28.3%	23,250	212,107	584,908		71.7%	100,814	259,590	226,836	412,976	64.1%		417,231	856,174
2001	207,195	31.2%	26.4%	19,425	189,172	576,587		73.6%	99,659	251,640	219,728	456,950	68.8%		462,169	871,069
2002	207,534	30.7%	27.9%	13,405	198,329	536,637	12.2%	72.1%	98,879	230,175	211,186	386,079	57.1%		390,074	799,589
2003	220,529	31.7%	29.4%	5,155	217,533	529,454	11.6%	70.6%	98,608	222,330	207,645	394,318	56.7%		397,051	822,229
2004	271,540	39.3%	34.5%	1,945	271,632	515,999	10.6%	65.5%	96,994	214,360	202,754	346,306	50.1%		348,500	822,886

TABLE 14

AIDEA Net Assets
Loan, Project, and Cash
($000)

	Loan					Project						Cash				
Fiscal Year	Total Assets	% of Loan, LOC & Cash[1]	% of Loan & Project[2]	Loan Bonds	Net Assets[3]	Total Assets	% of Loan, LOC & Cash[1]	% of Loan & Project[2]	Snettisham Bonds & Liabilities	Other Bonds	Net Assets[3]	Total Assets	% of Loan, LOC & Cash[1]	CARES Act Liabilities	Net Assets	Total Net Assets
2005	326,777	45.0%	44.2%	525	329,110	412,915		55.8%	94,697	205,985	110,249	399,031	55.0%		401,648	841,006
2006	357,954	48.6%	46.8%		361,166	406,406		53.2%	93,974	197,160	113,137	378,482	51.4%		381,283	855,587
2007	385,590	50.9%	48.0%		390,828	417,310		52.0%	93,287	192,015	133,016	371,894	49.1%		374,820	898,664
2008	382,867	53.0%	47.3%		386,371	427,370		52.7%	91,808	118,955	216,910	340,046	47.0%		342,661	945,942
2009	369,431	49.6%	46.6%		373,142	423,801		53.4%	90,161	111,220	223,118	375,252	50.4%		378,265	974,526
2010	378,888	47.7%	48.4%		377,641	404,665		51.6%	87,333	95,215	216,705	414,887	52.3%		417,836	1,012,182
2011	479,526	56.3%	55.8%	14,470	462,834	380,510		44.2%	86,335	87,260	201,943	372,541	43.7%		374,750	1,039,527
2012	468,611	55.4%	53.7%	14,005	454,197	404,543		46.3%	84,698	74,510	241,879	377,416	44.6%		379,580	1,075,656
2013	435,445	45.9%	49.7%	13,525	391,902	441,089		50.3%	82,496	67,565	257,829	512,757	54.1%		515,214	1,164,945
2014	380,236	35.1%	49.2%	13,030	341,948	392,931	0.0%	50.8%	80,077	60,135	224,452	701,546	64.8%		704,362	1,270,762
2015	367,151	33.6%	47.1%	12,515	331,273	412,269	1.9%	52.9%	78,419	52,185	253,427	703,104	64.4%		705,838	1,290,538
2016	352,974	33.9%	40.4%	11,980	319,532	520,679	6.1%	59.6%	77,590	43,665	365,779	624,196	60.0%		626,458	1,311,769
2017	405,108	38.4%	44.6%	11,425	369,988	503,355	6.3%	55.4%	74,575	34,565	362,832	582,548	55.3%		584,787	1,317,607
2018	428,382	38.7%	48.4%	10,845	413,565	455,906	9.9%	51.6%	72,960	32,110	344,950	567,843	51.4%		570,129	1,328,645
2019	443,147	36.1%	48.4%	10,245	427,757	472,779	16.8%	51.6%	68,782	29,475	367,612	576,976	47.1%		579,534	1,374,903
2020	450,423	31.8%	49.1%		434,607	466,757	15.9%	50.9%	66,440		382,520	741,010	52.3%	142,994	602,345	1,419,473
2021	463,382	37.4%	49.6%		447,241	470,656	16.5%	50.4%	65,211		387,896	570,675	46.1%	816	572,331	1,407,468

1. Pro-ration factor for accrued interest receivable. Pro-rated among loan total assets, project loan & LOC assets, and cash total assets.
2. Pro-ration factor for general assets and general liabilities. Pro-rated between loan total assets and project total assets.
3. Includes accrued interest payable, pro-rata to loan and non-Snettisham project AIDEA general obligation bonds outstanding at fiscal year-end. 2021 accrued interest payable is entirely Snettisham bonds. In prior years, Snettisham accrued interest payable was not itemized. Pre-2021 accrued interest payable was entirely for loan and non-Snettisham project AIDEA general obligation bonds.

Table 15 – AIDEA Income and Expense

Table 15, below, shows AIDEA's income and expense since 1980 grouped into the loan, project, and cash categories, to the extent categorized as such in AIDEA's financial statements. It also shows other income and expenses, the most significant being interest cost on AIDEA bonds[75,76] and various income and expense items grouped under the heading of administration/overhead.

AIDEA's financial statements do not breakdown income into the loan, project, and cash categories before FY 1987. There were no AIDEA projects, or statutory authority for projects, before 1987, in any event. Even so, the financial statements did not segregate income or expense into the loan and cash categories of assets that AIDEA did hold during 1981–1986. Thus, Table 15 shows only AIDEA's total net income for the first six years after 1980.

To get to net income figures for loans, projects, and cash, the bond interest and administrative/overhead expense amounts for each year are allocated to the loan or project categories as follows:

- interest expense on all bonds — other than those for Snettisham — whose proceeds were used by AIDEA for:
    - loan participations; and,
    - projects;

  is allocated pro-rata to the sum of all non-Snettisham bonds payable at the end of the prior fiscal year;[77] and,
- administration/overhead costs, as well as the "General Non-Operating Income (Loss)" amounts, shown in Table 15, are allocated pro-rata to the sum of:
    - loan; and,
    - project

  total assets.

The non-Snettisham interest expense is the major unallocated expense item. It makes up 73.5 percent of the above expenses to be allocated to loan or project net income.

The use of bond proceeds stated in the official statements (bond prospectuses) for each of AIDEA's post-1986 bond issues is this report's basis for classification of bond liabilities or

[75] AIDEA's financial statements itemize interest on Snettisham power project bonds separately from interest on other AIDEA bonds. The Snettisham debt is payable solely from project revenues and other project funds.

[76] AIDEA's non-Snettisham bonds are GO debt of AIDEA, except for the AIDEA $103,250,000 DeLong Mountain Transportation Project Series 1987A Revenue Bonds. The 1987A bonds were payable from project revenues, but also from AIDEA revenue from $132.7 million of State loan program loans appropriated to AIDEA by the State of Alaska. Interest payable on the 1987A bonds is aggregated with interest due on AIDEA GO debt in AIDEA's financial statements.

[77] Interest costs on the DeLong Mountain Transportation Project Series 1987A Revenue Bonds during project construction were capitalized and not payable by AIDEA until fiscal year 1991, after the Red Dog mine began operations. Prior to FY 1991, interest on the bonds were paid from bond proceeds and investment earnings thereon.

interest costs as either loan or project. All pre-1987 bond issue liabilities and expense are classified as loan, because AIDEA had no projects before Red Dog in 1987.

AIDEA's financial statements do not provide interest costs by bond issue (except for its Snettisham bonds). AIDEA's or its bond trustee's accounting records should have specific interest costs by bond issue.

If the accounting work is done to attribute interest costs to specific bond issues, it would produce different income and rate of return values than those contained in this report. However, AIDEA's numerous refundings of bond issues would tend to minimize differences in interest costs over time.

Differences in specific bond issues' interest cost would also be minimized by the fact that all the non-Snettisham bonds are GO bonds of AIDEA, or close to it.[78]

[78] The first Red Dog bonds are revenue bonds, secured by project revenues, but also by revenues from $132.7 million of State loans appropriated to AIDEA and segregated in AIDEA's Economic Development Account.

TABLE 15

AIDEA
Income and Expense
($000)

	Loan			Project				Cash		Administration/Overhead						
Fiscal Year	Income	Loan Loss & OREO Expense & Loss	Operating Income	Income	Expense	Write-Offs	Operating Income	Operating Income	Non-Snettisham Interest Expense	Income	Expense	Net Income (Expense)	Total Operating Income	Project Non-Operating Income	General Non-Operating Income	Net Income
1980																
1981																16,483
1982																21,034
1983																22,577
1984																25,269
1985																29,752
1986																39,985
1987	40,459	9,029	31,429					18,071	25,713	528	1,214	(686)	23,102			23,102
1988	33,951	14,945	19,006					23,463	26,678	297	1,942	(1,645)	14,146		(12,971)	1,174
1989	28,472	10,106	18,367		175		(175)	21,427	16,066	68	1,837	(1,769)	21,783			21,783
1990	27,228	5,692	21,536		175		(175)	24,823	14,801	100	2,084	(1,984)	29,400			29,400
1991	26,788	302	26,486	11,860	175		11,685	30,156	21,280	382	2,478	(2,096)	44,951			44,951
1992	24,565	1,907	22,659	13,633	175		13,458	30,274	21,437	478	2,937	(2,459)	42,495			42,495
1993	23,789	2,951	20,838	13,549	175		13,374	26,284	20,691	446	2,806	(2,360)	37,444		(1,061)	36,383
1994	21,791	3,446	18,345	11,924	175		11,749	24,340	17,172	510	2,939	(2,429)	34,833		(2,301)	32,532
1995	22,533	3,796	18,738	12,212	175		12,037	24,749	14,966	231	3,327	(3,097)	37,461			37,461
1996	21,716	2,929	18,787	16,528	1,317		15,210	26,167	15,109	1,459	3,612	(2,153)	42,902			42,902
1997	21,714	193	21,521	16,601	4,363		12,238	27,537	14,753	980	4,642	(3,662)	42,880			42,880
1998	22,551	3,518	19,034	15,683	1,207		14,476	35,916	14,059	1,114	4,108	(2,994)	52,374		(1,089)	51,284
1999	20,512	589	19,923	23,028	5,844	150,399	(133,215)	18,895	16,447	2,631	5,093	(2,462)	(113,306)			(113,306)
2000	19,990	540	19,450	24,588	7,172		17,416	20,051	17,679	1,566	5,207	(3,641)	35,597			35,597
2001	19,151	1,429	17,722	23,486	7,255	10,419	5,812	37,909	16,738	3,030	7,436	(4,406)	40,299		(6,904)	33,395
2002	17,132	3,074	14,058	25,265	10,749	91,346	(76,830)	27,500	16,058	4,228	7,666	(3,438)	(54,768)		136	(54,632)
2003	14,990	996	13,994	27,826	13,725	1,700	12,401	31,991	13,795	4,296	6,456	(2,160)	42,431		247	42,678
2004	15,104	1,138	13,966	27,328	9,055		18,273	928	12,948	4,404	6,012	(1,608)	18,611		15	18,626

TABLE 15

AIDEA
Income and Expense
($000)

	Loan			Project				Cash		Administration/Overhead						
Fiscal Year	Income	Loan Loss & OREO Expense & Loss	Operating Income	Income	Expense	Write-Offs	Operating Income	Operating Income	Non-Snettisham Interest Expense	Income	Expense	Net Income (Expense)	Total Operating Income	Project Non-Operating Income	General Non-Operating Income	Net Income
2005	18,411	2,029	16,382	23,442	8,517		14,925	18,013	12,387	4,323	7,246	(2,923)	34,010		76	34,086
2006	21,555	221	21,334	21,659	9,506		12,153	1,903	11,882	5,255	7,796	(2,541)	20,967	(115)	223	21,075
2007	25,535	(3,508)	29,043	21,333	9,343		11,990	21,180	10,757	4,135	8,101	(3,966)	47,490	170	282	47,942
2008	25,723	(416)	26,139	21,875	10,117		11,758	20,745	9,039	5,367	9,014	(3,647)	45,956	(100)	222	46,078
2009	24,054	(228)	24,282	21,638	9,648		11,990	17,509	3,715	6,264	10,170	(3,906)	46,160	(142)	128	46,146
2010	22,901	(154)	23,055	21,153	9,981		11,172	31,900	2,787	6,496	10,970	(4,474)	58,866	448	110	59,424
2011	21,280	1,775	19,505	19,800	10,286		9,514	14,613	3,699	12,574	11,429	1,145	41,078	(74)	57	41,061
2012	22,436	(367)	22,803	18,204	10,104		8,100	19,841	3,867	9,027	13,837	(4,810)	42,067	55	58	42,180
2013	20,986	(718)	21,704	18,486	12,608		5,878	1,272	3,304	10,834	15,952	(5,118)	20,432	798	4,070	25,300
2014	19,012	(1,349)	20,361	22,759	11,468		11,291	12,261	3,056	10,937	15,895	(4,958)	35,899	(648)	15	35,266
2015	17,468	(28)	17,496	19,615	8,608		11,007	5,563	3,065	10,469	16,115	(5,646)	25,355	(381)	(8,566)	16,408
2016	15,810	(176)	15,986	30,656	21,423		9,233	20,343	2,784	10,568	16,121	(5,553)	37,225	75	36	37,336
2017	16,612	1,120	15,492	35,588	30,899		4,689	(437)	2,461	8,157	15,469	(7,312)	9,971	(206)	29	9,794
2018	16,839	797	16,042	40,050	25,768		14,282	(116)	2,160	7,560	10,498	(2,938)	25,110	(3,112)	(2,297)	19,701
2019	17,674	51	17,623	23,945	7,157	12,504	4,284	32,060	2,034	6,753	11,130	(4,377)	47,556	448	262	48,266
2020	17,458	1,551	15,907	16,218	7,244	8,599	375	39,654	1,113	15,695	20,090	(4,395)	50,428	(41)	198	50,585
2021	17,598	(1,396)	18,994	13,500	7,768	19,091	(13,359)	(1,035)		287,715	290,828	(3,113)	1,487		7	1,494
Total																
1987-2021	763,789	65,784	698,005	653,431	272,357	294,058	87,016	705,751	394,501	448,877	562,457	(113,580)	982,691	(2,825)	(29,019)	950,847
1981-2021																1,105,947

Table 16 – AIDEA Loan, Project, and Cash Net Income

Table 16, below, shows AIDEA's net income since 1980, broken down into the loan, project, and cash categories, based on the income and expense items' characterization in AIDEA's financial statements and the allocations of uncategorized items discussed above, under "Table 15 – AIDEA Income and Expense".

TABLE 16

AIDEA Net Income
Loan, Project, and Cash
($000)

	Loan					Project					Cash	
Fiscal Year	Operating Income	Total Assets (% of Loan & Project)[1]	Pro-Rata Overhead	Non-Snettisham Bond Interest	Net Income	Operating Income	Total Assets (% of Loan & Project)[1]	Pro-Rata Overhead	Non-Snettisham Bond Interest	Net Income	Net Income	Total Net Income
1980												
1981												16,483
1982												21,034
1983												22,577
1984												25,269
1985												29,752
1986												39,985
1987	31,429	96.4%	(661)	(25,713)	5,056	0	3.6%	(25)	0	(25)	18,071	23,102
1988	19,006	84.6%	(12,369)	(26,678)	(20,042)	0	15.4%	(2,247)	0	(2,247)	23,463	1,174
1989	18,367	73.9%	(1,308)	(16,066)	993	(175)	26.1%	(462)	0	(637)	21,427	21,783
1990	21,536	64.8%	(1,285)	(14,801)	5,451	(175)	35.2%	(699)	0	(874)	24,823	29,400
1991	26,486	57.6%	(1,208)	(12,468)	12,810	11,685	42.4%	(888)	(8,812)	1,985	30,156	44,951
1992	22,659	51.7%	(1,272)	(10,950)	10,437	13,458	48.3%	(1,187)	(10,487)	1,784	30,274	42,495
1993	20,838	48.7%	(1,668)	(10,065)	9,105	13,374	51.3%	(1,754)	(10,626)	993	26,284	36,383
1994	18,345	45.8%	(2,168)	(7,106)	9,071	11,749	54.2%	(2,562)	(10,066)	(880)	24,340	32,532
1995	18,738	44.4%	(1,376)	(4,938)	12,424	12,037	55.6%	(1,721)	(10,028)	288	24,749	37,461
1996	18,787	39.6%	(853)	(4,886)	13,048	15,210	60.4%	(1,300)	(10,224)	3,687	26,167	42,902
1997	21,521	34.6%	(1,269)	(4,403)	15,849	12,238	65.4%	(2,393)	(10,350)	(506)	27,537	42,880
1998	19,034	30.0%	(1,226)	(1,684)	16,124	14,476	70.0%	(2,857)	(12,375)	(756)	35,916	51,284
1999	19,923	29.0%	(713)	(1,806)	17,404	(133,215)	71.0%	(1,749)	(14,641)	(149,605)	18,895	(113,306)
2000	19,450	28.3%	(1,031)	(1,654)	16,765	17,416	71.7%	(2,610)	(16,025)	(1,219)	20,051	35,597
2001	17,722	26.4%	(2,990)	(1,376)	13,356	5,812	73.6%	(8,320)	(15,362)	(17,870)	37,909	33,395
2002	14,058	27.9%	(921)	(1,151)	11,986	(76,830)	72.1%	(2,381)	(14,907)	(94,118)	27,500	(54,632)
2003	13,994	29.4%	(563)	(759)	12,672	12,401	70.6%	(1,350)	(13,036)	(1,985)	31,991	42,678
2004	13,966	34.5%	(549)	(293)	13,123	18,273	65.5%	(1,044)	(12,655)	4,575	928	18,626

TABLE 16

AIDEA Net Income
Loan, Project, and Cash
($000)

	Loan					Project					Cash	
Fiscal Year	Operating Income	Total Assets (% of Loan & Project)[1]	Pro-Rata Overhead	Non-Snettisham Bond Interest	Net Income	Operating Income	Total Assets (% of Loan & Project)[1]	Pro-Rata Overhead	Non-Snettisham Bond Interest	Net Income	Net Income	Total Net Income
2005	16,382	44.2%	(1,258)	(111)	15,013	14,925	55.8%	(1,589)	(12,276)	1,060	18,013	34,086
2006	21,334	46.8%	(1,086)	(30)	20,218	12,153	53.2%	(1,232)	(11,852)	(1,046)	1,903	21,075
2007	29,043	48.0%	(1,769)	0	27,274	11,990	52.0%	(1,915)	(10,757)	(512)	21,180	47,942
2008	26,139	47.3%	(1,618)	0	24,521	11,758	52.7%	(1,807)	(9,039)	812	20,745	46,078
2009	24,282	46.6%	(1,760)	0	22,522	11,990	53.4%	(2,018)	(3,715)	6,115	17,509	46,146
2010	23,055	48.4%	(2,110)	0	20,945	11,172	51.6%	(2,254)	(2,787)	6,579	31,900	59,424
2011	19,505	55.8%	670	0	20,175	9,514	44.2%	532	(3,699)	6,273	14,613	41,061
2012	22,803	53.7%	(2,550)	(550)	19,703	8,100	46.3%	(2,202)	(3,317)	2,636	19,841	42,180
2013	21,704	49.7%	(521)	(523)	20,661	5,878	50.3%	(527)	(2,781)	3,367	1,272	25,300
2014	20,361	49.2%	(2,431)	(510)	17,420	11,291	50.8%	(2,512)	(2,546)	5,585	12,261	35,266
2015	17,496	47.1%	(6,695)	(546)	10,255	11,007	52.9%	(7,517)	(2,519)	590	5,563	16,408
2016	15,986	40.4%	(2,229)	(539)	13,219	9,233	59.6%	(3,288)	(2,245)	3,774	20,343	37,336
2017	15,492	44.6%	(3,248)	(530)	11,714	4,689	55.4%	(4,035)	(1,931)	(1,483)	(437)	9,794
2018	16,042	48.4%	(2,536)	(537)	12,969	14,282	51.6%	(2,699)	(1,623)	6,848	(116)	19,701
2019	17,623	48.4%	(1,991)	(514)	15,119	4,284	51.6%	(2,124)	(1,520)	1,087	32,060	48,266
2020	15,907	49.1%	(2,061)	(287)	13,559	375	50.9%	(2,136)	(826)	(2,628)	39,654	50,585
2021	18,994	49.6%	(1,541)	0	17,453	(13,359)	50.4%	(1,565)	0	(14,924)	(1,035)	1,494
Total												
1987-2021	**698,005**		**(68,160)**	**(151,472)**	**478,373**	**87,016**		**(74,440)**	**(243,029)**	**(233,278)**	**705,751**	**950,847**
1981-2021												**1,105,947**

AIDEA Economic Development Financial Performance

Table 17 – AIDEA Loan, Project, & Cash Rates of Return

Table 17, below, shows AIDEA's nominal and real rates of return on loan, project, and cash net assets, as well as on total net assets, over the last 35, 30, 20, and 10 years.

