Fitch Ratings

Public Finance
State General Obligation
U.S.A.

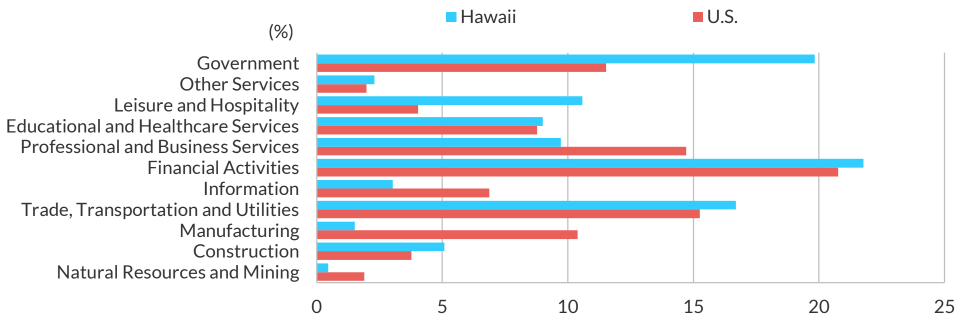
# State of Hawaii

The State of Hawaii's (the state) 'AA' Long-Term Issuer Default Rating (IDR) and GO bond ratings reflect Hawaii's solid revenue growth prospects, high independent revenue-raising ability and demonstrated ability to control spending. The state's focus on prudent long-term fiscal planning will help maintain robust fiscal resilience and budgetary flexibility despite substantial long-term liabilities and related carrying costs.

The State of Hawaii has a population of nearly 1.5 million, over two thirds of whom reside on the island of Oahu. Personal income is above average on a nominal basis, but real spending power is curtailed by the state's high cost of living. The leisure and hospitality and government (due to the substantial military presence) sectors remain key components of the state's employment and economic base.

Tourism recovery has been steady but slow. Importantly, visitor spending surged past 2019 levels by the spring of 2022 and growth has continued this year. Total visitor arrivals by air remain just below pre-pandemic levels with the Maui wildfires contributing to a dip in recent months. International visitor volume remains well short of pre-pandemic levels while domestic volume had been comfortably ahead of 2019 levels since the spring of 2021 until the Maui wildfires.

### Components of 2022 Real GDP




Source: Fitch Ratings, Lumesis, U.S. Bureau of Economic Analysis

### Population Data Overview

| | Hawaii | U.S. |
|---|---|---|
| **Total Population** | **1,440,196** | **333,287,557** |
| Pop. Growth, 1990–2000 (%) | 9.3 | 13.2 |
| Pop. Growth, 2000–2010 (%) | 12.3 | 9.7 |
| Pop. Growth, 2010–Present (%) | 5.9 | 7.9 |

Source: Fitch Ratings, Lumesis, U.S. Census Bureau

## Rating

| | |
|---|---|
| Long-Term Issuer Default Rating | AA |

## Rating Outlook

| | |
|---|---|
| Long-Term Issuer Default Rating | Stable |

### New Issue

| | |
|---|---|
| $750,000,000 State of Hawaii Taxable General Obligation Bonds of 2023, Series GM | AA |

### Sale Date

The bonds will price via negotiated sale on or about Dec. 6, 2023.

### Outstanding Debt

| | |
|---|---|
| General Obligation Bonds | AA |

## Applicable Criteria

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

## Related Research

Fitch Rates Hawaii's $750M GOs 'AA'; Outlook Stable (November 2023)

2023 State Liability Report (Post-Pandemic Asset Surge Lowers Pension Burdens) (November 2023)

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## Key Rating Drivers

### Revenue Framework - 'aa'

General excise taxes (GETs) and individual and corporate income taxes provide the majority of Hawaii's general fund revenues. Fitch Ratings anticipates medium-term revenue growth will exceed inflation but lag the pace of U.S. GDP expansion, driven by solid prospects for continued economic gains. The state has full independent control over its revenues with no legal limits on potential tax or fee increases.

