

CREDIT OPINION

13 July 2017

Update

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State of Alaska

Update - Moody's Downgrades Alaska to Aa3; Outlook Remains Negative

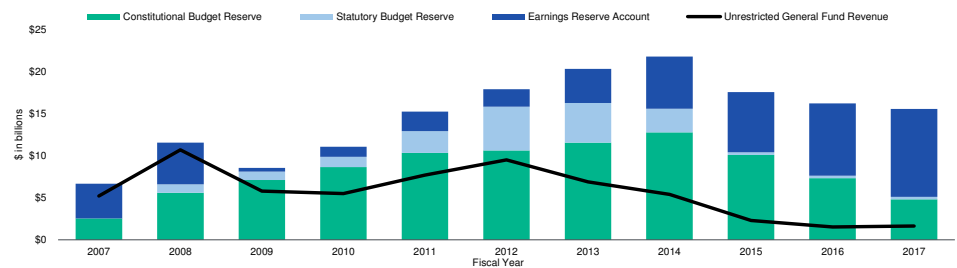
Summary Rating Rationale

Moody's Investors Service has downgraded the State of Alaska's general obligation debt to Aa3 from Aa2. The outlook is still negative. We have also downgraded the state's lease revenue bonds, to A1 from Aa3, and its moral obligation bonds, to A2 from A1. In a separate action, we have affirmed the Alaska Municipal Bond Bank's general obligation rating at A1 (see separate report published concurrently with this one).

The downgrade reflects the state's ongoing structural budget imbalance, a small economy with concentration in energy production, large fixed costs, and heavy pension burden. The rating recognizes that Alaska still has the means to solve its fiscal problems (see a summary of the governor's proposed plan on page 4), and our baseline expectation remains that the state will do so before exhausting its still-considerable liquid reserves.

Exhibit 1

Alaska Still Has Abundant Reserves



The reserves shown above are all available for appropriation into the budget. The decline in reserves above include a one-time \$3 billion transfer to the state's pension fund.

Source: State of Alaska

Credit Strengths

- » Considerable liquid reserves
- » Identifiable path toward structural balance

Credit Challenges

- » Large pension burden
- » Large imbalance between general fund spending and unrestricted revenues

Rating Outlook

The negative outlook incorporates the large structural imbalance that the state has still not rectified, and the ongoing spending of the state's reserves. As the state's reserves diminish, its options to close the budget gap narrow and the consequences should it fail to do so intensify.

Factors that Could Lead to an Upgrade (Removal of Negative Outlook)

- » Passage of a plan to close the structural budget imbalance
- » Significant rebound in revenues, bringing revenues closer to expenditures

Factors that Could Lead to a Downgrade

- » Continued reliance on reserves to finance large deficits
- » Failure to enact a plan to close the structural budget gap

Key Indicators

Exhibit 2

Alaska	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Operating Fund Revenues (000s)	10,785,224	8,577,583	7,706,982	3,678,644	2,251,963
Balances as % of Operating Fund Revenues	211.0%	301.6%	353.2%	579.0%	786.6%
Net Tax-Supported Debt (000s)	914,900	1,156,400	1,097,200	1,050,300	1,254,600
Net Tax-Supported Debt/Personal Income	2.8%	3.2%	3.0%	2.7%	3.0%
Net Tax-Supported Debt/Personal Income 50 State Median	2.8%	2.6%	2.5%	2.5%	2.5%
Debt/Own-Source Governmental Funds Revenue	8.3%	8.6%	7.7%	18.9%	51.1%
Debt/Own-Source Governmental Funds Revenue Median	37.4%	36.1%	35.8%	34.4%	N/A
ANPL/Own-Source Govt Funds Revenue	90.8%	117.4%	99.9%	241.1%	N/A
ANPL/Own-Source Govt Funds Revenue Median	92.6%	90.8%	83.0%	84.9%	N/A
Total Non-Farm Employment Change (CY)	1.6%	0.4%	0.4%	0.3%	-1.9%
Per Capita Income as a % of US (CY)	118.9%	115.6%	117.5%	116.6%	111.6%

Source: Moody's Investors Service

Recent Developments

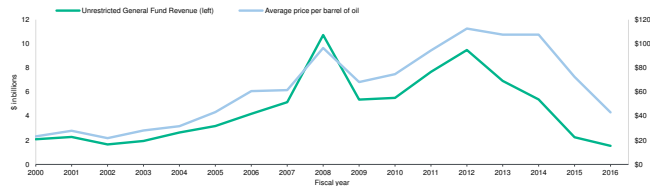
Entering fiscal 2018, Alaska finds itself in much the same position as last year. Its budget is still imbalanced by several billion dollars, and the legislature has yet to adopt a plan to remedy that.