TABLE 17

AIDEA Loan, Project, & Cash Rates of Return

	Loan	Project	Cash	Total
Average of Annual Returns				
35 Years, FY 1987–2021	4.9%	(3.0%)	4.7%	3.1%
30 Years, FY 1992–2021	5.6%	(3.3%)	4.4%	2.9%
20 Years, FY 2002–2021	4.8%	(1.5%)	3.6%	2.8%
10 Years, FY 2012–2021	3.8%	0.4%	2.3%	2.3%
Compound Annual Return[1]				
35 Years, FY 1987–2021	4.6%	(2.6%)	**5.2%**	**3.1%**
30 Years, FY 1992–2021	5.8%	(2.6%)	**4.8%**	**2.9%**
20 Years, FY 2002–2021	5.0%	(1.2%)	**3.5%**	**2.8%**
10 Years, FY 2012–2021	3.9%	0.2%	**2.2%**	**2.3%**
Compound Annual Return after Inflation[2]				
35 Years, FY 1987–2021	2.4%	(4.6%)	3.0%	0.9%
30 Years, FY 1992–2021	3.6%	(4.6%)	2.6%	0.8%
20 Years, FY 2002–2021	2.9%	(3.1%)	1.4%	0.7%
10 Years, FY 2012–2021	2.4%	(1.3%)	0.7%	0.8%

1. Dollar-weighted compound rate of return, weighted by average net assets during the fiscal year.
2. Inflation measured by the Urban Alaska (Anchorage) CPI-U in Table 11.

Three different measures of rate of return are shown in the table:

- average of annual returns – this is the arithmetic average of the annual returns for each period;

- compound annual return – this rate would produce the same present value for:

    - the loan, project, or cash net income stream, estimated in Table 16, earned over the respective 35, 30, 20, or 10-year periods; as for

    - the stream of net income earned over the same period, at this compound annual return rate applied to the average loan, project, or cash net assets held by AIDEA at the beginning and end of each year,

  This is the earnings rate that would make one indifferent between holding, and investing at that rate, the amount of net assets, estimated in Table 14, for a loan, project, or cash category, versus simply receiving AIDEA's stream of net income from that asset category over the period in question, as estimated in Table 16.

- compound annual return after inflation – this is the compound annual return, net of inflation. This is also called the real rate of return. Inflation is calculated in Table 11, based on the U.S. Bureau of Labor Statistics, Consumer Price Index (CPI) for Urban Alaska (formerly the Municipality of Anchorage CPI).

Chart C, below, provides a graphic comparison of AIDEA's loan, project, and cash annual rates of return, unadjusted for inflation. The unadjusted rates are also called the nominal rates of return. Chart D compares AIDEA's real rates of return for just the loan and project asset segments, to highlight the performance of these two broad mechanisms of economic development.

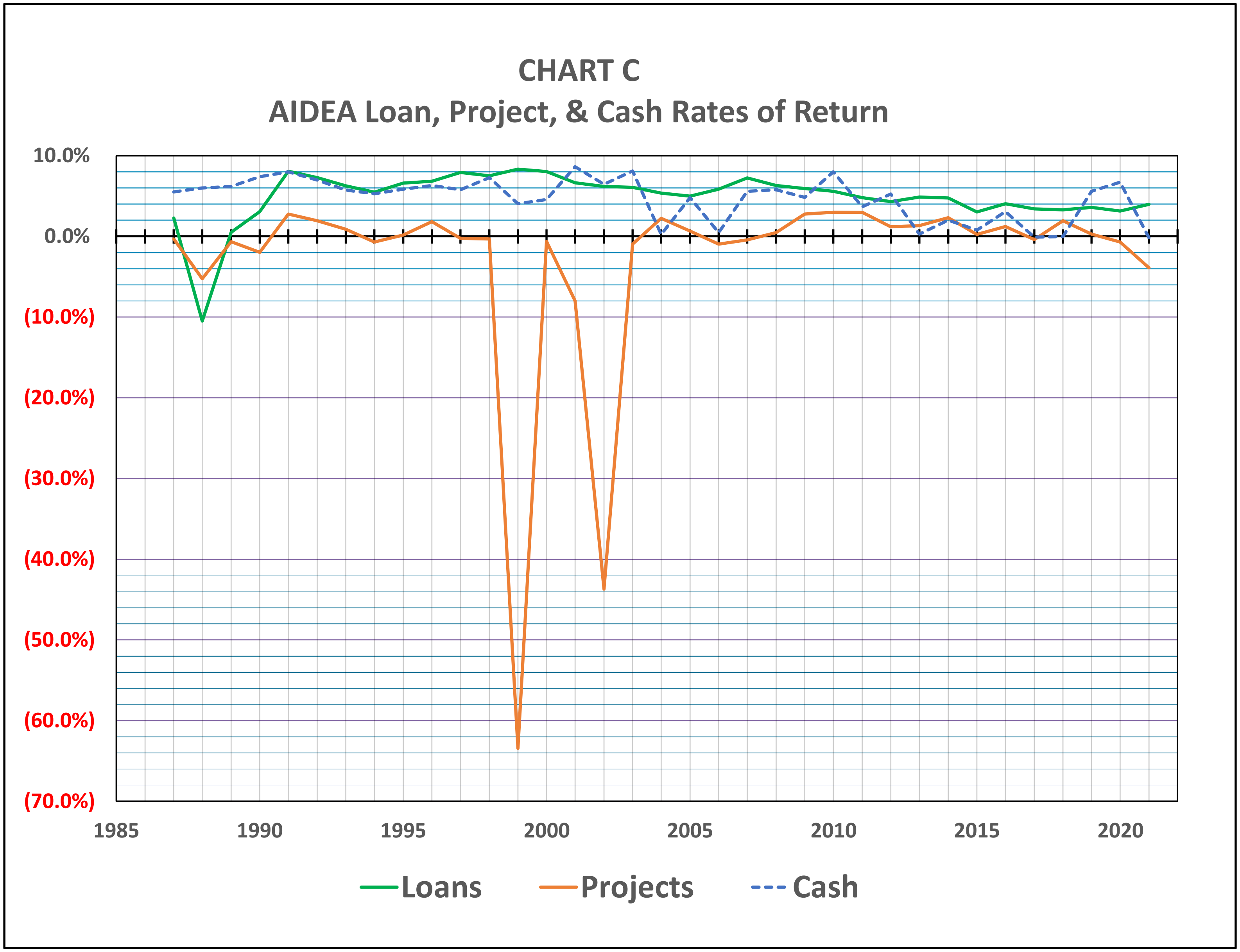


CHART C
AIDEA Loan, Project, & Cash Rates of Return
10.0%
0.0%
(10.0%)
(20.0%)
(30.0%)
(40.0%)
(50.0%)
(60.0%)
(70.0%)
1985
1990
1995
2000
2005
2010
2015
2020
Loans
Projects
Cash


CHART D
AIDEA Loan & Project Real Rates of Return
10.0%
0.0%
(10.0%)
(20.0%)
(30.0%)
(40.0%)
(50.0%)
(60.0%)
(70.0%)
1985
1990
1995
2000
2005
2010
2015
2020
Loans
Projects

Table 18 – AIDEA Loan, Project, & Cash Rates of Return by Fiscal Year

Table 18, below, shows AIDEA's nominal and real rates of return on loan, project, and cash net assets, by fiscal year.

For FY 1987–1989, prior to the start of operations of AIDEA's first project, the DeLong Mountain Transportation System, project rates of return are calculated on average total assets, rather than average net assets. Average project net assets were negative until 1990 because bond proceeds not yet spent on the DeLong Mountain project were accounted for as cash, not projects, in AIDEA's financial statements.

Table 18 indicates that, during the years 1987–1990, rates of return on AIDEA loans were below the Authority's cost of funds as represented by the rates of return AIDEA could and did earn on cash. These were years of high delinquencies, defaults, and foreclosures on Alaska loans. They followed an unsustainable real estate construction boom earlier in the eighties, fueled by large government capital spending of surplus oil revenues. The bust — and AIDEA loan losses — followed the boom, like night follows day.

Since then, as Chart C shows, one can see that loan returns (the green line) have mostly been above AIDEA's cost of funds, i.e., AIDEA's cash returns (the hashed blue line). However, loan returns have fallen, sporadically, below AIDEA's cash returns, up to the present day.

By contrast, AIDEA project returns (the orange line in Chart C) have exceeded cash returns (the hashed blue line) only four times in the 35 years since AIDEA's first project was undertaken. Even more concerning is the fact that AIDEA project returns have been negative — on a nominal basis, for all but the most recent 10-year average, as shown in Table 17. Table 17 shows real project average returns have been negative over all periods measured. Table 18 shows negative real rates of return for projects in all but five fiscal years out of 35.

Table 18 also reveals deterioration in the average nominal and real rates of return for loans investment over time. The downward trend is somewhat evident in Charts C and D, as well.

Table 17 seems to show improvement over time in average rates of return for projects, but examination of Charts C and D suggest that this is an artifact of two large project losses shortly before and after FY 2000 falling out of the longer-term averages. First, a 1999 $150 million write-down on the Healy Clean Coal project fell out the 20-year project average return. Then in 2002, a further Healy write-down and an Alaska Seafood International write-down, together totaling $91.3 million, fell out of the 10-year average. No strong trend in project returns appears to be discernable in Charts C and D.

TABLE 18

AIDEA Loan, Project, & Cash Annual Rates of Return

Fiscal	Nominal Rates				Real Rates			
Year	Loan	Project	Cash	Total	Loan	Project	Cash	Total
1980								
1981				16.7%				7.0%
1982				9.9%				3.0%
1983				9.5%				5.7%
1984				9.7%				6.5%
1985				10.3%				7.0%
1986				10.1%				6.7%
1987	2.3%	(0.3%)	5.5%	4.6%	2.1%	(0.5%)	5.3%	4.3%
1988	(10.5%)	(5.3%)	6.0%	0.2%	(10.8%)	(5.6%)	5.6%	(0.1%)
1989	0.5%	(0.7%)	6.2%	4.1%	(1.0%)	(2.1%)	4.6%	2.5%
1990	3.1%	(2.0%)	7.4%	5.3%	(1.2%)	(6.1%)	2.9%	0.9%
1991	8.1%	2.8%	8.0%	7.4%	1.7%	(3.3%)	1.7%	1.1%
1992	7.3%	1.9%	7.0%	6.4%	3.8%	(1.4%)	3.5%	2.9%
1993	6.3%	0.9%	5.7%	5.1%	2.8%	(2.4%)	2.2%	1.6%
1994	5.5%	(0.7%)	5.3%	4.3%	2.9%	(3.1%)	2.7%	1.8%
1995	6.6%	0.2%	5.9%	4.8%	3.9%	(2.3%)	3.2%	2.2%
1996	6.8%	1.8%	6.3%	5.3%	4.1%	(0.8%)	3.6%	2.6%
1997	7.9%	(0.2%)	5.8%	4.9%	5.5%	(2.5%)	3.4%	2.5%
1998	7.5%	(0.3%)	7.3%	5.4%	5.9%	(1.8%)	5.7%	3.9%
1999	8.3%	(63.4%)	4.1%	(12.4%)	7.0%	(63.9%)	2.8%	(13.5%)
2000	8.1%	(0.6%)	4.6%	4.2%	7.1%	(1.5%)	3.6%	3.2%
2001	6.7%	(8.0%)	8.6%	3.9%	3.9%	(10.4%)	5.8%	1.2%
2002	6.2%	(43.7%)	6.5%	(6.5%)	3.7%	(45.0%)	4.0%	(8.7%)
2003	6.1%	(0.9%)	8.1%	5.3%	3.9%	(3.0%)	5.9%	3.1%
2004	5.4%	2.2%	0.2%	2.3%	2.4%	(0.7%)	(2.6%)	(0.7%)
2005	5.0%	0.7%	4.8%	4.1%	2.5%	(1.7%)	2.3%	1.7%
2006	5.9%	(0.9%)	0.5%	2.5%	1.8%	(4.7%)	(3.4%)	(1.4%)
2007	7.3%	(0.4%)	5.6%	5.5%	5.3%	(2.2%)	3.7%	3.5%
2008	6.3%	0.5%	5.8%	5.0%	2.5%	(3.2%)	1.9%	1.2%
2009	5.9%	2.8%	4.9%	4.8%	3.0%	(0.1%)	1.9%	1.9%
2010	5.6%	3.0%	8.0%	6.0%	3.7%	1.2%	6.1%	4.1%
2011	4.8%	3.0%	3.7%	4.0%	2.8%	1.1%	1.7%	2.0%
2012	4.3%	1.2%	5.3%	4.0%	1.2%	(1.8%)	2.1%	0.9%
2013	4.9%	1.3%	0.3%	2.3%	2.5%	(1.0%)	(2.0%)	(0.1%)
2014	4.7%	2.3%	2.0%	2.9%	2.0%	(0.4%)	(0.7%)	0.2%
2015	3.0%	0.2%	0.8%	1.3%	1.8%	(1.0%)	(0.4%)	0.1%
2016	4.1%	1.2%	3.1%	2.9%	4.1%	1.3%	3.1%	2.9%
2017	3.4%	(0.4%)	(0.1%)	0.7%	2.6%	(1.2%)	(0.9%)	(0.1%)
2018	3.3%	1.9%	(0.0%)	1.5%	2.2%	0.8%	(1.1%)	0.4%
2019	3.6%	0.3%	5.6%	3.6%	0.3%	(2.9%)	2.2%	0.3%
2020	3.1%	(0.7%)	6.7%	3.6%	3.9%	0.0%	7.5%	4.4%
2021	4.0%	(3.9%)	(0.2%)	0.1%	2.5%	(5.2%)	(1.6%)	(1.3%)
Average (arithmetic)								
1981-2021				4.3%				1.6%
1987-2021	4.9%	(3.0%)	4.7%	3.1%	2.6%	(5.1%)	2.5%	0.9%

Table 19 – AIDEA Loan, Project, & Cash Net Income Proportions

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 — its investment assets of cash and marketable securities. Barely 25 percent of AIDEA's net earnings has flowed from its twin economic development engines — loans and projects. See Table 19, below.

