MOODY'S
INVESTORS SERVICE

Rating Action: Moody's downgrades Hawaii's GO bonds to Aa2; outlook stable

31 Jul 2020

New York, July 31, 2020 -- Moody's Investors Service has downgraded rating on the State of Hawaii's general obligation bonds to Aa2 from Aa1. At the same time, we have downgraded the state's highway revenue bonds to Aa2 from Aa1; the Department of Hawaiian Homelands' Certificates of Participation (Kapolei Office Facility), 2017 Series A to Aa3 from Aa2; and the Department of Hawaiian Homelands' Revenue Bonds, Series 2017 to A1 from Aa3. These actions affect approximately $9 billion of outstanding debt. At this time, we have also assigned a Aa2 rating to the state's planned issue of $900 million Taxable General Obligation Bonds of 2020, Series FZ. The outlook is revised from negative to stable.

RATINGS RATIONALE

Today's action downgrading Hawaii's long term debt reflects the impact of the coronavirus pandemic on the state and its important tourism industry. The state is experiencing a severe decline in the state's tax revenues as a result of the rapid downturn in visitor arrivals, resulting in a multi-year fiscal imbalance and the need for significant spending adjustments. The state does not expect visitor arrivals and tax revenues to return to pre-crisis level before 2024. Absent significant additional federal assistance, the state's financial plan will likely include a short-term deficit financing, suspending indefinitely payments to pre-fund its OPEB liability, employee furloughs, drawing down reserves, and, beyond fiscal 2021, spending cuts which have not yet been identified.

The Aa2 rating on the general obligation bonds incorporates the state's strong fiscal governance, combined with its strong financial position and liquidity entering the crisis. Balanced against these strengths are the volatility of the state's tourism industry, above average debt, pension, and OPEB liabilities; and high fixed costs.

The rapid and widening spread of the coronavirus outbreak, deteriorating global economic outlook, falling oil prices, and financial market declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

The Aa2 rating on the Highway Revenue Bonds reflects the strong coverage of debt service by pledged revenues, the diversity of the pledged revenue stream, the state legislature's demonstrated willingness to add new pledged revenues as needed to fund the state's highway program, and limited future borrowing plans. At the same time, pledged revenues are more vulnerable to a downturn in tourism than comparably-rated state highway bonds due to the significance of car rental surcharges as a share of pledged revenues.

The Aa3 rating on the Hawaiian Homelands' COPs, one notch below the general obligation rating, reflects the limited, subject to appropriation, nature of a lease security; the essentiality of the leased asset; and the state's obligation to fund administrative and operating costs of the department, including lease payments, from its general fund.

The A1 rating on the Hawaiian Homelands' Revenue Bonds, two notches below the general obligation rating, reflects the satisfactory coverage of debt service by pledged revenues, the inherent volatility and lessee concentration of these real estate-derived revenues, and the availability of state payments to the department through Office of Hawaiian Affairs to make debt service payments.

RATING OUTLOOK

The stable outlook reflects the state's generally conservative revenue estimates and our expectation that the state will utilize its strong fiscal governance tools to maintain positive reserves and adequate liquidity.

FACTORS THAT COULD LEAD TO AN UPGRADE OF THE RATINGS

- GO: Increased economic diversification and reduced economic volatility.

- GO: Sustained reduction in debt ratios and significant and accelerated improvement in pension funded ratios.

- Highway Revenue Bonds: A sustained in coverage coupled with an upgrade of the state's GO rating.

- DHHL COPs and DHHL Revenue Bonds: Upgrade of the state's GO rating.

FACTORS THAT COULD LEAD TO A DOWNGRADE OF THE RATINGS

- GO: An extended economic downturn leading to further deterioration of revenue trends, budget imbalance, liquidity pressures, and narrowing of financial position.

- GO: Utilization of additional non-recurring solutions to balance the budget.

- GO: Increased debt ratios relative to other states, or deterioration of pension and OPEB funded ratios.

- Highway Revenue Bonds: Severe decline in pledged revenues, not offset by new revenue sources, resulting in significantly lower debt service coverage and/or a downgrade of the state's GO rating.

