

ALAN M. ARAKAWA
Mayor



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COUNTY OF MAUI
DEPARTMENT OF FINANCE
200 S. HIGH STREET
WAILUKU, MAUI, HAWAII 96793

October 31, 2018

Honorable Mayor Alan Arakawa
Mayor, County of Maui
200 South High Street
Wailuku, Hawaii 96793

For Transmittal to:

Honorable Riki Hokama, Chair
Budget and Finance Committee
200 South High Street
Wailuku, Hawaii 96793

APPROVED FOR TRANSMITTAL
 11/2/18
Mayor Date

Dear Chair Hokama,

**SUBJECT: AUTHORIZING EMPLOYMENT OF BOND AND
DISCLOSURE COUNSEL (BF-177)**

This is in response to your letter dated October 24, 2018 regarding the proposed resolution to authorize the employment of bond counsel for a Supplemental Taxable General Obligation Bond issuance of approximately \$8.0 million. The following is our response to the questions posed in the aforementioned correspondence;

- 1) Provide a breakdown of the \$8,000,000, by Department, by project. Include the title of the project, fiscal year the project was appropriated, the total amount required for reimbursement, and the date the reimbursement should have been made.

Response:

See report enclosed of project reimbursements that cannot be funded from tax exempt bonds attached as requested. Please disregard the previous schedule provided as that was not a formal transmittal and there were some project name and ordinance inaccuracies.

Reimbursement of projects on a tax exempt basis were disallowed for two reasons by IRS regulation according to our Bond Counsel; 1) reimbursement cannot occur on a tax exempt basis if the project expenditure is for a project that has been in service for more than 18 months prior to bond closing, and 2) individual project expenditures cannot be reimbursed on a tax exempt basis if the expenditures were made more than 36 months prior to the bond closing.

The overwhelming preponderance of disallowed expenditures were because of the "Placed In Service" date rule. Of the total \$7,833,061.65 in disallowed expenditures \$7,827,486.79 were related to the "In service Date" issue. If you review the schedule provided, there would have had to have been tax exempt bonds issued in both 2016 and 2017 to cover the majority of these projects in order to have the project expenditures treated as allowable reimbursements to the County. It is my understanding that the Finance Department has never tracked "Placed In Service" dates for projects as relates to federal tax regulations and the potential impact on reimbursement from tax exempt bond proceeds nor has it been advised to do so by bond counsel, corporation counsel or by County policy. Had the Finance Department been tracking placed "In Service Dates" for projects it is not at all clear that the former Director, nor I for that matter, would have issued bonds just to fund a small amount of projects that reimbursed "placed in service" projects. The "Placed In Service" criteria is only one component that is reviewed in the decision to do a bond issuance. Otherwise the County could potentially be issuing bonds every year in small amounts to satisfy this requirement.

Based on the information recently obtained from our Bond Counsel and given the current circumstances regarding the "Placed In Service" date issue, Finance Administration, along with the Accounts Division and the Treasury Division, have met and have agreed on a set of new procedures and internal controls that will monitor project "Placed In Service" dates moving forward. The off-shoot is that the Finance Director, the Finance Deputy Director, the Treasurer and the System Accounts Division Administrator will receive a quarterly report that will show among other items, project placed in service dates and accumulated advances from the general fund on a project by project basis.

Whether or not the possible disallowance of projects due to in service dates warrants accelerating the bond issuance process will have to be determined on a case by case basis. In the past the decision has been only to issue bonds and their resulting costs when a significant amount of advances have been incurred or if a bond refunding is advisable to avoid a series of small bond issuances. It may also be advisable to re-appropriate disallowed expenditures or possibly fund them from taxable bonds at a later time as part of a combined bond issuance. There are a number of options consistent with the County's existing policy.

- 2) Provide the bond issuance cost for the taxable bond.

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Response: Below is the estimated cost of issuance for a \$7.8 million taxable GO bond if the sale is completed by calendar year end 2018. It should be noted that the cost of issuance is paid out of bond proceeds and not a cost that the County pays for upfront.

