State of Wisconsin
Event Filing #2017-11
Dated August 4, 2017

This Additional/Voluntary Filing does not concern an event described in Securities and Exchange Act Rule 15c2-12, as amended. The State of Wisconsin provides this information as it may be material to financial evaluation of one or more obligations of the State of Wisconsin.

Issuer:	State of Wisconsin General Obligation Bonds	
CUSIP Numbers:	977055 Prefix (All) 97705L Prefix (All)	977056 Prefix (All) 97705M Prefix (All)
Type of Information:	Event Filing Rating Change	

Moody's Investor Service has upgraded the State's general obligation bonds from Aa2 to Aa1, with a "stable" outlook. Attached is a report issued by Moody's Investors Service.

The State of Wisconsin is providing this Additional/Voluntary Filing with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access system. This Additional/Voluntary Filing is also available on the State of Wisconsin Capital Finance Office web site at:

doa.wi.gov/capitalfinance

The undersigned represents that he is the Capital Finance Director, State of Wisconsin Capital Finance Office, which is the office of the State of Wisconsin responsible for providing additional/voluntary filings, annual reports, and Event Filings pursuant to the State's Master Agreement on Continuing Disclosure (Amended and Restated December 1, 2010), and is authorized to distribute this information publicly.

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MOODY'S INVESTORS SERVICE

CREDIT OPINION
4 August 2017

Update

Rate this Research

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Wisconsin (State of)

Update - Moody's upgrades Wisconsin GO to Aa1; outlook stable

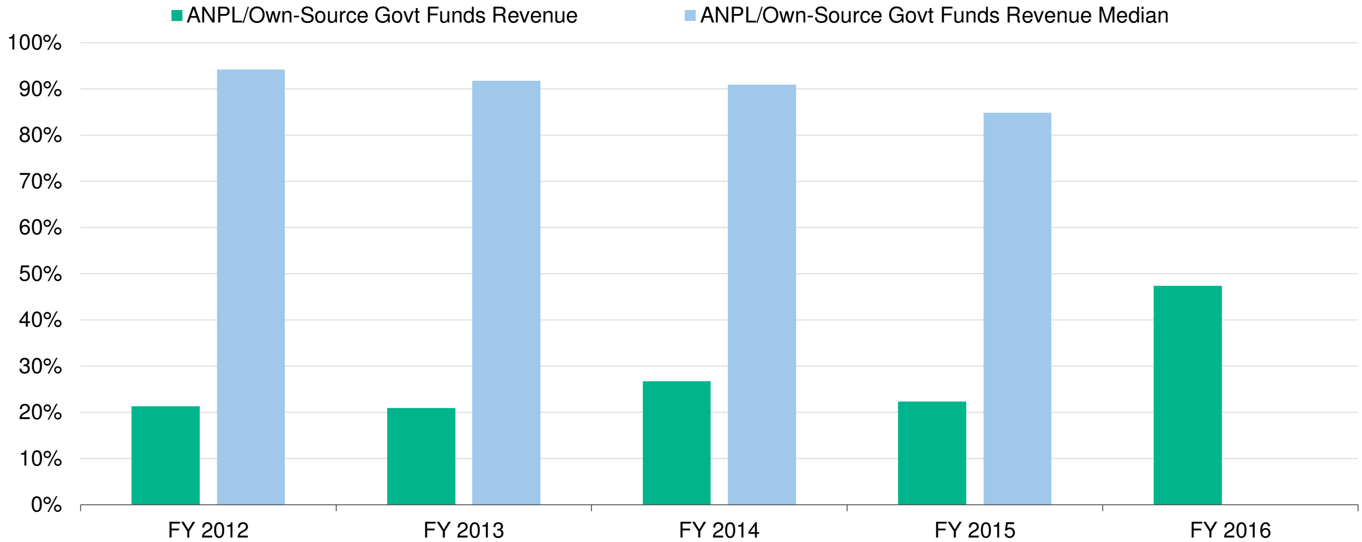
Summary Rating Rationale

Moody's Investors Service has upgraded the state of Wisconsin's General Obligation rating to Aa1. Moody's has also upgraded the state's appropriation backed debt as follows: to Aa2 for Certificates of Participation issued under the state's master lease program; Aa2 for General Fund Annual Appropriation Bonds; Aa2 for Taxable Pension Funding Bonds; Aa3 for Appropriation Revenue Bonds; Aa3 for Milwaukee Public Schools Revenue Bonds Series 2007A and A1 for Milwaukee Public Schools Revenue Bonds Series 2013A. Moody's also affirmed the short-term P-1 ratings on the state's general obligation commercial paper programs based on the bank counterparty ratings and the long-term underlying state rating. The outlook for all the long-term ratings was moved to stable.