- DHHL COPs and DHHL Revenue Bonds: Downgrade of the state's GO rating.

LEGAL SECURITY

The state's general obligation bonds, including the Series FZ bonds, are general obligations of the state, to which the state has pledged its full faith, credit and resources. The bonds have a first charge on all general fund resources.

The Highway Revenue Bonds are limited obligations of the state, secured by a gross pledge of highway fund revenues including fuel taxes, registration fees, weight taxes, and car rental surcharges.

The Department of Hawaiian Homelands' COPs are secured by lease payments to be made by the state from its general fund for the use of the Department of Hawaiian Homeland's headquarters facility in the Kapolei area of Oahu. Lease payments are subject to appropriation by the state legislature.

The Department of Hawaiian Homelands' Revenue Bonds are special limited obligations of the department secured by a first lien on revenues from general leases, licenses, permits, and investment income collected from management and operation of the available lands. In addition, pursuant to a contract between the department and the Office of Hawaiian Affairs (OHA), a separate state agency, OHA has agreed to pay the department $3 million annually as long as the revenue bonds are outstanding. Although not pledged to the bonds, the OHA payments are specifically designated in the contract for the payment of debt service on the revenue bonds. In practice, the department has always used the OHA payments and interest earnings on the payments to pay debt service on the revenue bonds. OHA's obligation to make the annual payments is absolute and unconditional, and not subject to appropriation by the state legislature.

USE OF PROCEEDS

Proceeds of the Series FZ bonds will fund various state public improvement projects.

PROFILE

Hawaii is the 40th largest state by population, at 1.4 million. Its gross domestic product is 38th largest, at $97.3 billion. The population's income levels are above average, with per capita personal income equal to 101% of the US level and a median household income equal to 130%. Its poverty rate is in the bottom third among states.

METHODOLOGY

The principal methodology used in the general obligation ratings was US States and Territories published in April 2018 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1084466. The principal methodology used in the lease ratings was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2018 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1102364 . The principal methodology used in the special tax ratings was US Public Finance Special Tax Methodology published in July 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBM_1077147 . Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

The ratings have been disclosed to the rated entity or its designated agent(s) and issued with no amendment resulting from that disclosure.

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Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1133569 .

At least one ESG consideration was material to the credit rating action(s) announced and described above.

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CREDIT OPINION
5 August 2020

Rate this Research

Hawaii (State of)

Update to credit analysis following downgrade to Aa2 from Aa1

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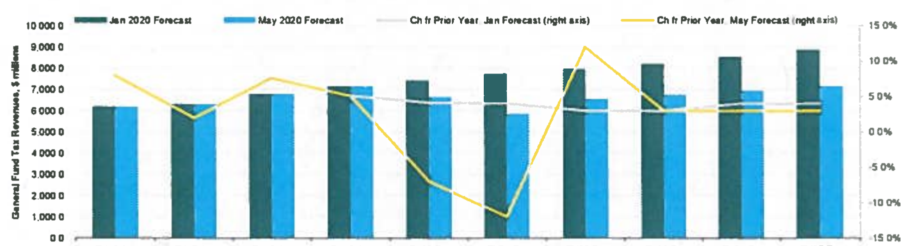
Summary

The Aa2 rating on the State of Hawaii's general obligation bonds recognizes the significant fiscal challenges posed by the current health and economic crisis, but also the state's strong fiscal governance, its positive financial position and liquidity entering the crisis, and our expectation that the state will take timely action to respond to the challenges. Additional long-term credit factors include the volatility of the state's tourism industry; above average debt, pension, and OPEB liabilities; and high fixed costs.

On July 31, Moody's downgraded Hawaii's general obligation bonds to Aa2 from Aa1. The downgrade was driven by the impact of the coronavirus pandemic on the state and its important tourism industry. The state is experiencing a severe decline in tax revenues as a result of the rapid downturn in visitor arrivals, resulting in a multi-year fiscal imbalance and the need for significant spending adjustments. The state does not expect visitor arrivals and tax revenues to return to pre-crisis levels before 2024. Absent significant additional federal assistance, the state's financial plan will likely include short-term deficit financing, suspending indefinitely payments to pre-fund its OPEB liability, employee furloughs, drawing down reserves, and spending cuts beyond fiscal 2021 which have not yet been identified.