### Expenditure Framework - 'aa'

Fitch expects that expenditure increases will be in line with, to marginally above, the natural pace of revenue growth absent offsetting policy actions by the state. Carrying costs for debt service and retiree benefits are somewhat elevated for a U.S. state, partially reflecting the state's relatively unique commitment to provide full actuarial funding for its other post-employment benefit (OPEB) obligations.

### Long-Term Liability Burden - 'a'

Hawaii's long-term liabilities for debt and pension benefits are well above the median for U.S. states but still in the moderate range relative to personal income. Direct debt includes bonds issued for the state's public schools, which are paid for by local governments in most other U.S. jurisdictions. Changes to retiree benefits and higher contributions have helped to slow the growth of related liabilities.

### 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.

## Rating Sensitivities

### Factors, actions or events that may, individually or collectively, lead to negative rating action include:

- Deterioration in operating performance tied to economic cyclicality beyond Fitch's expectations that threatens ongoing structural balance and reduces the state's financial resilience, with reserves falling to below pre-pandemic levels.
- A diminished commitment to addressing the state's retiree liabilities.

### Factors, actions or events that may, individually or collectively, lead to positive rating action include:

- The state's actions in managing retiree obligations materially and sustainably reduce those long-term liabilities to below 20% of personal income and/or carrying costs closer to or below 10% of spending.
- Sustained revenue growth closer to or above the national pace of economic growth.

## Current Developments

Hawaii's economic recovery from the coronavirus pandemic has lagged that of most other states. The state's job losses at the start of the pandemic were deep with nonfarm payrolls declining 23% in the first few months versus a national decline of roughly 15%. Through October 2023, Hawaii's nonfarm payrolls were still more than 4% below their February 2020 level, while the national rate of recovery was positive 3%.

The state's unemployment rate in October 2023 of 2.9% was well below the national rate of 3.9% for the same month. Fitch also considers a state’s employment-to-population ratio (EPOP) when evaluating the health of state and local labor markets, as the EPOP gauges the share of the population that is actively employed. Hawaii’s EPOP was 58.4% in October 2023, below the state’s ratio in February 2020 (59.9%) and the national level of 60.2%, reflecting both the state’s above average share of older, nonworking adults and the slow pandemic recovery.

### Revenue Growth Slows from Historical High but Future Gains Still Likely

Hawaii's fiscal 2023 (ended June 30) general fund revenues declined 1.7% yoy, with an income tax refund playing a key role in the drop from 2022. The state implemented the refund to meet a constitutional requirement to return excess revenues to taxpayers following large revenue surpluses. Excluding effects of the refund, fiscal 2023 revenues were up 1.7%.

Individual income tax (IIT) collections dropped sharply, while GET collections and transient accommodations tax (TAT) collections showed solid growth. The IIT refund lowered income tax revenues by more than $300 million (out of a roughly $660 million total IIT decline). The state's council on revenues (COR, its official revenue forecasting body) suggested that real estate market declines may have driven down nonwithholding revenues. Withholding revenue, however, was up by more than 6%. GET and TAT gains reflected the ongoing recovery in tourism.

For fiscal 2024, the state's October 2023 general fund financial plan (reflecting the September 2023 COR) estimates a modest 1.3% yoy gain, with growth moderating for the GET and TAT and a flat expectation for the IIT. The COR attributes the limited growth expectations to several factors, including effects of the recent wildfires in Maui on economic activity. For fiscal 2025, the COR estimates reconstruction efforts to drive an acceleration in general fund revenues to 5.2%, before reverting to a long-term trend of 3.5% annual gains in 2026 and beyond. Fitch considers this expectation of subdued initial economic activity followed by a strong rebound relatively consistent with patterns observed in other states dealing with natural disasters. Should tax collections diverge from expectations, the state retains ample tools to manage moderate revenue shortfalls without negatively affecting credit quality.