TABLE 19

AIDEA Net Income Proportions
Loan, Project, and Cash
($000)

Fiscal Year	Net Income Loan	Net Income Project	Net Income Cash	Net Income Total	Proportion Loan	Proportion Project	Proportion Cash	Proportion Total
1980	0	0	0	0				
1981	0	0	0	16,483	0.0%	0.0%	0.0%	100.0%
1982	0	0	0	21,034	0.0%	0.0%	0.0%	100.0%
1983	0	0	0	22,577	0.0%	0.0%	0.0%	100.0%
1984	0	0	0	25,269	0.0%	0.0%	0.0%	100.0%
1985	0	0	0	29,752	0.0%	0.0%	0.0%	100.0%
1986	0	0	0	39,985	0.0%	0.0%	0.0%	100.0%
1987	5,056	(25)	18,071	23,102	21.9%	(0.1%)	78.2%	100.0%
1988	(20,042)	(2,247)	23,463	1,174	(1706.6%)	(191.4%)	1998.0%	100.0%
1989	993	(637)	21,427	21,783	4.6%	(2.9%)	98.4%	100.0%
1990	5,451	(874)	24,823	29,400	18.5%	(3.0%)	84.4%	100.0%
1991	12,810	1,985	30,156	44,951	28.5%	4.4%	67.1%	100.0%
1992	10,437	1,784	30,274	42,495	24.6%	4.2%	71.2%	100.0%
1993	9,105	993	26,284	36,383	25.0%	2.7%	72.2%	100.0%
1994	9,071	(880)	24,340	32,532	27.9%	(2.7%)	74.8%	100.0%
1995	12,424	288	24,749	37,461	33.2%	0.8%	66.1%	100.0%
1996	13,048	3,687	26,167	42,902	30.4%	8.6%	61.0%	100.0%
1997	15,849	(506)	27,537	42,880	37.0%	(1.2%)	64.2%	100.0%
1998	16,124	(756)	35,916	51,284	31.4%	(1.5%)	70.0%	100.0%
1999	17,404	(149,605)	18,895	(113,306)	(15.4%)	132.0%	(16.7%)	100.0%
2000	16,765	(1,219)	20,051	35,597	47.1%	(3.4%)	56.3%	100.0%
2001	13,356	(17,870)	37,909	33,395	40.0%	(53.5%)	113.5%	100.0%
2002	11,986	(94,118)	27,500	(54,632)	(21.9%)	172.3%	(50.3%)	100.0%
2003	12,672	(1,985)	31,991	42,678	29.7%	(4.7%)	75.0%	100.0%
2004	13,123	4,575	928	18,626	70.5%	24.6%	5.0%	100.0%

TABLE 19

AIDEA Net Income Proportions
Loan, Project, and Cash
($000)

Fiscal Year	Net Income Loan	Net Income Project	Net Income Cash	Net Income Total	Proportion Loan	Proportion Project	Proportion Cash	Proportion Total
2005	15,013	1,060	18,013	34,086	44.0%	3.1%	52.8%	100.0%
2006	20,218	(1,046)	1,903	21,075	95.9%	(5.0%)	9.0%	100.0%
2007	27,274	(512)	21,180	47,942	56.9%	(1.1%)	44.2%	100.0%
2008	24,521	812	20,745	46,078	53.2%	1.8%	45.0%	100.0%
2009	22,522	6,115	17,509	46,146	48.8%	13.3%	37.9%	100.0%
2010	20,945	6,579	31,900	59,424	35.2%	11.1%	53.7%	100.0%
2011	20,175	6,273	14,613	41,061	49.1%	15.3%	35.6%	100.0%
2012	19,703	2,636	19,841	42,180	46.7%	6.3%	47.0%	100.0%
2013	20,661	3,367	1,272	25,300	81.7%	13.3%	5.0%	100.0%
2014	17,420	5,585	12,261	35,266	49.4%	15.8%	34.8%	100.0%
2015	10,255	590	5,563	16,408	62.5%	3.6%	33.9%	100.0%
2016	13,219	3,774	20,343	37,336	35.4%	10.1%	54.5%	100.0%
2017	11,714	(1,483)	(437)	9,794	119.6%	(15.1%)	(4.5%)	100.0%
2018	12,969	6,848	(116)	19,701	65.8%	34.8%	(0.6%)	100.0%
2019	15,119	1,087	32,060	48,266	31.3%	2.3%	66.4%	100.0%
2020	13,559	(2,628)	39,654	50,585	26.8%	(5.2%)	78.4%	100.0%
2021	17,453	(14,924)	(1,035)	1,494	1168.2%	(998.9%)	(69.3%)	100.0%
Total								
1987-2021	**478,373**	**(233,278)**	**705,751**	**950,847**	**50.3%**	**(24.5%)**	**74.2%**	100.0%
1981-2021				1,105,947				

If loans were AIDEA's only economic development tool, their 35 years of net income from 1987 on — $478.4 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. Thus, economic development, i.e., loans and projects, contributed only 25.8 percent of AIDEA's total net income of $950.8 million over the last 35 years. See Table 19.

Economic development's 25 percent contribution to AIDEA's net income suggests that AIDEA has been sitting on too much of its wealth, that it's financing terms are too generous, or that it has picked poor loans or projects to invest in.

AIDEA's Cash

AIDEA currently holds more than half a billion dollars in cash and marketable securities. While the cash gives AIDEA significant financial strength, it comes with real costs. The

- fixed income nature of the cash and securities;
- their short maturities; and,
- their safe credit ratings

limit the rates of return on AIDEA's cash assets. On average over 1981–2021, AIDEA held almost half —48.6 percent — of its net assets as cash, creating a significant part of AIDEA's opportunity costs, compared to the Alaska Permanent Fund. See Table 21.

AIDEA's large cash holdings — $572.3 million in cash, as of June 30, 2021, 40.7 percent of AIDEA's net assets[79] — serve a number of purposes:

- as reserve funds and other security for specific AIDEA bond issues, it can lower interest rates on, or enables issuance of, specific AIDEA bonds;
- as a highly liquid reservoir of financial strength, it boosts AIDEA's credit ratings and lowers interest rates across the board on its GO debt;
- it provides ready cash to fund:
    - new loans and projects;
    - repairs, replacements, or expansion of existing projects; and,
    - dividends to the State;
- in the past, it has contributed to fulfilling Enterprise Development Account Bond Resolution and Revolving Fund Bond Resolution covenants that require:
    - no GO bond issuance unless estimated net income would be at least 150 percent of all GO debt service in each year bonds would be outstanding; and,

  depending on the amount of GO debt outstanding,

    - AIDEA's net assets to be between $100 million and $200 million; and,
    - AIDEA's cash equivalents to be up to $50 million,

[79] See Tables 20 and 21.

AIDEA generally has had no problems complying with bond covenants. The "Revolving Fund Debt Service Coverage" table, below, is from the Official Statement for AIDEA's most recent bond issue, the Revolving Fund Bonds, Series 2010B, for the Goose Creek Corrections Center wastewater facility loan participation.

The table shows debt service coverage, in the next to last column, was projected to be far above the 1.5 times (150 percent) required by the first bond covenant above. This indicated substantial capacity to issue new debt.

The most recent debt service coverage calculation is from AIDEA's June 30, 2018 financial statements, showing Revolving Fund debt service coverage to be 28.46 times the $5,387,000 debt service due in FY 2018.

All Revolving Fund GO bonds have since been defeased, rendering bond covenants ineffective until new Revolving Fund bonds are issued. AIDEA defeased all outstanding Revolving Fund GO bonds on October 1, 2019, by placing sufficient funds with an escrow agent to pay all debt service due on the bonds until their call dates, as well as the principal redemption amounts required to call the bonds.

REVOLVING FUND
PROJECTED DEBT SERVICE COVERAGE
(Dollars in Thousands)

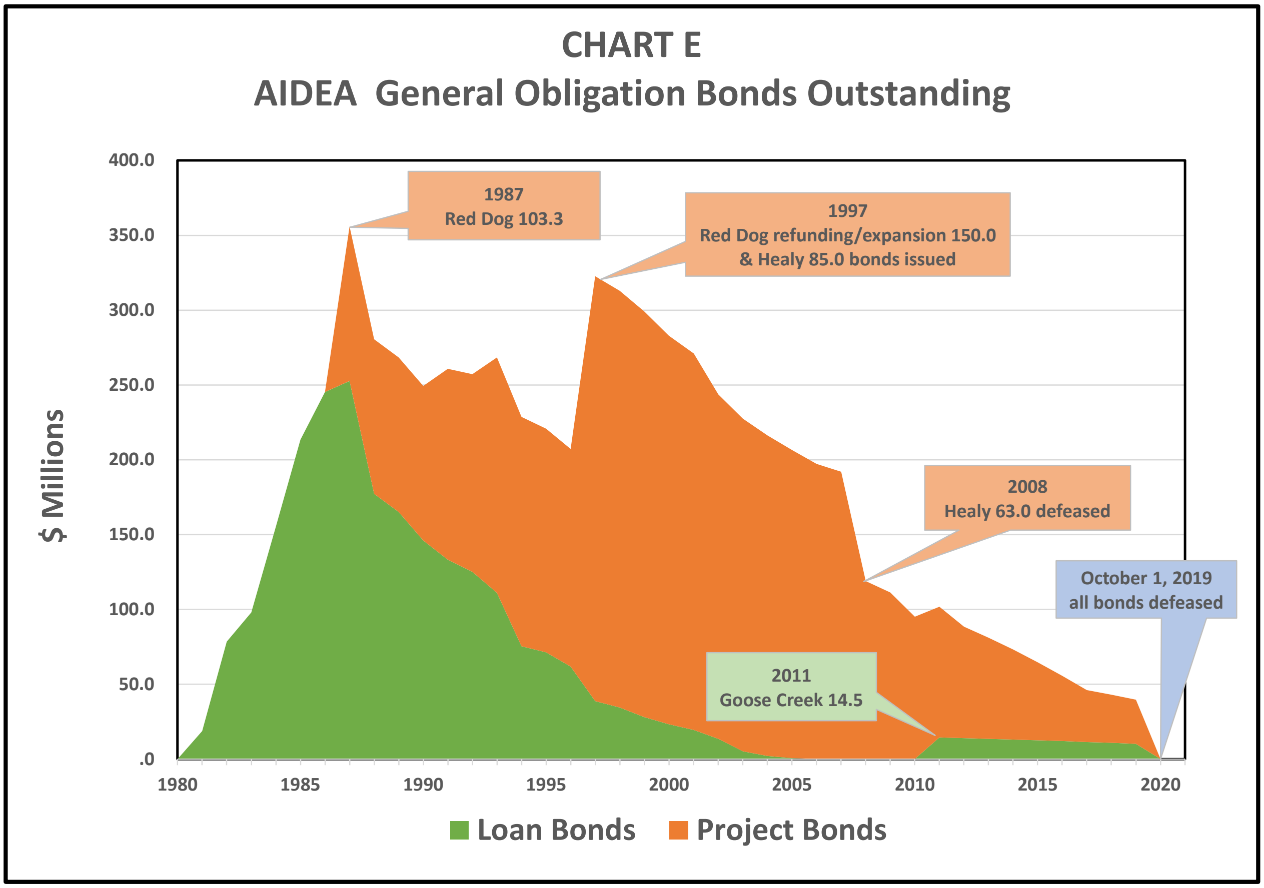
Year Ended 06/30	Revenues from Loans (1)	Revenues from Development Projects (2)	Revenues from Investments (3)	Amortization of Investments (4)	Expenses (5)	Net Income	Debt Service Requirements			Debt Service Coverage	Computed Maximum Dividend at 50 percent (8)
							Existing (6)	The Bonds (7)	Total (7)		
2011	$ 39,634	$ 30,189	$ 14,144	$ 15,764	$ (5,057)	$ 94,674	$ 12,768	-	$ 12,768	7.41	$ 29,400
2012	38,912	25,326	15,614	15,764	(5,209)	90,407	12,891	$ 820	13,711	6.59	20,360
2013	39,423	24,505	17,236	15,764	(5,365)	91,563	12,997	1,176	14,173	6.46	18,271
2014	39,396	24,464	18,971	15,764	(5,526)	93,069	13,126	1,174	14,300	6.51	18,210
2015	39,468	22,287	20,762	15,764	(5,692)	92,589	10,985	1,174	12,159	7.61	17,580
2016	59,673	19,163	22,646	15,764	(5,862)	111,384	11,158	1,174	12,332	9.03	17,476
2017	37,804	17,955	25,278	15,764	(6,038)	90,763	11,312	1,172	12,484	7.27	17,468
2018	37,283	17,955	27,080	15,764	(6,219)	91,863	4,212	1,175	5,387	17.05	17,543
2019	35,372	17,955	29,207	15,764	(6,406)	91,892	4,269	1,172	5,441	16.89	17,542
2020	34,500	18,502	31,333	15,764	(6,598)	93,501	4,332	1,177	5,509	16.97	17,564
2021	33,705	17,887	33,519	15,764	(6,796)	94,079	4,396	1,175	5,571	16.89	17,577
2022	32,233	15,542	35,726	15,764	(7,000)	92,265	4,466	1,172	5,638	16.36	17,535
2023	30,922	15,542	37,859	15,764	(7,210)	92,877	4,540	1,174	5,714	16.25	17,501
2024	27,597	15,542	40,015	15,764	(7,426)	91,492	4,626	1,173	5,799	15.78	17,496
2025	24,670	15,667	42,112	15,764	(7,649)	90,564	4,702	1,175	5,877	15.41	18,326
2026	22,214	15,414	44,136	15,764	(7,879)	89,649	4,789	1,175	5,964	15.03	24,399
2027	21,408	15,129	45,877	15,764	(8,115)	90,063	4,889	1,173	6,062	14.86	24,456
2028	18,030	15,129	47,628	15,764	(8,358)	88,193	-	1,176	1,176	74.99	24,626
2029	14,852	15,129	49,493	15,764	(8,609)	86,629	-	1,176	1,176	73.66	24,906
2030	11,477	15,187	51,285	15,764	(8,867)	84,846	-	1,173	1,173	72.33	25,238
2031	7,974	9,210	52,991	15,764	(9,134)	76,805	-	1,173	1,173	65.48	25,617

(1) Revenues from loan participations are net of all fees and expenses and exclude revenues from loans delinquent more than 90 days.
(2) Revenues from existing Authority development projects. Assumes minimum annual assessment from the DMTS continues uninterrupted even though revenue stream is subject to force majeure events. Includes projection for future DMTS tonnage sensitive payments and zinc price escalator. Includes $3 million estimated annual cost of maintaining Healy Project in mothball status and includes no revenues from the Healy Project.
(3) Revenues from investments computed at an assumed rate of 4% compounded annually; includes income from certain restricted investments.
(4) The Revolving Fund Bond Resolution directs the Authority to calculate a level amortization of the net book value of Unrestricted Investment Securities and to add such amortization amounts to net revenues to arrive at covenant coverage.
(5) Expenses include operating costs estimated at the Authority's fiscal year 2011 budget level as a base, with a 3% increase each year thereafter.
(6) Debt service requirement for bonds outstanding at June 30, 2010.
(7) Amounts do not include capitalized interest to be paid from Bond proceeds.
(8) These projections assume the Authority will transfer to the State the maximum dividend as defined by the Act, based upon projected GAAP-based results projected on the same basis as cash flows, which is presumed to affect debt service coverage in future years. Dividend indicated will be paid during the next fiscal year (i.e., the Board authorized $29.4 million dividend shown for year ended June 30, 2011 will be paid in fiscal year 2012). The Authority is paying a $23.4 million dividend during fiscal year 2011.

Source: Alaska Industrial Development and Export Authority.

Debt-Free AIDEA

On October 1, 2019, AIDEA defeased all outstanding GO debt. See Chart E, below. Note again that the $103,250,000 DeLong Mountain Transportation Project Series 1987A bonds (Red Dog) were technically revenue bonds.[80] In any event, the DeLong 1987A Revenue Bonds were defeased with part of the proceeds from AIDEA's $150 million Series 1997A Revolving Fund Bonds, which were AIDEA GO bonds.



Early in 2019, Governor Dunleavy had proposed transferring funds from AIDEA to the State to fund $254 million in State purchases of oil tax credits in the State's FY 2020 budget.

Then,

> "Rep. Andy Josephson, D-Anchorage, took the governor's proposal and offered an amendment to the budget in the House Finance Committee using the same mechanism.

[80] The 1987A bonds are payable from project revenues, but also from AIDEA revenue from $132.7 million of State loan program loans appropriated to AIDEA by the State of Alaska.

> Josephson proposed spending $70 million in AIDEA receipts to pay down the state's debt obligations…
>
> After debate, Josephson's amendment was approved and became part of the budget passed by the House of Representatives."[81]

Neither of these draws from AIDEA were enacted in the final FY 2020 budget. Nevertheless, the events spooked AIDEA's credit rating agencies — Moody's Investor Services (Moody's) and Standard and Poor's (S&P). Is AIDEA an independent state corporation? Or, is its capital just another rainy day savings account for the State? Are its economic development decisions also beholden to political winds? Are they sound?

In July 2019, Moody's downgraded all AIDEA outstanding GO debt "Despite very high debt-service coverage and large amounts of liquidity relative to debt currently outstanding…" S&P initiated a rating review of AIDEA's GO debt."[82]

AIDEA's response was to defease all its GO outstanding debt. This forestalled a downgrade by S&P and put AIDEA in better credit standing, if it returned to the bond market.

An ancillary effect of the defeasance was to eliminate the restrictions imposed by bond covenants on AIDEA's finances. In theory, it would free the State to reappropriate all assets of AIDEA, except for cash pledged to AIDEA's Snettisham bonds, to the State, the Permanent Fund, or other entities.

That being the case, it might seem that defeasance presents a rare window of opportunity for such action, before new AIDEA bond issues resuscitate bond covenant restrictions. AIDEA is currently authorized to issue up to $485 million for various projects.

However, it should be kept in mind that, if AIDEA issues new bonds, it is always possible to return AIDEA to a bond covenant-free status with a new defeasance. At least, it's possible if cash assets remain substantial in comparison to the amount of debt outstanding.

---

[81] "Alaska's public investment fund tapped to pay state's oil tax debt obligations in FY2020 budget", Sean Maguire, KTUU, April 18, 2019, at https://www.alaskasnewssource.com/content/news/Alaskas-public-investment-fund-tapped-to-pay-states-debt-obligations-508787541.html.

[82] 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.

AIDEA Asset Allocation

Table 20 – AIDEA Net Assets with & without Project Write-Offs

Table 20, below, shows AIDEA's net asset totals for loans, projects, and cash, both with and without project write-offs. Inclusion of cumulative project write-offs in project and total AIDEA net assets gives a better look at AIDEA's attempted allocation of assets between the three asset classes. It shows what project and total net assets would have been in each year if all projects had been successful.

Table 20 shows that because of the write-offs, projects are the smallest asset class in 2021. But, if no write-offs had occurred, project net assets in 2021 would be the largest class.

TABLE 20

AIDEA Net Assets
with & without Project Write-Offs
($000)

Fiscal Year	Loan	Project with Write-Offs	Project Cumulative Write-Offs	Project without Write-Offs	Cash	Total Net Assets with Write-Offs	Total Net Assets without Write-Offs
1980					158	158	158
1981	146,833				50,397	197,230	197,230
1982	143,355				82,909	226,263	226,263
1983	159,576				89,264	248,840	248,840
1984	171,969				102,809	274,778	274,778
1985	162,242				142,832	305,074	305,074
1986	256,367				232,204	488,571	488,571
1987	183,784	(86,798)		(86,798)	422,687	519,673	519,673
1988	198,242	(35,009)		(35,009)	357,614	520,847	520,847
1989	186,121	20,973		20,973	335,536	542,630	542,630
1990	168,298	67,867		67,867	335,865	572,029	572,029
1991	148,754	75,906		75,906	419,142	643,802	643,802
1992	137,044	109,113		109,113	447,022	693,180	693,180
1993	152,937	116,246		116,246	468,903	738,085	738,085
1994	179,124	143,210		143,210	453,154	775,487	775,487
1995	197,441	181,618		181,618	392,077	771,136	771,136
1996	184,606	224,574		224,574	436,207	845,386	845,386
1997	215,348	186,943		186,943	513,899	916,190	916,190
1998	213,697	290,155		290,155	472,030	975,883	975,883
1999	204,423	181,587	150,399	331,986	460,567	846,577	996,976
2000	212,107	226,836	150,399	377,235	417,231	856,174	1,006,573
2001	189,172	219,728	160,818	380,546	462,169	871,069	1,031,887
2002	198,329	211,186	252,164	463,350	390,074	799,589	1,051,753
2003	217,533	207,645	253,864	461,509	397,051	822,229	1,076,093
2004	271,632	202,754	253,864	456,618	348,500	822,886	1,076,750
2005	329,110	110,249	253,864	364,113	401,648	841,006	1,094,870
2006	361,166	113,137	253,864	367,001	381,283	855,587	1,109,451
2007	390,828	133,016	253,864	386,880	374,820	898,664	1,152,528
2008	386,371	216,910	253,864	470,774	342,661	945,942	1,199,806
2009	373,142	223,118	253,864	476,982	378,265	974,526	1,228,390
2010	377,641	216,705	253,864	470,569	417,836	1,012,182	1,266,046
2011	462,834	201,943	253,864	455,807	374,750	1,039,527	1,293,391
2012	454,197	241,879	253,864	495,743	379,580	1,075,656	1,329,520
2013	391,902	257,829	253,864	511,693	515,214	1,164,945	1,418,809
2014	341,948	224,452	253,864	478,316	704,362	1,270,762	1,524,626
2015	331,273	253,427	253,864	507,291	705,838	1,290,538	1,544,402
2016	319,532	365,779	253,864	619,643	626,458	1,311,769	1,565,633
2017	369,988	362,832	253,864	616,696	584,787	1,317,607	1,571,471
2018	413,565	344,950	253,864	598,814	570,129	1,328,645	1,582,509
2019	427,757	367,612	266,368	633,980	579,534	1,374,903	1,641,271
2020	434,607	382,520	274,967	657,487	602,345	1,419,473	1,694,440
2021	447,241	387,896	294,058	681,954	572,331	1,407,468	1,701,526

Chart F, below, shows graphically how cash, loans, and projects with and without write-offs would have stacked up in dollars.

