

## CREDIT OPINION

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 Rate this Research

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# Madison (City of) WI

## Update to credit analysis

### Summary

[Madison](#) (Aaa negative) maintains a strong credit profile, characterized by a large tax base serving as the state capital, a diverse local economy and long-standing stability provided by government and higher education presences. Operating reserves are healthy, somewhat offsetting revenue raising limitations. Fixed costs are high, though long-term leverage is moderate.

### Credit strengths

- » Large, expanding tax base with solid resident income levels
- » Healthy operating reserves

### Credit challenges

- » High fixed costs
- » Limited revenue raising flexibility due to state imposed levy limits

### Rating outlook

The negative outlook reflects the city's exposure to the operations of its water enterprise given its close governing ties and coterminous service area. The outlook reflects the challenges of the water system and the potential impact on the city's credit profile.

### Factors that could lead to an upgrade

- » Not applicable

### Factors that could lead to a downgrade

- » Significant contraction of tax base coupled with weakened resident income levels
- » Narrowing of operating reserves
- » Increased leverage

## Key indicators

Exhibit 1

Madison (City of) WI	2014	2015	2016	2017	2018
<b>Economy/Tax Base</b>					
Total Full Value (\$000)	\$22,710,892	\$23,685,668	\$24,596,422	\$26,768,654	\$28,727,408
Population	239,848	243,122	246,034	248,856	252,546
Full Value Per Capita	\$94,689	\$97,423	\$99,972	\$107,567	\$113,751
Median Family Income (% of US Median)	119.3%	119.0%	120.7%	120.0%	120.0%
<b>Finances</b>					
Operating Revenue (\$000)	\$268,260	\$289,227	\$309,799	\$305,928	\$319,755
Fund Balance (\$000)	\$69,118	\$65,598	\$69,707	\$73,487	\$74,438
Cash Balance (\$000)	\$62,808	\$67,609	\$76,712	\$76,057	\$84,297
Fund Balance as a % of Revenues	25.8%	22.7%	22.5%	24.0%	23.3%
Cash Balance as a % of Revenues	23.4%	23.4%	24.8%	24.9%	26.4%
<b>Debt/Pensions</b>					
Net Direct Debt (\$000)	\$366,527	\$391,177	\$431,957	\$467,292	\$469,046
3-Year Average of Moody's ANPL (\$000)	\$219,029	\$317,383	\$462,514	\$529,245	\$593,594
Net Direct Debt / Full Value (%)	1.6%	1.7%	1.8%	1.7%	1.6%
Net Direct Debt / Operating Revenues (x)	1.4x	1.4x	1.4x	1.5x	1.5x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	1.0%	1.3%	1.9%	2.0%	2.1%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	0.8x	1.1x	1.5x	1.7x	1.9x

Sources: Moody's Investors Service, the city's audited financial statement, US Census Bureau

## Profile

Madison is the state capital of [Wisconsin](#) (Aa1 stable) and is home to the flagship campus of the University of Wisconsin. It is the state's second largest city with an estimated population of 255,650.

## Detailed credit considerations

### Economy and tax base: state capital with strong tax base growth

Madison's tax base will continue to expand, with strong economic growth supported by its status as the state capital, a regional economic center and the institutional presence of the University of Wisconsin's flagship campus. The \$29.8 billion tax base averaged annual growth of 5.6% over the past five years driven by both appreciation of existing property and new construction. Upcoming projects include a 176-room Hilton Garden Inn to be built adjacent to the university campus and a 159-unit apartment complex within Judge Doyle Square, located downtown in the city's central business district.

As the state capital, Madison remains a major employment center, with the state employing over 19,000 employees, and the University of Wisconsin and its [affiliated hospital and clinics](#) (Aa3 stable) account for a combined employment of roughly 37,400. The Madison campus is the University of Wisconsin's largest campus, with roughly 44,411 students enrolled as of fall 2018. Besides a sizeable public sector presence, technological industries continue to bolster the local economy. Exact Sciences, a biotechnology company focusing on cancer research, recently opened its second facility within the city, a 169,000 square foot processing lab, and a new \$60 million headquarters is currently under construction with an anticipated completion date in early 2020.

Demographic trends within the city are positive, with cumulative population growth of 36.7% between the 1980 and 2010 censuses. Increases have remained steady since 2010, with estimated growth of 9.6% through 2019. Despite its large student population, resident income levels are strong with median family income estimated at 120% of the US median. Madison's July 2019 unemployment rate was a low 2.5%, below both the state (3.4%) and nation (4%).

