FitchRatings

Public Finance
Tax-Supported
U.S.A.

State of Hawaii

Ratings

Issuer Default Rating	AA

New Issues

$600,000,000 Taxable General Obligation Bonds of 2021, Series GD	AA
$200,000,000 Taxable General Obligation Refunding Bonds of 2021, Series GE	AA
$1,100,210,000 Taxable General Obligation Refunding Bonds of 2021, Series GF, GG, GH, GI and GJ	AA

Outstanding Debt

General Obligation Bonds	AA
Highway Revenue Bonds	AA

Rating Outlook

Stable

Applicable Criteria

U.S. Public Finance Tax-Supported Rating Criteria (May 2021)

Related Research

Fitch Rates Hawaii's $1.9B GOs 'AA'; Outlook Stable (September 2021)

New Issue Summary

Sale Date: Negotiated sale on Sept. 29, 2021.

Series: $600,000,000 Taxable General Obligation (GO) Bonds of 2021, Series GD; $200,000,000 Taxable GO Refunding Bonds of 2021, Series GE; $1,100,210,000 Taxable GO Refunding Bonds of 2021, Series GF, GG, GH, GI and GJ.

Purpose: 2021 series GD bond proceeds will finance various public improvement projects. 2021 series GE bond proceeds will repay $200 million in outstanding taxable GO bond anticipation notes prior to maturity. 2021 series GF to GJ bond proceeds will refund certain outstanding GO bonds for debt service savings.

Security: The GO bonds are general obligations of the state that carry the full faith and credit pledge of the state.

The state's 'AA' Issuer Default Rating (IDR) and GO bond ratings reflect its solid revenue growth prospects, high independent revenue-raising ability and ability to control spending. The state's increasingly diversified economic base will help the state maintain its financial flexibility in the medium term as it works to absorb the costs arising from its pension and other post-employment benefit (OPEB) liabilities. The ratings also consider the outsized effect of the coronavirus pandemic on Hawaii's economy and workforce, particularly its large leisure and hospitality sector. In the face of considerable economic and fiscal uncertainty caused by the pandemic, the state has already demonstrated considerable flexibility in its budgetary responses and has a wide array of available budget-balancing options.

Key Rating Drivers

Revenue Framework: 'aa': General excise taxes (GETs) and corporate and personal income taxes provide the majority of Hawaii's general fund revenues. Total general fund revenues have performed solidly historically and are recovering from the current economic downturn. Medium-term prospects for revenue gains appear solid based on the state's economy where long-term diversification trends have bolstered economic resiliency. The state has full control over its revenues with no legal limits on potential increases.

Expenditure Framework: 'aa': Over the medium term, Fitch Ratings expects that state expenditure increases will be in line with to marginally above revenue growth absent offsetting policy action. Carrying costs for debt service and retiree benefits are somewhat elevated for a U.S. state, reflecting the state's ongoing commitment to actuarially fund its pension and OPEB obligations.

Long-Term Liability Burden: 'a': Long-term liabilities for debt and retiree pension benefits are well above the median for U.S. states but still in the moderate range relative to total personal income. Fitch's long-term liability burden calculation includes liabilities for the state's public schools, which are paid for by local governments in most other jurisdictions. Changes to retiree benefits and higher contributions have helped to slow the growth of related liabilities. However, considerable progress on pension system funding will take place only gradually.

Operating Performance: 'aaa': The state is well positioned to address economic challenges given its recapitalization of reserves and control over a broad array of budget balancing options. Budget management is guided by frequent revenue forecasts and multiyear financial plans that provide input for policy adjustments as required.

Analysts

Alan Gibson
+1 415 732-7577
alan.gibson@fitchratings.com

Bryan Quevedo
+1 415 732-7576
bryan.quevedo@fitchratings.com

Rating Sensitivities

Factors that could, individually or collectively, lead to a positive rating action/upgrade:

- Sustained revenue growth at or above national economic growth.
- The state's actions in managing retiree obligations that materially and sustainably reduce those long-term liabilities closer to 10% of personal income.

Factors that could, individually or collectively, lead to a negative rating action/downgrade:

- Failure to achieve consensus on the budget modifications necessary to structurally balance future budgets, reducing the state's financial resilience.
- Deterioration in operating performance tied to economic cyclicality beyond Fitch's expectations and a slower than expected return to revenue growth and financial resilience.
- A diminished commitment to addressing the state's retiree liabilities.