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How Alaska Got Here

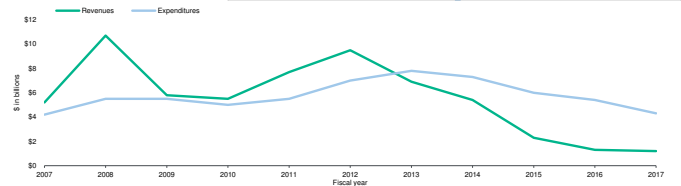
How Alaska got here is basically a story about the price of oil. More than 80% of Alaska's unrestricted revenues since 1980 have come from taxes, royalties and other types of revenues generated from oil production in the state. When the price of oil went up, Alaska's revenues went up. Then, when the price of oil went down, Alaska's revenues went down. Meanwhile, when Alaska's revenues went up, its spending went up, too. But when its revenues went down, the spending didn't go down as much.

Exhibit 3
Higher Oil Prices Drove Higher Revenues



Source: State of Alaska

Exhibit 4
Spending Hasn't Fully Adjusted to the Decline in Revenues



Source: State of Alaska

Alaska has yet to fully adjust to the lower-revenue¹ environment. The state has cut spending by \$3.5 billion (44%) since 2013. But with unrestricted revenues down so sharply over the past few years, a multibillion dollar surplus has morphed into a multibillion dollar deficit.

Our baseline expectation remains that Alaska will adjust its unrestricted revenues and expenditures back into balance, and maintain a strong credit profile overall. The governor has identified exactly how he wishes to do so (see sidebar on next page). However, uncertainties about what the state's fiscal future will look like and the risk that the state will not fully rectify its fiscal situation soon continue to apply downward pressure on Alaska's rating.

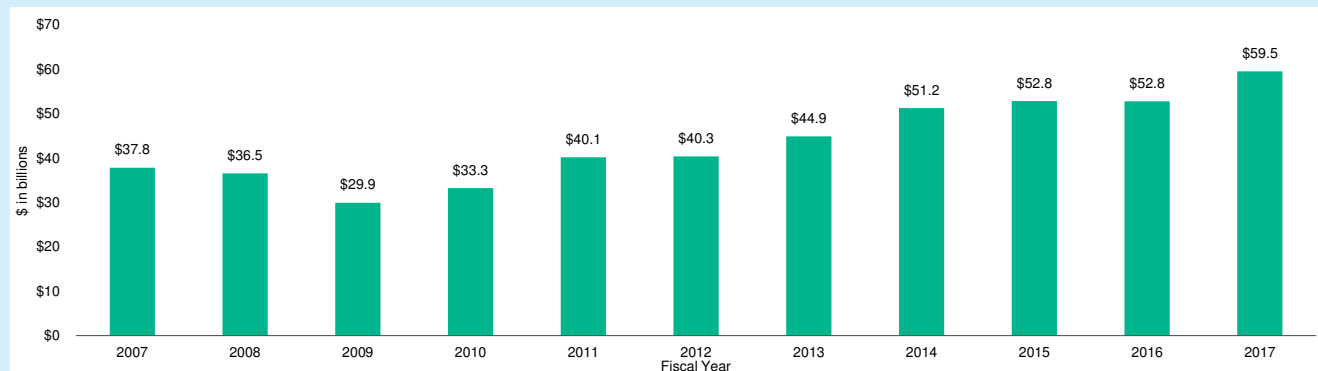
The Governor's Plan to Balance the Budget

Alaska's governor has put forth a proposal for exactly how the state will close its \$2.5 billion budget gap: the [Alaska Permanent Fund Protection Act](#).

The Alaska Permanent Fund is a public trust created in 1976, into which the state deposits about 30% of its oil revenues. After 40 years of deposits and investment gains, the total fund balance has grown to \$59.5 billion.

Exhibit 5

Alaska's Permanent Fund Continues to Grow



(2017 balance is as of May 2017)

Source: Alaska Permanent Fund Corp.

The above balance includes both the principal (which cannot be spent) and the fund's realized investment income (which can). Since 1982, the state has used the fund's earnings primarily to pay [dividends](#) to citizens. The state had paid almost \$24 billion of dividends cumulatively through 2015, when the dividend peaked at \$2,072 per person.

The governor has [concluded](#) that the annual earnings of the permanent fund are the best revenue source to sustainably close the general fund's \$2.5 billion gap. These earnings are available for appropriation, and represent a significant source of funds in addition to the state's unrestricted general fund revenues. Favorably, the state has stopped following the statutory dividend formula, and the past two years has paid approximately half of the statutory amount in dividends, preserving the rest for a potential budget solution.