The rapid and widening spread of the coronavirus outbreak, deteriorating global economic outlook, falling oil prices, and financial market declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

Exhibit 1
Hawaii's tax revenues for 2020 and beyond will fall well short of 2019 and prior forecasts



Sources: State of Hawaii Council on Revenues Quarterly Forecasts; Moody's calculations.

Credit strengths

» Strong financial governance practices including multi-year planning, quarterly consensus revenue forecasting, and strong executive power to reduce spending.

» Historical fiscal conservatism; prompt action to address past revenue shortfalls.

» Above average reserves and strong liquidity position entering the current economic downturn.

» Rapid amortization of debt; no exposure to variable rate debt or derivative products.

Credit challenges

» Significant tourism industry creating an above-average vulnerability to the global downturn driven by the current coronavirus pandemic.

» Debt ratios that are among the highest in the nation, largely attributable to the state's responsibility for funding all the capital needs of its centralized K-12 school system.

» High pension and OPEB liabilities; very high fixed costs.

Rating outlook

The stable outlook reflects the generally conservative revenue estimates underlying the state's proposed financial plan and our expectation that the state will utilize, as needed, its strong fiscal governance tools to maintain positive reserves and adequate liquidity.

Factors that could lead to an upgrade

» Increased economic diversification and reduced economic volatility.

» Sustained reduction in debt ratios and significant and accelerated improvement in pension and OPEB funded ratios.

Factors that could lead to a downgrade

» An extended economic downturn or extended stagnation in tourism leading to further deterioration of revenue trends, budget imbalance, liquidity pressures, and narrowing of financial position.

» Utilization of additional non-recurring solutions to balance the budget.

» Increased debt ratios relative to other states, or deterioration of pension and OPEB funded ratios.

Key indicators

Exhibit 2

Hawaii (State of)	2015	2016	2017	2018	2019	50-State Median (2018)
Operating Fund Revenues (000s)	$6,109,019	$6,583,418	$6,643,799	$7,120,962	$7,526,131	$11,520,082
Available Balances as % of Operating Fund Revenues	25.6%	24.1%	22.4%	16.2%	17.7%	7.4%
Nominal GDP (billions)	$82.7	$85.8	$89.4	$93.8	$97.3	$236.9
Nominal GDP Growth	6.2%	3.8%	4.2%	4.9%	3.7%	4.7%
Total Non-Farm Employment Growth	1.7%	1.3%	1.1%	0.5%	-0.3%	1.1%
Fixed Costs as % of Own-Source Revenue	22.7%	24.1%	27.3%	23.3%	NA	8.1%
Adjusted Net Pension Liabilities (000s)	$8,199,864	$8,391,291	$14,351,491	$13,950,603	NA	$12,209,760
Net Tax-Supported Debt (000s)	$6,523,739	$7,168,256	$7,504,305	$7,745,335	$7,827,018	$4,146,966
(Adjusted Net Pension Liability + Net Tax-Supported Debt) / GDP	17.8%	18.1%	24.4%	23.1%	NA	7.7%

Sources: State of Hawaii CAFRs; Moody's state debt and pension medians reports; US Bureau of Labor Statistics; US Bureau of Economic Analysis.

Profile

Hawaii is the 40th largest state by population, at 1.4 million. Its gross domestic product is 38th largest, at $97.3 billion. The population's income levels are above average, with per capita personal income equal to 101% of the US level and a median household income equal to 130%. Its poverty rate is in the bottom third among states.