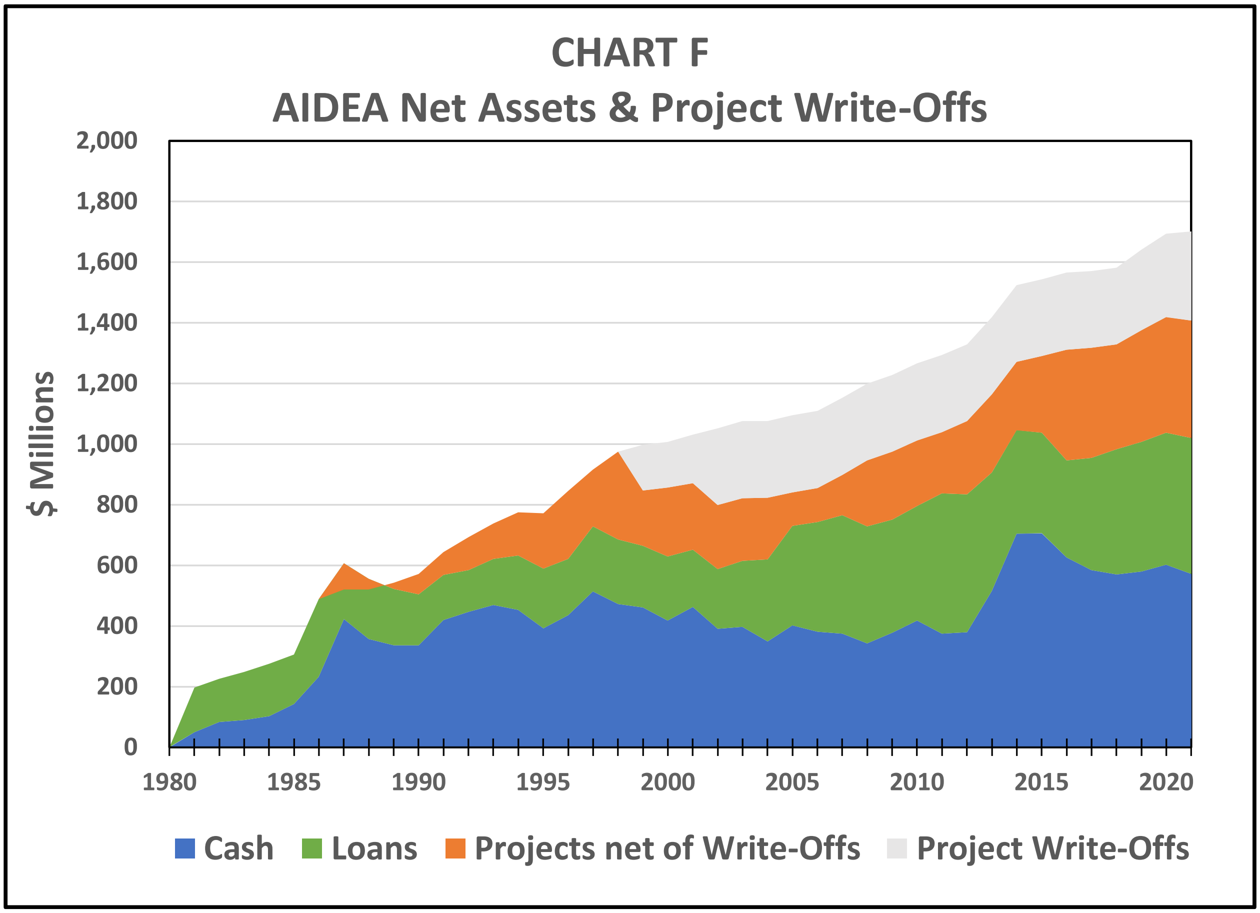


Table 21 – AIDEA Net Asset Proportions with & without Project Write-Offs

Table 21, below, shows loan, project, and cash proportions of total net assets, both with and without project write-offs. Charts G and H, following, show the proportions, with and without write-offs, in graphical terms.

Table 21 and Charts G and H show again, that in 2021, projects are the smallest asset class, but would be the largest, if no write-offs had occurred.

TABLE 21

AIDEA Net Asset Proportions
with & without Project Write-Offs

Fiscal	with Project Write-Offs				without Project Write-Offs			
Year	Loan	Project	Cash	Total	Loan	Project	Cash	Total
1980			100.0%	100.0%			100.0%	100.0%
1981	74.4%		25.6%	100.0%	74.4%		25.6%	100.0%
1982	63.4%		36.6%	100.0%	63.4%		36.6%	100.0%
1983	64.1%		35.9%	100.0%	64.1%		35.9%	100.0%
1984	62.6%		37.4%	100.0%	62.6%		37.4%	100.0%
1985	53.2%		46.8%	100.0%	53.2%		46.8%	100.0%
1986	52.5%		47.5%	100.0%	52.5%		47.5%	100.0%
1987	35.4%	(16.7%)	81.3%	100.0%	35.4%	(16.7%)	81.3%	100.0%
1988	38.1%	(6.7%)	68.7%	100.0%	38.1%	(6.7%)	68.7%	100.0%
1989	34.3%	3.9%	61.8%	100.0%	34.3%	3.9%	61.8%	100.0%
1990	29.4%	11.9%	58.7%	100.0%	29.4%	11.9%	58.7%	100.0%
1991	23.1%	11.8%	65.1%	100.0%	23.1%	11.8%	65.1%	100.0%
1992	19.8%	15.7%	64.5%	100.0%	19.8%	15.7%	64.5%	100.0%
1993	20.7%	15.7%	63.5%	100.0%	20.7%	15.7%	63.5%	100.0%
1994	23.1%	18.5%	58.4%	100.0%	23.1%	18.5%	58.4%	100.0%
1995	25.6%	23.6%	50.8%	100.0%	25.6%	23.6%	50.8%	100.0%
1996	21.8%	26.6%	51.6%	100.0%	21.8%	26.6%	51.6%	100.0%
1997	23.5%	20.4%	56.1%	100.0%	23.5%	20.4%	56.1%	100.0%
1998	21.9%	29.7%	48.4%	100.0%	21.9%	29.7%	48.4%	100.0%
1999	24.1%	21.4%	54.4%	100.0%	20.5%	33.3%	46.2%	100.0%
2000	24.8%	26.5%	48.7%	100.0%	21.1%	37.5%	41.5%	100.0%
2001	21.7%	25.2%	53.1%	100.0%	18.3%	36.9%	44.8%	100.0%
2002	24.8%	26.4%	48.8%	100.0%	18.9%	44.1%	37.1%	100.0%
2003	26.5%	25.3%	48.3%	100.0%	20.2%	42.9%	36.9%	100.0%
2004	33.0%	24.6%	42.4%	100.0%	25.2%	42.4%	32.4%	100.0%
2005	39.1%	13.1%	47.8%	100.0%	30.1%	33.3%	36.7%	100.0%
2006	42.2%	13.2%	44.6%	100.0%	32.6%	33.1%	34.4%	100.0%
2007	43.5%	14.8%	41.7%	100.0%	33.9%	33.6%	32.5%	100.0%
2008	40.8%	22.9%	36.2%	100.0%	32.2%	39.2%	28.6%	100.0%
2009	38.3%	22.9%	38.8%	100.0%	30.4%	38.8%	30.8%	100.0%
2010	37.3%	21.4%	41.3%	100.0%	29.8%	37.2%	33.0%	100.0%
2011	44.5%	19.4%	36.1%	100.0%	35.8%	35.2%	29.0%	100.0%
2012	42.2%	22.5%	35.3%	100.0%	34.2%	37.3%	28.6%	100.0%
2013	33.6%	22.1%	44.2%	100.0%	27.6%	36.1%	36.3%	100.0%
2014	26.9%	17.7%	55.4%	100.0%	22.4%	31.4%	46.2%	100.0%
2015	25.7%	19.6%	54.7%	100.0%	21.4%	32.8%	45.7%	100.0%
2016	24.4%	27.9%	47.8%	100.0%	20.4%	39.6%	40.0%	100.0%
2017	28.1%	27.5%	44.4%	100.0%	23.5%	39.2%	37.2%	100.0%
2018	31.1%	26.0%	42.9%	100.0%	26.1%	37.8%	36.0%	100.0%
2019	31.1%	26.7%	42.2%	100.0%	26.1%	38.6%	35.3%	100.0%
2020	30.6%	26.9%	42.4%	100.0%	25.6%	38.8%	35.5%	100.0%
2021	31.8%	27.6%	40.7%	100.0%	26.3%	40.1%	33.6%	100.0%
Average	35.0%	16.5%	48.6%	100.0%	31.5%	24.7%	43.8%	100.0%

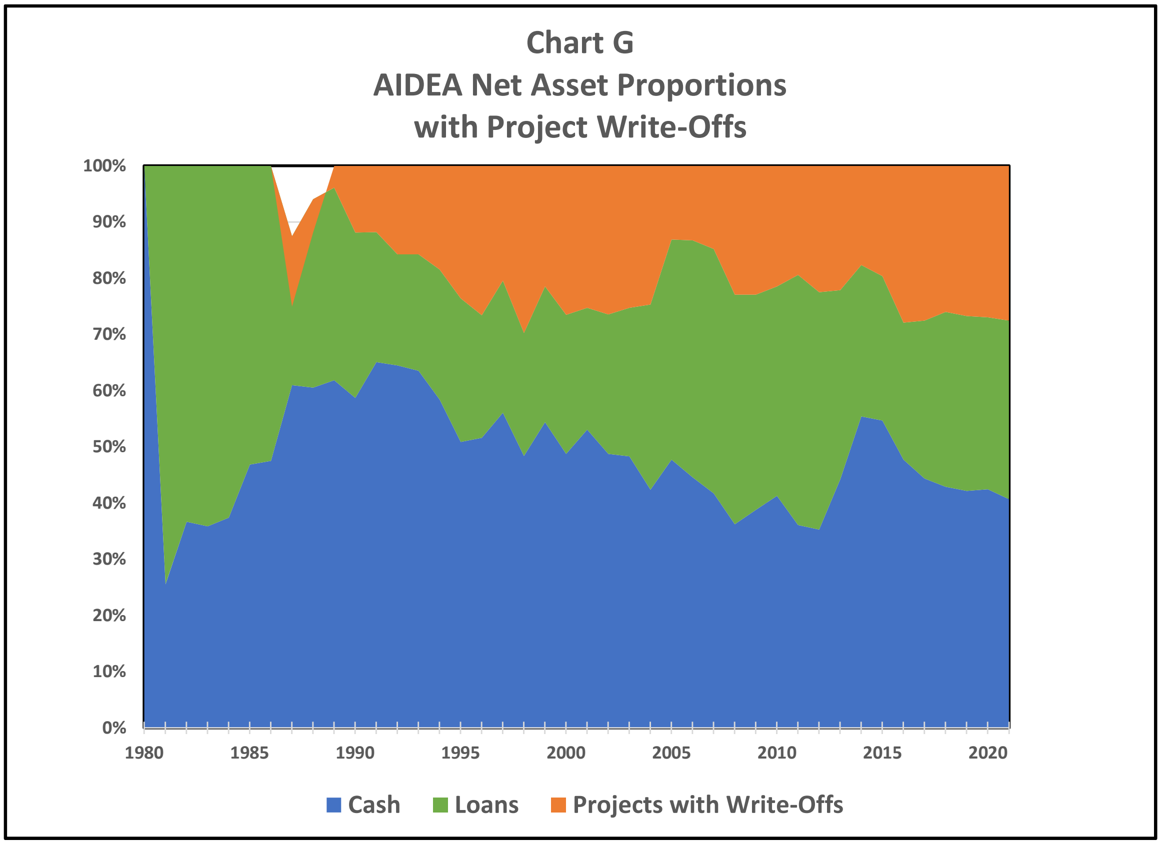


Chart G
AIDEA Net Asset Proportions
with Project Write-Offs
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1980
1985
1990
1995
2000
2005
2010
2015
2020
Cash
Loans
Projects with Write-Offs

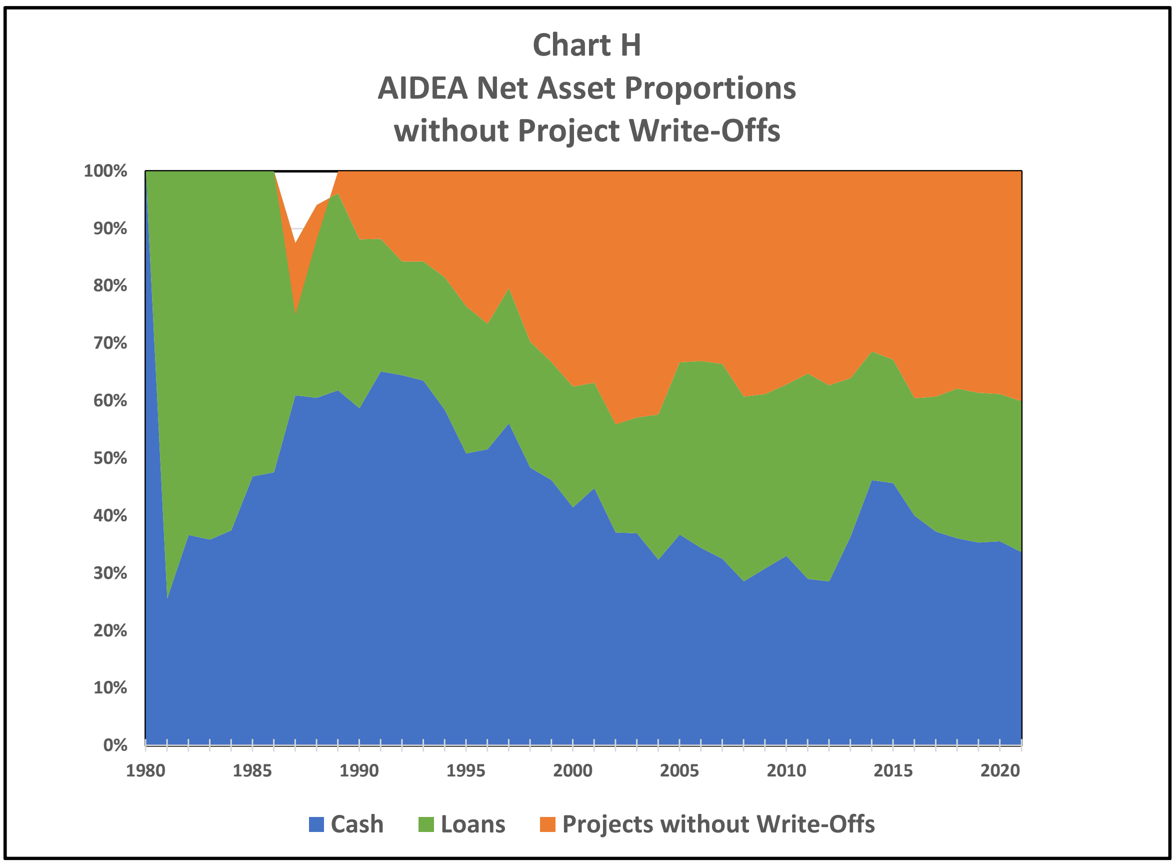


Chart H
AIDEA Net Asset Proportions
without Project Write-Offs
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
1980
1985
1990
1995
2000
2005
2010
2015
2020
Cash
Loans
Projects without Write-Offs

AIDEA's Investment Plans

An important question is how much cash does AIDEA need to do its job? Can or should more of it be invested in loans or projects? Can or should some or all of it be transferred to the State, the Permanent Fund, or other uses? What level of bonding will AIDEA's cash, along with income from loans and projects, support?

AIDEA's June 30, 2021 financial statements state that the Authority expects to fund an additional $37 million in loan participations during FY 2022 and has over $600 million of industrial infrastructure projects in the pipeline.[83] The Alaska Legislature has authorized AIDEA to issue up to $485 million in bonds that could fund a major part of these financing needs:[84]

- $150 million in bonds as part of $275 million total AIDEA funding for the Interior Energy Project (IEP). The Authority had already provided five IEP loans totaling $137.5 million from its Sustainable Energy Transmission and Supply Development Fund (SETS) at the end of FY 2021.[85] IEP would fund natural gas production from any in-state location and fund its distribution in interior Alaska. The bonding authorization expires June 30, 2023;

- $65 million for Skagway Ore Terminal improvements;

- $145 million for the Bokan-Dotson Ridge Rare Earth Element project; and,

- $125 million for the Niblack project: a mineral processing mill, associated dock, and other infrastructure at the Gravina Island Industrial Complex, as well as at a mine site on Prince of Wales Island.