Current Developments

In April, the state Legislature approved a $31.2 billion fiscal 2021–2023 biennium budget, with federal pandemic-related aid offsetting various general and special fund revenue declines. Federal aid and special fund balance sweeps ensured there were no employee furloughs or layoffs.

The governor subsequently vetoed various budget proposals for reasons including a much improved economic and revenue forecast (supported by rapid tourism recovery) and the U.S. Treasury's May guidance on allowable uses for federal relief aid.

In response, the Legislature readjourned in a special session to make necessary amendments to the budgeted use of federal aid moneys, appropriate funds for the emergency and budget reserve fund and OPEB, and override six vetoes. In one veto override, the Legislature terminated state transient accommodations tax (TAT) revenue-sharing with Hawaii's four counties, reserving all TAT revenues for state purposes. To offset the loss to counties, the Legislature authorized each county to levy its own TAT tax surcharge of up to 3%, which in some cases will generate more than the capped revenue shares previously received by each county.

In addition to augmenting reserves, the biennium budget starts to repay $750 million of short-term GO bonds that were issued to address state cash flow needs during the pandemic. In addition, $700 million of American Rescue Plan Act (ARPA) stimulus funds have been used to repay federal advances for unemployment benefits. The state is considering making a further $130 million payment to ensure a $0 year-end balance, which the state believes would remove a burden from private-sector employers and encourage further hiring.

The state has received a total of $5.1 billion in direct federal pandemic-related aid through the Coronavirus Aid, Relief, and Economic Security (CARES) Act and ARPA. The Legislature has largely made the necessary budgetary appropriations and, to date, all major pandemic-related expenditures have been covered by that aid.

While tourism activity has been subject to periodic declines historically, it has proven resilient over the long term. Historical data indicate that major economic shocks suppress visitor arrival growth for around three years at the most, before resumption of the upward growth trend. The state received an immediate strong response to its "Safe Travels" program launched in October 2020, with a sharp rebound in domestic demand offsetting some of the ongoing loss of international tourists. However, the fall tourism season is being adversely affected by concerns about the Delta coronavirus variant.

The governor has requested tourists to delay non-essential travel through October to ease the burden on the state's healthcare system until surge capacity enhancements are implemented. Limits on indoor and outdoor gatherings have been reinstated and individual counties are re-

Rating History — IDR and GO Bonds

Rating	Action	Outlook/ Watch	Date
AA	Affirmed	Stable	9/17/21
AA	Downgraded	Stable	10/19/20
AA+	Affirmed	Negative	4/27/20
AA+	Upgraded	Stable	12/10/19
AA	Affirmed	Positive	4/28/17
AA	Downgraded	Stable	6/15/11
AA+	Revised	Negative	4/05/10
AA	Affirmed	Negative	6/03/09
AA	Affirmed	Stable	4/13/06
AA	Upgraded	—	2/16/06
AA–	Assigned	—	10/29/98

Rating History — Highway Revenue Bonds

Rating	Action	Outlook/ Watch	Date
AA	Affirmed	Stable	9/17/21
AA	Affirmed	Stable	10/19/20
AA	Revised	Stable	4/5/10
AA–	Assigned	—	10/5/00

imposing pandemic-related mitigation measures. For the winter holiday season, the state is expecting a strong rebound in domestic visitors from November onward and a return of international travelers from December/January. The state anticipates better pandemic control by that time, with higher vaccination rates supported by federal, state and county vaccine mandates. Resumption of business and convention travel is expected to lag tourism recovery, particularly given the current limitations on gatherings.

Credit Profile

The state of Hawaii has a population of nearly 1.5 million, over two-thirds of whom reside on Oahu. Although personal income levels are above average on a nominal basis, real spending power is curtailed by the state's high cost of living. The state's employment base and economy are diversifying, with concentrations in the leisure and hospitality and government sectors.

Hawaii's labor market recovery continues to underperform most other states. Fitch's September 2021 "U.S. States Labor Markets Tracker" notes that Hawaii lagged all but two other states in recovering jobs lost at the height of the pandemic (nearly 48% by July 2021). Positively, it also notes the pace of recovery has picked up, although gains might slow if national leisure and hospitality spending trends weaken. Fitch's August 2021 report "U.S. States Labor Market: Disparities in Pandemic Job Losses to Persist Beyond 2022" indicates that Hawaii has one of the slackest labor markets, with two unemployed people for every open position. The percentage of long-term unemployed (greater than 52 weeks) to total employment exceeds 40%. Such metrics will improve as all of Hawaii's employment sectors recover.