Detailed credit considerations

Economy

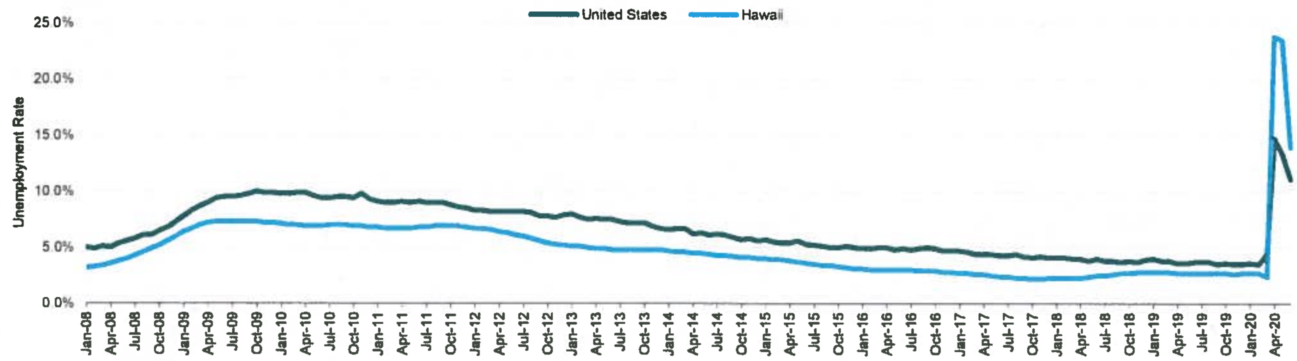
Although Hawaii's economy has shown some diversification, it continues to be dominated by the tourism industry and a substantial military presence. According to Moody's Analytics, the state's industrial diversity in 2019 was 0.45, measured against 1.00 for the US as a whole, one of the lowest of the 50 states. Leisure and hospitality services account for 18.9% of the state's total employment, compared to 11.0% for the US. Government, including the military, accounts for 19.2%, versus 15.2% for the US. While the military presence is a stabilizing factor and the construction of military housing has contributed to significant construction activity, the state's economic performance closely tracks tourism trends.

As a highly desirable tourist destination for both international and domestic visitors, the tourism industry has at times been somewhat insulated from US economic cycles. Growth in visitor arrivals was particularly strong in the years since the last recession, reaching record levels in every year from 2015 through 2019, passing 10 million for the first time in 2019. As a result of the growth in tourism and substantial private and public construction activity, unemployment in the state was consistently below the US rate prior to the current crisis.

The state's tourism sector has been hit particularly hard by the current coronavirus pandemic and the state's efforts to contain the virus. Visitor arrivals, both domestic and international, started to drop in early March and had essentially stopped completely by the third week of March. We do not expect the visitor arrivals will recover to any meaningful extent before the end of 2020, and that recovery of the state's tourism sector will lag the recovery of the US and international economies. Visitor arrivals are unlikely to reach 2019 levels again for several years.

Hawaii's unemployment rate spiked after the pandemic-related shutdowns, reaching 23.8% in April. Although the state's unemployment rate dropped in June, it remains, at 13.9%, above the US rate, 11.1%.

Exhibit 3
While Hawaii's unemployment rate improved in June, it remains above the US rate

