MOODY'S
INVESTORS SERVICE

CREDIT OPINION
21 April 2017

Update

Rate this Research

Contacts

Eva Bogaty 415-274-1765
VP-Sr Credit Officer
eva.bogaty@moodys.com

Susan I Fitzgerald 212-553-6832
Associate Managing Director
susan.fitzgerald@moodys.com

Diane F. Viacava 212-553-4734
VP-Sr Credit Officer
diane.viacava@moodys.com

University of Hawaii, HI

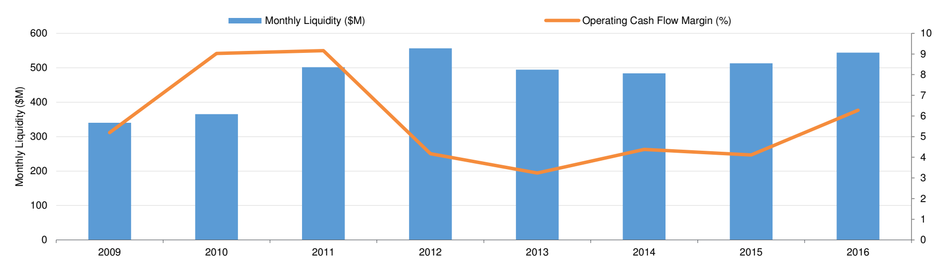
Update - Moody's Affirms Aa2 for University of Hawaii; Outlook Revised to Stable

Summary Rating Rationale

Moody's Investors Service has affirmed the Aa2 issuer and bond ratings for University of Hawaii (UH). The outlook has been revised to stable from negative, reflecting slowly improving operating cash flow as a result of enhanced system oversight and heightened budgetary control.

UH's Aa2 rating reflects its essential role in the State of Hawaii (Aa1 stable) as the sole provider of public higher education and an economic driver within the state. The importance of this role is underscored by steady state operating and capital support. UH's rating also incorporates the university's large scale and scope of operations, with unique programming and research, and well-diversified revenues. The rating is tempered by significant expense pressures across the 10-campus system, as well extensive capital needs with a large backlog of deferred maintenance.

Exhibit 1
Reserves Will Continue to Grow With Slow Improvement to Operating Cash Flow



Source: Moody's Investors Service

Credit Strengths

» Dominant provider of higher education and important economic development driver in the state with strategically important research enterprise in the US Pacific

» State operating support is strong and growing, at 41% of total operating revenue

» Trend of improving cash and investments cushion to debt (1.5 times)

» Approximately 42% of outstanding revenue bonds have an additional pledge of revenue from the State equal to debt service

Credit Challenges

» Substantial pension and other post-retirement health benefit (OPEB) liabilities

» Extensive capital needs with high deferred maintenance across 10-campus system

» Highly unionized faculty and staff reduces expense flexibility

» Weak enrollment trends due to countercyclical nature of community college enrollment

Rating Outlook

The revision of the outlook to stable reflects expectations of stabilized or slowly improving operating cash flow, with resumption of modest wealth growth.

Factors that Could Lead to an Upgrade

» Substantial growth of reserves relative to debt and operations

» Sustained and material improvement to operating cash flow

Factors that Could Lead to a Downgrade

» Weakening operating cash flow

» Deterioration of monthly liquidity

» Reduction of state support, capital or funding of fringe benefit payments

Key Indicators

Exhibit 2

UNIVERSITY OF HAWAII, HI

	2012	2013	2014	2015	2016
Total FTE Enrollment	40,991	40,392	39,237	38,460	36,701
Operating Revenue ($000)	1,437,039	1,435,715	1,500,521	1,479,004	1,530,302
Annual Change in Operating Revenue (%)	2.8	-0.1	4.5	-1.4	3.5
Total Cash & Investments ($000)	794,661	756,704	774,049	821,912	844,873
Total Debt ($000)	623,791	625,892	620,841	595,965	579,815
Spendable Cash & Investments to Total Debt (x)	1.0	0.9	0.9	1.0	1.1
Spendable Cash & Investments to Operating Expenses (x)	0.4	0.3	0.3	0.4	0.4
Monthly Days Cash on Hand (x)	145	128	121	130	136
Operating Cash Flow Margin (%)	4.2	3.2	4.4	4.1	6.3
Total Debt to Cash Flow (x)	10.4	13.5	9.4	9.8	6.0
Annual Debt Service Coverage (x)	1.7	1.2	1.6	1.4	2.3

Enrollment reflects fall of the indicated year
Source: Moody's Investors Service

Detailed Rating Considerations

Market Profile: Very Good Strategic Positioning as Sole Public Higher Education Provider with Strong Research Profile

University of Hawaii's role as the sole provider of public higher education for the State of Hawaii is a key component of its credit strength, including geographically and programmatically diverse enrollment, growing net tuition, strong partnership with the State of Hawaii and a unique research enterprise. These factors, combined with the state's strong and growing operating and capital support and improved long term strategic and capital planning contribute to the university's very good strategic positioning.