Housing affordability is a significant issue across Hawaii. State officials advise that considerably fewer houses are being constructed than local and out-of-state demand could absorb. Despite the pandemic, many residential, commercial and hotel projects are currently underway and significant public-sector capital investments are being made in transportation infrastructure, schools and universities, and water and wastewater systems. The military continues to make sizable capital investments in its Hawaii bases.

Revenue Framework

The state relies on taxes (the GET, corporate and personal income taxes, and various other taxes) for over half of its total governmental revenues and transfers in. Hawaii's GET is broader than most states' sales taxes, which are typically limited to retail transactions. Instead, Hawaii's GET applies more broadly to business transactions such as wholesaling and real estate rentals, and includes both goods and services.

Fitch's May 2021 report "State Tax Revenue Performance Boosted by Federal Stimulus" identified Hawaii as one of three states that experienced more than 10% year-over-year tax revenue declines in 2020. Nevertheless, since the GET is broad based, capturing income from the sale of services as well as goods, it has proved resilient in the subsequent economic rebound. At the same time, personal income tax collections have benefitted from federal assistance. As of June 2021, monthly GET, personal income tax and TAT revenues all surpassed pre-pandemic levels. The permanent elimination of $187 million in annual TAT revenue-sharing with the four counties also means that the state will now be able to retain most of those recovering revenues for its general fund.

In both its May and September 2021 quarterly forecasts, the state's independent Council on Revenues projected material improvements in tax revenues compared to its March 2021 quarterly forecast. The September quarterly forecast increased general fund revenues by almost $1.6 billion for fiscal years 2022–2026, on top of $3.1 billion added by the May quarterly forecast for fiscal years 2021–2026.

Fitch expects Hawaii's revenue growth, absent policy actions, generally to perform in line with inflation based on the state's resilient and growing economy. While revenue gains will be affected by periodic economic shocks, solid growth is expected over the medium to long term. During the pandemic, federal funding assistance has provided meaningful budgetary support and liquidity. As that phases out, the state's general fund multiyear financial plan shows total general fund revenues dipping somewhat in fiscal years 2022 and 2023; however, the tax revenue portion is projected to continue steadily growing.

The state has full legal authority to raise revenues and regularly adopts measures to modify revenue sources and amounts.

Expenditure Framework

Hawaii provides a broad range of services to its residents with education and health and human services accounting for the bulk of total governmental fund expenditures. Elementary, secondary and higher education represent almost a third of total governmental fund expenditures and transfers out. Health and welfare spending represent another third.

In the medium term, Fitch expects that the natural pace of spending growth will be in line with to marginally above expected revenue growth based on the state's historical spending profile. While the state will continue to see growth in spending for retiree benefits, education and healthcare in particular, it continues to have a wide array of offsetting expenditure control options available. The state's multiyear general fund financial plan indicates steady, manageable total general fund expenditure growth through fiscal 2027, largely staying below total general fund revenues.

The fiscal challenge of Medicaid is common to all U.S. states and the nature of the program and federal government rules limit the states' options in managing the pace of spending growth. Federal action to revise Medicaid's fundamental programmatic and financial structure does not appear to be a near-term priority of the current federal administration or congressional leadership. Medicaid remains subject to regulatory changes that could affect various aspects of the program.

A constitutional expenditure ceiling can only be exceeded with a two-thirds vote of the Legislature. Apart from fiscal 2007, appropriations for recent years have not exceeded that ceiling.

The state has a strong track record of making expenditure reductions when needed despite the large share of its budget devoted to education and health and human services.

Looking ahead, the state's substantial expenses for debt service and prefunding of retiree healthcare benefits could present a greater challenge for expenditure flexibility. Carrying costs for these items accounted for nearly 18% of governmental expenditures in fiscal 2020, among the highest shares for states. This is partly driven by Hawaii's commitment, unusual for a state, to prefund OPEB and, thus, make actuarial rather than pay-as-you-go contributions from fiscal 2019 onward. The state initially suspended required OPEB pre-funding for fiscal years 2021 to 2023 to help itself and the four counties address budget shortfalls resulting from the pandemic. However, strong revenue recovery allowed the state to makes its full actuarial contribution in fiscal 2021, and it expects to do so again for fiscal years 2022 and 2023.