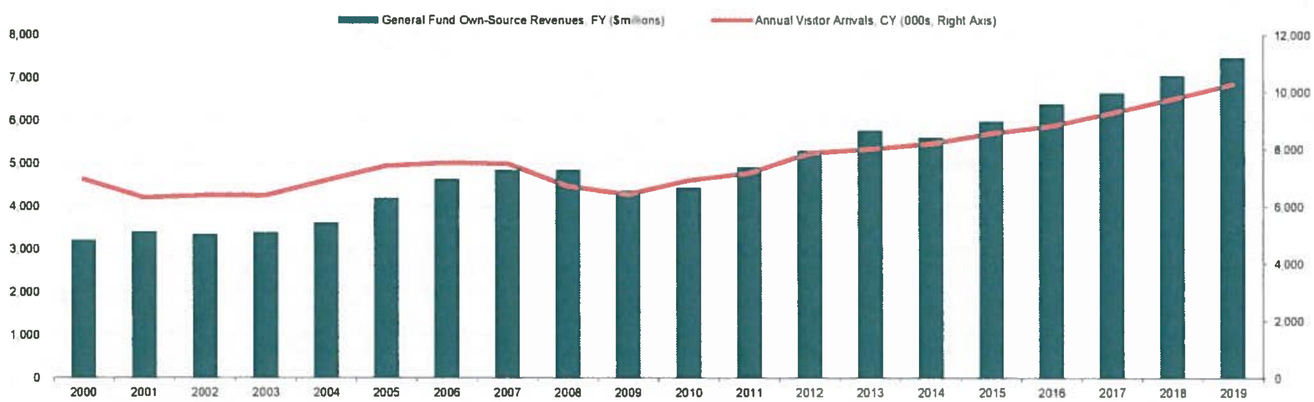


Source: US Bureau of Labor Statistics.

Finances and Liquidity

The state's general fund revenues track very closely to the performance of the tourism sector. A 9.3% drop in visitor arrivals in calendar year 2001 and stagnant arrivals in 2002 and 2003--a period that included the 9/11 attacks, dot com crash, and SARS outbreak--resulted in essentially stagnant revenues in fiscal years 2002 and 2003. A 10.4% and 4.4% decline in visitors in the Great Recession years of 2008 and 2009, drove a 9.7% decline in revenues in fiscal 2009 and stagnant revenues in fiscal 2010. Strong growth in tourism since the Great Recession has contributed to healthy growth in revenues: from 2009 to 2019 visitor arrivals grew at a compound annual rate of 4.8%, while from fiscal 2009 to 2019 general fund revenues grew at a compound annual rate of 5.5%.

Exhibit 4
Hawaii's revenues closely track visitor arrivals



Sources: Hawaii Department of Business, Economic Development & Tourism; State CAFRs; Moody's calculations

The strong growth in revenues since the recession enabled the state to rebuild its reserves, even as it ramped up its contributions for pensions and OPEB. At the end of fiscal 2019, GAAP-basis reserves (Moody's calculation) totaled $1.335 billion, including $1.147 billion unassigned general fund balance and $188 million in the Hawaii Hurricane Relief Fund (HHRF). Budget-basis reserves, which track closely to the GAAP numbers, totaled $1.314 billion, including $752 million in General Fund Balance, $378 million in the Emergency Budget and Reserve Fund (EBRF), and $184 million in the HHRF. While the HHRF is not a formal budgetary reserve, it is available with legislative approval as a funding source, if needed.

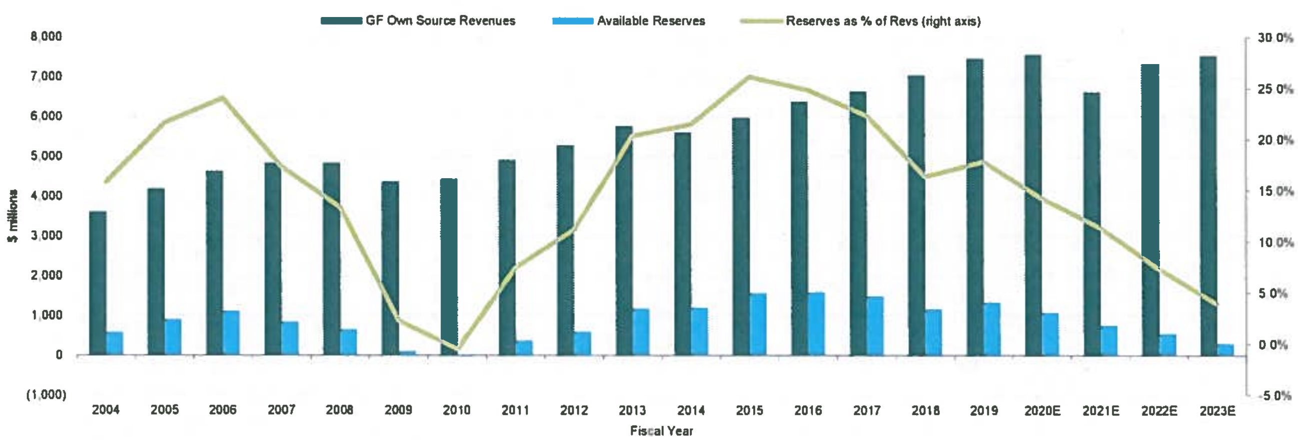
The unprecedented decline in tourism that began in March has resulted in a sudden and severe downturn in the state's revenues, more severe than that seen during the Great Recession. In its May 2020 forecast, the state's Council on Revenues estimated fiscal 2020 general fund tax revenues of $6.64 billion, a 7.0% decline from fiscal 2019 and a $792.7 million shortfall compared to the amount projected its January 2020 forecast. The council projects fiscal 2021 general fund tax revenues of $5.84 billion, an 18.2% decline from fiscal 2019 and a $1.89 billion shortfall compared to the amount projected in January 2020. The council does not expect revenues to return to fiscal 2019 levels before 2025.