Through October, the state reports general fund collections are up nearly 8%, but Fitch anticipates growth will revert closer to the COR expectation of more modest growth as the year progresses. IIT collections are up sharply, nearly 30%, but the majority of that derives from lower tax refunds paid to date in fiscal 2024 versus 2023, which the state attributes to the one-time payout of the IIT refund noted earlier. Withholding revenues are up more than 9%, signaling strong fundamental economic gains. GET is essentially flat yoy, while the TAT is down nearly 8%, likely related to the Maui wildfires.

### State Reserves Have Significantly Improved

Despite weaker-than-anticipated revenues, Hawaii's formal reserves more than doubled in fiscal 2023 to reach over $1.1 billion, equal to more than 11% of total revenues. The enacted biennial budget for fiscal 2024–2025 includes another $500 million contribution to reserves this fiscal year. The state's fiscal 2023 general fund ending balance was also substantial, concluding at $2.2 billion. The new biennial budget utilizes a large portion of this balance to fund various one-time items, including policy priorities and the $500 million deposit to the Emergency and Budget Reserve Fund (EBRF), which serves as Hawaii's primary “rainy day fund”.

### Enacted Fiscal 2024–2025 Biennial Budget Includes First Steps on Broad Tax Proposal

Hawaii's enacted fiscal 2024–2025 biennial budget appears structurally balanced following vetoes to address the lowered revenue forecast and inclusive of a set of new tax credits. The tax credits, approved for five years, total just over $100 million annually and are targeted at lower income households, often referred to in the state with the acronym, “ALICE” (asset limited, income constrained, employed). The governor intends to propose a more extensive set of tax policy changes in a future legislative session. The biennial budget also includes a $425 million increase to K–12 spending targeted at raising teacher pay. Medicaid spending is up, in part due to the state raising provider rates to match Medicare rates in an effort to expand healthcare access. The budget includes approximately $500 million for a series of measures to address the state's affordable housing shortage.

### Wildfire Response and Recovery Underway

The scope of damage from the August 2023 wildfires in Maui County remains in flux but will likely be substantial. A recent estimate from the Pacific Disaster Center (PDC) and the Federal Emergency Management Agency (FEMA) suggests $5.52 billion in capital exposure and 2,207 structures damaged or destroyed, along with the approximately 100 reported fatalities.

As with disasters in other states, Fitch observes a mix of primarily state and federal funding for initial disaster response and the initial stages of recovery. Private donations are also likely to play a key role with the state estimating more than $300 million in donations to support the effort. Debris removal, the costliest aspect of response and currently estimated at $1.5 billion, is fully covered by FEMA for the first six months and then subject to a 10% state match thereafter. Hawaii estimates full debris removal will take over a year. To account for this and other state costs, the latest general fund financial plan reflects a redirection of $164.1 million of planned fiscal 2024 one-time appropriations toward wildfire expenses.

The state anticipates additional federal aid for reconstruction efforts, again consistent with the pattern observed in other major natural disasters, and insurance proceeds playing an important role in longer-term recovery efforts. Hawaii's sizable cash balances provide strong liquidity, though Fitch does not anticipate the state will draw on its formal reserves to support wildfire response and recovery. Tourism visitors are down in Maui and statewide since the wildfires, but counts have improved. Islands other than Maui have actually seen a slight yoy uptick in visitors since the start of September after being relatively flat until that point.

# Credit Profile

## Revenue Framework

The state relies on taxes (the GET, corporate taxes, IITs 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 expects Hawaii's revenue growth, absent policy actions, to generally perform above inflation but below national GDP based on the state's resilient and growing economy. While revenue gains will be affected by periodic economic shocks, we anticipate solid growth over the medium-to-long term.