Under the governor's [proposal](#), the state would use about \$2.5 billion of annual earnings from the permanent fund (a 5.25% percent of market value draw) to top up the general fund, closing that gap. The state would also restructure its dividend format: annual dividends of about \$1,000 would be funded from a combination of permanent fund earnings and oil revenues, instead of solely from permanent fund earnings. This change would shift the volatility risk inherent to oil revenues to dividend recipients and away from the general fund.

What the governor calls the "New Sustainable Alaska Plan" has a few other elements, such as tax increases. The state's progress in implementing this plan or any plan that brings the budget into balance will be integral to the state's rating going forward.

Detailed Rating Considerations

Economy

Alaska's [economy](#) is struggling. The state's unemployment rate (6.7% as of May) is the highest in the nation. Lower oil prices have soured the outlook for capital spending and employment in the energy industry, and the economy is in recession. Population trends are weak, and we expect the state's \$52 billion economy to be a below-average performer economically for the time being.

In the five years from the end of 2011 to the end of 2016, US real gross domestic product grew 10.2%. During that time, Alaska's economy shrank 6.9%, the worst of any state. The worst-performing states economically during that period were generally energy states, but Alaska's economy stacks up poorly against even these and other underperforming peers.

Alaska's economic performance looks particularly poor relative to its peers in the Far West region, which on the whole have been among the best-performing of all.

Exhibit 6 Alaska's Economy Has Fared Poorly Against the Worst-Performing ...

From 2011 to 2016	Rating	Real GDP Growth	Personal Income Growth (Rank)
Alaska	Aa3 negative	-6.9%	49
Wyoming	No rating	-5.2%	45
Louisiana	Aa3 negative	-1.7%	33
West Virginia	Aa2 stable	-0.7%	50
Connecticut	A1 stable	1.0%	47
Vermont	Aaa stable	1.6%	44
United States	Aaa stable	10.2%	Not applicable

Source: Bureau of Economic Analysis

Exhibit 7 ... And Against the Best-Performing

From 2011 to 2016	Rating	Real GDP Growth	Personal Income Growth (Rank)
Alaska	Aa3 negative	-6.9%	49
Far West	Not applicable	15.0%	Not applicable
California	Aa3 stable	17.2%	3
Hawaii	Aa1 stable	7.8%	13
Nevada	Aa2 stable	6.4%	9
Oregon	Aa1 stable	4.4%	4
Washington	Aa1 stable	15.6%	2

Source: Bureau of Economic Analysis

Finances and Liquidity

Alaska continues to spend substantially in excess of its unrestricted general fund revenues.

In fiscal 2018 (ending 6/30/2018), Alaska has [appropriated](#) \$4.2 billion of operating expenditures. Meanwhile, it [forecasts](#) unrestricted general fund revenue of \$1.8 billion. That deficit – about \$2.5 billion – will once again be closed with a draw from reserves. This will be the fifth straight year that Alaska has financed a large operating deficit with reserves.

Exhibit 8 Alaska Continues to Finance Deficits with the Constitutional Budget Reserve (\$ in billions)

Fiscal Year	Change in Operating Reserves	Remaining Operating Reserves
2013	(\$0.6)	\$16.3
2014	(\$1.9)	\$15.6
2015	(\$2.5)	\$10.4
2016	(\$3.7)	\$7.6
2017	(\$2.7)	\$5.1

"Operating Reserves" above excludes the Earnings Reserve Account of the Permanent Fund, which consists of investment income and has not been used to finance deficits. See sidebar on next page for more details.

Source: State of Alaska

Excluding the investment income of the Permanent Fund (more information on that on the next page), Alaska has drawn more than \$10 billion from reserves that once totaled more than \$16 billion. While this is still a very large reserve position (and includes a one-time \$3 billion contribution to the pension fund), Alaska continues to burn through cash each year.

Alaska's Reserves Explained

Alaska has many billions of dollars of reserves with varying degrees of accessibility. Understanding the reserves is important to understanding the state's structural imbalance as well as the remedies it is considering.