Series 2018 B (taxable)			
Costs of Issuance			
Rating	\$	15,500	If done by end of 11/2018 (90 days from last rating)
Legal		42,500	Discounted fee assuming no delay
Financial		35,000	Discounted fee assuming no delay
Trustee		3,000	
Printing/Bidding		3,500	
Misc.		5,000	
Estimated Total	\$	104,500	

It is worth noting that neither bond counsel nor our municipal advisor drove the decision to propose the issuance of taxable bonds, though both firms have agreed to discount fees should the County elect to proceed with this taxable issuance. Issuing a small taxable bond series was one of a number of options considered by the Finance team as I discuss later in this response.

3) Provide the interest cost for a taxable bond and a tax-exempt bond.

Response: Knowing the exact interest rate on a proposed bond whether it be tax exempt or taxable is not possible as the market is dynamic and moving every day. However, we do know that we appear to be in a rising interest rate environment and that municipal bond interest rates have risen approximately 10 to 15 basis points in the last 45 days and up 30 basis points since the end of August.

The current spread between tax exempt and taxable bonds assuming a 20 year bond term range anywhere from 75 to 100 basis points depending on the various maturities. This equates to an average rate of 3.35% for a tax exempt bond and approximately 4.15% for a taxable bond based on current market conditions. Finance's plan to reimburse the General Fund for these disallowed expenditures is to issue a taxable bond and shorten the maturity so that the debt burden costs are no more than would have been paid had the subject expenditures been included in the tax exempt GO Bond issuance. Under this scenario there will be no added overall debt service cost to the citizens of Maui. We have confirmed with our Accounts Division that there is sufficient funding available in the Countywide Cost program to make the one (1) debt service payment in FY19 that would be requirement if we moved forward with the proposed taxable GO bond offering.

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Proposing the issuance of a supplemental taxable series bond for 2018 to reimburse the \$7.8 million in project expenditures was done after due consideration of other potential options, including;

1. Direct Placement – obtain bids for the bonds from banks and other financial institutions rather than undertake a public bond sale. It was determined after reviewing market data that this option, even when lower issuance costs were considered, was too expensive from an interest rate perspective unless the bond term was less than 5 years. .
2. Request via the FY2020 Countywide budget process for an appropriation to refund the General Fund. The Finance team dismissed this option as the reimbursed funds would not make it into the General Fund until July 2020 and would therefore not be reflected in the unrestricted fund balances in the 6/30/19 CAFR.
3. Waiting until the next County tax exempt bond issuance and include the \$7.8 million as a taxable series with that issuance or re classifying other like amounts of “pay as you go” appropriation that do qualify for tax exempt financing and effect a substitution. This option was also not agreed upon as reimbursement funds would not be reflected on the 6/30/19 CAFR and future interest rates are anticipated to be higher than they are today thus increasing borrowing costs.

Ultimately, I made the decision to propose a \$7.8 million 2018 supplemental taxable bond issuance to reimburse the general fund for the following reasons;

1. The expenditures for these projects were originally and remain budgeted projects to be funded by bonds.
2. The General Fund would be reimbursed in FY19 and these funds would be reflected in the balances of the unrestricted fund balance in the 6/30/19 CAFR.
3. Ability to shorten the maturity of the bond to ensure that the total debt burden cost to the County would be no more than if the disallowed expenditures had been included in the 2018 tax exempt issuance.
4. Reduced Cost of Issuance – We would need only one rating agency review (discounted cost because of short period of time from last rating), the Official Statement would need fairly minor revisions because no updated audited financial information would yet be available that would need to be included and we would receive discounted fee's from our advisors and legal counsel. These reduced costs would only likely be available if the bond issuance happened in calendar 2018.

Of most concern to me and others on our Finance team is the potential credit rating issue that may be created if the General Fund is not reimbursed in FY19 for these project expenditures. Included for your information is a copy of the Moody's Investor Service Credit Opinion dated September 7, 2018. I refer you to page 1 under the heading “Credit Challenges”, the second