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

### Economic Data Overview

| | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Nonfarm Employment (% Change)** | | | | | | | | | | | | **10-year CAGR** |
| Hawaii | 2.2 | 2.0 | 1.4 | 1.7 | 1.3 | 1.1 | 0.5 | 0.1 | −15.0 | 4.8 | 5.3 | 0.2 |
| U.S. | 1.7 | 1.6 | 1.9 | 2.1 | 1.8 | 1.6 | 1.6 | 1.3 | −5.8 | 2.9 | 4.3 | 1.3 |
| **Labor Force (% Change)** | | | | | | | | | | | | **10-year CAGR** |
| Hawaii | −1.5 | 0.1 | 2.0 | 1.0 | 1.3 | 2.4 | −0.4 | −0.9 | −3.2 | 0.9 | 0.9 | 0.4 |
| U.S. | 0.9 | 0.3 | 0.3 | 0.8 | 1.3 | 0.7 | 1.1 | 0.9 | −1.7 | 0.3 | 1.9 | 0.6 |
| **Unemployment Rate (% Labor Force)** | | | | | | | | | | | | **10-year Avg.** |
| Hawaii | 5.9 | 4.8 | 4.2 | 3.4 | 2.9 | 2.2 | 2.4 | 2.5 | 11.7 | 6.0 | 3.5 | 4.4 |
| U.S. | 8.1 | 7.4 | 6.2 | 5.3 | 4.9 | 4.4 | 3.9 | 3.7 | 8.1 | 5.3 | 3.6 | 5.5 |
| **Personal Income (% Change)** | | | | | | | | | | | | **10-year CAGR** |
| Hawaii | 3.3 | 1.3 | 5.2 | 4.6 | 3.7 | 4.1 | 2.2 | 4.4 | 5.4 | 7.5 | 0.0 | 3.8 |
| U.S. | 4.6 | 1.1 | 5.1 | 4.7 | 2.7 | 4.9 | 5.1 | 4.7 | 6.9 | 9.1 | 2.0 | 4.6 |
| **Real GDP (% Change)** | | | | | | | | | | | | **10-year CAGR** |
| Hawaii | 1.8 | 1.6 | 0.6 | 3.2 | 1.9 | 2.1 | 1.1 | −0.8 | −11.5 | 6.3 | 1.2 | 0.5 |
| U.S. | 2.3 | 2.1 | 2.5 | 2.9 | 1.8 | 2.5 | 3.0 | 2.5 | −2.2 | 5.8 | 1.9 | 2.3 |

CAGR – Compound annual growth rate
Source: Fitch Ratings, Lumesis, U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics

## Expenditure Framework

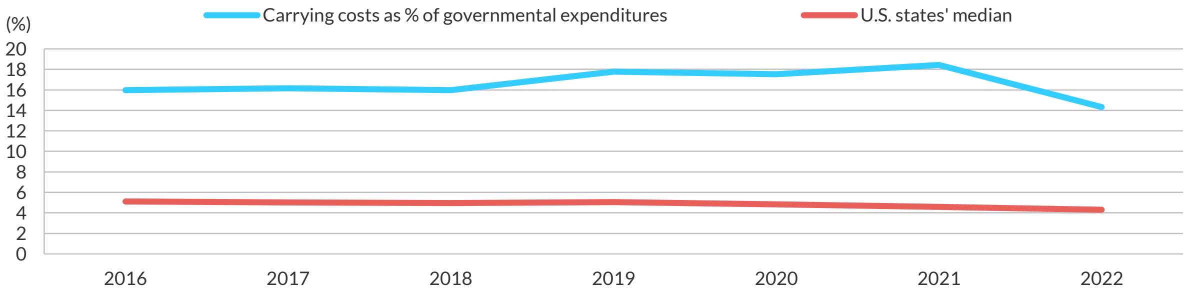
Hawaii provides a broad range of services to its residents with education and health and human services accounting for the bulk of total governmental fund expenditures. Elementary, secondary and higher education represent almost a third of total governmental fund expenditures and transfers out. Health and welfare spending represent another third. Hawaii is unique among U.S. states in directly employing its public school teachers and staff, and Fitch incorporates workforce evaluation to its assessment of the state's expenditure framework.