The *State of Alaska, FY2023 Governor's Operating Budget, Department of Commerce, Community and Economic Development, AIDEA Component Budget Summary*[86] states,

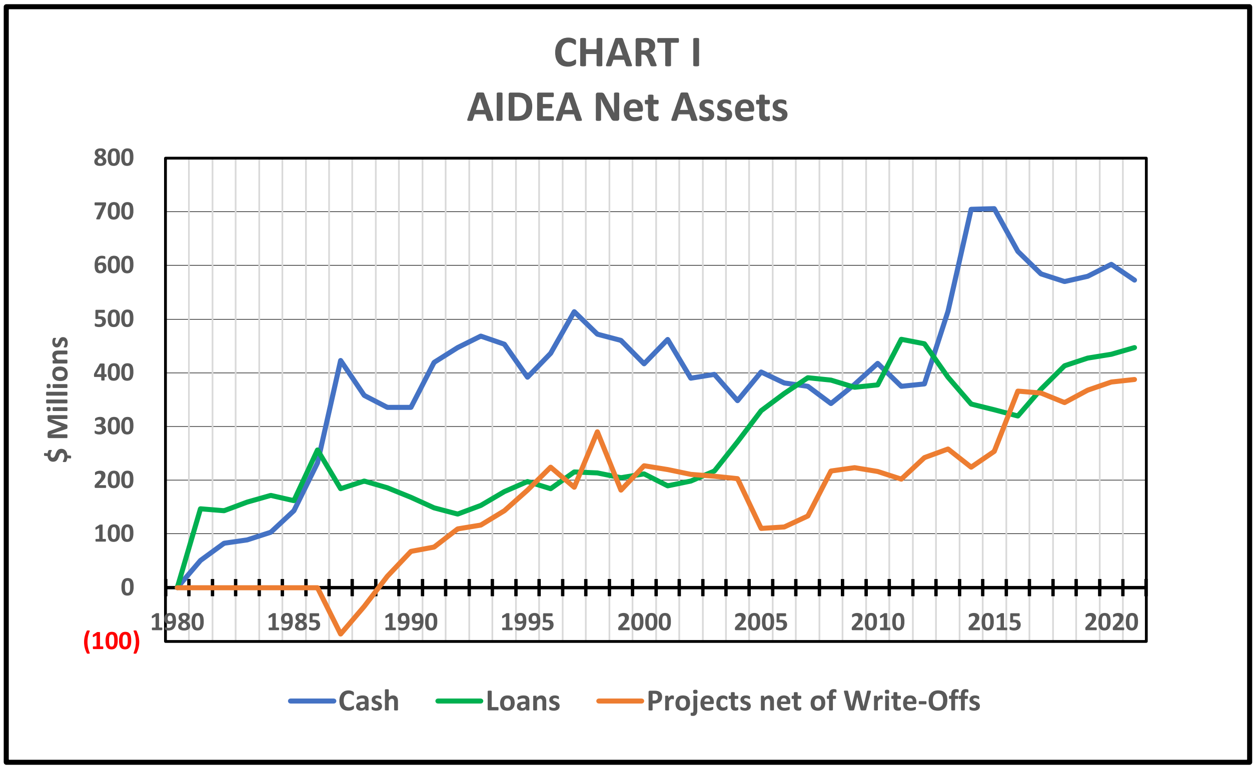
> "AIDEA's development project pipeline has 15 major infrastructure and development projects in active review status with a potential AIDEA investment target estimated at approximately $1 billion. There are an additional 12 projects in early stage financial planning with AIDEA…"

So, even though project assets were AIDEA's smallest holdings in 2021, that could change dramatically over the coming years. It is apparent in Chart I, below, that projects have exhibited a somewhat stronger upward trend than loans, even after write-downs. Loan assets have risen

---

83 EideBailly, *op. cit*., page 14.
84 *Ibid*., pages 25 and 26.
85 *Ibid*., page 43.
86 Released December 15, 2021. Available at https://omb.alaska.gov/ombfiles/23_budget/DCCED/Proposed/26_comp1234.pdf.

only modestly over the last four years (2018–2021), but may rise more strongly as the economy comes out of the COVID-19 pandemic downturn.



Instead of asking how much cash AIDEA needs, we might want to ask how much AIDEA can handle.

AIDEA's Projects

AIDEA's development projects concentrate more dollars in fewer investments, compared to loan or cash investments. In a 1993 report prepared for the Alaska Legislative Finance Division, Bartle Wells Associates reported,

> "The rating agencies expressed concern about AIDEA's trend toward development projects and the resulting greater exposure to individual projects and leases. The potential for delinquency of a single large project puts greater pressure on AIDEA's finances than delinquencies of several smaller loans."[87]

AIDEA's project net assets have increased to a peak of $387.9 million in FY 2021. Without the $294.1 million of write-offs AIDEA has taken, total projects would have stood at $682.0 million in 2021. See Table 20 and Chart F.

Table 22 – AIDEA Individual Project Total Assets, FY 2011–2020

Table 22, below, shows the total assets of individual AIDEA projects, by year, over the 10 years from FY 2011 through FY 2020.[88] The table was prepared by AIDEA, but retitled in this report.

Table 22's amounts are total assets, rather than net assets. Liabilities, including outstanding AIDEA bonds issued for projects, are not netted from the project amounts. Netting of allowances for loan losses appears to be inconsistently applied.

[87] Bartle Wells Associates, "Alaska Industrial Development and Export Authority Review of Financial Position", March 1993, for Alaska Legislative Finance Division, in "Alaska Industrial Development and Export Authority Financial Analysis", Control No. 08-4527-96, Alaska Division of Legislative Audit, March 29, 1996.

[88] AIDEA Board Work Session, August 13, 2021, at http://www.aidea.org/Portals/0/Meeting%20Docs/2021BoardMeetings/081321/AIDEA-10-Year-Development-Project-Asset-Investments.pdf.

TABLE 22
AIDEA individual Project Total Assets, FY 2011-2020 ($ 000)

Source: June 30 Financial Statements; Board Work Session, 8/13/21

Projects:	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020
Revolving Loan Fund Development Project-Direct Financing Leases:										
Federal Express Project -Aircraft Maintenance Facility	9,266	6,892	4,590	1,599	-	-	-	-	-	-
DeLong Mountain Transportation System (aka Red Dog) Project	206,997	194,951	186,446	171,951	163,817	150,587	135,845	116,727	102,055	80,651
Department of Mility and Veteran Affairs (DMVA) project-expansion to National Guard Armory on JBER.	-	-	10,324	14,021	13,874	13,714	13,544	13,362	13,165	12,955
Total Direct Financing Leases	**216,263**	**201,843**	**201,360**	**187,571**	**177,691**	**164,301**	**149,389**	**130,089**	**115,220**	**93,606**
Investment in Preferred Interest in Operating Company:										
Kenai Offshore Ventures, LLC (KOV). Jack-up rig.	-	20,373	24,390	23,877	-	-	-	-	-	-
Mustang Road LLC	-	-	20,046	15,592	9,731	9,803	10,029	10,194	-	-
MOC 1 LLC	-	-	-	58	29,680	45,818	50,003	52,677	-	-
Total Investment in Preferred Interest in Operating Company	-	**20,373**	**44,436**	**39,527**	**39,411**	**55,621**	**60,032**	**62,871**	-	-
Revolving Loan Fund Development Project-Loans (net investment):										
Blood Bank of Alaska, Inc	-	-	-	-	-	8,200	4,410	3,972	3,932	3,896
BlueCrest Drill Rig	-	-	-	-	-	26,007	31,898	28,249	22,343	13,198
Mustang Development Loan	-	-	-	-	-	-	-	-	63,625	62,084
Mustang Development Loan (Capitalized Interest)	-	-	-	-	-	-	-	-	6,119	6,119
MOC1 Aquired Loan	-	-	-	-	-	-	-	-	16,367	16,367
Duck Point Development, ISP Uplands II	-	-	-	-	-	-	-	-	-	8,511
Wilderness Adventure	-	-	-	-	-	-	-	-	-	542
Drake Investments	-	-	-	-	-	-	-	-	-	1,500
Hex Cook Inlet	-	-	-	-	-	-	-	-	-	7,500
Total Development Projects - Loans	-	-	-	-	-	34,207	36,308	32,221	112,386	119,717
Total Revolving Fund Projects	**216,263**	**222,216**	**245,796**	**227,098**	**217,102**	**254,129**	**245,729**	**225,181**	**227,606**	**213,323**
Capital Assets:										
Skagway Ore Terminal (fully depreciated)	-	-	-	-	-	-	-	-	-	-
Healy Project (sold December 2013)	43,775	41,785	39,796	-	-	-	-	-	-	-
Ketchikan Shipyard	43,672	65,562	80,350	82,350	79,426	76,646	73,775	71,108	67,827	66,938
Snettisham Hydroelectric	76,800	74,980	73,052	71,007	68,840	63,307	60,951	58,469	55,863	53,144
AIDEA Administration Building | Land | CIP	2,176	2,197	2,095	2,792	2,684	2,502	2,622	2,552	2,862	2,827
Ambler Road	-	-	-	4,642	8,834	9,361	10,897	12,891	15,743	18,622
Interior Energy Project				4,993	14,459	14,269	11,240	5,404	-	-
Pentex (sold June 2018)						62,377	60,542	-	-	-
Infrastructure -held for sale									3,200	-
Total Capital Assets	**166,423**	**184,524**	**195,293**	**165,784**	**174,243**	**228,462**	**220,027**	**150,424**	**145,495**	**141,531**
SETS Fund Project -Loans:	-	-	49	12,906	20,924	29,690	27,412	76,849	104,019	125,287
TOTAL ASSETS	**382,686**	**406,740**	**441,138**	**405,788**	**412,269**	**512,281**	**493,168**	**452,454**	**477,120**	**480,141**

Table 23 – AIDEA Projects closed out before 2011

TABLE 23

AIDEA Projects
Closed Out before 2011
($ 000)

Project	Loan/Lease ($ 000)	Loan/Lease Originated	Acquired	Sold/ Paid Off	Notes
Four Dam Pool Power Agency loan	82,100.0	1/31/02		Oct-04	Agency acquisition from Alaska Energy Authority
Seward Coal Load-Out Facility Suneel loan		1984	1995	2003	$6.9 million 49% acquisition from Suneel; sold to Alaska Railroad
Alaska Seafood International loan	48,000.0		1999	Jun-05	sold for $24.5 million, AIDEA taking note for $23.5 million
City of Unalaska Marine Center lease	7,000.0	Dec-91		May-00	
MarkAir hangers lease					

Sources: AIDEA annual financial statements, various years ending June 30.

Table 23 shows AIDEA's five additional projects that are not contained in Table 22. The Table 23 projects were completed, sold, paid off, or otherwise disposed of before 2011. They were no longer on AIDEA's books after 2010.

AIDEA's first project write-down was in FY 1999. That year's write-down 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 the year.

Since AIDEA's first project, Red Dog, went into operation in 1991, AIDEA's project net assets have averaged $225.2 million. Since AIDEA's first project write-off in 1999, AIDEA's projects have averaged $245.8 million in net assets. 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.

Aside from the write-downs and project average returns of a negative 2.6 percent over the last 30 and 35 years (Table 17), it is still surprising that AIDEA's projects have not more consistently shown profitability.

As seen in Tables 16 and 19 and Chart C, AIDEA's projects made money, $58.1 million in total, during 18 years — just over half of the last 35 years. But, they lost money, $291.3 million in total, in almost as many years — 17 out of the last 35 years.

This is in spite of the fact that for two of AIDEA's most successful projects — Red Dog and the FedEx maintenance facility at Anchorage International Airport — AIDEA negotiated 6.5 percent and 7.55 percent interest rates, respectively.[89]

This raises the question of whether AIDEA's decision-making process for projects has fundamental flaws. Weaknesses in the project approval process could include:

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

Insufficient or Unattractive Deal Flow

AIDEA has not had that many development projects. It has only had 26 projects in the 38 years since amendments to AIDEA's statutes,[90] in 1984, gave AIDEA the powers to own or operate projects.

---

[89] *Alaska Industrial Development and Export Authority, Basic Financial Statements, June 30, 2009*, KPMG LLP, October 23, 2009.
[90] AS 44.88.172.

Tables 22 and 23 identify 24 of these projects[91]. Two future projects under development by AIDEA, not contained in Tables 22 and 23, are the Section 1002 Coastal Plain, ANWR oil leases and the West Susitna Access Road Project.

At least four of AIDEA's 26 projects — Seward Coal Facility, Alaska Seafood International, Skagway Ore Terminal, and Mustang — are not operating, and may be unlikely to operate again. At least another seven projects financed acquisitions of existing operating properties — two oil drill rigs, Ketchikan Shipyard, Snettisham dam, AIDEA administration building, the Four Dam Pool, and MarkAir hangers.

Three future projects — the Section 1002 Coastal Plain ANWR leases, West Susitna Access Road Project, and Ambler Road — are planned to operate in the future, but are not doing so currently.

That leaves 12 projects — less than half of AIDEA's 26 projects to date — that embody new economic activity now taking place. Whether any of it would be occurring without AIDEA's involvement is another question.

As an investor of last resort, maybe only the questionable deals wind up on AIDEA's doorstep. Good deals go to the "bank" — commercial or investment banks, institutional investors, or, if the project sponsor is truly a successful company, internal cash flow from profits on other company activities.

In insurance company lingo, AIDEA could have a problem of adverse selection. Those project applicants facing the greatest costs, highest risks, and least returns are going to be self-selected as the ones who show up at AIDEA's door.

AIDEA, a public agency, could adopt a private market solution to the problem of adverse selection — price for it. That's how the insurance industry handles adverse selection. To deal with the fact that people in poor health or dangerous jobs are more likely to buy life insurance, insurance companies raise their premiums.

AIDEA also creates artificial demand due to underpriced capital. The problem is simply that "there is always a shortage of free goods". AIDEA may very well want to undertake some deals that wouldn't pencil out, but for AIDEA subsidies, because of the jobs or economic development that would be created. But, part of the extra deal flow, from the "good deals" to be had at AIDEA, is just noise in the system that wastes AIDEA's managerial resources.

As a finance agency operating solely in the Alaska marketplace, AIDEA faces all the historical challenges described in the **Alaska Economic Development Challenges** section of this report. A relative scarcity of good projects in Alaska, compared to other states, combined with the

[91] The various Mustang oil development projects listed in Table 22 are counted as one project. The Pentex and Interior Energy Project are counted as one project.

problem of adverse selection, could mean that AIDEA has meager pickings when it comes to projects, and higher risks on projects it chooses to greenlight.

The AIDEA Strategic Plan from 2009 recognized the problem to a degree, stating that

> "AIDEA's development finance program is directed at financing large projects with potential for significant private investment and job growth. … These projects fit the accepted definition of "public-private partnerships" and tend to involve complex financial relationships, long-term commitments from both parties, and relatively high levels of risk.
>
> Not surprisingly, given the risk profile of development projects of this nature, AIDEA has had notable failures to go along with the successes. While losses should be expected for a major economic development finance program, the larger challenge to programs of this nature is what the private sector refers to as "deal flow". Because investment-worthy large public-private projects of size are difficult to develop, they are also infrequent – particularly in a relatively small (economically) state like Alaska."[92]

How much should AIDEA charge to compensate for adverse selection and a geographically concentrated, rather than diversified, project portfolio? Based on AIDEA's historical track record, a premium of 7.2 percentage points would need to be added to its traditional financing terms to bring average project portfolio returns up to the level of its loan portfolio. 7.2 percent is the difference between AIDEA's 35-year 4.6 percent return on loans versus its 2.6 percent rate of loss on projects. See Table 17. To equal AIDEA's 35-year cost of funds, as represented by its 5.2 percent return on cash, AIDEA would need a 7.8 percent add-on to its standard project terms. Such premiums would reflect AIDEA's internal opportunity costs.

Such premiums could be expected to reduce project applicants. In so doing, it would, in part, be doing AIDEA's job, weeding out undesirable proposals. With the weeds hacked back, AIDEA might be able to better single out the productive candidates among the remaining field of development proposals.

Overly Generous Subsidies

It may be that AIDEA's project financing terms give away too much. This could be a problem with AIDEA's standard financing terms, or due to asymmetric strength between the negotiating parties, in arriving at specific terms for a specific project.

Project sponsors should know more about their projects than AIDEA ever would, even with AIDEA's due diligence, feasibility studies, and vetting of projects with industry or market experts. Reputable, credible sponsors should have experience, planning, and expertise on their

[92] *AIDEA Strategic Plan, Investing in Alaskans*, AIDEA, 2009 at https://www.aidea.org/Portals/0/AIDEA%20Documents/AIDEAStrategicPlan.pdf.

side, from networking, as well as on-board, that can give them the upper hand in hammering out the terms that are flexible — or making those that are inflexible flexible.

Of course, the economic distortions subsidies induce, if not the outright failure of some projects to produce their advertised jobs or economic development, can be an argument against subsidies altogether. Even some economic development advocates and professionals will say so.

The late Scott Hawkins, former and first executive director of the Anchorage Economic Development Corporation, speaking regarding then Governor Palin's plan for a $500 million grant to TransCanada Corporation, a pipeline company, under the Alaska Gasline Inducement Act (AGIA), said,

> "We are suggesting that the state take out the subsidies," in AGIA, said Hawkins. "The state's track record in subsidizing big projects is abysmal."
>
> The big projects referred to by Hawkins are the Delta Barley Project, the Healy Coal Project and the Alaska Seafood International plant….
>
> "We think it's clear that the economy marches to its own drummer, and to invest $500 million in this project is in direct conflict with the state's largest tax payer," he said.[93]

Equity-level Risk on AIDEA Financing

Part of the problem with AIDEA projects could be that AIDEA's payments from a borrower or project sponsor don't fully recognize the business, market, and credit risks AIDEA is exposed to, particularly for resource extraction projects. All the more so, if there is only one user of the project infrastructure. Resource extraction projects are so location specific that business or market risk that would shut down the associated resource production leaves AIDEA infrastructure with no alternative use. Natural resource price swings can be so severe as to blow through an otherwise sterling credit risk that AIDEA might be partnering with as borrower or developer.

AIDEA's stake in some projects is compensated largely as a lender would be, whether the deal is structured as infrastructure AIDEA owns and leases to a user, or as a loan to an owner/developer. This may work in more urbanized areas or high transportation corridors, but is risky when the infrastructure is designed to process a particular resource and is located in close proximity to that resource.

In essence, AIDEA projects in remote locations have risks closer to equity owners, than to lenders. AIDEA's infrastructure risks being stranded assets as much as the resources that the infrastructure is there to produce or process.

[93] Stapleton, Rob, "New group builds change in AGIA views", *Alaska Journal of Commerce*, June 14, 2008.

Loan and Project Subsidies

How much have AIDEA's subsidies amounted to in dollars (as opposed to rates of return)? $10.0 billion, for loans and projects together. Subsidies are the other side of AIDEA's opportunity costs. More precisely, subsidies are the net cost of AIDEA's operations, shown in Table 24, below. Over the last 41 years, the subsidies total $10.0 billion. $10.0 billion is AIDEA's 1981–2021 $11.4 billion of opportunity costs, less the $1.4 billion in net assets they had realized with the money given to them, by June 30, 2021.

The $1.4 billion AIDEA net assets consist of both capital contributions from the State and others, and retained earnings. The retained earnings include AIDEA's net income from what borrowers and project sponsors have paid over the last 41 years, as well as the money earned on AIDEA's cash. Retained earnings totaled $1.1 billion at June 30, 2021.