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bullet "Reserve levels that are satisfactory but lag those of Aa-1 national median" and page 2 under, "Factors that could lead to a downgrade". The second item states, "Inability to demonstrably build cash and reserve positions." Further on page 4 the report states, "The County's ability to manage these costs while also making progress in building reserve levels will be a key feature of future credit reviews." The Financing team, including our Municipal Advisor, had a number of conversations and exchanges of information regarding our declining unrestricted fund balances with Moody's analysts prior to the issuance of our bond rating. We indicated to them that part of the issue with our declining unrestricted fund balances is that we fund bond projects in advance from unrestricted fund balances. We discussed our project expenditure advance process and explained that we would be reimbursed for all of these expenditures once bonds were issued. The Moody analyst informed us that there was a distinct possibility that the Moody's rating committee might consider downgrading the County for its 2018 GO Bond placement. The good news is that in the end Moody's did confirm and maintain the County's Aa1 bond rating. However, we have been put on notice that fund balances are very important and should be increasing and not decreasing. There is a multi - year history of declining unassigned fund balance relative to general fund expenditures for the County of Maui. As such, it is the strong recommendation of your Finance Director and the Finance Department that we; 1) move expeditiously to refund these outstanding expenditures so that our Moody's credit rating will not be put at risk, and 2) that our proposed resolution authorizing bond counsel be scheduled and heard at the earliest possible convenience. While a taxable bond issue will incur a higher interest rate the added interest cost will be no greater under my proposal than what we would have paid had we been able to fund the improvements on a tax exempt basis. I believe this is a better option than risking a rating change and its possible impact on the County's future interest costs.

Thank you in advance for your consideration of the taxable GO bond proposal. Should you have any questions about anything discussed in this letter or the topic of the 2018 bond issuance in general, please feel free to contact me at Ext.7474.

Sincerely,



MARK R WALKER
Director of Finance

cc: Alan Arakawa, Mayor
Keith Regan, Managing Director
Jack Kulp , Finance Deputy Director
May-Anne Alibin, Treasurer
Sandy Baz, Budget Director
Budget & Finance Committee Members

COUNTY OF MAUI
2018 DISQUALIFIED GO BOND PROJECTS

ORD	Bond ORD	FISCAL YEAR	Index	Project Title		Bond Appropriation	Disqualified Bond Expenditures	"IN SERVICE DATE" PRIOR TO 4/10/17	EXPENDITURE DATE BEFORE 10/10/15
4044	4041	FY2014	345276	LAHAINA WATERSHED PHASE 3A	*	1,100,000.00	6,936.82	3/24/2015	
4044	4041	FY2014	345278	MOLOKAI LANDFILL CELL 4 CONSTRUCTION	*	3,000,000.00	120,411.71	2/17/2015	
4044	4041	FY2014	345286	OLD HALEAKALA HIGHWAY SIDEWALK	*	592,000.00	57,802.00	6/17/2016	
4044	4041	FY2014	345288	KALIALINUI BRIDGE IMPROVEMENTS	*	1,500,000.00	26,289.87	12/1/2015	
4044	4041	FY2014	345291	BUS STOPS & SHELTERS	*	1,000,000.00	18,814.00	10/12/2016	
4044	4041	FY2014	345293	WAKEA AVENUE TRAFFIC SIGNALS	*	100,000.00	46,384.54	6/3/2015	
4133	4130	FY2015	356215	WAILEA ALANUI/WAILEA IKE DRIVE PAVEMENT	*	2,170,000.00	1,008,541.23	6/2/2016	
4133	4130	FY2015	356217	HONOAPIILANI RD RETAINING (KAHANA SUNSET RETAINING WALL)	*	300,000.00	262,474.00	7/18/2016	
4133	4130	FY2015	356223	KOKOMO ROAD PAVEMENT RECONSTRUCTION	*	1,450,000.00	837.70	10/7/2015	
4133	4130	FY2015	356225	HANSEN ROAD IMPROVEMENT	*	1,375,000.00	415,441.36	11/4/2015	
4133	4130	FY2015	356266	CW DRAINAGE IMPROVEMENTS	*	1,700,000.00			
			356273	SOUTH KIHEI RD CULVERT REPAIR AT STATION 27+01.12			226,590.22	6/30/2016	
			356281	KALUANUI ROAD SHOULDER IMPROVEMENTS			2,790.24	10/16/2015	
			356283	MAKENA ALANUI CULVERT IMPROVTS AT MAKENA SURF			160,924.00	11/30/2015	
			356288	KEHALA DRIVE DRAINAGE IMPROVEMENTS			161,800.00	2/19/2016	
				TOTAL CW DRAINAGE IMPROVEMENTS			552,104.46		
4231	4228	FY2016	367235	NORTH SHORE GREENWAY		350,000.00	3,971.21		9/30/2015
4231	4228	FY2016	367237	WAIAKOA/KULA GYM ACQUISITION		1,220,000.00	1,202,596.61	4/18/2016	
4231	4228	FY2016	367238	BALDWIN AVENUE RESURFACING, PHASE 2		3,361,250.00	1,603.65		9/30/2015
4231	4228	FY2016	367239	KOKOMO ROAD/MAKAWAO PAVEMENT		1,400,000.00	7,370.90	10/7/2015	
4231	4228	FY2016	367243	SOUTH KIHEI ROAD CULVERT REPLACEMENT		1,600,000.00	3,800.00	7/22/2016	
4231	4228	FY2016	367256	SOLID WASTE EQUIPMENT		2,162,500.00	2,035,664.20	8/10/2016	
4231	4228	FY2016	367257	FURNISH & DELIVERY OF DIESEL POWERED TRACTOR		988,000.00	818,119.70	4/4/2016	
4231	4228	FY2016	367248	CW DRAINAGE IMPROVEMENTS		1,500,000.00			
			368264	KEHALA DRIVE DRAINAGE IMPROVEMENTS			22,667.24	2/19/2016	
			368269	MALUHIA BEACH LOTS			3,837.84	6/30/2012	
				TOTAL CW DRAINAGE IMPROVEMENTS			26,505.08		
4231	4228	FY2016	367249	CW FACILITY BUILDING IMPROVEMENTS		750,000.00			
			368274	IAO PLAZA			1,618.26	6/27/2016	
				TOTAL CW FACILITY BLDG IMPROVEMENTS			1,618.26		
4265	4266	FY2016	367280	ACQUISITION OF REAL PROPERTY AT 2154 KAOHU STREET		1,220,000.00	1,214,840.35	3/31/2016	
4334	4331	FY2017	378268	KAUNAKAKAI POLICE STATION		390,000.00	884.00	10/27/2016	
4334	4331	FY2017	378295	PAPA AVENUE DRAINAGE IMPROVEMENTS		400,000.00	50.00	10/21/2015	
TOTAL DISQUALIFIED BOND EXPENDITURES							7,833,061.65		