The state plans to continue making its actuarially required contributions to the pension system. Anything less than full actuarially required contributions would require legislative action.

The majority of the state's bargaining units have agreed to two-year labor agreements with no wage increases in fiscal 2022 and a reopener for possible increases in fiscal 2023. Nurses and firefighters will be going to arbitration; their remuneration costs are largely funded through health system and the airport revenues. Increased health benefit costs have been incorporated into the general fund multiyear financial plan.

Long-Term Liability Burden

Long-term liabilities for debt and pensions are elevated but still in the moderate range at 21% of personal income in fiscal 2019, four times the median for states, as reported in Fitch's "2020 State Liability Report" (October 2020). The state's commitment to increasing pension and OPEB contributions, and a requirement to report to the Legislature annually on a range of pension stresses, establishes a solid basis for managing the risks posed by its retirement obligations, which Fitch expects to remain high for the foreseeable future.

Unusual for a state, long-term liabilities include debt issued for the state's elementary and secondary schools; currently approximately 40% of the state's general fund debt is for K-12 education (local governments pay for this in most other states). The long-term liability burden ratio excludes the net pension liability attributed to the University of Hawaii.

Debt amortization is moderate, with about 60% of outstanding principal due for repayment within 10 years. While the state plans to issue approximately $500 million in GO bonds every six months, it typically requires less than that.

The pension system reported a relatively low 55% ratio of assets to liabilities as of its fiscal 2019 measurement date and an assumption of 7% investment returns. Under Fitch's standard 6% return assumption, this would drop to 48%. Contribution rates are determined by statute and adjusted periodically if the actuarial funding period exceeds 30 years. The state increased contribution rates in 2012 and again in 2017. Having remained on track with its four-year phase-in of higher employer contributions, the state will make its full actuarial pension system contribution in fiscal 2022. The state currently projects elimination of the pension system's UAAL by fiscal 2045. State officials preliminarily estimate the pension system's ratio of assets to liabilities will improve at June 30, 2021.

The state implemented several rounds of pension system changes since the previous recession. Despite the immediate negative effect on the plan's funded condition, Fitch expects that these changes, along with rising contributions, will position the plan for funding progress, assuming current actuarial assumptions are achieved. Fitch views positively the state's proactive support of pension system sustainability, most notably through the contribution increases, and its annual mandate of stress testing pension investments and their effect on contributions. The latter provides significant transparency for the state's management on how contributions would have to change in the event of asset underperformance. These stress tests, conducted annually since 2017, indicate the pension system remains sustainable in a low-return environment.

The state also carries a high liability for accrued OPEB, which it regards as explicitly protected under the constitution. Unusually for a state, Hawaii has made notable progress in prefunding OPEB, moving from pay-as-you-go to full funding of the annual required contribution (ARC). Legislation adopted in 2013 established a schedule for full ARC funding by 2019, which the state achieved, with full prefunding of accrued benefits forecast for 2045, if plan assumptions are achieved.

The 2013 legislation also established an irrevocable OPEB trust that had assets with a market value of $3.4 billion at June 30, 2021. By comparison, in fiscal 2015, the OPEB trust balance was only $221 million (over 2% funded ratio). Nevertheless, the net OPEB liability continued to grow to nearly $11.4 billion in fiscal 2020 and it represents a very high 11% of personal income. There are no plans to tap the corpus of the OPEB trust.

Operating Performance

The Fitch Analytical Stress Test (FAST) scenario analysis tool relates historical tax revenue volatility to GDP to support the assessment of operating performance under Fitch's criteria. The FAST provides a relative sense of the risk exposure of a particular state compared to its peers. Despite Hawaii's reliance on business GET and corporate and personal income taxes for the majority of its general fund revenues, the state has a history of limited revenue volatility. This, in combination with the state's reserves and liquidity, supports an assessment of strong financial resilience for the state in a moderate economic downturn.

The state has significant policy tools at its disposal, including its high independent revenue-raising capacity and options for further expenditure reductions, notably in relation to personnel. In previous recessions, the state has demonstrated its ability to address significant revenue downturns. It reduced general fund spending by approximately 14% during fiscal years 2010 and 2011, largely through employee furloughs and reduced executive department spending.