Exhibit 9

Alaska's Many Reserve Funds

Reserve	\$	Description	Role in Fiscal Overhaul
Permanent Fund (Principal)	\$47 billion	Cannot be accessed except to generate investment income	The plan is for the general fund to be primarily funded by investment income from the Permanent Fund ERA
Permanent Fund (Earnings Reserve Account)	\$12.5 billion	Investment income and realized earnings from Permanent Fund; available for appropriation	The plan is for the general fund to be primarily funded by investment income from the Permanent Fund ERA
Constitutional Budget Reserve Fund	\$4.8 billion	Liquid reserve available for appropriation	Original plan was to deposit some of these funds into the Permanent Fund, but as they are depleting this appears less likely
Statutory Budget Reserve	\$288 million	Liquid reserve available for appropriation	None

All figures are as of May 2017.

Source: State of Alaska, Moody's Investors Service

When we talk about Alaska's reserves, we are generally referring to the Constitutional Budget Reserve (CBR), the Statutory Budget Reserve (SBR), and the Permanent Fund Earnings Reserve Account (ERA). The Permanent Fund principal, which is invested in equities and other longer-term strategies, cannot be spent under the state's constitution.

Alaska's Structural Imbalance

Each year, Alaska spends in excess of its unrestricted general fund revenues, which is expressed in the decline in the SBR and the CBR (the state has not yet drawn from the ERA to fund operations).

However, because the Permanent Fund has been generating investment income into the ERA, Alaska's total reserves have not been declining at a rate equal to the annual deficits. In other words, each year Alaska draws from its liquid reserves to fund operations, but adds investment income into liquid reserves from the Permanent Fund. The Permanent Fund's investment gains have been partially offsetting the state's operating deficits, with the result that total reserves have only declined \$6 billion from their peak in 2014 (compared with more than \$10 billion excluding gains in the ERA). Of that \$6 billion draw, half is explainable by a one-time pension contribution of \$3 billion in 2015.

Exhibit 10

ERA's Investment Gains Have Sustained Alaska's Reserves (\$ in billions)

Fiscal Year	2013	2014	2015	2016	2017
Change in CBR/SBR	\$0.4	(\$0.7)	(\$5.2)	(\$2.8)	(\$2.5)
Change in ERA	\$2.0	\$2.2	\$1.0	\$1.4	\$1.9
Net change in total reserves	\$2.4	\$1.5	(\$4.2)	(\$1.3)	(\$0.7)

The \$4.2 billion draw in 2015 included a one-time \$3 billion contribution to the pension fund.

Source: State of Alaska

Debt and Pensions

Alaska's long-term liabilities are heavy, mainly because of a large pension burden. Although pension reform will prevent these liabilities from growing much more, for now Alaska is carrying heavy pension liabilities with a weak economy amid a troubled budget environment.

DEBT STRUCTURE

Alaska's debt burden is about average. The state's net tax supported debt (NTSD) consists mainly of general obligation bonds. Not included in the below are an additional \$1.3 billion of moral obligation bonds (mostly local government borrowings through the Municipal Bond Bank) and some other debt that is self-supporting from other sources.

Exhibit 11

Alaska's Net Tax Supported Debt

Debt Type	Rating	Security	Par Outstanding (6/30/2016)
General Obligation	Aa3 negative	Full faith and credit	\$823.2 million
Sport Fishing Revenue Bonds	A1 stable	Fishing licenses and fees	\$27.9 million
Leases	A1 negative	Appropriations	\$255.6 million
		Total	\$1.11 billion

Leases include both bonds secured by lease payments and capital leases. The A1 rating shown above applies only to rated bonds.

Source: State of Alaska

A \$1.1 billion debt burden is not especially large relative to the state's economy or budget. Debt is not much higher than regional peers, and is significantly lower than the [highest-debt states](#).

Exhibit 12

Alaska's Debt is Lower than Some Regional Peers ...

State	Rating	NTSD to State GDP (rank)	NTSD per capita (rank)
Alaska	Aa3 negative	2.38% (24)	\$1,691 (18)
US Median	Not applicable	2.23%	\$1,006
California	Aa3 stable	3.51% (12)	\$2,217 (8)
Hawaii	Aa1 stable	8.92% (2)	\$5,018 (3)
Nevada	Aa2 stable	1.24% (37)	\$587 (37)
Oregon	Aa1 stable	3.46% (14)	\$1,842 (14)
Washington	Aa1 stable	4.45% (7)	\$2,717 (6)

A lower-number rank is a higher debt burden

Source: Moody's Investors Service

Exhibit 13

... And Much Lower than the Highest-Debt States

State	Rating	NTSD to State GDP (rank)	NTSD per capita (rank)
Alaska	Aa3 negative	2.38% (24)	\$1,691 (18)
US Median	Not applicable	2.23%	\$1,006
Connecticut	A1 stable	9.2% (1)	\$6,505 (1)
Hawaii	Aa1 stable	8.92% (2)	\$5,018 (3)
Massachusetts	Aa1 stable	8.4% (3)	\$5,983 (2)
New Jersey	A3 stable	6.91% (4)	\$4,388 (4)
Mississippi	Aa2 negative	5.22% (5)	\$1,847 (13)

A lower-number rank is a higher debt burden

Source: Moody's Investors Service

Debt service of about \$90 million annually represents a moderate share of revenues (roughly 5%), a figure that would become even lower should the state increase its revenues as part of a budget solution.