The upgrade to Aa1 reflects the proven fiscal benefits of the state's approach to granting and funding pension obligations when many other states are experiencing stress from rising costs and heavy liabilities; an economy that delivers steady but moderate growth; conservatively managed budgets; and adequate liquidity. Despite Wisconsin's slightly elevated debt levels, its fixed costs for pensions, debt and retiree health benefits are below the median for Aa1 states and outweigh the credit challenge of the state's negative unassigned fund balances.

Appropriation debt is notched off the state's GO rating to reflect risk of non-appropriation since the state is not obligated to appropriate debt service for the bonds. The Certificates of Participation, General Fund Annual Appropriation Bonds, and Taxable Pension Bonds are upgraded to Aa2, one notch lower than the state GO rating, to reflect their average legal structure and essential nature of the projects funded. The Appropriation Revenue Bonds funded a sports facility, which we view as a less essential purpose warranting an upgrade to Aa3, two notches off the state rating. The Milwaukee Public Schools Revenue Bond Series 2007A is upgraded to Aa3, two notches off the GO to reflect the moral obligation of the state to make debt service payments on the bonds. The Milwaukee Public Schools Revenue Bonds Series 2013A is upgraded to A1, three notches lower than the GO rating to reflect weak legal provisions.

Exhibit 1
Wisconsin Pension Burden Below State Median



Fiscal 2016 ANPL state median not yet available
Source: Moody's Investors Service; Wisconsin audited financial statements

Credit Strengths

- Pension obligations that are well funded, supplemented by structural plan enhancements that will insulate the plan from significant market volatility
- Liquidity position bolstered by significant alternate liquidity
- Minimal OPEB liability

Credit Challenges

- Low rainy day reserve levels combined with negative unassigned balances provide little financial cushion
- Lack of certain fiscal best practices (binding consensus revenue forecasting, and multi-year revenue and expenditure plans)
- Exposure to cyclical manufacturing economy

Rating Outlook

The stable outlook reflects the expectation that the state will experience moderate economic growth and will continue its prudent fiscal management practices.

Factors that Could Lead to an Upgrade

- Established trend of recurring structural budget balance reflected in elimination of the negative unassigned GAAP fund balance
- Funding and maintenance of the budget stabilization fund to a level sufficient to provide a meaningful financial cushion in times of revenue volatility
- Sustained job and economic growth

Factors that Could Lead to a Downgrade

- » Departure from prudent fiscal management practices that have aligned spending with the state's moderate economic growth
- » Return to structural budget imbalance and reliance on non-recurring measures to address budget gaps
- » Accelerated deterioration of the state's financial position resulting in weakening of liquidity or larger GAAP-negative fund balances

Key Indicators

Exhibit 2

Wisconsin	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Operating Fund Revenues (000s)	16,913,431	17,326,052	17,707,489	17,970,695	18,464,704
Balances as % of Operating Fund Revenues	-14.8%	-11.9%	-9.8%	-12.0%	-11.4%
Net Tax-Supported Debt (000s)	10,730,964	10,596,200	10,331,182	10,274,025	10,051,056
Net Tax-Supported Debt/Personal Income	4.7%	4.4%	4.2%	4.0%	3.8%
Net Tax-Supported Debt/Personal Income 50 State Median	2.8%	2.6%	2.5%	2.5%	2.5%
Debt/Own-Source Governmental Funds Revenue	60.8%	58.9%	56.2%	55.1%	52.5%
Debt/Own-Source Governmental Funds Revenue Median	37.4%	36.1%	35.8%	34.4%	N/A
ANPL/Own-Source Govt Funds Revenue	21.3%	20.9%	26.7%	22.3%	47.5%
ANPL/Own-Source Govt Funds Revenue Median	94.2%	91.8%	90.9%	84.9%	N/A
Total Non-Farm Employment Change (CY)	1.1%	1.0%	1.5%	1.4%	1.2%
Per Capita Income as a % of US (CY)	96.1%	96.0%	95.6%	95.3%	95.4%

Source: Moody's Investors Service; Wisconsin audited financial statements

Recent Developments

Recent developments are incorporated in the Detailed Rating Considerations below.

