

CREDIT OPINION

3 November 2023



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City of Madison, MS

New Issuer

Summary

The credit profile of the [City of Madison](#) (Aa3) is driven by the city's strong resident wealth, stable financial position albeit with narrow but consistent reserves and typical long term leverage and fixed costs.

On October 27, we assigned a Aa3 initial issuer and GOULT bond rating.

Credit strengths

- » Very strong resident wealth and suburban economy
- » Proximity to employment center of Jackson
- » Stable operating performance

Credit challenges

- » Below average cash and reserves for the rating level
- » Rising fixed costs

Rating outlook

Moody's does not usually assign outlooks to local governments with this amount of debt.

Factors that could lead to an upgrade

- » Sustained improvement to cash and reserves
- » Material decline in leverage and fixed costs

Factors that could lead to a downgrade

- » Significant economic decline resulting in material loss of full value or resident income
- » Material reduction of cash or reserves

Key indicators

Exhibit 1

Madison (City of) MS

	2019	2020	2021	2022	Aa Medians
Economy					
Resident income ratio (%)	205.5%	206.9%	194.8%	N/A	115.0%
Full Value (\$000)	\$3,463,577	\$3,532,646	\$3,592,066	\$3,764,850	\$2,649,338
Population	25,592	25,650	27,459	N/A	22,694
Full value per capita (\$)	\$135,338	\$137,725	\$130,816	N/A	\$108,666
Economic growth metric (%)	N/A	-1.9%	-1.8%	N/A	-0.5%
Financial Performance					
Revenue (\$000)	\$34,948	\$36,711	\$40,857	\$44,803	\$48,404
Available fund balance (\$000)	\$11,363	\$10,481	\$10,959	\$11,436	\$24,069
Net unrestricted cash (\$000)	\$10,109	\$9,007	\$12,982	\$11,386	\$32,092
Available fund balance ratio (%)	32.5%	28.6%	26.8%	25.5%	51.0%
Liquidity ratio (%)	28.9%	24.5%	31.8%	25.4%	69.0%
Leverage					
Debt (\$000)	\$50,299	\$51,872	\$46,710	\$43,190	\$34,496
Adjusted net pension liabilities (\$000)	\$54,031	\$78,954	\$72,224	\$63,667	\$55,543
Adjusted net OPEB liabilities (\$000)	\$0	\$0	\$0	\$0	\$6,316
Other long-term liabilities (\$000)	\$2,258	\$2,331	\$2,384	\$2,578	\$1,623
Long-term liabilities ratio (%)	305.0%	362.7%	296.9%	244.3%	244.8%
Fixed costs					
Implied debt service (\$000)	\$3,843	\$3,667	\$3,715	\$3,276	\$2,436
Pension tread water contribution (\$000)	\$1,966	\$2,073	\$2,275	\$1,889	\$1,565
OPEB contributions (\$000)	\$0	\$0	\$0	\$0	\$178
Implied cost of other long-term liabilities (\$000)	\$148	\$165	\$167	\$167	\$109
Fixed-costs ratio (%)	17.0%	16.1%	15.1%	11.9%	11.1%

For definitions of the metrics in the table above please refer to the [US Cities and Counties Methodology](#) or see the Glossary in the Appendix below. Metrics represented as N/A indicate the data were not available at the time of publication. The medians come from our most recently published [US Cities and Counties Median Report](#). The Economic Growth metric cited above compares the five-year CAGR of real GDP for Jackson, MS to the five-year CAGR of real GDP for the US.

Sources: US Census Bureau, Madison (city Of) Ms's financial statements and Moody's Investors Service

Profile

Madison is a suburban city located ten miles north of the City of Jackson. The city has had strong growth over the last 40 years from a population of approximately 2,240 in 1980 to its currently population of approximately 27,500.

Detailed credit considerations

Madison's population growth is driven by its proximity to and distinctions from the state capitol of Jackson. As such, Madison has established a niche as a desired community among residents with very strong income that is a robust 194% of the US median. This competitive advantage will persist and support a strong and growing residential base. Jackson's public sector is large segment of the economy and employs approximately 50,000 people. Another key component of the local economy is the presence of the University of Mississippi Medical Center, which is the state's only academic medical center and the largest of the area's medical facilities that includes four other hospitals. Together, the hospitals employ more than 18,000 people with three of them being among the ten largest employers in the city of Jackson.

Madison's finances have been stable over the last five years and will remain so over the next fiscal year. Madison has maintained consistent operations despite cash and reserves that are significantly below average for Aa-rated cities. Management has not prioritized growing reserves but is committed to maintaining an available fund balance ratio consistent with the levels maintained over the last several years.

The \$10 million 2023 bonds will not materially alter the city's leverage profile, which is typical of a Aa-rated city. This includes a 244% long-term liabilities ratio and 11% fixed cost ratio.