Borrowers and project sponsors would have had to pay another $10.0 billion over the 41 years for AIDEA's June 30, 2021 net assets to equal the $11.4 billion they would have amounted to, if invested in the Permanent Fund. From the State's perspective, $10.0 billion is the cost of the subsidies.

Again, one private market response to a money-losing business is to raise rates. As discussed in connection with adverse selection, higher rates would lose AIDEA some customers. But, as money-losing or less profitable projects get weeded out, AIDEA's average realized rates of return would rise and charges could be reduced.

Table 24 shows the costs of AIDEA's subsidies for loans, projects, and total assets. The table shows the subsidy costs measured from three perspectives:

1. AIDEA's opportunity cost: what AIDEA can earn on its cash;

2. Alaska's opportunity cost: what the State could earn if AIDEA's assets were invested with APFC with the opportunity cost, i.e., "subsidy", for cash, alternatively:

    a. allocated to cash; or,

    b. picked up by loans and projects.

We can see that on average, AIDEA's 3.1 percent compound rate of return on all net assets would have to increase 5.3 percent to equal the 8.4 percent 35-year average return on the Permanent Fund.

AIDEA has little control over returns on their cash. This means that a 5.3 percent increase in total earnings would have to come from their loan and project holdings. This makes sense, both practically and equitably. Loans and projects are where AIDEA's subsidies go.

TABLE 24

AIDEA Subsidy Costs
Loans and Projects

	AIDEA Returns				
	Loan	Project	Cash	Total	Total
Compound Annual Return[1]	35 Years, FY 1987–2021				41 Years, FY 1981–2021
AIDEA Opportunity Cost					
AIDEA Cash	5.2%	5.2%	5.2%	5.2%	
AIDEA	4.6%	(2.6%)	5.2%	3.1%	
Subsidy Cost	**0.6%**	**7.8%**	**0.0%**	**2.2%**	
State of Alaska Opportunity Cost					
Cash Subsidy Unallocated					
Permanent Fund (AIDEA Breakeven Rates)	8.4%	8.4%	8.4%	8.4%	9.4%
AIDEA	4.6%	(2.6%)	5.2%	3.1%	3.8%
Subsidy Cost	**3.8%**	**11.0%**	**3.2%**	**5.3%**	**5.6%**
AIDEA Net Assets, average FY 1987–2021					
$ Millions	287.8	198.5	458.3	944.6	
Proportion of Net Assets	30.5%	21.0%	48.5%	100.0%	
Proportion of Loan & Project Net Assets	59.2%	40.8%			
Cash Subsidy Allocated to Loans & Projects					
AIDEA Breakeven Rates, Cash costs absorbed	11.4%	11.4%	5.2%	8.4%	
AIDEA	4.6%	(2.6%)	5.2%	3.1%	
Subsidy Cost	**6.8%**	**14.0%**	**0.0%**	**5.3%**	
Net-Asset Weighted Proportion of Subsidy Cost	41.3%	58.7%			
State of Alaska Opportunity Cost ($ Millions)				8,450.9	11,377.7
Less: AIDEA Net Assets, 6/30/2021				1,407.5	1,407.5
Subsidy Cost				7,043.5	9,970.2
FY 1981–1986	2,926.8				
FY 1987–2021	2,906.8	4,136.7	0.0	7,043.5	
FY 1981–2021	5,833.5	4,136.7	0.0		9,970.2
FY 1981–2021 proportion of subsidies	58.5%	41.5%	0.0%		100.0%

1. Dollar-weighted compound rate of return, weighted by average net assets during the fiscal year.

AIDEA's average FY 1987–2021 cash amounted to $458.3 million, or 48.5 percent, of average net assets of $944.6 million, for the period. This means that AIDEA's rates or earnings on loans and projects, the other 51.5 percent of net assets, would have to be 11.4 percent on average, for AIDEA's total return on net assets to equal the Permanent Fund's 8.4 percent 35-year average return.

An 11.4 percent target for loan and project returns means that over the FY 1987–2021 period, loans were subsidized 6.8 percent, while projects were subsidized 14.0 percent, in comparison to actual average AIDEA loan and project returns.

AIDEA's total FY 1987–2021 subsidy from the State's perspective, i.e., compared to what could have been earned by the Permanent Fund, was $7,043.5 million. Given the relative size of loan and project average net assets and subsidy rates over this period, as shown in Table 24, the FY 1987–2021 State subsidy cost for loans was $2,906.8 million and for projects $4,136.7 million, 41.3 percent and 58.7 percent of the total $7,043.5 million subsidy for this period.

We can add to the loan subsidy the $2,926.8 million difference in subsidy costs between the 35-year FY 1987–2021 $7,043.5 million subsidy and the overall, 41-year FY 1981–2021 total subsidy of $9,970.2 million. There were no AIDEA projects before FY 1987, so all the subsidy before then can be allocated to loans.

Thus, over the 41 years of AIDEA's life, 58.5 percent of subsidy costs were on account of loans and 41.5 percent on account of projects. But, since projects first began in 1987, 58.7 percent of subsidy costs can be ascribed to projects.

11.4 percent on loans and projects would recoup the earnings foregone on AIDEA's cash, from not investing the cash in the Permanent Fund. This stance would view AIDEA's holding of cash as a necessary cost of doing business, for financing loans and projects.

Indeed, AIDEA continually stresses a "need" for its large cash and marketable securities to securitize its debt and generally instill market confidence in its finances, creditworthiness, and solvency.

For example, AIDEA's Component Budget Summary, submitted to the State's Office of Management and Budget (OMB) as part of the process of preparing the Governor's FY 2023 budget, states:

> "AIDEA's asset base – investments, loans, developments and projects within Alaska – are not financial investments that are un-allocated assets or easily liquidated and transferred to serve other purposes. They are committed, encumbered or held in reserve to fulfill statutory purpose through programs for job growth and economic development in Alaska…
>
> AIDEA's capital base remains the sole source of funding for these development opportunities covering all regions of the state. AIDEA's partners on these projects rely on continued financial capacity as a source of financing for these projects.
>
> In order to continue to generate meaningful dividends to the State, it is crucial that the private financial market have confidence that AIDEA's funds are separate and independent of the State of Alaska. Any appropriation beyond the statutorily defined dividend will not only impact AIDEA's ability to issue a dividend and raise funding

> externally through the capital markets, but will impact all state public corporations who benefit from the statutorily defined separation of their finances from state obligations."[94]

There are limits to how much AIDEA can raise rates or reduce subsidies. With its cash, AIDEA might be able to push securities' maturities further out or buy securities of poorer credit quality to earn higher rates, but such moves can be limited by bond covenants, credit rating agency and bond buyer concerns, or the inherent interest rate and default risks AIDEA would face.

The Federal Home Loan Bank indices to which AIDEA's loan participation rates are tied may not leave much headroom for rate increases without going above market rates and seeing business disappear.

Similarly, at some point, AIDEA projects might cease to pencil out or might find alternative financing sources to be cheaper, as AIDEA rates rose. But, as discussed above, this could be part of the solution to AIDEA's dismal track record with projects.

Value of AIDEA Subsidies to Developers and Borrowers

The possibility of other financing sources being less costly than unsubsidized financing from AIDEA points up the fact that the cost of subsidies may be more than their value to a borrower or project sponsor. Generally, market rates on mortgage loans will be less than the returns on Permanent Fund investments. Permanent Fund investments include equity investments, which are going to earn more on average than mortgage rates because of the higher risk associated with equity investments.

By the same token, the value of AIDEA subsidies to some higher risk projects may be more than the State's opportunity costs for AIDEA's subsidies. As cited in *Alaska Megaprojects Update*, Tetra Tech conducted an economic evaluation of the Ucore Bokan Mountain rare earth element mining project, using a 10 percent discount rate.[95]

The discount rate is a cost to the developer. It is her opportunity cost, her time value of money. In this case, it is something more than the State's 8.4 percent or 9.4 percent opportunity cost over the last 35 or 41 years, respectively, though less than the 11.4 percent 35-year breakeven opportunity cost in Table 24 that reflects AIDEA's costs of holding cash. Tetra Tech also calculated a 43 percent internal rate of return on the Bokan project.

Beginning July 2014, both of AIDEA's equity investments in the Mustang oil project — the Mustang Road LLC Operating Agreement and the Mustang Operations Center 1 LLC agreement provided for a 10% annual Guaranteed Payment amount on the amount of AIDEA's outstanding investment.[96]

---

[94] *State of Alaska, FY2023 Governor's Operating Budget, op. cit.*
[95] Fay, *op.cit.*
[96] BDO USA, LLP, *Alaska Industrial Development and Export Authority, Basic Financial Statements and Schedules*, June 30, 2018, page 89, at https://www.aidea.org/Portals/0/Financials/Fs18aidea.pdf.

SRI's economic evaluation of Red Dog estimated returns on equity investment ranging from 10.3 percent to 19.3 percent.[97] Any project financing provided at rates below Bokan's 43 percent or Red Dog's 10.3 percent to 19.3 percent would increase these rates of return on the remaining portions of the projects that are equity-financed. As SRI states,

> "We note that debt-financing by Cominco of - its mine and mill facilities--as is usual within the industry--would increase the anticipated return on its investment in the Red Dog operation above that shown by our analysis."[98]

The value of AIDEA's subsidies will vary from project to project, depending on the other opportunities facing a sponsor for use of their cash. On the whole, the value of AIDEA's subsidies may not be too different from their cost to the State. Since 1950, the average annual nominal compound rate of return on equities in 16 developed countries has been 10.26 percent.[99] This is somewhere between the 9.4 percent (40-year) to 11.4 percent breakeven rates (35-year) used in Table 24's computation of subsidy costs.

Value of AIDEA Subsidies to State of Alaska

It is beyond the scope of this study to estimate the value the State and its residents receive for the $10.0 billion of AIDEA subsidies.

What we can say, in a very rough fashion, is how much of the subsidies produced zero benefits.

As noted in this report's **AIDEA Refinancings et al** section, 48 percent of the dollar amount of AIDEA loans funded over the 16 months prior to October 31, 2020 were for loans with no permanent jobs. 65 percent of loan dollars went for loans with no construction jobs.

Thinking of the 48 percent of loan dollars not associated with any permanent jobs, we could say half of AIDEA's loan subsidies produced no economic benefits. As discussed above, in the **Insufficient or Unattractive Deal Flow** section, 12 projects — less than half of AIDEA's 26 projects to date — are providing current economic activity.

So, for a rough estimate, we could say half of all subsidies produced no results…or, no results different than what would have occurred without the subsidies. That is, they cost $5.0 billion, but they had no value, the State got zero benefits for them. That means that the State had a net loss of $5.0 billion, on this non-productive half of the $10.0 billion in subsidies.

But, it could be worse. It may be that most of the economic activity financed by AIDEA commercial mortgage loan participations would have been funded by the participating bank or other secondary market mortgage buyers, in any event. If so, we could say all $5.8 billion of FY

---

97 SRI International, *op.cit*., page IV–13.

98 SRI International, *op.cit*., page II–1.

99 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.

1981–2021 loan subsidies, along with half of the $4.1 billion in project subsidies, shown in Table 24, were for naught. This would be a total of $7.85 billion, out of $10.0 billion of AIDEA subsidies, wasted.

Instead, a good part of this $5.0 billion to $8.0 billion of wasted subsidies became income transferred to project developers, resource owners, ratepayers in the case of regulated utilities, and, to a lesser extent, to loan participation borrowers and banks.

Outside Influence

Politics, lobbying, and conflicts of interest may push AIDEA into unwise projects.

Mustang

AIDEA's disastrous venture into oil and gas development with the Mustang Development Project (Mustang), made AIDEA a victim itself, along with a number of private companies, of the Siren's song of State subsidies, this time in the form of State oil tax credits. By June 30, 2021, AIDEA had recorded losses of $38.2 million,[100] or 44 percent, on its total Mustang investments of $86.5 million.[101]

AIDEA's financings of the Mustang project were counting on the State cashing out oil tax credits held by Brooks Range Petroleum Corporation (BRPC), the Mustang developer. State purchases of tax credits were indicated in Mustang financing agreements as a source of funds for BRPC payments that, flowing through a constantly shifting mélange of legal entities, were to ultimately make preferred dividend and loan payments owed to AIDEA on its Mustang equity and loan investments.

Mustang began in October 2011, when

> "The Department of Natural Resources approved BRPC's application to form the Southern Miluveach Unit (SMU) located in the North Slope Borough of Alaska ... The application designated BRPC as the operator of the SMU and approved the initial development plan titled Mustang Development Project. The objective of the Mustang

[100] $10.5 million and $8.6 million provisions for loan loss in FY 2019 and FY 2020, respectively, BDO USA, LLP, *Alaska Industrial Development and Export Authority, Basic Financial Statements and Schedules*, June 30, 2020, page 17, at https://www.aidea.org/About/News-Publications/Publications/Financial-Statements; and $19,091,000 impairment loss in FY 2021, EideBailly, *op. cit.*, page 17.

[101] BDO USA, LLP, *Alaska Industrial Development and Export Authority, Basic Financial Statements and Schedules*, June 30, 2019, page 10, at https://www.aidea.org/About/News-Publications/Publications/Financial-Statements.

> Development Project was to construct an oil processing facility capable of delivering sales quality crude oil."[102]

AIDEA approved a $20 million equity investment in December of 2012 for the Mustang Oilfield Access Road and Production Pad Project. This created the Mustang Road, LLC, with AIDEA as the 80 percent majority owner of the company.[103]

Between 2014 and 2018, AIDEA invested an additional $50 million in preferred shares of Mustang Operations Center 1 (MOC 1), LLC, the owner of the project's processing facility. The estimated total development cost of the processing facility was as much as $225 million.[104]

AIDEA invested in MOC 1 without the additional $175 million, needed to have a functioning processing facility, being in place. It was supposed to come from Strategic Equipment, Inc. (SEI), a wholly-owned subsidiary of AIDEA's minority interest partner in MOC 1, LLC.

> "As a result of an extreme drop in oil prices in late 2014, the loan financing from SEI to MOC1 LLC never materialized."[105]

The MOC 1 financing plan relied in part on

> "**State of Alaska oil and gas capital expenditure tax credits**, issued under AS 43.55.023, which were to be used to partially repay the $175 million of additional financing."[106] [**Emphasis added**.]

In 2015, the Alaska Department of Revenue (DOR) provided a line of credit (LOC) for the Mustang project to BRPC. By 2016, this DOR loan disbursement totaled $19.3 million. Alaska Statutes 37.10.071(b)(5) requires loans made by DOR to have collateral on deposit. **The collateral was to be 2015 oil and gas tax credits** yet to be applied for or approved by the Tax Division of DOR. There was no collateral on deposit at the time the LOC was approved or for nine months thereafter. In May 2019, AIDEA purchased this loan from DOR for $16.5 million.[107]

So, here's a second State agency (DOR) extending credit to a for-profit enterprise without the financing lined up to do what they say they are going to do.

Here's what Legislative Audit had to say about this,

---

102 Division of Legislative Audit, Alaska State Legislature, *A Special Review of the Department of Revenue (DOR), Mustang Operations Center 1 LLC (MOC 1) Loan*, July 24, 2020, page 5, at https://legaudit.akleg.gov/wp-content/docs/audits/special/dor/30093-MOC-1-Final-WEB.pdf.
103 *Ibid*., pages 3 and 4.
104 *Ibid*., page 5.
105 BDO USA, LLP, June 30, 2018, *op.cit.*, page 92.
106 Division of Legislative Audit, *A Special Review…MOC 1, LLC Loan*, July 24, 2020, page 5.
107 *Ibid*., page 22.

> "The DOR commissioner's decision to loan up to $22.5 million to MOC 1 under the authority of the department's investment statutes was not appropriate when compared with behavior that a prudent person would consider reasonable….
>
> Several red flags that appeared before the loan was issued should have raised significant concern regarding the viability of the MOC 1 project…
>
> **MOC 1's risk as a going concern due to inability to obtain financing** and a drop in oil prices**."**[108]

The Mustang investment, given an ex post facto sheen of legitimacy by adoption of a "tax credit loan program" by DOR, ipso facto also violates a fiduciary requirement for diversification of investments by being the only loan made under the program.

DOR claimed they approved the LOC to protect AIDEA's previous Mustang investments. But, this puts the DOR Commissioner in a clear conflict of interest with protecting the State general fund, i.e., observing the fiduciary duty of loyalty to a fund's beneficiaries. But, you can read all about it in Legislative Audit's *MOC 1, LLC loan review* for that, at https://legaudit.akleg.gov/wp-content/docs/audits/special/dor/30093-MOC-1-Final-WEB.pdf**.**

The 2015 fall in oil prices produced gaping multi-billion dollar deficits in the State of Alaska's budget. This resulted in Governor Walker vetoing appropriations for the State to buy refundable oil tax credits that oil and gas companies had received for their Alaska exploration, development, and operations.

Unfortunately, many oil and gas companies production and development activities were not profitable or promising enough to move forward without the cash subsidies they expected to receive through State purchases of oil and gas tax credits they had earned.

Some companies had moved forward with bank or investment fund loans, secured by pledges of the tax credits as collateral. However, vetoes of appropriations for tax credit purchases froze additional financing and squeezed the companies' ability to make payments on loans. Some bankruptcies resulted, among smaller, less capitalized petroleum developers and producers.

The economic distress in the oil patch produced severe pressure on the State administration to stanch the cash squeezes and bankruptcies. On June 30, 2015, Governor Walker had vetoed $200 million for tax credit purchases, from a State budget facing a $3.5 billion deficit for FY 2016. By October 14, 2015, the Walker administration had held more than 20 meetings with industry, investors, oil and gas support companies, and legislators to understand the importance of the credits and how the program could be revamped, according to Tax Division Director Ken Alper.[109]

---

[108] *Ibid.*, page 24.
[109] Brehmer, E., "Changes to credits eyed as payments hit deficits", *Alaska Journal of Commerce*, October 14, 2015, page 2.

In addition to, or as alternatives to, reshaping tax credits or the State's purchase of them, the Walker administration was looking at new programs that

> "could include direct state loans through the Alaska Industrial Development Authority to help smaller companies fund projects, the state taking a direct working interest in a project(,) or a combination of both, according to Alper."[110]

As described above, AIDEA had already made equity investments at that point in Mustang.[111] Mustang's success partly hinged on the State buying oil tax credits held by BRPC.[112]

Though the State may have been tempted by AIDEA's $700 million in cash in 2015, as well as its previous oil industry investments as a model, the Administration ultimately grasped at a more unorthodox tax credit fix — the issuance of State debt to fund purchases of tax credits. This stratagem, enacted into law by the Legislature, came to its end under the succeeding Dunleavy administration with its unanimous rejection as unconstitutional by the Alaska Supreme Court in *Eric Forrer v. State of Alaska*.