CREDIT OPINION

7 September 2018

 Rate this Research

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Maui (County of) HI

Update to credit analysis

Summary

Maui County, HI's (Aa1 stable) credit profile reflects a large and growing property tax base and a healthy local economy evidenced by a very low unemployment rate, largely supported by solid tourism metrics; above average socioeconomic indicators, including a very high full value per capita; a stable fiscal profile and strong financial flexibility, despite reserves that lag the Aa1-rated national county median; and a strong management team. Our review also takes into account a modest direct debt burden composed entirely of fixed rate debt and an above average budgetary burden from the combination of debt service, pension and employee and retiree healthcare costs.

Credit strengths

- » Growing tax base supported by its role as an internationally renowned resort destination and strong tourism metrics
- » Unlimited ability to adjust operating property tax rates and considerable expenditure flexibility
- » Low debt burden; large portion of annual debt service paid by non-tax revenues

Credit challenges

- » High cost of living and vulnerability to shifts in tourism sector
- » Reserve levels that are satisfactory but lag those of Aa1-national median
- » Increasing fixed cost burden from pensions, debt and retiree medical costs due to rapidly escalating contribution requirements to statewide pension system

Rating outlook

The outlook is stable and reflects the county's healthy economic profile and our expectation that Maui will continue to tap into the economic strength of the community and its own financial flexibility to make planned progress in building reserves to levels that approximate similarly-rated peers while absorbing challenges related to pension and OPEB liabilities

Factors that could lead to an upgrade

- » Increased local economic diversification and improvement in socioeconomic wealth indices
- » Significant improvement in funding OPEB and pension liabilities

- » Sustained financial and debt characteristics consistent with higher-rated entities

Factors that could lead to a downgrade

- » Significant economic slowing with sustained increase in unemployment and weakened assessed valuation
- » Inability to demonstrably build cash and reserve positions
- » Inability to manage escalating fixed cost burden