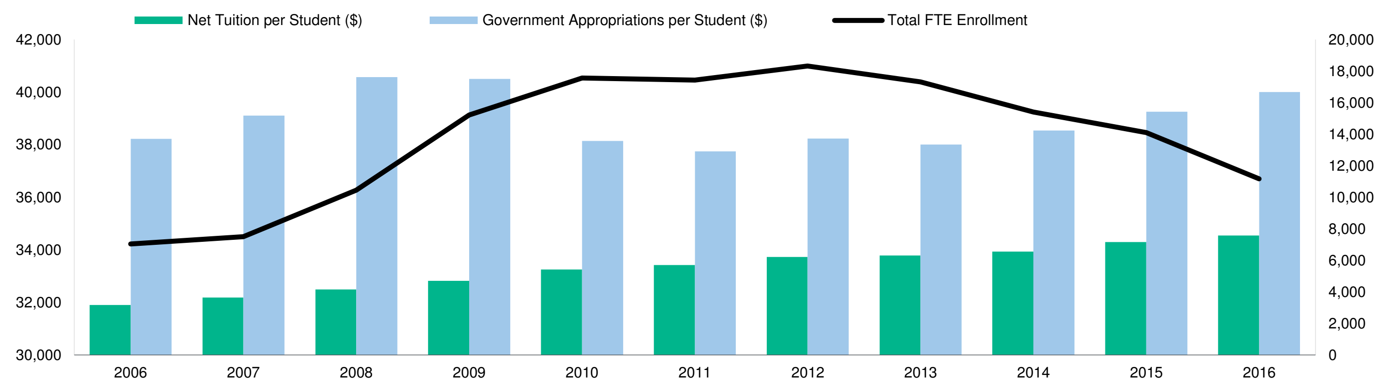
The diversity of UH's programming and campus types bolster long-term student demand despite expected continue enrollment volatility. The university reported enrollment of over 36,700 FTEs for Fall 2016 across its ten campuses located on the islands, with nearly half at the seven two-year community colleges and over 40% at the Manoa flagship research campus. Enrollment continues to decline due primarily to declining community college enrollment with strong economic indicators and employment rates at the state. Improved graduation rates at the four-year campuses over the last few years also contributed modestly to enrollment declines.

Over the longer term, the university expects enrollment to stabilize with growth at the newer West O'ahu campus and with a continued focus on greater participation rates for Hawaiian high school graduates. Prospects are good for stabilization and modest growth at the four-year campuses with projections for slow growth of the number of graduating high school students in the state over the next ten years.

Exhibit 3

Unique Position Within Hawaii as Sole Provider of Public Education Bolsters UH's Demand

Net Tuition per Student and Government Appropriations Per Student Grow Despite Declining Enrollment



Source: Moody's Investors Service

Net tuition per student has grown at a healthy pace annually over the last ten years, reflecting strong demand and some continued pricing flexibility. We expect the pace of growth to moderate in FYs 2018 and beyond, with the university instituting a 0% tuition rate increase in FY 2018 to maintain affordability after multiple years of relatively high 5-8% tuition rate increases. Continued growth of state appropriations will help to offset the lack of net tuition revenue growth.

Hawaii's strategic Pacific location for certain federal research activities and unique scientific research is a key competitive advantage. The university manages a significant research enterprise, with $391 million of research expenditures for FY 2016. UH's research funding is largely from diverse federal agencies at 64% of FY 2016 awards, with large awards from the National Science Foundation, Departments of Defense and Commerce and Department of Education. UH's designation as a Naval University Affiliated Research Center helps to create a stronger pipeline to future awards.

Operating Performance: Slow Improvements with Stronger Oversight

Improved operational oversight and stronger budgetary and expense controls are key drivers of the revision of the outlook to stable. UH's operating cash flow margin was a modest, but improved 6.2% in FY 2016 and is expected to continue improve slowly as the system's efforts to help the Manoa campus return to breakeven operations gain traction.