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 to it. Apart from planned one-time ending general fund balance draws in fiscal 2024, the state's multiyear general fund financial plan indicates steady, manageable general fund expenditure growth through fiscal 2029, staying below general fund revenue growth. Formal reserves increase under the financial plan.

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. The state increased Medicaid rates to Medicare levels in the enacted biennial budget to widen healthcare access by making Medicaid patients more attractive to providers.

Hawaii has a constitutional and statutory expenditure growth ceiling equal to the state's average personal income growth over the prior three years that can be exceeded only by a two thirds vote of the Hawaii Legislature. Driven by large revenue surpluses and planned uses of excess balances, the legislature overrode the ceiling for fiscal 2023 and 2024. Fitch anticipates the state will revert to capping spending growth below the ceiling in future years as revenue growth returns to its long-term trend.

**State of Hawaii — Carrying Costs**




Source: Fitch Ratings, State of Illinois Audited Comprehensive Financial Reports

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. Hawaii's substantial expenses for debt service and prefunding of retiree healthcare benefits limit the state's expenditure flexibility. Carrying costs for these items accounted for just over 14% of governmental expenditures in fiscal 2022 (and nearly 17% over the past five years), among the highest shares for states.

Carrying costs are partly driven by Hawaii's statutory 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 OPEB prefunding 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 make or exceed its full actuarial contribution for each fiscal year. The enacted budget includes full contributions for fiscal years 2024 and 2025.

Hawaii also regularly makes its actuarially determined contributions to the pension system. Anything less requires legislative action.

### *Workforce Dynamics Uniquely Important in Hawaii*

Relatively strong labor protections for the state's 15 recognized bargaining units include binding arbitration of contract terms for all units and the ability to strike for three of the largest units (comprising roughly half of executive branch employees). However, while state law characterizes arbitration as "final and binding," the state legislature can still reject any cost item and force the parties to return to the bargaining table. While the state has limited ability to set or adjust terms beyond layoffs and/or furloughs outside of contract terms, it does have strong control over headcount. Fitch notes that, during the Great Recession, the state took aggressive cost-cutting measures that include implementing furlough days across the entire state workforce.

Nearly all of the state's bargaining units have contracts extending through June 30, 2025, with the teachers' contract extending through June 30, 2027. Annual across-the-board raises range from 2% to 5% depending on the unit. Hawaii's teachers make up the largest share of the executive branch workforce at roughly one third and their raises range from 2.0% to 3.5%. All contract costs are reflected in the state's biennial budget and multiyear financial plan through contract termination dates.

## Long-Term Liability Burden

Long-term liabilities for debt and pensions are elevated but still in the moderate range at 20.1% of personal income per Fitch's 2023 State Liability Report (November 2023), more than five times the median for states. Fitch's long-term liability metric excludes the net pension liability attributed to the University of Hawaii based on presentation in the state's annual comprehensive financial reports.

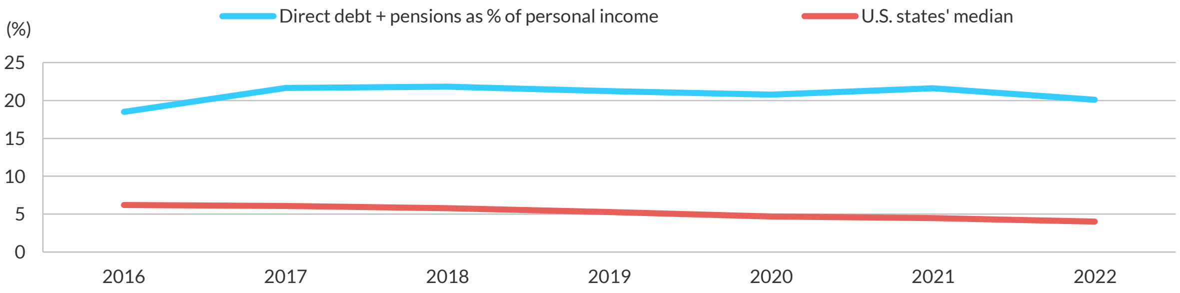
Hawaii has demonstrated a clear commitment to address its sizable retirement liabilities. The state has implemented several rounds of pension system changes since the Great Recession, including creating a new tier of benefits and adopting a schedule for significant increases to employer contribution rates. Fitch expects that these changes position the plan for funding progress, assuming current actuarial assumptions are achieved. Contribution rates are determined by statute and adjusted periodically if the actuarial funding period exceeds 30 years.