The state is currently projecting that its fiscal 2021 ending general fund balance will be over $1.2 billion, from just over $1 billion in fiscal 2020. This increase is largely due to improving tax revenues, receipt of federal pandemic-related aid, lower than expected spending and proceeds from the state's October 2020 deficit financing.

The state's much improved general fund multiyear financial plan still indicates two years of general fund balance drawdowns in fiscal years 2022 and 2023 as federal pandemic-related assistance phases out and certain extraordinary nonrecurring expenses are incurred (including some discretionary OPEB items). Thereafter, projections indicate strong rebuilding of general

fund balances to over $2 billion in fiscal 2027. This assumes a combination of steady general fund revenue growth coupled with slower general fund expenditure growth.

The state made key improvements to financial flexibility in the wake of the previous recession, including increasing its reserves. Although a significant draw reduced the Emergency Budget and Reserve Fund (EBRF) balance to $59 million in fiscal 2020 from $378 million a year prior, the state was able to recapitalize it at $320 million in fiscal 2021, just under 4% of prior year general fund revenues.

The state intends to increase the EBRF to over $1.3 billion in fiscal 2022, 15% of prior year general fund revenues, depending on how such a transfer would affect maintenance of effort requirements with the U.S. Department of Education, and subject to the state Legislature's approval. The present administration is keen to augment reserves beyond historical levels to protect against future severe economic downturns in which the federal government does not provide aid on the scale demonstrated during the pandemic.

The state also holds about $187 million in its Hawaii Hurricane Relief Fund (HHRF), which functions as an additional working reserve in times of economic stress. Although the 2020 Legislature provided the governor with the option of using HHRF funds to address fiscal 2021 coronavirus-related budget shortfalls, without any statutory repayment requirement, the current plan is to maintain the HHRF appropriation at its current level.

Highway Revenue Bonds

The 'AA' rating and Stable Rating Outlook on the state's highway revenue bonds reflect Fitch's assessment of the strong resiliency of the structure and the pledged revenue stream's exposure to broader economic recovery. The rating is capped by the state's 'AA' IDR and Stable Rating Outlook.

Dedicated Tax Key Rating Drivers

Rating Capped by State Credit Quality: The highway revenue bond rating is capped by the state's general credit quality. Pledged revenues, a relatively narrow basket of motor vehicle-related taxes and user charges, are structurally protected from general government operations and restricted to the support of the state highways system.

Revenue Performance Subject to Economy's Recovery: The pledged revenues' historically solid revenue growth rate has been sharply affected by the pandemic in the near term, to be followed by what the state expects to be a strong rebound in the medium term, subject to broader economic recovery.

Robust Debt Service Coverage: Pledged revenues provide robust coverage of debt service under a moderate stress scenario.

Dedicated Tax Credit Profile

Pledged revenues consist of highway fuel license taxes assessed at a per-gallon rate; a fixed per vehicle registration fee; a tax based on motor vehicle weight; surcharges on rental motor vehicles, tour vehicles and car-sharing vehicles applied on a per day, month or hour basis; and other miscellaneous fines, charges and fees. Consequently, pledged revenues are sensitive to fuel usage and efficiency, vehicle ownership levels, motor vehicle size, total mileage and tourism activity. The largest historical decline in revenues was 13% in fiscal years 2009-2010, but subsequent economic recovery and repeated state policy actions resulted in cumulative growth of almost 56% over the following decade.

The 10-year compound annual growth rates (CAGRs) for 2019 (4.3%) and 2020 (4.5%) were above national growth. However, earlier 10-year CAGRs had been below GDP growth although well above inflation.

Despite a 67% increase in the rental motor vehicle surcharge enacted on July 1, 2019 (Act 174), overall pledged revenues remained flat in fiscal 2020 and are projected to have experienced a 21% decline in fiscal 2021. While this would be their sharpest decline to date due to the most restrictive pandemic mitigation measures' temporary effect on vehicle-related consumption, the state anticipates a strong rebound over fiscal years 2022 to 2027. However, this will depend on the pace and trajectory of the state's overall economic recovery.

The 'a' assessment for growth prospects reflects the expectation that the pledged revenues will experience a strong recovery in the medium term but that they remain vulnerable to future pandemic-related shocks.