Detailed Rating Considerations

Economy

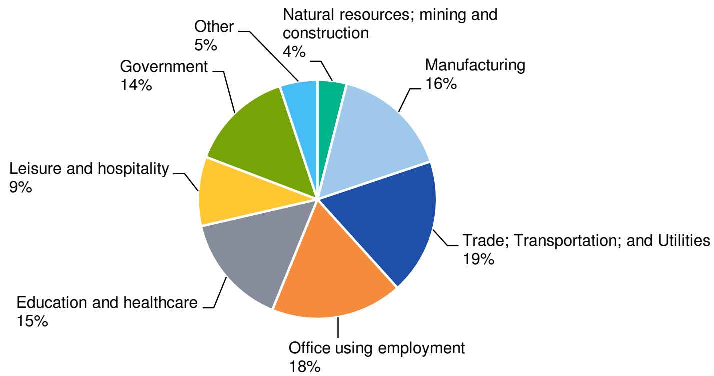
Leading areas of growth for the state continue to be the manufacturing and service sectors. Manufacturing accounts for 19% of Wisconsin's Gross Domestic Product (GDP) and 16% of the state's employment. Nationally, the sector accounts for less than 9% of employment. The state lost approximately 100,000 manufacturing jobs between 2000 and 2010. The state's manufacturing sector employment has been recovering in recent years, and as of June 2017 had grown 1.7% from June 2016, compared to the nation's year-over-year growth of 0.4%. Manufacturing job growth has been concentrated in food manufacturing and fabricated metals which together accounted for about 30% of manufacturing employment in 2016. Measured by employment, transportation equipment manufacturing has slipped out of the top five manufacturing sectors in the state since the early 2000s.

The state's economy is vulnerable to international trade fluctuations and trade policy changes. Wisconsin's strong trade ties with Canada (Aaa stable) could be impacted by protectionist changes to NAFTA, but the state could also be an attractive location for manufacturers seeking to expand their US production capacity.

Exhibit 3

Manufacturing Makes Up 16% of Wisconsin Employment

2016 employment by industry



Source: Moody's Analytics; US BLS

Wisconsin's unemployment rate has remained below the national rate since 2008, with unemployment as of June 2017 at 3.1% compared to 4.4% nationally. Total personal income growth averaged about 3.1% annually since 2010 compared to national growth of 3.6%. As a result of manufacturing employment losses, the state's per-capita income as a percentage of the national average declined from approximately 98% in 2002 to 94.7% in 2008, but has held relatively stable at 95% to 96% in recent years.

Finances and Liquidity

The state ended fiscal 2016 with a gross budgetary balance of $331 million, as spending restraint overcame slightly lower-than-projected revenues. In fiscal 2017, both revenue and spending trends were favorable and may boost the state's year-end gross balance, which the January projection by the Legislative Fiscal Bureau pegged at $427 million.

The legislature has yet to enact a budget. The governor's executive budget projects total available revenue growth of 6.9% during the 2017-2019 biennium, with spending growing 8.2% during the same period. The resulting gap would be filled with draws from the fiscal 2018 projected beginning balance. Disputes over a number of policy issues, particularly transportation funding, are the source of delayed budget adoption. In case of a late budget, continuity in debt service payments and government service provision is ensured by a continuing appropriation mechanism.

The state's reserve levels have historically been low compared to its peers. After the recession ended, the state rebuilt its budget stabilization fund and reduced its negative fund balance. The GAAP-basis negative unassigned balance narrowed from its lowest point, -24% of operating revenues in fiscal 2010 to about -10% of operating revenues in fiscal 2014 but widened slightly to -11.4% of revenues in 2016. The mismatch in fiscal years between the state's, which ends June 30, and local governments', which have a calendar fiscal year, contributes significantly to the negative balances because the state makes large local aid payments in July that reflect liabilities accrued in the first half of the calendar year. The payment timing is a vestige of past efforts by the state to manage budgetary pressures.