Fitch also views positively additional steps the state has taken, such as a $300 million supplemental contribution in fiscal 2024 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. Based on its most recent valuation and tests, Hawaii estimates it will retire its unfunded actuarial accrued liability by fiscal 2046 if all actuarial assumptions are met.

Fitch expects the long-term liability burden to remain moderately high for the foreseeable future and consistent with the 'a' long-term liability burden assessment. A quicker pace of improvement in the liability burden and its associated budgetary costs could support positive rating action.

Somewhat unusually for a state, long-term liabilities include all 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, sometimes with state support.

**State of Hawaii Long-Term Liability Burden**




Source: Fitch Ratings, State of Illinois Audited Comprehensive Financial Reports, U.S. Bureau of Economic Analysis

### *OPEB Liability Poses Unique Challenge, State Management Efforts Proactive*

The state also carries a high liability for accrued OPEBs, which it regards as explicitly protected under the constitution. Hawaii has made notable progress in prefunding OPEBs, 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 2044 if plan assumptions are achieved. With the July 1, 2021 actuarial valuation, Hawaii began using an "ARC Smoothing Corridor" in its OPEB funding policy, which Hawaii anticipates will lead to higher actual contributions than under the prior funding policy and a more predictable budget trajectory. Under the current funding policy, each year's ARC is set at 101% to 105% of the prior's year's ARC, rather than being fully subject to investment returns and movement in healthcare premiums. The state and its actuary estimate the current funding policy will lead to approximately $320 million more in annual contributions between 2025 and 2030 than under the prior policy, at a level the state can reliably build into its multiyear general fund financial plan.

The 2013 legislation also established an irrevocable OPEB trust that had assets with actuarial and market values of $3.820 billion and $3.775 billion (both numbers for the state portion the liability only), respectively, as of June 30, 2022 and as reported in the most recent valuation report, according to the state. By comparison, in fiscal 2015 the OPEB trust balance was only $221 million. Hawaii has also taken actions to manage the liability such as reducing reimbursements for retirees (and spouses) hired after June 30, 2023. On an accounting basis, the net OPEB liability has declined in recent years but remains notable, at 8.7% of personal income as of fiscal 2022.

## 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. Hawaii's economic profile and tax structure, including the broad GET, limits revenue volatility with a year 1 FAST result of approximately 3%, consistent with the U.S. states median. This, in combination with the state's reserves and liquidity and ample policy tools, supports Fitch's assessment of superior financial resilience for the state through a moderate economic downturn.

Hawaii's policy tools to manage downturns include 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.

### *Hawaii is Quick to Rebuild Fiscal Resilience*

The state made key improvements to financial flexibility in the wake of the previous recession, including increasing its reserves, and did so even more aggressively following the pandemic-induced recession. A significant draw reduced the EBRF balance to $59 million in fiscal 2020, from $378 million the year prior. But the state was able to recapitalize it at $320 million in fiscal 2021, just under 4% of prior year general fund revenues, and has rapidly added to it.

The EBRF reached $1.5 billion following an October 2023 contribution, more than 14% of projected general fund revenues. Under its current multiyear financial plan, the state envisions additional contributions bringing the EBRF to $1.76 billion by fiscal YE29. The state also holds around $170 million in its Hawaii Hurricane Relief Fund (HHRF), which functions as an additional working reserve in times of economic stress.