Good revenue diversity and exceptional operating and capital support from the Aa1-rated State of Hawaii help anchor the university at the Aa2 rating despite continued weak cash flow. In addition to general operating funds (almost $430 million in FY 2016, up from $410 million in FY 2015), the state pays annual debt service on 42% of the university's debt, and covers almost all pension and OPEB contributions on behalf of the university – together, these funds represent approximately 41% of total operating revenue. Grants and contracts revenue and student charges are the second and third largest contributors, at 25% each.

Wealth and Liquidity: Slow Growth Expected after Several Years of Stagnancy

Improved operating cash flow, a focus on building reserves and fundraising will drive the resumption of slow growth of cash and investments for UH. Total cash and investments has grown a weak 7% from FY 2012-2016, compared to the median Aa2 growth of approximately 29%. Spendable cash and investments of $617 million provide a solid 1.1 times coverage of debt, and a weaker, but adequate 0.5 times coverage of operations. The university continues to focus on building philanthropic support, with average gift revenue of $67 million from FYs 2014-2016.

The board's recent implementation of conservative debt and capital plans that are focused on bringing down deferred maintenance at each campus, with very limited debt plans and healthy state capital support are credit positive. The university's five year capital plan calls for limited new construction, primarily to be funded by the state, with a potential for up to $100 million of university bonds. UH instituted a moratorium on new construction on campuses that have continued deferred maintenance issues. The majority of planned capital projects will be for repair, renovation and repurposing existing space, and will likely be funded through state capital appropriations.

LIQUIDITY

Reserves began to stabilize in FY 2016 with concentrated expense control measures and strict reserve policies, and are expected to grow modestly over the next few years. Monthly liquidity of $845 million at June 30, 2016, provided a thin, but adequate 136 monthly days cash on hand. UH's improved campus reserve oversight and all fixed rate debt structures are important mitigants to thinner monthy days cash relative to Aa2 peers. In FY 2015, the university implemented a minimum reserve requirement at each campus, which will stabilize their monthly liquidity in the future.

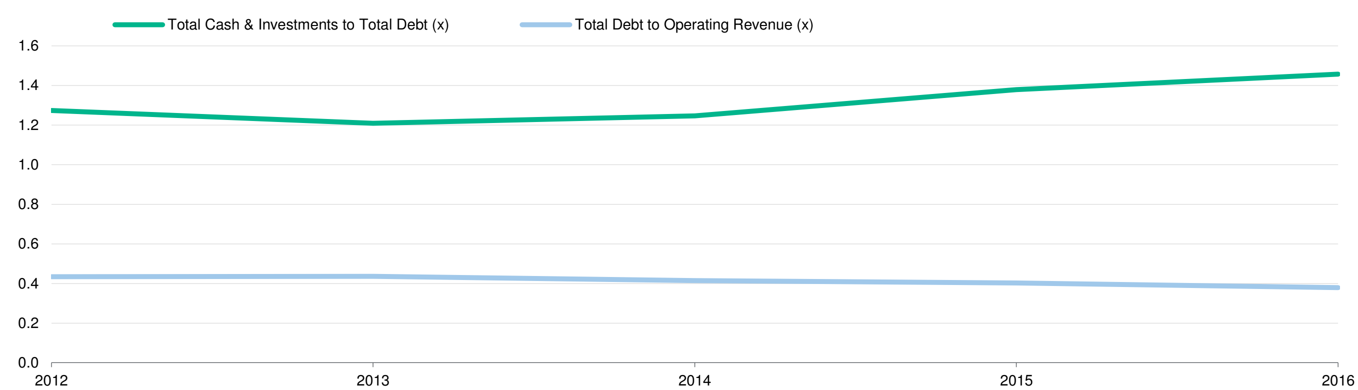
Similar to peers, the university's endowment had a weak negative 2% investment in FY 2016. The endowment is managed at the foundation, with investment oversight provided by the foundation board and an external advisor.

Leverage: Low Debt Due to Strong State Capital Funding; Pension and OPEB Obligations add Significant Leverage

UH's manages a relatively stable debt burden due to healthy state capital support and regular amortization. Debt to operations is 0.4 times, compared to the Aa2 median of 0.6. Debt affordability is weaker than peers due to still thin operations, with debt to cash flow of 6 times. The university has limited additional debt plans, but is seeking $100 million of bond authorization from the state for the next two to three years. Debt capacity will depend upon continued growth of cash flow.

Exhibit 4

Robust State Capital Support Helps UH Maintain Stable Leverage Position



Source: Moody's Investors Service

DEBT STRUCTURE

Positively, the majority of the university's outstanding debt is all fixed rate with regular long-term amortization schedules. Debt service is at its peak through FY 2019 at just under $45 million annually, and then is level at around $40 million through 2033, and begins to more rapidly decline through 2045. The only variable rate debt is a $17 million note with Hawai'i Regional Center, with semi-annual interest payments, and principal due on July 16, 2017.