Although Wisconsin has the largest negative fund balance among Aa1-rated states, this credit-negative factor is outweighed by the state's other credit strengths, particularly its low fixed costs (discussed below), which afford the state spending flexibility. It is also manageable in view of the state's demonstrated ability to maintain adequate liquidity. However, we would view negatively new efforts to achieve budget relief through additional timing shifts or other measures that increase liabilities that add to the negative balance.

LIQUIDITY

Wisconsin's liquidity is adequate, having improved from historically weak levels. From the recession-era low ending cash balance of -$190 million in fiscal 2009, year-end general fund cash balances have improved. Recent balances have been $1.5 billion (fiscal 2014), $1.37 billion (fiscal 2015) and $1.06 billion for fiscal 2016. The state has additional liquidity, which it tapped in August 2016 as the general fund cash balance dipped to -$137 million. Internal borrowable resources (temporary reallocation) are capped at 9% of general purpose revenue appropriations, yielding resources of approximately $1.53 billion in fiscal 2017. An additional 3% that can be borrowed against for a 30-day period would provide another $510 million for the state to access on short notice, affording the state a total of $2 billion in alternate liquidity on a general fund revenue base of about $16 billion. The 9% temporary allocation can be borrowed across fiscal years, which is an important credit feature for the state.

As a result of the improved liquidity, Wisconsin has not issued external short-term cash notes since fiscal 2012 and does not intend to issue such notes in the 2017-2019 biennium.

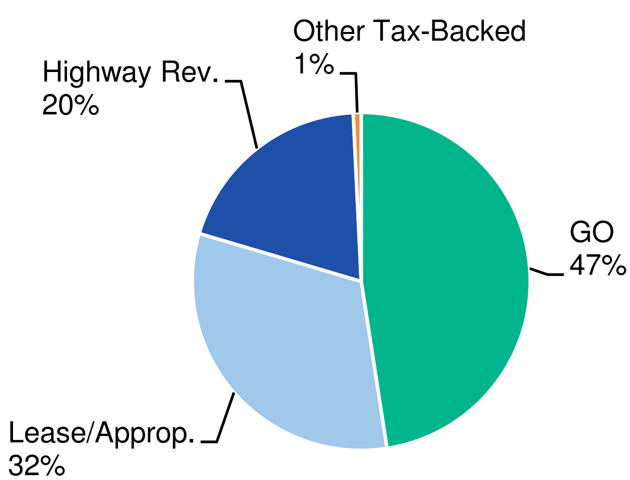
Debt and Pensions

DEBT STRUCTURE

Wisconsin's debt ratios are higher than average. The state has about $10.1 billion in net tax-supported debt (NTSD) outstanding comprising 47% general obligation bonds, 32% general fund appropriation bonds, 20% highway bonds and a small amount of non-highway tax-backed debt (see Exhibit 4). For fiscal 2015, the state's $10.3 billion in net tax-supported debt outstanding places it 14th among the states for net tax-supported debt per capita and 13th for debt as a percent of personal income, according to Moody's 2016 State Debt Medians report. Wisconsin has debt per capita of $1,780 compared to the 50-state median of $1,025 and debt as a percent of personal income stands at 4.0%, relative to the median of 2.5%. The state's debt ratios incorporate the issuance in 2003 of approximately $1.8 billion in appropriation-backed bonds to address unfunded pension/sick leave liability. Like most states, Wisconsin's debt ratios have declined in recent years. The high bonded debt level is offset by low unfunded pension liability.

The state has approximately $1.21 billion in variable rate debt exposure (12% of NTSD), which includes a GO Commercial Paper Program and a GO Extendable Commercial Paper Program, both rated P-1. The GO Commercial Paper line of credit has a stated expiration of March 2019. The total variable rate amount also includes about $88.7 million of outstanding transportation revenue commercial paper notes issued by the Wisconsin Department of Transportation, also rated P-1, for which the liquidity facility has a stated expiration date of April 2019.