## Peer Analysis

Hawaii's GDP decile includes Mississippi (AA/Stable), New Mexico (not rated by Fitch), Idaho (AAA/Stable) and New Hampshire (AA+/Stable). The state's IDR is on the low end of its GDP decile, reflecting a liability burden and associated budgetary costs that are multiples higher than its peers. The state's robust operating performance, including proactive steps to mitigate the annual and long-term fiscal costs of liabilities, supports the 'AA' rating.

Fitch also compared Hawaii to an additional peer group of other top five states in terms of leisure and hospitality concentration in state GDP, including Nevada (AA+/Stable), Vermont (AA+/Stable), Tennessee (AAA/Stable) and New Hampshire. Hawaii's IDR is the lowest in this group, with its liability burden and carrying costs being the key distinction.

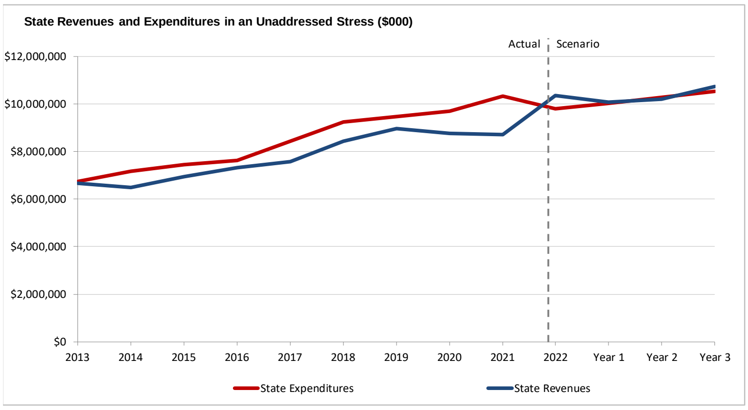
## ESG Considerations

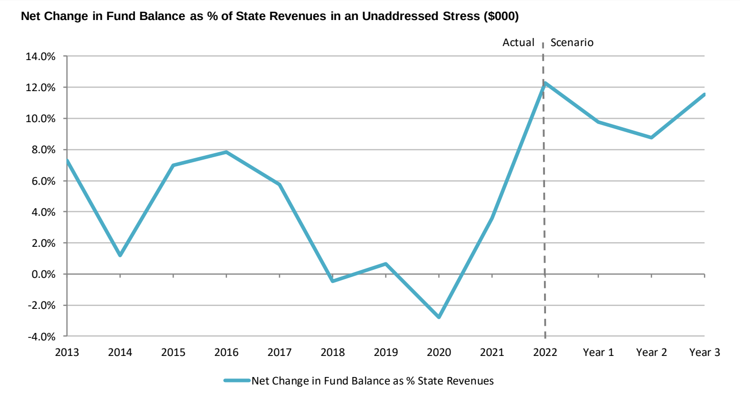
The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, due to either their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

## Hawaii, State of (HI)

**Scenario Analysis**

Ver 42




**Analyst Interpretation of Scenario Results**

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Hawaii's policy tools to manage downturns include 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.

| Scenario Parameters: | | | | Year 1 | Year 2 | Year 3 |
|---|---|---|---|---|---|---|
| GDP Assumption (% Change) | | | | (1.0%) | 0.5% | 2.0% |
| Expenditure Assumption (% Change) | | | | 2.5% | 2.5% | 2.5% |
| Revenue Output (% Change) | *Minimum Y1 Stress:* -1% | *Case Used:* | Moderate | (2.6%) | 1.3% | 5.1% |