Key indicators

Exhibit 1

Maui (County of) HI	2013	2014	2015	2016	2017
Economy/Tax Base					
Total Full Value (\$000)	\$32,473,303	\$33,411,557	\$36,249,111	\$40,711,721	\$44,363,537
Population	156,633	158,814	160,863	162,456	165,386
Full Value Per Capita	\$207,321	\$210,382	\$225,342	\$250,602	\$268,242
Median Family Income (% of US Median)	116.5%	115.2%	115.4%	114.8%	114.8%
Finances					
Operating Revenue (\$000)	\$303,030	\$311,960	\$329,197	\$343,553	\$368,316
Fund Balance (\$000)	\$164,642	\$91,801	\$80,682	\$74,263	\$77,711
Cash Balance (\$000)	\$188,945	\$68,394	\$91,659	\$91,254	\$90,176
Fund Balance as a % of Revenues	54.3%	29.4%	24.5%	21.6%	21.1%
Cash Balance as a % of Revenues	62.4%	21.9%	27.8%	26.6%	24.5%
Debt/Pensions					
Net Direct Debt (\$000)	\$225,549	\$202,786	\$270,320	\$265,325	\$250,137
3-Year Average of Moody's ANPL (\$000)	\$621,491	\$665,223	\$646,966	\$668,459	\$860,037
Net Direct Debt / Full Value (%)	0.7%	0.6%	0.7%	0.7%	0.6%
Net Direct Debt / Operating Revenues (x)	0.7x	0.7x	0.8x	0.8x	0.7x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	1.9%	2.0%	1.8%	1.6%	1.9%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	2.1x	2.1x	2.0x	1.9x	2.3x

Source: Moody's Investors Service

Profile

Maui is the second largest of the four counties in the state by area (1,162 square miles) and is home to an estimated 166,260 residents. Under the provisions of the county charter the executive power of the county is vested in the executive branch, headed by the mayor. The county council consists of nine members, all of whom are elected at large and serve concurrent two-year terms.

Detailed credit considerations

Economy and tax base: Tourism metrics remain solid; very low unemployment; growing tax base

Maui's economy is strong with record low unemployment levels, supported by a healthy tourism industry while the county's tax base continues to grow. The primary sectors contributing to the county's employment base are leisure and hospitality, followed by a large state and local government presence. As of May 2018, the county's unemployment rate was a very low 2%, equal to the state and below the nation (3.6%). In addition to ongoing residential construction, several large private construction projects continue, although predominantly related to resorts.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Moody's believes that Maui's world-wide reputation as a premier resort destination, combined with the affluent, primarily domestic visitor base it serves, will support the county's economic growth over the long-term. Similar to neighboring islands the number of visitors continue to grow, averaging 3% annually since 2015. Total visitor counts as of 2017 were about 8% above the county's pre-recession peak. The county continues its marketing efforts to international visitors which make up about 18% of total visitors on average over the last few years.

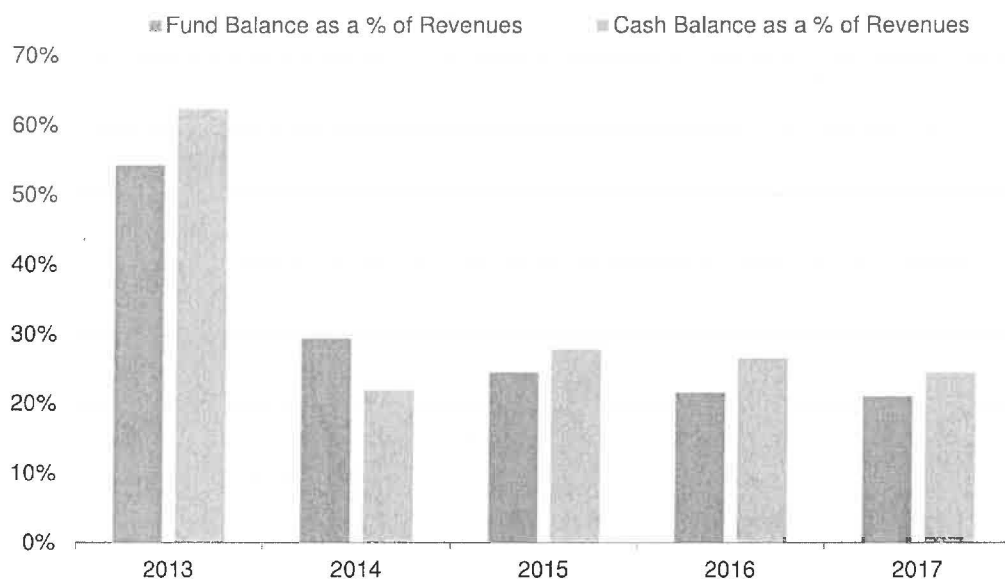
Hotel occupancy rates have improved steadily but slightly since 2013 averaging a strong 77.1% in 2018 (year-to-date) and just under the peak of 80% observed in 2006. Notably, occupancy rates have remained stable despite rising room rates that are above average relative to neighboring islands.