Exhibit 4
Wisconsin Debt Outstanding Primarily in GO and Appropriation-Backed Bonds
New Tax-Supported Debt Outstanding as of December 2016



Source: Wisconsin annual disclosures; Moody's Investors Service

DEBT-RELATED DERIVATIVES

A portion of the state's variable rate debt exposure is hedged to fixed with swaps provided by Citibank, N.A. (A1(cr)/P-1(cr)), UBS AG (Aa3(cr)/P-1(cr)), and JPMorgan Chase Bank, N.A. (Aa2(cr)/P-1(cr)). Swap notional amounts are $479.2 million (about 37% of variable rate debt exposure). The swaps provide for declining notional amounts that parallel the amortization of the associated bonds. The state also has a direct loan with JPMorgan Chase Bank, N.A. for $280 million, which was used to refund outstanding general obligation bonds. This is the first and currently only direct bank loan for the state.

PENSIONS AND OPEB

Wisconsin's adjusted net pension liabilities (ANPL) relative to revenues are the second lowest of any state in the US. Based on the state's fiscal 2015 disclosures, the overall retirement system's three-year average ANPL relative to governmental revenues was 15% compared to a state median of 53%. Other pension ratios such as ANPL to personal income, GDP, and population are similarly low. The state's 2016 ANPL is $9.1 billion. Moody's ANPL reflects certain adjustments made to improve comparability of reported pension liabilities.

The state retirement plan, the Wisconsin Retirement System (WRS), benefits from contributions at 100% of the funding requirement and unique structural enhancements that minimize negative effects of a market downturn. The plan separates its systems into active and retiree segments and allows employees and retirees the option of assuming greater investment risk in exchange for potential increased pension benefits. If returns exceed 5% (the assumed rate of return for retirees), then "dividend" increases can be granted. However, if investment performance is adverse, then previous dividend increases can be reduced. During fiscal year 2011 the state actually reduced payments to retirees based on poor market performance. This mechanism is used in lieu of automatic cost of living adjustments. Additionally, Wisconsin Act 10 reforms passed in 2011 included some cost containing measures such as requiring non-public safety employees to contribute half of the annually required contribution for normal costs to WRS and eliminating the authority of the state and local governments to assume employee contributions. Based on these enhancements and the fully funded asset value, the state has effectively controlled its pension costs in a time when many states are combating rising costs and liabilities.

The state contributed $271 million to its pension systems in 2016. In 2015, the contribution amount of $276 million was more than the contribution amount that would allow the state's reported net pension liability to "tread water" – or remain stable from one year to the next, assuming investment return and other actuarial assumptions are met for the year. The tread water amount is determined by the actuarial cost of the year's benefit accruals ("service cost") plus interest on the net pension liability at the beginning of the year. The state's contribution relative to the tread water benchmark implies a funding approach that will lead to declining adjusted net pension liabilities over time. The state had an unadjusted reported proportionate share of the pension system's net pension asset of $686.9 million in fiscal 2015 and net pension liability of $455.5 million in fiscal 2016.

Wisconsin's latest valuation of its retiree health insurance (OPEB) plan shows a modest unfunded OPEB liability for this and other retiree benefits of approximately $944 million as of January 1, 2015. A Moody's ranking of fiscal 2013 OPEB unfunded liabilities showed the state with an OPEB unfunded actuarial accrued liability of 3.8% of revenues versus a state median of 15.7%.

Governance

The state has a number of governance constraints evidenced by a super-majority requirements for tax increases, limited executive authority to reduce mid-year appropriations, lack of multi-year financial planning and a weak binding consensus revenue forecasting process. However, the state Secretary of Administration is authorized to de-allocate expenditure payments from certain state agencies at any time. The state also benefits from timely and robust financial reporting.

Legal Security

The state's general obligation bonds are secured by its full faith and credit.

The state's certificates of participation, general fund appropriation bonds, Neighborhood Schools Initiatives bonds issued by the Milwaukee Regional Development Authority and pension funding bonds are payable from state appropriations.

Use of Proceeds

Not applicable

Obligor Profile

Wisconsin is the twentieth largest state, with a population of 5.7 million. Its GDP ranks twentieth among states.

Methodology

The principal methodology used in this rating was US States Rating Methodology published in April 2013. The additional methodology used in the lease-backed rating was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2016. The additional methodology used in the short-term rating was Variable Rate Instruments Supported by Conditional Liquidity Facilities published in March 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of these methodologies.

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