| Revenues, Expenditures, and Net Change in Fund Balance | Actuals | | | | | | | | | | Scenario Output | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | Year 1 | Year 2 | Year 3 |
| **Expenditures** | | | | | | | | | | | | | |
| Total Expenditures | 9,103,240 | 9,829,887 | 10,254,158 | 10,628,399 | 11,362,828 | 12,130,012 | 12,260,264 | 13,036,832 | 15,072,727 | 15,586,380 | 15,976,040 | 16,375,440 | 16,784,826 |
| % Change in Total Expenditures | 5.8% | 8.0% | 4.3% | 3.6% | 6.9% | 6.8% | 1.1% | 6.3% | 15.6% | 3.4% | 2.5% | 2.5% | 2.5% |
| State Expenditures | 6,730,760 | 7,179,011 | 7,450,169 | 7,632,631 | 8,424,271 | 9,251,295 | 9,476,726 | 9,703,436 | 10,331,551 | 9,784,689 | 10,029,306 | 10,280,039 | 10,537,040 |
| % Change in State Expenditures | 5.8% | 6.7% | 3.8% | 2.4% | 10.4% | 9.8% | 2.4% | 2.4% | 6.5% | (5.3%) | 2.5% | 2.5% | 2.5% |
| **Revenues** | | | | | | | | | | | | | |
| Total Revenues | 9,024,984 | 9,125,004 | 9,737,152 | 10,309,851 | 10,516,019 | 11,316,814 | 11,744,341 | 12,091,455 | 13,450,796 | 16,145,421 | 16,022,418 | 16,298,269 | 16,972,623 |
| % Change in Total Revenues | 9.2% | 1.1% | 6.7% | 5.9% | 2.0% | 7.6% | 3.8% | 3.0% | 11.2% | 20.0% | (0.8%) | 1.7% | 4.1% |
| Federal Revenues | 2,372,480 | 2,650,876 | 2,803,989 | 2,995,768 | 2,938,557 | 2,878,717 | 2,783,538 | 3,333,396 | 4,741,176 | 5,801,691 | 5,946,733 | 6,095,402 | 6,247,787 |
| % Change in Federal Revenues | 6.0% | 11.7% | 5.8% | 6.8% | (1.9%) | (2.0%) | (3.3%) | 19.8% | 42.2% | 22.4% | 2.5% | 2.5% | 2.5% |
| State Revenues | 6,652,504 | 6,474,128 | 6,933,163 | 7,314,083 | 7,577,462 | 8,438,097 | 8,960,803 | 8,758,059 | 8,709,620 | 10,343,730 | 10,075,685 | 10,202,867 | 10,724,836 |
| % Change in State Revenues | 10.4% | (2.7%) | 7.1% | 5.5% | 3.6% | 11.4% | 6.2% | (2.3%) | (0.6%) | 18.8% | (2.6%) | 1.3% | 5.1% |
| **Excess of Revenues Over Expenditures** | (78,256) | (704,883) | (517,006) | (318,548) | (846,809) | (813,198) | (515,923) | (945,377) | (1,621,931) | 559,041 | 46,379 | (77,172) | 187,796 |
| **Total Other Financing Sources** | 563,476 | 781,465 | 1,001,870 | 906,013 | 1,282,607 | 774,156 | 573,830 | 700,496 | 1,933,941 | 712,198 | 938,924 | 971,878 | 1,051,487 |
| **Net Change in Fund Balance** | 485,220 | 76,582 | 484,864 | 574,165 | 435,798 | (39,042) | 57,907 | (244,881) | 312,010 | 1,271,239 | 985,303 | 894,706 | 1,239,284 |
| % Total Expenditures | 5.3% | 0.8% | 4.7% | 5.4% | 3.8% | (0.3%) | 0.5% | (1.9%) | 2.1% | 8.2% | 6.2% | 5.5% | 7.4% |
| % State Expenditures | 7.2% | 1.1% | 6.5% | 7.5% | 5.2% | (0.4%) | 0.6% | (2.5%) | 3.0% | 13.0% | 9.8% | 8.7% | 11.8% |
| % Total Revenues | 5.4% | 0.8% | 5.0% | 5.6% | 4.1% | (0.3%) | 0.5% | (2.0%) | 2.3% | 7.9% | 6.1% | 5.5% | 7.3% |
| % State Revenues | 7.3% | 1.2% | 7.0% | 7.9% | 5.8% | (0.5%) | 0.6% | (2.8%) | 3.6% | 12.3% | 9.8% | 8.8% | 11.6% |

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.

## SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.