### Financial operations and reserves: healthy operating reserves

We expect the city's financial position will remain sound, strengthened by the repayment of an interfund advance to the water enterprise. The city closed fiscal 2018 with an available operating fund balance (combined general, library and debt service funds) of

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\$74.4 million, or 23.3% of revenues. The fiscal 2019 budget is balanced. The city's largest source of revenue is property taxes, which comprised 72.7% of fiscal 2018 operating fund revenues, followed by intergovernmental revenue at 11.8%.

General operations of the city remain exposed to its water enterprise. Due to a cash drawdown for maintenance expenses and a delay in the approval of a rate increase by the Wisconsin Public Service Commission (PSC), the general fund advanced \$6.1 million to the water utility in fiscal 2017. Favorably, the advance was subsequently repaid with proceeds from revenue-supported promissory notes issued in December of 2018. PSC approved the system's rate increase in October 2018, which should support strengthening of water operations, however any challenges to water operations requiring general fund support could potentially place downward pressure on the city's credit profile. Operational stability of the water enterprise will continue to be a credit consideration in future reviews of the city.

#### **LIQUIDITY**

The city closed fiscal 2018 with a net cash position of \$84.3 million, or a healthy 26.4% of operating revenue.

#### **Debt and pensions: high fixed costs stemming from rapid debt amortization**

Fixed costs will remain elevated driven by regular borrowing for capital projects and rapid principal amortization. Following an upcoming sale, the city's net direct debt will be 1.7% of full value and 1.6x operating revenue. Management reports no plans for additional GO debt in 2019, but anticipates issuing water revenue bonds prior to year-end. Fixed costs, inclusive of debt service and pension contributions, were a high 28.8% of operating revenue in fiscal 2018.

#### **DEBT STRUCTURE**

All of the city's debt is long-term and fixed rate. Amortization is rapid with 93.7% of principal retired within ten years.

#### **DEBT-RELATED DERIVATIVES**

The city has no exposure to any debt-related derivatives.

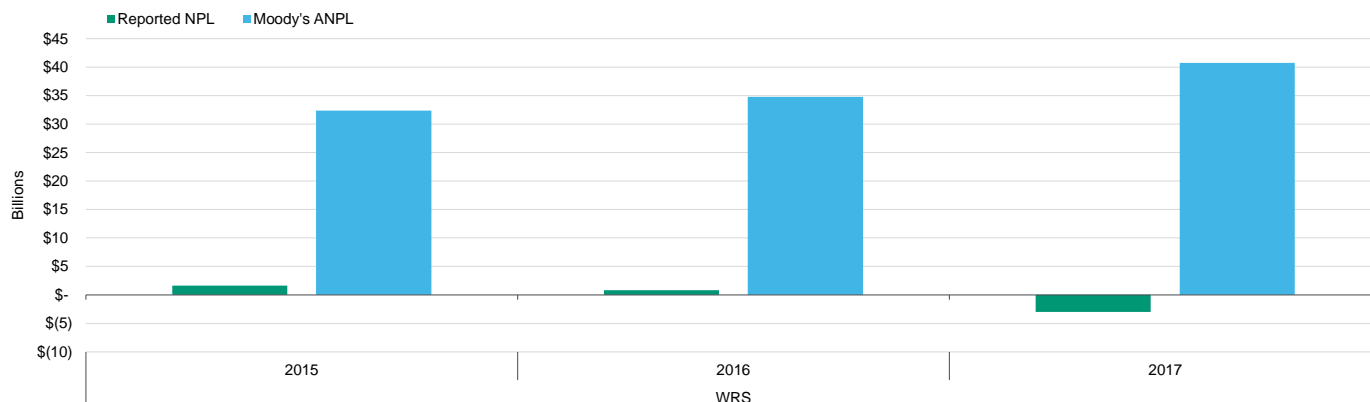
#### **PENSIONS AND OPEB**

Madison participates in the Wisconsin Retirement System (WRS), a statewide cost-sharing plan. Contributions are determined using a level contribution actuarial method in an effort to keep employer and employee contribution rates at a level percentage of payroll over time, and are set at 100% of the plan's funding requirement. As a result, WRS remains one of the best-funded public employee retirement systems in the country, with statewide employer contributions to WRS in 2017 totaling 107.7% of the amount needed to tread water<sup>1</sup>.