DEBT-RELATED DERIVATIVES

None.

PENSIONS AND OPEB

The university's large and growing defined benefit pension (the Hawaii Employees' Retirement System) and OPEB obligations and expenses present heightened long-term credit risk due to their size and scope relative to the university's operations. In the near-term, however, these risks are mitigated by the state's demonstrated commitment to pay the university's portion of fringe benefit (pension and OPEB) costs, as well as the state's active approach to improving funding to both programs. Both pension and OPEB contributions are growing at a fast pace, with pension contributions estimated to grow by 6% in FY 2016, and OPEB contributions growing rapidly in order for the state to meet its goal of fully funding the ARC by FY 2019.

The university's pension liability is very large relative to peers, but has stabilized in recent years, with a $2.4 billion three-year average Moody's adjusted net pension liability (ANPL) in both FYs 2015 and 2016. Cash and investments cover just 0.3 times of total adjusted debt (including the ANPL and capitalized operating leases), compared to the Aa-rated public university median of 0.5 times. While contribution requirements are projected to grow over the long-term at 3% annually, contribution rates are not yet sufficient to cover both service cost and interest on the reported unfunded liability.

UH's retiree health benefit expense and obligations (OPEB), are growing rapidly. Total OPEB liability was $723 million in FY 2016, up 75% from $413 million in FY 2012. The liability will continue to grow in the near term until the state and the university make sufficient headway in fully funding the OPEB ARC (anticipated for FY 2019).

Governance and Management: Improved Oversight and Internal Controls Add Stability; Close Alignment with State

Strengthened oversight and budgetary controls are a key factor in the revision of the university's outlook to stable. The university and the board now regularly reconcile and consolidate campus financials, providing opportunity for tighter expense controls and mid-year adjustments. Recently implemented guidelines around minimum reserve requirements at each campus and long-term strategic planning and prioritization will help stabilize the university continue its trend of stabilizing operations and liquidity. As the primary higher education provider for the state, the university has built long-term capital and strategic plans around the needs and priorities of the state.

After multiple high-level turnovers and politically charged governance moves, management has begun to stabilize over the last year and a half. However, leadership at the flagship Manoa will remain a challenge. The university recently announced the unsuccessful conclusion of its search for chancellor. The president of the system, who has served as interim chancellor over the last year, will continue to serve in that capacity as the Board and president urgently address financial and enrollment challenges at the campus.

Legal Security

All university revenue bonds are secured by a first lien on the Network revenue, including System revenues consisting of various housing and auxiliary activities, a subordinate lien on Legislative Appropriations in special and revolving funds appropriated or allocated to the Board of Regents, the university, the System or the Network, to the extent permitted by law, which includes tuition and fees. FY 2016 system gross revenues of $102 million provided debt service coverage of 2.3 times. The special and revolving fund balance is approximately $148 million for FY 2016.

The lien on special and revolving funds is subordinate to payment on the Series 2006A University (School of Medicine) Bonds, as well as the reimbursement to the state for debt service on its general obligation bonds issued for university purposes.

Approximately 42% of the university's bonds have debt service that is offset by additional State-pledged funds. The Series 2010A-1 and A-2 (Cancer Center) bonds are additionally secured by amounts on deposit in the Hawai'i Cancer Research Special Fund. As long as any Series 2010A-1 and A-2 bonds remain outstanding, the Legislative Appropriation is to be allocated to the University's Cancer

Research Center to be used solely for repayment of debt service on these bonds and current expenses and capital expenditure of the Cancer Research Center. In FY 2016, the university received $14.2 million compared to $7.9 million of debt service.

The Series 2015 D&E and Series 2006A Refunding Bonds are additionally secured by tobacco settlement receipts. Under its Master Settlement Agreement with tobacco companies, the state has pledged to provide 26% of the state annual tobacco settlement receipts for the payment of debt service on the bonds until maturity. The university no longer receives supplemental funds as of FY 2016, but will continue to receive the full debt service payment for the life of the bonds.

Use of Proceeds

Not applicable.

Obligor Profile

The University of Hawaii is a large multi-campus system with three university campuses, seven community college campuses and nine educational centers distributed across six islands throughout the State. The scope and scale of the university is reflected in its $1.5 billion operating revenue and almost 37,000 FTE students. The university has a strong and unique research profile, particularly in earth and marine sciences.

Methodology

The principal methodology used in this rating was Global Higher Education published in November 2015. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

REPORT NUMBER 1068692