To evaluate the sensitivity of the dedicated tax revenue stream to a moderate recessionary decline, Fitch considers both revenue sensitivity results (using a 1% decline in national GDP scenario) and the largest net pledged revenue decline in revenues over the period covered by the revenue sensitivity analysis. Based on this history, Fitch's analytical sensitivity stress test (FAST) generates an over 3% decline in pledged revenues during the first year of a moderate recession while the largest cumulative revenue decline historically has been the 13% described above.

Management typically aims to maintain debt service coverage at no lower than 5.0x to ensure sufficient funding for operations and maintenance. However, due to the projected sharp decline in fiscal 2021 pledged revenues, management estimates that coverage temporarily dropped to 4.5x that year. Annual debt service coverage is expected to rebound to over 5.0x the following year, strengthening thereafter, even with the planned issuance of additional revenue bonds in 2023. The debt amortization schedule including a 2023 issuance shows pledged revenues more than fully rebounding in fiscal years 2022 to 2027, and projects that pledged revenues will maintain a minimum of 5.4x annual debt service coverage.

Fitch estimates the structure could withstand a 78% decline in revenues from fiscal 2020 levels, nearly 4x the pandemic-driven decline projected for fiscal 2021, and still maintain sum sufficient coverage of Fitch's view of maximum anticipated leverage of $64 million. This is also nearly 24x the potential decline in pledged revenues in year 1 of a moderate economic downturn under the Fitch Analytical Stress Test (FAST) model and nearly 6x the largest historical decline. This is consistent with an assessment of 'aaa' for resilience of structure. Fitch's estimate of maximum leverage is based on anticipated annual debt service coverage in fiscal 2021 (4.5x), taking into account pandemic-related pressures on pledged revenues that year.

Exposure to Issuer Operations

The dedicated tax bond rating is capped by the state's 'AA' IDR and Stable Rating Outlook. While pledged highway revenues are structurally protected from general government operations and restricted to supporting the state highway system, the state has considerable discretion over the appropriation of state highway fund moneys. Transfers out of the state highway fund are permitted once certain conditions are met, and, in 2017, the fund received support from the general fund.

ESG Considerations

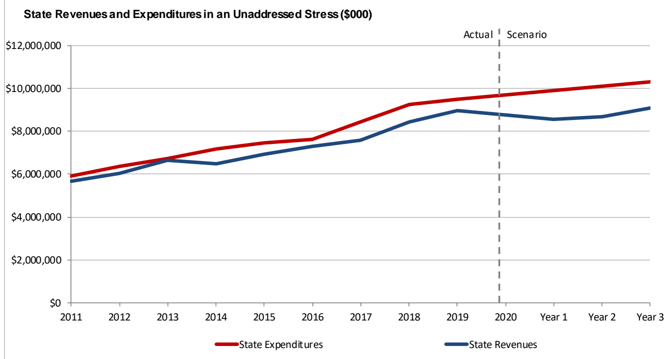
Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3' — ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity.

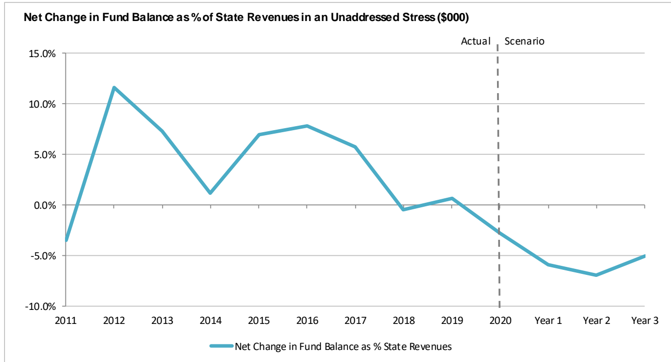
For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Hawaii, State of (HI)

Scenario Analysis

Ver 36





Analyst Interpretation of Scenario Results

The Fitch Analytical Stress Test (FAST) scenario analysis tool relates historical tax revenue volatility to GDP to support the assessment of operating performance under Fitch's criteria. The FAST provides a relative sense of the risk exposure of a particular state compared to its peers. Despite Hawaii's reliance on business GET and corporate and personal income taxes for the majority of its general fund revenues, the state has a history of limited revenue volatility. This, in combination with the state's reserves and liquidity, supports an assessment of strong financial resilience for the state in a moderate economic downturn.