Between 2014 and 2019, assessed valuation (AV) increased an average of 7.9% annually, including healthy growth of 6.3% this past year (2019); AV adjustments lag the market by 18 -24 months. The county's AV is large at \$48.8 billion and well above the median for similarly-rated counties nationally. Moody's notes Maui historically has not experienced much foreclosure activity given the relative rarity of sub-prime financing in Hawaii. The 2016 estimated median family income was 115% of national levels and the county's full value per capita is strong at \$293,808. Going forward, we believe AV growth will continue although over the long-term growth will likely resume a more subdued pace due to the county's somewhat low affordability. According to the 2016 American Community Survey, the county's median home value was about 286% of the US average.

Financial operations and reserves: Reserves are stable, but below Aa1 national median

Financial operations are well managed and a combination of unlimited property taxing ability for operations and above-average annual pay-go provide the county sound flexibility. The county's fiscal 2017 available operating fund reserve dropped slightly to a still healthy 21.1% of operating fund revenues, below the fiscal 2017 national Aa1 median fund balance of 34.6%.

In fiscal 2014 the county remitted a large \$97 million OPEB payment to the state trust resulting in a drop in the operating fund balance to about 30% of operating revenues. Since then, operating fund reserves have softened gradually (See exhibit).



Source:

Source: Moody's Investors Service

Operating funds include the county's general, highway and debt service funds, although nearly all resources flow through the general fund. The county's general fund balance includes an emergency reserve that has been steadily built up since at least 2010. As of 2017, the Emergency Reserve was equal to 9.5% of general fund expenditures and over time the county has a goal of reaching 20% of expenditures.

General fund resources are comprised primarily of property taxes which totaled 80% of general fund revenues, including transfers-in. In 2017, the county maintained or lowered property tax rates for each of the 10 property classes, and combined with growth in AV property tax revenues grew 7.0% over the prior year, similar to the prior year's revenue growth. Notably, the county has continued to aggressively pay-go various capital projects from its operating funds, averaging between 5 – 7% of operating expenditures which also provides the county with a modest level of additional operating flexibility; the county will reimburse itself with a portion of the 2018 bond issuance.

In fiscal 2018 the county increased property tax rates for all property classifications. Combined with nearly 4% growth in AV, 2018 property tax revenues increased by the largest margin in several years (10.9%, unaudited). Nonetheless, the county estimates the fiscal 2018 (unaudited) unassigned general fund balance and emergency reserve ended similar to the prior year. The county balanced the fiscal 2019 budget after identifying another comparatively small budget gap and adjusting property tax rates very slightly, resulting in year-end property tax collections to grow by about 6.0%. Fiscal 2019 reserves will increase slightly due to reimbursement from the county's 2018 bond issuance and a modest increase in the emergency reserve has been budgeted.

Despite the county's demonstrated ability to maintain healthy and stable reserve levels, the county's financial profile will continue to be challenged by high fixed obligations. In fiscal 2017, debt service, pension and OPEB costs represented about 27% of operating revenues. The county's ability to manage these costs while also making progress in building reserve levels will be a key feature of future credit reviews.

LIQUIDITY

General fund cash equaled 22.5% of revenues in fiscal 2017, down slightly from the prior year. The county anticipates fiscal year ending 2019 general fund cash will increase slightly due in part to reimbursement from the 2018 bond issuance.