The city's adjusted net pension liability (ANPL) was \$695.1 million in 2018, up from \$516.8 million in 2016, bringing the three-year average to \$593.6 million, or 1.9x operating revenue and 2% of full value. Moody's ANPL reflects the use of a market-based discount rate to value pension liabilities rather than the assumed rate of investment return on plan assets. In comparison, the reported net pension liability (NPL), based on the plan's 7.2% discount rate, was negative \$50.6 million in fiscal 2018, reflecting a net pension asset.

Growth in the Moody's ANPL has been driven largely by falling market discount rates, however the plan's NPL has benefited from strong investment performance in recent years, with WRS reported a net pension asset as of fiscal 2017. (See Exhibit 2.)

Exhibit 2

**Wisconsin Retirement System remains well-funded on a reported basis**

Source: State of Wisconsin

Madison's other post-employment benefits (OPEB) obligations do not pose a material credit risk. The OPEB liability reflects an implicit rate subsidy for retirees who pay to remain on the city's health care plan. The city's report net OPEB liability at the close of fiscal 2018 was \$65.8 million. Moody's adjusted net OPEB liability, which is similar to our adjustments to pension liabilities, is \$65.3 million, equivalent to 0.2% of full value and 0.2x operating revenue.

**Management and governance: moderate institutional framework**

The city utilizes a conservative budgetary approach and a multi-year capital plan. City management aims to maintain an unassigned general fund balance of 15% of expenditures, a level it currently exceeds.

Wisconsin cities have an Institutional Framework score of "A", which is moderate. The sector's major revenue source, property tax revenue, is subject to a cap that restricts cities from increasing their operating property tax levies except to capture amounts represented by net new construction growth. Revenues and expenditures tend to be predictable. Across the sector, fixed and mandated costs are generally high. Many cities utilize tax increment districts to attract economic development, often issuing debt to fund initial infrastructure in undeveloped areas. While tax increment districts are ultimately expected to generate revenues sufficient to cover initial city outlay, cities are exposed to economic downturns which could halt development.

**Rating methodology and scorecard factors**

The [US Local Government General Obligation Debt](#) methodology includes a scorecard, a tool providing a composite score of a local government's credit profile based on the weighted factors we consider most important, universal and measurable, as well as possible notching factors dependent on individual credit strengths and weaknesses. Its purpose is not to determine the final rating, but rather to provide a standard platform from which to analyze and compare local government credits.

## Exhibit 3

## Madison (City of) WI

Rating Factors	Measure	Score
<b>Economy/Tax Base (30%)</b> <sup>[1]</sup>		
Tax Base Size: Full Value (in 000s)	\$29,802,897	Aaa
Full Value Per Capita	\$116,577	Aa
Median Family Income (% of US Median)	120.0%	Aa
<b>Notching Factors:</b> <sup>[2]</sup>		
Institutional Presence		Up
Regional Economic Center		Up
<b>Finances (30%)</b>		
Fund Balance as a % of Revenues	23.3%	Aa
5-Year Dollar Change in Fund Balance as % of Revenues	0.1%	A
Cash Balance as a % of Revenues	26.4%	Aaa
5-Year Dollar Change in Cash Balance as % of Revenues	5.2%	A
<b>Notching Factors:</b> <sup>[2]</sup>		
Other Analyst Adjustment to Finances Factor: available liquidity outside core operating funds		Up
<b>Management (20%)</b>		
Institutional Framework	A	A
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures	1.0x	A
<b>Notching Factors:</b> <sup>[2]</sup>		
Other Analyst Adjustment to Management Factor (specify): high fixed costs		Down
<b>Debt and Pensions (20%)</b>		
Net Direct Debt / Full Value (%)	1.7%	Aa
Net Direct Debt / Operating Revenues (x)	1.6x	A
3-Year Average of Moody's Adjusted Net Pension Liability / Full Value (%)	2.0%	Aa
3-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues (x)	1.9x	A
	Scorecard-Indicated Outcome	Aa1
	Assigned Rating	Aaa

[1] Economy measures are based on data from the most recent year available.

[2] Notching Factors are specifically defined in the US Local Government General Obligation Debt methodology dated December 16, 2016.

[3] Standardized adjustments are outlined in the [GO Methodology Scorecard Inputs Updated for 2019 publication](#).

Sources: Moody's Investors Service, the city's audited financial statements, US Census Bureau

## Endnotes

- Employer contributions that tread water equal the sum of current year service cost and interest on reported net pension liabilities at the start of the year, using reported actuarial assumptions. If plan assumptions are met exactly, contributions equal to the tread water indicator will prevent the reported net pension liabilities from growing. Net liabilities may decrease or increase in a given year due to factors other than the contribution amount, such as investment performance that exceeds or falls short of a plan's assumed rate of return.

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