Scenario Parameters:	Year 1	Year 2	Year 3
GDP Assumption (% Change)	(1.0%)	0.5%	2.0%
Expenditure Assumption (% Change)	2.0%	2.0%	2.0%
Revenue Output (% Change)	(2.4%)	1.3%	5.0%

Minimum Y1 Stress: -1% *Case Used:* **Moderate**

Revenues, Expenditures, and Net Change in Fund Balance	Actuals										Scenario Output		
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Year 1	Year 2	Year 3
Expenditures													
Total Expenditures	8,476,625	8,600,890	9,103,240	9,829,887	10,254,158	10,628,399	11,362,828	12,130,012	12,260,264	13,036,832	13,297,569	13,563,520	13,834,790
% Change in Total Expenditures	0.6%	1.5%	5.8%	8.0%	4.3%	3.6%	6.9%	6.8%	1.1%	6.3%	2.0%	2.0%	2.0%
State Expenditures	5,909,359	6,362,251	6,730,760	7,179,011	7,450,169	7,632,631	8,424,271	9,251,295	9,476,726	9,703,436	9,897,505	10,095,455	10,297,364
% Change in State Expenditures	(1.5%)	7.7%	5.8%	6.7%	3.8%	2.4%	10.4%	9.8%	2.4%	2.4%	2.0%	2.0%	2.0%
Revenues													
Total Revenues	8,239,489	8,264,770	9,024,984	9,125,004	9,737,152	10,309,851	10,516,019	11,316,814	11,744,341	12,091,455	11,949,348	12,128,540	12,629,624
% Change in Total Revenues	8.1%	0.3%	9.2%	1.1%	6.7%	5.9%	2.0%	7.6%	3.8%	3.0%	(1.2%)	1.5%	4.1%
Federal Revenues	2,567,266	2,238,639	2,372,480	2,650,876	2,803,989	2,995,768	2,938,557	2,878,717	2,783,538	3,333,396	3,400,064	3,468,065	3,537,427
% Change in Federal Revenues	5.5%	(12.8%)	6.0%	11.7%	5.8%	6.8%	(1.9%)	(2.0%)	(3.3%)	19.8%	2.0%	2.0%	2.0%
State Revenues	5,672,223	6,026,131	6,652,504	6,474,128	6,933,163	7,314,083	7,577,462	8,438,097	8,960,803	8,758,059	8,549,284	8,660,475	9,092,198
% Change in State Revenues	9.3%	6.2%	10.4%	(2.7%)	7.1%	5.5%	3.6%	11.4%	6.2%	(2.3%)	(2.4%)	1.3%	5.0%
Excess of Revenues Over Expenditures	(237,136)	(336,120)	(78,256)	(704,883)	(517,006)	(318,548)	(846,809)	(813,198)	(515,923)	(945,377)	(1,348,220)	(1,434,980)	(1,205,166)
Total Other Financing Sources	37,889	1,034,507	563,476	781,465	1,001,870	906,013	1,282,607	774,156	573,830	700,496	847,420	835,702	746,321
Net Change in Fund Balance	(199,247)	698,387	485,220	76,582	484,864	574,165	435,798	(39,042)	57,907	(244,881)	(500,800)	(599,278)	(458,845)
% Total Expenditures	(2.4%)	8.1%	5.3%	0.8%	4.7%	5.4%	3.8%	(0.3%)	0.5%	(1.9%)	(3.8%)	(4.4%)	(3.3%)
% State Expenditures	(3.4%)	11.0%	7.2%	1.1%	6.5%	7.5%	5.2%	(0.4%)	0.6%	(2.5%)	(5.1%)	(5.9%)	(4.5%)
% Total Revenues	(2.4%)	8.5%	5.4%	0.8%	5.0%	5.6%	4.1%	(0.3%)	0.5%	(2.0%)	(4.2%)	(4.9%)	(3.6%)
% State Revenues	(3.5%)	11.6%	7.3%	1.2%	7.0%	7.9%	5.8%	(0.5%)	0.6%	(2.8%)	(5.9%)	(6.9%)	(5.0%)

Notes: Scenario analysis represents an unaddressed stress on issuer finances. Fitch's scenario analysis assumes the GDP and expenditure growth sequence shown in the 'Scenario Parameters' section. For further details, please see Fitch's US Tax-Supported Rating Criteria.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: https://www.fitchratings.com/understandingcreditratings. In addition, the following https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third- party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US$1,000 to US$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US$10,000 to US$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2021 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.