To address the revenue shortfalls the state has proposed a multi-year financial plan. The plan appears achievable under current authorizations and prudently maintains positive reserves, including $50 million in the EBRF and $191 million in the HHRF, and ample liquidity through the end of fiscal 2023. The plan also provides for the scheduled step-up in employer pension contributions in fiscal 2021. But, absent significant additional assistance from the federal government, the plan would require one-time measures, including a large deficit financing in fiscal 2021, as well as significant spending cuts beginning in fiscal 2022 which have not yet been identified. Notably, the plan would suspend for the foreseeable future state payments to prefund its OPEB liability. The state's progress, prior to the current crisis, in funding its OPEB liability had been a positive credit factor previously incorporated in the rating.

Exhibit 5

Hawaii successfully built up reserves prior to current crisis

Current plan provides for a measured reduction in reserves and maintenance of liquidity



Source: State of Hawaii CAFRs; Hawaii general fund financial plan; Moody's calculations.

Liquidity

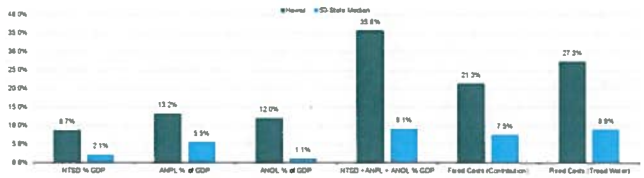
Hawaii does not engage in short-term borrowing for cash flow purposes and relies on pooled treasury cash for temporary internal borrowing as needed. During the last recession, when the state's General Fund reserves were depleted, some liquidity strain was indicated by payment deferrals at the end of fiscal 2009 and the delay of fiscal 2010 personal income tax refunds until fiscal 2011. Current liquidity levels are quite strong. At the end of June, the state's investment portfolio totaled $5.93 billion, not counting $1.36 billion in demand deposits and CARES Act funds held outside of the portfolio.

Debt and Pensions

Hawaii compares unfavorably with other states on its debt ratios, pension funding levels, and OPEB liabilities. Its fixed costs are among the highest of the 50 states.

Exhibit 6

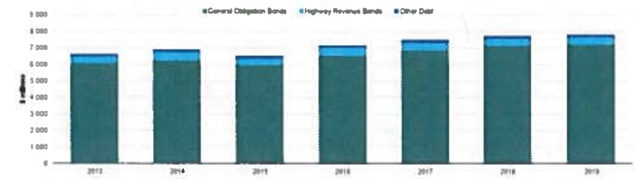
Hawaii's long-term liabilities and fixed costs are well above state medians



Note: Ratios are fiscal 2018, except fixed cost (tread water) which is fiscal 2017.
Sources: Moody's state debt and pension medians reports.

Exhibit 7

Hawaii's Net Tax-Supported Debt consists primarily of general obligation bonds



Sources: Hawaii CAFRs and Statements of Outstanding Indebtedness.

Debt structure

Hawaii's Net Tax-Supported Debt (NTSD) per capita, $5,452, is the third-highest among the states and almost five times Moody's 50-state median of $1,068. As a percentage of personal income, Hawaii's debt is the highest in the country. These debt ratios are, in part, attributable to the fact that, unlike other states, Hawaii is entirely responsible for the capital needs of its centralized K-12 school system. Total state and local government debt ratios indicate that the state's debt is a more manageable burden on the state's economy than suggested by comparison to the state medians. Nevertheless, the state's high levels of direct debt, along with its large pension liability and aggressive OPEB funding plan, contribute to its high fixed costs.