DEBT-RELATED DERIVATIVES

None of Alaska's direct debt is variable rate, and the state is not party to any derivative agreements through its direct debt. Some state agencies whose debt we do not consider state debt – such as the airport system and student loan and housing corporations – have variable rate debt outstanding.

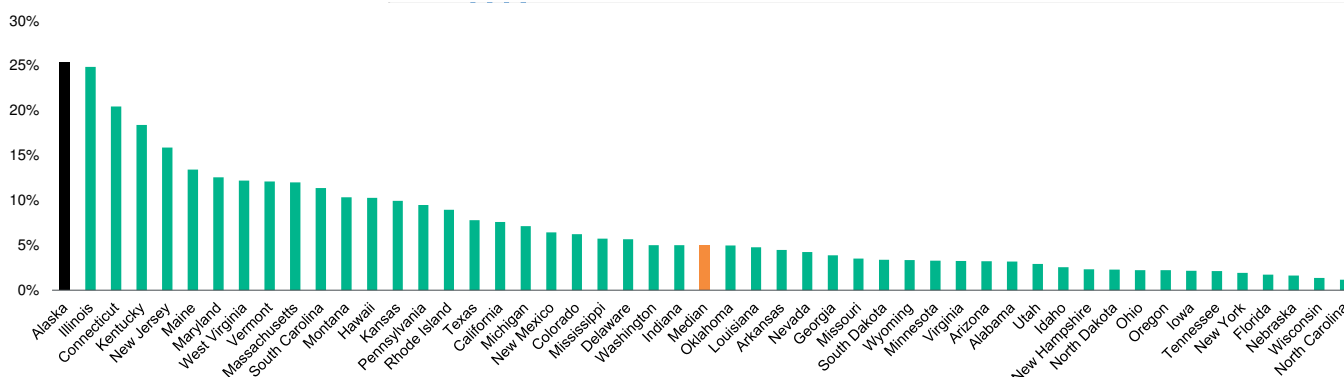
PENSIONS AND OPEB

Alaska's pension burden is extremely high, by many measures the highest of all states. Relative to personal income, Alaska's Moody's-adjusted net pension liability (ANPL) is higher than [Illinois'](#) (Baa3 review for downgrade), almost twice as high as [New Jersey's](#) (A3 stable), and more than five times as high as the national median. Alaska's ANPL is the highest of all states relative to personal income, state GDP, and on a per-capita basis.

Exhibit 14

Alaska Has the Highest Pension Burden of Any State

ANPL relative to state GDP



Source: Moody's Investors Service

The above figures attempt to measure the capacity of each state's economy to generate enough revenues to service pension liabilities, based on income and economic activity. We recognize that Alaska's revenue-generating dynamics are different from most other states, because of its substantial natural resources and the income-producing potential of the permanent fund discussed on page 4.

Therefore, Alaska probably has more capacity to fund its pension liabilities than would be communicated in the above exhibit. Neither the cost of servicing pensions nor total fixed costs are overly onerous on the overall state budget, particularly if the governor's plan to begin funding the general fund with permanent fund income takes effect.

Governance

Fiscal 2018 will prove a crucial year for Alaska's governance as the governor and the legislature work toward a fiscal overhaul to put unrestricted general fund revenues and ongoing expenditures on a more balanced path.

Legal Security

Alaska's general obligation bonds are secured by the full faith, credit and resources of the state. By law, the funds necessary to pay debt service on GO bonds are automatically appropriated from the general fund.

The state's certificates of participation are secured by lease payments that are made subject to appropriation by the legislature.

Lastly, bonds secured by the state's moral obligation are backed by the state's pledge to replenish any draws on the debt service reserve fund for the bonds.

Use of Proceeds

Not applicable.

Obligor Profile

Alaska is the 48th-largest state, with a population of 740,000.

Methodology

The principal methodology used in the general obligation rating was US States Rating Methodology published in April 2013. The principal methodology used in the lease rating was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

Endnotes

- 1 When we talk about Alaska's revenues, we will frequently be referring to its unrestricted general fund revenue. Alaska has various revenues in addition to unrestricted revenue, some of which are vital to its fiscal future.

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