The dominoes fell, and on September 23, 2020 AIDEA foreclosed on its $70 million invested in the Mustang access road, drill pad, and oil processing facility.[113] In retrospect, AIDEA is lucky it didn't have much wider stakes in oil and gas production. AIDEA narrowly escaped being pushed by the State into further investments in the oil patch. As investor of last resort, those investments would likely have been with developers in the direst of straights, wholly dependent on the problematic oil and gas tax credits for their solvency.

Though oil tax credits produced hemorrhaging in AIDEA's finances, it is eye-opening how greater the risks of AIDEA's evisceration could be from a government fiscal crisis, budgetary politics, or gubernatorial re-election pressures. Being a state development corporation, a creature of government, this comes with the territory.

Bob Poe, resigning as AIDEA's executive director in August, 2002, recognized the problem,

> "It is interesting, Poe said, that three high-profile development projects on which AIDEA's board did get pressured -- Alaska Seafood International, the Healy Clean Coal Project and an earlier project to buy out old MarkAir hangars in Fairbanks and Bethel -- ultimately faced problems.

---

[110] *Ibid.*, page 4.
[111] Bradner, T., "AIDEA approves $50 million investment at Mustang field", *Alaska Journal of Commerce*, May 1, 2014, page 2.
[112] "Construction, production wells at Mustang move forward", *Alaska Journal of Commerce*, December 17, 2014.
[113] EideBailly, *op. cit.*, page 77.

> In retrospect, absent the political pressure, "We might not have allowed ASI to build a plant that was so large," Poe said."[114]

ANWR

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.

On January 6, 2021, the Bureau of Land Management (BLM) held an oil lease sale through sealed bidding on 22 parcels of land within the Coastal Plain of ANWR.[115] In the lease sale, only 11 of the offered parcels received bids. None of the bids were proffered by oil and gas companies.[116]

AIDEA bid on all eleven tracts and was the sole bidder on nine of those tracts.[117] Prior to the lease sale, on December 23, 2020, the AIDEA Board adopted Resolution G20-31,[118] which approved expenditures of up to $20 million for bids on leases within ANWR.[119] The nine lease tracts bids which AIDEA won totaled $12,018,825.[120] AIDEA executed leases for seven of the tracts, and paid BLM $13,102,615 in fees and annual lease payments.[121]

Former Governors Walker and Murkowski had separately written columns advocating ANWR bidding by the State.[122] In his column, Gov. Murkowski did not suggest AIDEA do the bidding, but that,

---

[114] "Poe reflects on 2 years as AIDEA chief", *Alaska Journal of Commerce*, September 8, 2002.

[115] Bureau of Land Management, "Alaska Oil and Gas Lease Sales", https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/alaska.

[116] https://www.reuters.com/article/us-usa-alaska-oil/oil-drillers-shrug-off-trumps-u-s-arctic-wildlife-refuge-auction-idUSKBN29B0KR.

[117] https://www.blm.gov/sites/blm.gov/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf.

[118] AIDEA, "Resolution of the Alaska Industrial Development and Export Authority Relating to the Evaluation and Potential Submission of Bid(s) for the Coastal Plain Alaska Oil and Gas Lease Sale, Resolution No. G20-31", December 23, 2020, at https://www.aidea.org//portals/0/Meeting%20Docs/2020Boardmeetings/122320/Resolution%20G20-31_ANWR%20Coastal%20Plain%20Oil%20and%20Gas%20Lease%20Sale.pdf.

[119] AIDEA, "AIDEA Board of Directors Unanimously Approves Resolution for Evaluation of Bids for the Coastal Plain Alaska Oil and Gas Lease Sale", December 24, 2020, at https://www.aidea.org//Portals/0/PressReleases/AIDEA%20Coastal%20Plain%20Press%20Release_122420_Final.pdf?ver=7gM_YA2lWGndpE6Q2P8-eg%3d%3d&ver=7gM_YA2lWGndpE6Q2P8-eg%3d%3d.

[120] https://www.blm.gov/sites/blm.gov/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf

[121] AIDEA Motion to Intervene, *Gwich'in Steering Committee, et. al, v. Bernhardt, et. al,* 3:20-cv-00204-SLG, (D. Alaska).

[122] Brooks, James, "State-owned Alaska corporation to consider bidding on Arctic wildlife refuge oil leases", *Anchorage Daily News*, December 22, 2020.

> "The bid could be funded from acquired revenue receipts or reserve accounts or by the Permanent Fund."[123]

But, Gov. Murkowski did appear and gave public comments at the December 23, 2020 AIDEA Board meeting at which the bidding was authorized.[124]

AIDEA executive director Alan Weitzner

> "said the idea of an ANWR bid was developed organically within AIDEA, not in response to Murkowski, Walker, or current Alaska Gov. Mike Dunleavy."[125]

This is somewhat at odds with a statement from the Governor's office when,

> Asked whether the governor or any member of the administration had ordered the move, Dunleavy deputy communications director Jeff Turner said, "No. The opportunity to participate in the 1002 lease sale has been discussed by various departments of the state administration. AIDEA is an independent organization established by the legislature to promote economic opportunity for the state and its residents. The decision to participate in the lease sale will be made by the AIDEA board."[126]

Regardless, public comments by AIDEA Board members, prior to unanimously approving AIDEA Board Resolution G20–31, lead one to think that they all believed this to be the best course of action.

What is more curious than Board support for the bidding is how the conventional wisdom changed to allow people to consider the idea at all. In 2015, Tim Bradner, a journalist writing about Alaska natural resources development since 1966, who also served as a lobbyist for BP and Standard Oil of Ohio for 14 years, wrote in the *Alaska Journal of Commerce*,

> "current state law does not allow AIDEA to invest "upstream" in oil and gas reserves, but only in the infrastructure needed to produce oil and gas. For example, in the Brooks Range investment [*Mustang*] AIDEA is a partner in an oil and gas processing plant needed for Mustang as well as the civil support structures like the pad for the plant and an access road. "[127]

AIDEA executive director "Weitzner said he wasn't aware of any other time when the state bid on a federal oil and gas lease."[128]

---

[123] Murkowski, Frank, "Alaska should bid on ANWR oil leases itself", *Anchorage Daily News*, December 16, 2020.
[124] AIDEA Board Meeting Minutes, December 23, 2020, at https://www.aidea.org/Portals/0/Meeting%20Docs/2020BoardMeetings/122320/12.23.20%20Signed%20Meeting%20Minutes.pdf.
[125] Brooks, *op. cit.*
[126] *Ibid*.
[127] Bradner, Tim, "Discussion begins on tax credits", *Alaska Journal of Commerce*, July 8, 2015.
[128] Brooks, *op. cit.*

Indeed, AIDEA's statutes do not mention ownership, acquisition, or financing of mineral interests except in AS 44.88.690, which **prohibits** AIDEA from using its Sustainable Energy Transmission and Supply Development Fund to "purchase or acquire gas reserves or a gas lease or become a working interest owner of a natural gas lease", without approval by law.

What stands out to a layman about AIDEA's statutes is the definition in AS 44.88.900 (12) of a "project" as a "plant or facility". A "plant" or "facility" is defined by AS 44.88.900 (12) to include land, and partial interests in land, such as leases, along with structures, equipment, and tangible personal property. But, a plant or facility is defined to exclude work in process or stock in trade.

While one might argue that a plant or facility could include a lease of the mineral interests that a plant or facility would process, it is hard to argue that a mineral lease, in and of itself, has sufficient attributes to constitute a plant or facility. This is all the more true because of the exclusion of work in process or stock in trade.

Let's note here that purchase of an oil lease is not the same thing as purchase of proven oil reserves. There might not be any oil in the ground, or any that is economic to produce. In this case, it's just a right to explore. A right to drill a wildcat, as they say in the industry.

The idea that a mineral lease alone could constitute a project is also at odds with AIDEA's own G20–31 resolution's multiple references to creating or financing infrastructure. The common sense idea that infrastructure is not the same thing as the minerals it's there to process, is in evidence in the resolution's statement that

> "WHEREAS, the Authority has the ability to finance projects or facilities that promote and create *infrastructure* needed to bring *natural resources* to market."[129] [*Emphasis added*.]

The $20 million authorized for ANWR lease bids by AIDEA was designated to come from the Arctic Infrastructure Development Fund (AIDF).[130]

The closest purported authority, under the AIDEA's AIDF statutes, to do something like bid on ANWR leases might seem to be the subsections of AS 44.88.830 that give AIDEA the powers to:

> "(1) finance Arctic infrastructure development, insure project obligations, guarantee loans or bonds, and establish reserves;...
>
> (4) subject to AS 36.30.085(e), enter into lease agreements, sales-lease-back agreements, build-operate-transfer and operate-transfer agreements, or any similar project financing agreement for a qualified Arctic infrastructure development;

[129] AIDEA, Resolution No. G20–31, *op. cit*.
[130] *Ibid*.

> (5) enter into agreements with government entities for the transfer and control of infrastructure, facilities, rights-of-way, and studies;"[131]

but not,

> "(2) acquire real or personal property by purchase, transfer, or foreclosure when the acquisition is necessary to protect the authority's interest in financing;"

because there is no AIDEA interest in financing at stake. Even AS 44.88.830(1), (4), and (5) seem an oddball inference of authority, if an inference can be made at all.

AIDEA's regulations specify that the AIDF be used to

> "make a loan or issue a bond, or guarantee a loan or bond, under this chapter to finance an Arctic infrastructure development."[132]

The relevant statute AS 44.88.900(2)(A), as well as AIDEA regulations, define "Arctic infrastructure development" as "the construction, improvement, rehabilitation of a facility..."[133]

And so, AIDEA's reliance on AIDF to legitimize ANWR bidding fails on the same definitional limitations of "facility" in AS 44.88.900(12) that were discussed above, as well as plain common sense.

Regardless of whether AIDEA has the statutory authority to be doing what it's doing, the ANWR bids just don't fit AIDEA's description of its criteria for approving a project.

AIDEA describes its "Six Factor Model" criteria for approval of a project:

> "1. Operating Experience: The developer has a demonstrated background and history in successfully building and operating the type of project for which they are seeking financing from AIDEA.
> 2. Capital Contribution: The developer will invest funds in tandem with AIDEA for the construction of the project.
> 3. Plans and Designs: The developer has complete plans, designs, and specifications for the project they wish to develop.
> 4. Permits: The developer has the necessary permits for the project.
> 5. Purchase Contracts: The developer has *access to key materials* and equipment.

[131] AS 44.88.830
[132] 3 AAC 103.020
[133] AS 44.88.900, 3 AAC 103.900

6. Sales Contracts: The developer has revenues under contract from credible entities." [*Emphasis added*.][134]

Notice again that "access to key materials", say like oil and gas, is but one condition necessary for project approval.

AIDEA has also stated things it does not do:

"AIDEA Does NOT

- Compete with the private sector
- Provide grants
- Exclusively finance large projects."[135]

AIDEA submitted minimum bids on eleven leases. Two leases went to two higher bidders. AIDEA was issued seven leases, after relinquishing an award of leases on the two easternmost tracts it bid on.[136] One could say the minimum bids did not constitute competition. AIDEA's executive director alluded to the idea of submitting minimum bids prior to the lease sale.[137] But, since the lease sale was by sealed bid, it is unclear if other bidders could be sure about what competition would have.

[134] "Alaska's Development Finance Authority, AIDEA Overview, Investing in Alaskans", John Springsteen, Executive Director, December 14, 2018, at https://www.aidea.org/Portals/0/PDF%20Files/121418AIDEAOverview.pdf.
[135] "AIDEA, Investing in Alaskans, Alaska Strategic & Critical Minerals Summit", Mark Davis, Deputy Director, November 2012, at http://dnr.alaska.gov/commis/priorities/Slides/Mark_Davis.pdf.
[136] AIDEA "Section 1002 Area", at https://www.aidea.org/Programs/Project-Development/1002-Area.
[137] Brooks, *op. cit.*

Conclusion

If the State's assets held by AIDEA are a commons, for Alaska business interests looking for financing, it is apparent that there are some holes in the fencing that are leading to overgrazing. Just as concerning is the fact that the gate to the back forty that has been Alaska's patrimony — its natural resource endowments — has been thrown open with AIDEA's ANWR bidding.

Resource extraction

AIDEA currently has a focus on resource development, epitomized by its role in the State's "Roads to Resources" Program Initiative.[138] 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 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;

[138] Fay, *op.cit.*

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.[139]

   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;"[140] and,

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."[141]

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."[142]

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

---

[139] Fay, *op.cit.*

[140] Legislative Finance Division, *Indirect Expenditure Report*, January 2021, at https://www.legfin.akleg.gov/IEBooks/2021IndirectExpenditureReport.pdf.

[141] Power, *op. cit.*

[142] *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.

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 workforce, and families.

Fix or forget AIDEA?

AIDEA's dual role — to make sure its net assets are not a totally open-access, come one, come all, resource, while endeavoring to assure that those given financing offer the best prospects for maximizing state jobs and economic development — appears to need some shoring up. Better deal filters, or adherence to stated screening criteria, better negotiated terms with lesser subsidies, and more effective insulation from outside influence, are needed.

While AIDEA's assets have grown over the years, even with its particularly lackluster performance, a true tragedy of the commons could be in the offing. With the current administration having "a potential AIDEA investment target estimated at approximately $1 billion" for 15 development projects, with another 12 projects under review, 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.

This may be particularly challenging if the view holds that AIDEA financing and subsidies are the pixie dust that assures success.

Those who do not want to see AIDEA bet the house, may feel we would be better off without AIDEA.

Or, that the State should go back to the way things were before 1981. No State assets would be used to back up financing. AIDEA project financing would all be conduit financing, with AIDEA funding development projects from the proceeds of revenue bonds it issued.

This would preserve the organizational capabilities and institutional knowledge that AIDEA currently provides for accessing the bond market. It might be most used to secure federal subsidies of tax-exempt rates on projects that would qualify under the Internal Revenue Code.

One advantage of this approach is that it ensures a market test of a project's feasibility, substituting the bond market for AIDEA and its Board as arbiters of creditworthiness. It almost certainly would preclude financing oil lease sale bids, forcing adherence to AIDEA's "Six Factor Model", or similar due diligence protocols.

Of course, the State has a number of State corporations that issue public debt in their own right. An organization that specializes in development finance probably has merit. But, at one point, AIDEA debt issuance was performed by Alaska Municipal Bond Bank personnel.[143]

[143] "Lacking operating appropriations, AIDA was dormant between 1967 and 1977. In 1977, the original statute was amended to specifically include types of projects qualifying for federal tax-exempt industrial revenue bonds and the program became operational for the first time in 1978. Still without an appropriation, AIDA was operated within the Alaska Municipal Bond Bank Authority (AMBBA) under an agreement between the AIDA Board and the AMBBA. During this initial period five industrial

A similar arrangement might not be out of the question with the Bond Bank or another debt-issuing State corporation. The State Bond Committee can also perform the ministerial functions of issuing debt for other entities, as it does with University of Alaska debt and International Airports revenue bonds.

Privatization of government services has had some supporters. It may boost efficiency, but it can lead to under-investment in, and under-staffing of, services that provide public benefits not susceptible to being captured as profits by the private providers. The spillover effects of economic development are such public benefits or goods.

Back in 1990, privatization was considered by the University of Alaska Anchorage's Institute of Social and Economic Research (ISER) in their review of AIDEA.

> "We argue against privatization or liquidation of AIDEA. Local banks and private investors would not receive privatization of AIDEA favorably. The huge liquidity of local banks offers convincing evidence of the paucity of profitable investment projects in Alaska. Without a reasonably high and stable rate of return for investors, the stock of the privatized institution would be lackluster. Also, AIDEA's privatization and subsequent entry into the banking market would dilute the profit margins of existing banks and adversely affect AIDEA's own operations."[144]

ISER was looking at AIDEA's returns from 1981 through 1990. They average 8.0 percent on net assets as measured in Table 9 (4.7 percent on total assets, as measured by ISER). In the 35 years since AIDEA began development project financing, AIDEA's return on net assets have averaged only 3.1 percent (Table 17). This is far less enticing than the 8.0 percent that led ISER to deprecate the idea of privatization.

What ISER was saying is that AIDEA would take a big loss on its loan and project assets if it tried to sell them to private buyers, i.e., liquidate them. This is simply a reflection of the fact that equity investors would discount AIDEA assets that earn only 3.1 percent with a big haircut to give themselves long-term market rates on the order of 10.0 percent or so.

AIDEA could nevertheless transition to privatized operation, with its assets spun off to the State's general fund. Again, this is simply the idea of the State pulling out its assets and leaving AIDEA to operate as a conduit financing operation. It also could or would mean AIDEA exits the commercial mortgage market.

ISER recommended

---

development projects were financed through the issuance of tax-exempt revenue bonds." Division of Legislative Audit, "A Report on the Alaska Industrial Development Authority", January 10, 1983.

[144] Essayyad, Musa et al, *Evaluation of Future Purposes and Functions of the Alaska Industrial Development and Export Authority*, Institute of Social and Economic Research, December 1990, at http://pubs.iseralaska.org/media/6715a88b-90f6-497e-b8c8-91c252f707ca/1990-EvaluationPurposesFunctions.pdf.

> "AIDEA should concentrate on financing industrial development projects and should not be involved in financing real estate, unless such financing leads to development of specific projects producing a value added to the Alaskan economy."[145]

More specifically, ISER recommended

> "AIDEA should welcome offers or opportunities to sell its loans or portions of loans to other institutions or to the general public, when it can do so advantageously. For example, sales to banks of late maturities of long-term loans as earlier amortization payments bring them within the time span acceptable to banks; sales to the public of mixed packages representing a cross-section of its portfolio;"[146]

ISER's latter example anticipates today's CMBS that AIDEA has stated they have as an initiative, presumably to recycle loans, in order to purchase more bank loan participations or to raise cash for project financing. Either way, liquidation or relinquishment of the State's bankroll in AIDEA would go a long way towards the fundamental financial problem with AIDEA — investing other people's money. Market forces are: investing your own money.

The State may very well want to maintain AIDEA as a vehicle for stimulating economic development or distributing income to business or regional interests. But, arguably this might be better done with the State retaining the purse strings and meting out funds for such purposes through legislative appropriations.

The arena of legislative action compares more favorably than AIDEA in terms of openness to public process, transparency, and competition for funds. Legislative competition for funds may be a better proxy for a market test than AIDEA's deliberations.

[145] *Ibid*., page 56.
[146] *Ibid*., page 59.