Debt and pensions

The county's debt burden is low at 0.6%, which approximates the Aa1-rated national county median. However, this debt burden is slightly overstated given a large portion of annual debt service (estimated 64% of annual debt service in FY 2019) are repaid from enterprise funds. Maui benefits from the active role the state government plays in financing traditional municipal capital needs more typically funded at the local level throughout the rest of the country including transportation, health, justice, and education. Including the current offering, the county has approximately \$294 million of outstanding general obligation bonds, including reimbursable GO bonds. Approximately 54% of the county's general obligation debt is retired in ten years.

DEBT STRUCTURE

The county has \$294 million in general obligation bonds outstanding (inclusive of the 2018 bonds), with the latest maturity in 2039. Annual debt service increases in 2020 before declining through final maturity.

DEBT-RELATED DERIVATIVES

All of the county's debt is fixed rate, The county has no derivative instruments in its G.O. borrowing program.

PENSIONS AND OPEB

Maui has an average defined-benefit pension burden, based on unfunded liabilities for a multi-employer plan and for its Moody's estimated share of a cost-sharing plan administered by the state. Reported unfunded liabilities in fiscal 2017 were approximately \$550.3 million, or 51% funded. Pension and OPEB budgetary pressures have been growing and will continue increasing because contribution requirements to the statewide pension system are rapidly escalating. The next five years will be critical in how the county addresses these rising costs given the multiple budgetary tools it has available, including the legal flexibility to raise revenue or to trim other operating expenses. Net of reimbursements from the county's self-sufficient enterprises, the county's fiscal 2017 contribution was approximately \$31.3 million, or 8.5% of operating revenue. Fixed costs have gradually consumed a greater proportion of the county's budget and in fiscal 2017, pension contributions, debt service and PAYGO costs for OPEB benefits represented 27% of

operating revenues. Looking forward, fixed costs could grow to roughly 30% of operating revenue by fiscal 2021, assuming no growth in revenues and primarily as a result of a four-year phase-in of higher employer contributions (discussed below).

Net of proportional shares allocated to business enterprises based on actual contributions from those entities, the three year average Moody's adjusted net pension liability (ANPL) for the county, under our methodology for adjusting reported pension data, is \$860 million. In the three years through fiscal 2017, the ANPL has averaged a moderate 3.3 times annual operating revenue and 2.7% of full valuation.

Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace Maui's reported liability information, but to improve comparability with other rated entities.

The fiscal 2016 system valuation resulted in an increase in the statewide UAAL from \$8.7 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 recently enacted higher employer contribution rates to address the increased liability. However, given the timing difference between lowering the discount rate, updated mortality tables and the legislature enacting higher contribution rates, the county's actual 2017 contribution was below the "tread water" indicator, resulting in a tread water gap equal to 8.4% of operating revenues. The tread water indicator measures the annual government contributions required to prevent reported net pension liabilities from growing, under reported assumptions. Employer contributions will increase from 25% to 41% for police and fire and from 17% to 24% for general employees over a four year phase-in period. The new rates are projected to eliminate the UAAL by 2045 and are expected to significantly reduce the tread water gap.

The county's OPEB liability is sizeable and remains a challenge. As of July 1, 2017 the unfunded OPEB liability was \$317.6 million or 0.86 times fiscal 2017 operating revenues. Importantly, in the 2013 legislative session, the state adopted a plan to require phasing in higher annual required contribution (ARC) payments by all counties and the state beginning in fiscal 2015. By fiscal 2019, the payments would reach 100% of the ARC. In June 2014, Maui transferred approximately \$97.2 million to an OPEB Trust Fund, significantly improving its funding ratio and since fiscal 2017 payments are equal to 100% of its annual OPEB ARC.

Hawaii is the only state that has adopted a plan to fully fund its OPEB ARC payments. While the pension and OPEB actions are credit positive, they will substantially increase all local government's (including Maui) annual fixed costs relative to budget.

Management and Governance

Hawaii Counties have an Institutional Framework score of Aa, which is high. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. The sector's major revenues source is property taxes which is not subject to any caps. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally greater than 25% of expenditures. Hawaii has public sector unions and additional constraints, which limit the ability to cut expenditures. Unpredictable expenditure fluctuations tend to be moderate, between 5-10% annually.

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