Hawaii's NTSD consists almost entirely (92.1%) of general obligation bonds. These bonds are general obligations of the state, to which the state has pledged its full faith, credit and resources. The bonds have a first charge on all general fund resources. Hawaii's general obligation bonds are conservatively structured with a maximum maturity of 20 years and level annual debt service. As a result, payout of the state's general obligation debt is relatively rapid with 67% of principal is repaid in 10 years.

The state's highway revenue bonds (Aa2 stable) make up 5.8% of it NTSD. The Aa2 rating incorporates the state's general credit quality as reflected in its general obligation rating, the strong coverage of debt service for the highway bonds by pledged revenues, the diversity of the pledged revenue stream, the state legislature's demonstrated willingness to add new pledged revenues as needed to fund the state's highway program, and limited future borrowing plans. At the same time, pledged revenues are more vulnerable to a downturn in tourism than comparably-rated state highway bonds due to the significance of car rental surcharges as a share of pledged revenues.

The balance of the state's NTSD consists of the Department of Hawaiian Homelands' (DHHL's) Certificates of Participation (Kapolei Office Facility), 2017 Series A (Aa3 stable), and its Revenue Bonds, Series 2017 (A1 stable). The Aa3 rating on the DHHL's COPs, one notch below the state's general obligation rating, reflects the limited, subject to appropriation, nature of a lease security; the essentiality of the leased asset; and the state's obligation to fund administrative and operating costs of the department, including lease payments, from its general fund. The A1 rating on DHHL's revenue bonds, two notches below the general obligation rating, reflects satisfactory coverage of debt service by pledged revenues, the inherent volatility and lessee concentration of these real estate-derived revenues, and the availability of a separate state payment to the department to make debt service payments.

Legal Security

Hawaii's general obligation bonds are general obligations of the state, to which it has pledged its full faith, credit and resources. The bonds have a first charge on all general fund resources.

The Highway Revenue Bonds are limited obligations of the state, secured by a gross pledge of highway fund revenues including fuel taxes, registration fees, weight taxes, and car rental surcharges. The state has covenanted to impose pledged revenues as long as the bonds are outstanding.

The DHHL's COPs are secured by lease payments to be made by the state from its general fund for the use of the Department of Hawaiian Homeland's headquarters facility in the Kapolei area of Oahu. Lease payments are subject to appropriation by the state legislature.

The DHHL's Revenue Bonds are special limited obligations of the department secured by a first lien on revenues from general leases, licenses, permits, and investment income collected from the management and operation of certain trust lands held by the department for the benefit of native Hawaiians. In addition, pursuant to a contract between the department and the Office of Hawaiian Affairs (OHA), a separate state agency, OHA has agreed to pay the department $3 million annually as long as the revenue bonds are outstanding. Although not pledged to the bonds, the OHA payments are specifically designated in the contract for the payment of debt service on the revenue bonds. In practice, the department has always used the OHA payments and interest earnings on the payments to pay debt service on the revenue bonds. OHA's obligation to make the annual payments is absolute and unconditional, and not subject to appropriation by the state legislature.

Debt-related derivatives
The state has no variable rate debt and no debt-related derivatives.

Pensions and OPEB
Hawaii's pension liabilities are above Moody's 50-state medians. The fiscal 2016 system valuation resulted in an increase in the UAAL from $8.8 billion to $12.4 billion and a reduction in the funded ratio from 62.4% to 51.3% based on market value of assets, primarily as a result of a reduction in the discount rate from 7.65% to 7.00% and revisions to the mortality table. The legislature enacted higher employer contribution rates to address the increased liability. Employer contributions were increased from 25% of payroll to 41% for police and fire and from 17% to 24% for general employees. The new rates were phased in over a four-year period ending in fiscal 2021. The state's budget and financial plan fund the final step up in employer contributions in fiscal 2021.