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;

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 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 might help AIDEA perform more as owners of capital, than mere stewards of other peoples' money,[147] 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

[147] 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.

management, the State, and the public the ability to better gauge the deployment, allocation, and performance of AIDEA's assets.

This wouldn't necessarily mean that detailed accounting by such asset classes would be required for all items on AIDEA's books. Various mechanisms for apportioning items common to more than one asset class could be employed. That is what has been done in this report.

AIDEA already does this to some extent. For example, AIDEA charges the Alaska Energy Authority (AEA) for AEA's share of personnel and other costs for services AIDEA provides to AEA. More generally, AIDEA's financial statements have typically shown offsetting "income from state agencies and component units" revenue, and "costs reimbursed from state agencies and component units" expense items, as they did in the June 30, 2016 income statement.

Another example is the interest rates charged on AIDEA's loan participations. For fixed rate loans, the rates are:

> "The Federal Home Loan Bank of Des Moines' Fixed-Rate Advances Index that most closely matches the term of the loan *plus AIDEA's allocable cost of operations*; OR the five year return on the investment funds of the authority *plus AIDEA's allocable cost of operations*; whichever is greater. (*Emphasis added*)"[148]

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 each financing:

   f. refinancings;
   g. acquisitions;
   h. assumptions;
   i. equity extraction; and,
   j. new construction.

   Permanent jobs should be broken down into new jobs versus transfers from another business, facility, or location.

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

   d. AIDEA's subsidy costs;
   e. the State's opportunity costs; and,
   f. the value of the subsidies to major project participants and beneficiaries;

[148] 3 AAC 99.350 (e).

7. ***the subsidy estimates should be***

    e. available to Board Members considering loan or project approval; and,
    f. summarized in AIDEA's budget documents, annual reports, and financial statements.

    The only previous subsidy estimates found in the course of this study are contained in the Division of Legislative Audit's January 10, 1983 "A Report on the Alaska Industrial Development Authority". These estimates were from a time when loans were AIDEA's only economic development activity. AIDEA did not have authority to engage in projects until FY 1985.

8. ***subsidy estimates should be included in the AS 43.05.095 and AS 24.20.235 indirect and tax expenditure reports.***

    Alaska, similar to some other political jurisdictions, has an indirect and tax expenditure "budget". AS 43.05.095 requires the Commissioner of Revenue to annually submit a report to the Legislature's Finance Committees that summarizes tax and other revenue losses from tax credits or deductions, Alaska residency discounts, and other special provisions.

    AS 24.20.235 requires the Legislative Finance Division to submit a report every two years to the Finance Committees that analyses the items in the Commissioner of Revenue's AS 43.05.095 report, on a six-year rotation, i.e., each State agency's indirect expenditures will be analyzed once every six years.

    Inclusion in the AS 43.05.095 and AS 24.20.235 reports, or something similar, should be done for below-market financing terms. They drain the public purse as surely as direct appropriations or indirect reductions in revenue. A subsidy budget would seem all the more important because the value of subsidized financing is not readily visible or evident to anyone but the parties to the transaction, and possibly not even to them.

9. ***Subsidy estimates should be 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.***

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

    a. ***"provide for annual post audits of*** the Alaska Housing Finance Corporation, the Alaska Aerospace Corporation, and the ***Alaska Industrial Development and Export Authority."* (AS 24.20.201(a)(12))**; [***Emphasis added***.]

        Our review of AIDEA audits performed by the Alaska Legislative Audit Division found eight audits, the earliest being from 1983. Only the 1983 audit was performed in response to Title 24 of Alaska Statutes. It appears to address the investment and operational performance evaluations called for in Recommendation 10.b and c, below. Three other audits were in response to special legislative requests and four were audits of specific AIDEA projects or loan programs.

b. ***"prepare a complete report of investment programs, plans, performance, and policies*** of all agencies of the state that perform lending or investment functions and notify the legislature on or before the first day of each regular session that the report is available;" **(AS 24.20.206(3))**; [***Emphasis added***.] and,

c. ***"provide for an annual operational and performance evaluation of*** the Alaska Housing Finance Corporation and the ***Alaska Industrial Development and Export Authority***; the performance evaluation must include, but is not limited to, a comparison of the effect on various sectors of the economy by public and private lending, the effect on resident and nonresident employment, the effect on real wages, and the effect on state and local operating and capital budgets of the programs of the Alaska Housing Finance Corporation and the Alaska Industrial Development and Export Authority;" **(AS 24.20.206(6))**. [***Emphasis added***.]

To our knowledge, no reports have been prepared fulfilling any of the above Legislative Budget and Audit reporting duties, except the 1983 Legislative Audit Division report.

References

AIDEA, *2021 Annual Report: Investing in Alaskans*, (no date) at https://www.aidea.org/Portals/0/Annual%20Reports/2021%20AIDEA%20Annual%20Report_Final_email.pdf?ver=vRfvbYsyE0HZQlKFt2Haiw%3D%3D.

AIDEA, *AIDEA Board Meeting Minutes*, December 23, 2020, at https://www.aidea.org/Portals/0/Meeting%20Docs/2020BoardMeetings/122320/12.23.20%20Signed%20Meeting%20Minutes.pdf.

AIDEA, *AIDEA Board Meeting Draft Minutes*, October 23, 2019 at http://www.aidea.org/Portals/0/Meeting%20Docs/2019BoardMeetings/120419/6A_AIDEADraftMinutes102319.pdf.

AIDEA, *AIDEA Board Meeting Minutes*, October 27, 2016 at https://www.aidea.org/Portals/0/2016/102716AIDEAMinutes.pdf.

AIDEA, *AIDEA Board of Directors Unanimously Approves Resolution for Evaluation of Bids for the Coastal Plain Alaska Oil and Gas Lease Sale*, December 24, 2020, at https://www.aidea.org//Portals/0/PressReleases/AIDEA%20Coastal%20Plain%20Press%20Release_122420_Final.pdf?ver=7gM_YA2lWGndpE6Q2P8-eg%3d%3d&ver=7gM_YA2lWGndpE6Q2P8-eg%3d%3d.

AIDEA, *AIDEA Board Work Session*, August 13, 2021, at http://www.aidea.org/Portals/0/Meeting%20Docs/2021BoardMeetings/081321/AIDEA-10-Year-Development-Project-Asset-Investments.pdf.

AIDEA, "AIDEA, Investing in Alaskans, Alaska Strategic & Critical Minerals Summit", Mark Davis, Deputy Director, November 2012, at http://dnr.alaska.gov/commis/priorities/Slides/Mark_Davis.pdf.

AIDEA, "AIDEA Investment Portfolio and Economic Exposure Analysis to Financial Entities with Anti-Arctic Development Policies", Alan Weitzner, Executive Director, December 1, 2021 at https://www.aidea.org/About/Board-Members/Board-Meeting-Archives#2021.

AIDEA, AIDEA Motion to Intervene, *Gwich'in Steering Committee, et. al, v. Bernhardt, et. al*, 3:20-cv-00204-SLG, (D. Alaska).

AIDEA, *AIDEA Strategic Plan, Investing in Alaskans*, 2009 at https://www.aidea.org/Portals/0/AIDEA%20Documents/AIDEAStrategicPlan.pdf.

AIDEA, *Alaska Industrial Development and Export Authority, Basic Financial Statements, June 30, 2009*, KPMG LLP, October 23, 2009.

AIDEA, *Alaska Industrial Development and Export Authority, Financial Statements, June 30, 1981*, Peat, Marwick Mitchell & Co., July 29, 1981.

AIDEA, "Alaska's Development Finance Authority, AIDEA Overview, Investing in Alaskans", John Springsteen, Executive Director, December 14, 2018, at https://www.aidea.org/Portals/0/PDF%20Files/121418AIDEAOverview.pdf.

AIDEA, *Delong Mountain Transportation System Asset Management Review*, Dec. 2007.

AIDEA, Loan applicant Seward Wildlife Cruises, LLC, "AIDEA Loans Funded & Jobs Supported as a Result of Loan Participations 7/1/20 - 3/31/21 for the 5/19/2021 Board Meeting", AIDEA Board Meeting, June 23, 2021, AGENDA, Finance Dashboard and Commercial Loan Reports, May 2021, at http://www.aidea.org/Portals/0/Meeting%20Docs/2021BoardMeetings/062321/06.23.21%20AIDEA%20Agenda%20Rev1.pdf, accessed December 3, 2021.

AIDEA, *Loan Dashboard Report*, as of October 31, 2020.

AIDEA, 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.

AIDEA, *Predevelopment Projects Quarterly Report: Project Status Reports*, January 2022.

AIDEA, *Project Fact Sheet*, February 2022 at https://www.aidea.org//Portals/0/Meeting%20Docs/2022BoardMeetings/030222/7._D_Development_Project_Financing_Report_030222%20(1).pdf.

AIDEA, *Resolution of the Alaska Industrial Development and Export Authority Relating to the Evaluation and Potential Submission of Bid(s) for the Coastal Plain Alaska Oil and Gas Lease Sale*, *Resolution No. G20-31*, December 23, 2020, at https://www.aidea.org//portals/0/Meeting%20Docs/2020Boardmeetings/122320/Resolution%20G20-31_ANWR%20Coastal%20Plain%20Oil%20and%20Gas%20Lease%20Sale.pdf.

AIDEA, *Section 1002 Area*, at https://www.aidea.org/Programs/Project-Development/1002-Area.

Alaska Administrative Code, Arctic Infrastructure Development Program, 3 AAC 103.900, 2016, at https://www.akleg.gov/basis/aac.asp.

Alaska Administrative Code, Arctic Infrastructure Development Program, 3 AAC 103.020, 2016 at https://www.akleg.gov/basis/aac.asp.

Alaska Administrative Code, Commercial and Industrial Financing, 3 AAC 99.350 (e), 2013 at https://www.akleg.gov/basis/aac.asp.

Alaska Department of Revenue, Permanent Fund Dividend Division, Microsoft Excel file "2020 Payment Breakdown by AK Zip Code 01.25.22.xlsx".

Alaska Journal of Commerce, "Construction, production wells at Mustang move forward", , December 17, 2014, at https://www.alaskajournal.com/business-and-finance/2014-12-17/construction-production-wells-mustang-move-forward.

Alaska Journal of Commerce, "Poe reflects on 2 years as AIDEA chief", September 8, 2002 at https://www.alaskajournal.com/community/2002-09-09/poe-reflects-2-years-aidea-chief.

Alaska Railroad Corporation, "Seward Loading Facility, Facility Facts", August 2015, at https://www.alaskarailroad.com/sites/default/files/akrr_pdfs/2015_08_05_Seward_Coal_Loading_Facility_FS_PROJ.pdf.

Alaska Statutes, Public Finance, AS 37.13.140, at https://www.akleg.gov/basis/statutes.asp.

Alaska Statutes, Public Finance, AS 37.13.145, at https://www.akleg.gov/basis/statutes.asp.

Alaska Statutes, Revenue and Taxation, AS 43.23.025, at https://www.akleg.gov/basis/statutes.asp.

Alaska Statutes, Revenue and Taxation, AS 43.23.045, at https://www.akleg.gov/basis/statutes.asp.

Alaska Statutes, State Government, AS 44.88.172, at https://www.akleg.gov/basis/statutes.asp.

Alaska Statutes, State Government, AS 44.88.830, at https://www.akleg.gov/basis/statutes.asp.

Alaska Statutes, State Government, AS 44.88.900, at https://www.akleg.gov/basis/statutes.asp.

Associated Press, "EPA report: Red Dog Mine is major chemical release source", Mar. 9, 2010.

Bartle Wells Associates, "Alaska Industrial Development and Export Authority Review of Financial Position", March 1993, for Alaska Legislative Finance Division, in "Alaska Industrial Development and Export Authority Financial Analysis", Control No. 08-4527-96, Alaska Division of Legislative Audit, March 29, 1996.

BDO USA, LLP, *Alaska Industrial Development and Export Authority, Basic Financial Statements and Schedules*, June 30, 2018, at https://www.aidea.org/Portals/0/Financials/Fs18aidea.pdf.

BDO USA, LLP, *Alaska Industrial Development and Export Authority, Basic Financial Statements and Schedules*, June 30, 2019, at https://www.aidea.org/About/News-Publications/Publications/Financial-Statements.

Bradner, T., "AIDEA approves $50 million investment at Mustang field", *Alaska Journal of Commerce*, May 1, 2014.

Bradner, Tim, "Discussion begins on tax credits", *Alaska Journal of Commerce*, July 8, 2015.

Brehmer, E., "Changes to credits eyed as payments hit deficits", *Alaska Journal of Commerce*, October 14, 2015.

Brooks, James, "Permanent Fund is making its biggest investments within the state since the 1980s, but many details remain secret", *Anchorage Daily News*, March 21, 2022 at https://adn-ak.newsmemory.com/?selDate=20220321&goTo=A01&artid=2&utm_source=emailMarketing&utm_medium=email&utm_campaign=email+stats.

Brooks, James, "State-owned Alaska corporation to consider bidding on Arctic wildlife refuge oil leases", *Anchorage Daily News*, December 22, 2020.

Bureau of Land Management, "Alaska Oil and Gas Lease Sales", at https://www.blm.gov/programs/energy-and-minerals/oil-and-gas/leasing/regional-lease-sales/alaska.

Division of Legislative Audit, Alaska State Legislature, "A Report on the Alaska Industrial Development Authority", January 10, 1983.

Division of Legislative Audit, *A Special Review of the Department of Revenue (DOR), Mustang Operations Center 1 LLC (MOC 1) Loan*, July 24, 2020, at https://legaudit.akleg.gov/wp-content/docs/audits/special/dor/30093-MOC-1-Final-WEB.pdf.

EideBailly, *Financial Statements, June 30, 2021, Alaska Industrial Development and Export Authority*, December 2, 2021, at http://www.aidea.org/Portals/0/Meeting%20Docs/2021BoardMeetings/120121/Alaska_Industrial_Development_2021_Financial_Statements_FINAL.pdf.

Earl, Elizabeth, "No plan for Seward coal terminal three years after last shipment", *Alaska Journal of Commerce*, May 8, 2019, at https://www.alaskajournal.com/2019-05-08/no-plan-seward-coal-terminal-three-years-after-last-shipment.

Essayyad, Musa et al, *Evaluation of Future Purposes and Functions of the Alaska Industrial Development and Export Authority*, Institute of Social and Economic Research, December 1990, at http://pubs.iseralaska.org/media/6715a88b-90f6-497e-b8c8-91c252f707ca/1990-EvaluationPurposesFunctions.pdf.

Fay, Ginny, *Alaska Megaprojects Update*, Ecosystems, LLC, March 31, 2022, at https://static1.squarespace.com/static/61df37a8ba8bd33d942ff3ed/t/62730139342195200b32661c/1651704136485/Alaska+Megaprojects+Update.pdf.

Federman, Adam, "How Joe Biden's Green Agenda Threatens the Alaskan Wilderness", *Politico Magazine*, Sept. 17, 2021.

http://www.companieshistory.com/teck-resources/.

https://en.wikipedia.org/wiki/Teck_Resources.

https://www.blm.gov/sites/blm.gov/files/docs/2021-01/BLM-Alaska_2021-Coastal-Plain-Sale-Bid-Recap_20210106.pdf.

https://www.reuters.com/article/us-usa-alaska-oil/oil-drillers-shrug-off-trumps-u-s-arctic-wildlife-refuge-auction-idUSKBN29B0KR.

Institute for Agricultural and Trade Policy, "World's largest lead and zinc mine (Red Dog mine) found in violation of Clean Water Act", August 3, 2006.

Johnson, Benjamin**,** "COMMENTARY: Veto of tax credit payments damages Alaska", July 13, 2016, *Alaska Journal of Commerce*, Anchorage, AK.

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

KDLL, "Marathon gets green light to reopen LNG plant — this time, to imports", December 21, 2020, at https://www.kdll.org/local-news/2020-12-21/marathon-gets-green-light-to-reopen-lng-plant-this-time-to-imports.

Kitchenman, Andrew, "Alaska lawmakers grill Permanent Fund Corp. chair Richards over firing of executive director Rodell" Alaska Public Media & KTOO, January 12, 2022, at https://www.ktoo.org/2022/01/18/alaska-lawmakers-grill-permanent-fund-corp-chair-richards-over-firing-of-executive-director-rodell/.

Legislative Finance Division, Indirect Expenditure Report, January 2021, at https://www.legfin.akleg.gov/IEBooks/2021IndirectExpenditureReport.pdf.

Maguire, Sean, "Alaska's public investment fund tapped to pay state's oil tax debt obligations in FY2020 budget", KTUU, April 18, 2019, at https://www.alaskasnewssource.com/content/news/Alaskas-public-investment-fund-tapped-to-pay-states-debt-obligations-508787541.html.

McDowell Group, Inc., "The Economic Impact of Mining on Alaska," prepared for the Alaska Miners Association (February 2006).

Murkowski, Frank, "Alaska should bid on ANWR oil leases itself", *Anchorage Daily News*, December 16, 2020.

Official Statement, $103,250,000 Alaska Industrial Development Authority, DeLong Mountain Transportation Project Revenue Bonds, Series 1987A, Goldman, Sachs & Co. and Prudential-Bache Capital Funding, February 25, 1987, at ftp://aidea.org/RFI%20-%2011-13-19/1987-02-01-DMTS-Rev.Bonds-Series1987-A.pdf.

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.

SRI International for AIDEA, *Economic Evaluation and Finance Plan for the Proposed DeLong Mountain Transportation System*, July 1985.

Stapleton, Rob, "New group builds change in AGIA views", *Alaska Journal of Commerce*, June 14, 2008.

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.

Swanson, Paulyn, "Alaska Permanent Fund - Historical Values by Fiscal Year", Alaska Permanent Fund Corporation, email to Gregg Erickson, October 26, 2021.

Trepp CMBS Research, "CMBS Issuance Explodes in 2021, Hits Levels Not Seen in 14 Years", February 1, 2022, at https://www.trepp.com/trepptalk/cmbs-issuance-explodes-in-2021-hits-levels-not-seen-in-14-years.

Trustees for Alaska, "Interior seeks pause on Arctic road litigation, threat to people, land remains", Oct. 15, 2021 at https://trustees.org/interior-seeks-pause-on-arctic-road-litigation-threat-to-people-land-remains/.

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 at https://pubs.iseralaska.org/media/534a8361-741b-44aa-88a1-9471b386336f/1969-MiningPublicPolicyAlaska.pdf.

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 at https://doi.org/10.1093/jopart/mul012.

Widerquist, Karl and Howard, M.W., *Alaska's Permanent Fund Dividend: Examining its Suitability as a Model*, bdpress, 2012, at https://works.bepress.com/widerquist/107/.