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

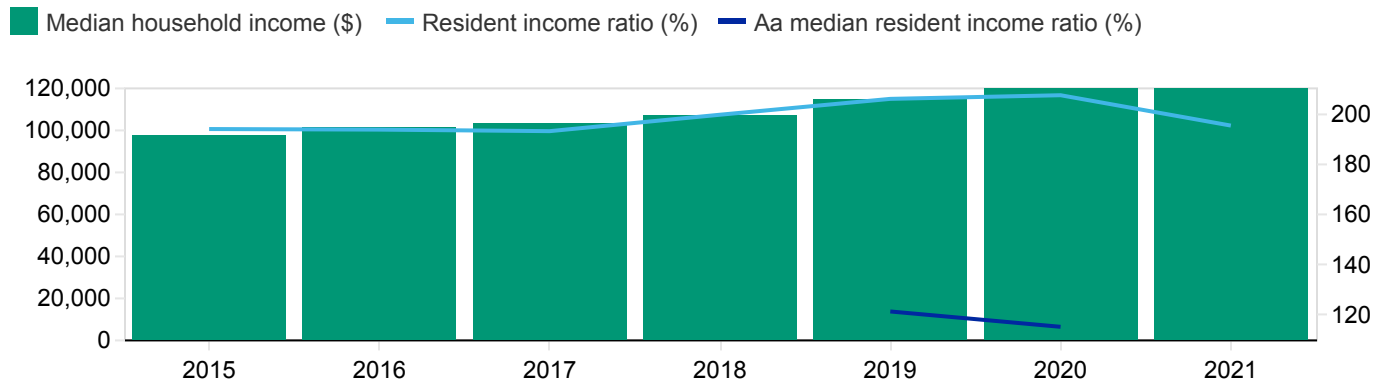
Madison participates in the state's cost-sharing multiple-employer defined benefit pension plan. The employer contribution rate, currently 17.4% of payroll, is established by the state legislature and has historically fell below our "tread water" indicator, meaning it's been insufficient to prevent reported unfunded liabilities from growing.

In August, the PERS board voted to phase in increases to the employer contribution rate and lower the assumed rate of return from 7.55% to 7%. Beginning in 2024, the employer contribution rate will increase 2% annually until it reaches the actuarially recommended amount, estimated to be 27.4% under the new discount rate.