The new rates are designed to eliminate the UAAL by 2045, but will challenge the state by increasing its already high fixed costs. Hawaii's OPEB liability is also quite sizeable. As in most states, Hawaii historically funded its OPEB costs on a pay-go basis. However, in the 2013 legislative session, the state enacted a phase in higher annual contributions by the state and counties beginning in fiscal 2015, reaching 100% of the ARC in fiscal 2019. Notably, the state also made supplemental contributions to the OPEB trust beyond the statutorily-required amounts--$100 million in fiscal 2014, $34 million in 2015, $86 million in 2016, $103 million in 2017, and $40 million in 2018. At the end of fiscal 2019, the trust fund had a balance of $1,829 million, resulting in a funding ratio of 16.1%. The contributions were designed to eliminate the unfunded liability by 2045, but the state's financial plan includes the suspension for the foreseeable future of the pre-funding contributions, with the state's annual contributions returning to the pay-go requirement.

ESG considerations

Environmental
The US states sector overall has low exposure to environmental risks because of states' large and diverse economies, revenue-raising ability and federal government support for disaster recovery costs via FEMA. According to data from Moody's affiliate Four Twenty Seven, Hawaii counties' average projected rate of change in five climate risk factors, when weighted by county GDP, is below average in the nation. Oahu, the City and County of Honolulu, which accounts for over 70% of the state's GDP, is projected to have high heat risk and sea level rise risk according to Four Twenty Seven's assessment scale. The state may also be vulnerable to an increase in the frequency and severity of tropical storms. The state has established its Hawaii Hurricane Relief Fund (HHRF) to address the costs of such storms, but it will continue to rely upon the availability of federal aid through FEMA to mitigate the costs of the largest storms.

Social
Social issues, such as demographics, labor force, income and education, are key influencers of the economic and financial factors driving state credit quality. Over the long term, Hawaii has benefited from the steady, although moderate, population growth, which has driven the residential construction, and other positive economic trends particularly growth in visitor arrivals. The state does have mismatch between the education levels of its population and the education requirements of its job market, which contributes to an out migration of college-educated residents. The coronavirus crisis will intensify social challenges, such as access to health care and demands on the social safety net.

Governance

Governance is a material consideration for the entire state sector. Hawaii has very strong governance practices, including consensus revenue forecasts, updated quarterly, and multi-year financial planning. The governor has power to restrict spending during the fiscal year, if necessary. The constitution does not provide for voter initiatives. The state adopted its first debt affordability study and debt polices in December 2016.

Rating methodology and scorecard factors

The US States and Territories Rating Methodology includes a scorecard, which summarizes the 10 rating factors generally most important to state and territory credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 8

US states and territories rating methodology scorecard

Hawaii (State of)

Rating Factors	Measure	Score
Factor 1: Economy (25%)		
a) Per Capita Income Relative to US Average [1]	101.4%	Aaa
b) Nominal Gross Domestic Product ($ billions) [1]	$97.3	Aaa
Factor 2: Finances (30%)		
a) Structural Balance	A	A
b) Fixed Costs / State Own-Source Revenue [2]	23.3%	Baa
c) Liquidity and Fund Balance	Aa	Aa
Factor 3: Governance (20%)		
a) Governance / Constitutional Framework	Aaa	Aaa
Factor 4: Debt and Pensions (25%)		
a) (Moody's ANPL + Net Tax-Supported Debt) / State GDP [2] [3]	22.4%	A
Factors 5 - 10: Notching Factors [4]		
Adjustments Up: None	0	
Adjustments Down: Economic Volatility; Pension/OPEB	-1	
Rating:		
a) Scorecard-Indicated Outcome		Aa3
b) Actual Rating Assigned		Aa2

[1] Economy measures are based on data from the most recent year available.
[2] Fixed costs and debt and pensions measures are based on data from the most recent debt and pensions medians report published by Moody's.
[3] ANPL stands for adjusted net pension liability.
[4] Notching factors 5-10 are specifically defined in the US States and Territories Rating Methodology.
Sources: US Bureau of Economic Analysis, State CAFRs, Moody's Investors Service.

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