Economy

Exhibit 2

Resident Income

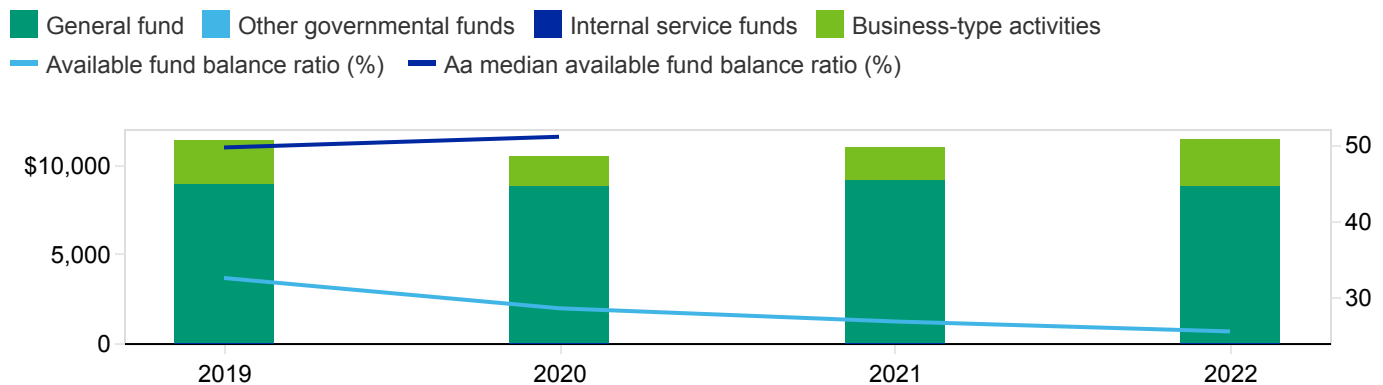


Source: Moody's Investors Service

Financial operations

Exhibit 4

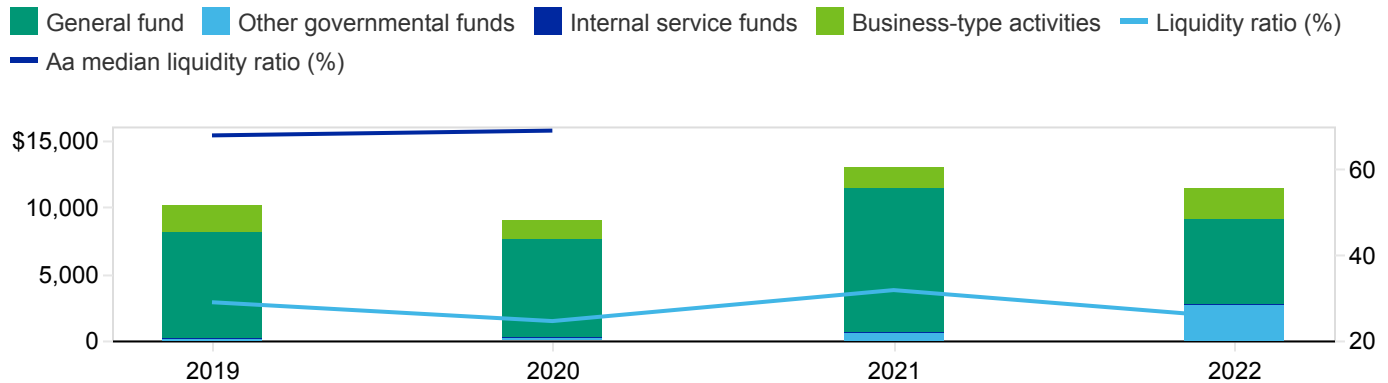
Fund Balance



Source: Moody's Investors Service

Liquidity

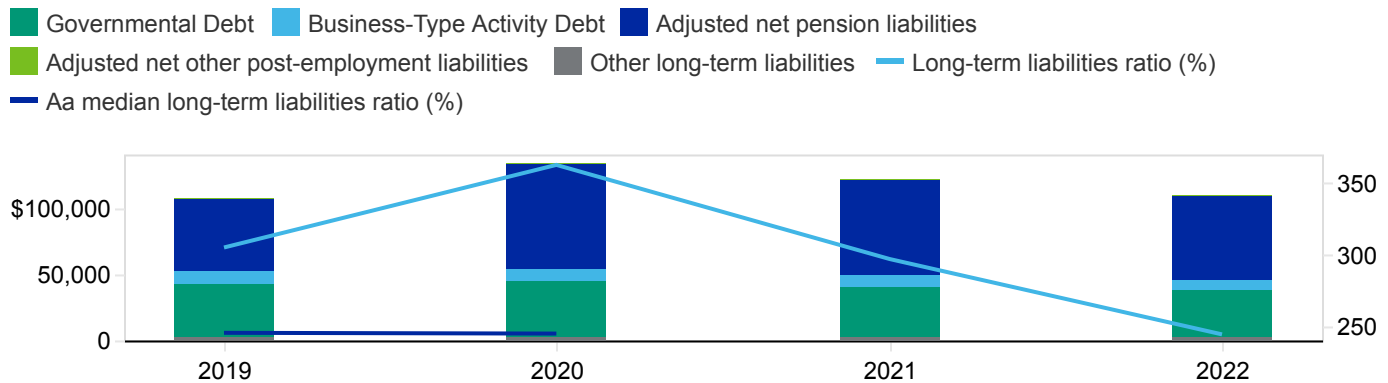
Exhibit 5

Cash

Source: Moody's Investors Service

Leverage

Exhibit 6

Total Primary Government - Long Term Liabilities

Source: Moody's Investors Service

ESG considerations**Environmental**

The city's exposure to environmental risk largely reflects elevated exposure to flooding and wildfire risk. The city's vulnerability to other environmental risks includes moderate exposure to heat stress. We do not anticipate material credit risk attendant to carbon transition, water management, natural capital or waste and pollution.

Social

Credit risks related to the provision of public safety, education, housing and basic services are generally low. The city also benefits from its favorable proximity to the state capitol, Jackson State University and a sizeable medical facility presence in Jackson.

Governance

The city benefits from a solid institutional structure and management of the city's finances. The city's political leadership has been unusually stable; the mayor has served since 1981. Effective governance has also been exhibited by consistency of financial performance and manageable leverage.

Rating methodology and scorecard factors

The US Cities and Counties Rating Methodology includes a scorecard, which summarizes the rating factors generally most important to city and county credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 7

Madison (City of) MS

	Measure	Weight	Score
Economy			
Resident income ratio	194.8%	10.0%	Aaa
Full value per capita	141,487	10.0%	Aa
Economic growth metric	-1.8%	10.0%	A
Financial Performance			
Available fund balance ratio	25.5%	20.0%	Aa
Liquidity ratio	25.4%	10.0%	A
Institutional Framework			
Institutional Framework	Aa	10.0%	Aa
Leverage			
Long-term liabilities ratio	244.3%	20.0%	A
Fixed-costs ratio	11.9%	10.0%	Aa
Notching factors			
No notchings applied			
Scorecard-Indicated Outcome			Aa3
Assigned Rating			Aa3

The complete list of outstanding ratings assigned to the Madison (city Of) Ms is available on their [issuer page](#). Details on the current ESG scores assigned to the Madison (city Of) Ms are available on their [ESGView page](#).

Sources: US Census Bureau, Madison (city Of) Ms's financial statements and Moody's Investors Service

Appendix

Exhibit 8

Key Indicators Glossary

	Definition	Typical Source*
Economy		
Resident income ratio	Median Household Income (MHI) for the city or county, adjusted for Regional Price Parity (RPP), as a % of the US MHI	MHI: US Census Bureau - American Community Survey 5-Year Estimates RPP: US Bureau of Economic Analysis
Full value	Estimated market value of taxable property in the city or county	State repositories; audited financial statements; continuing disclosures
Population	Population of the city or county	US Census Bureau - American Community Survey 5-Year Estimates
Full value per capita	Full value / population	
Economic growth metric	Five year CAGR of real GDP for Metropolitan Statistical Area or county minus the five-year CAGR of real GDP for the US	Real GDP: US Bureau of Economic Analysis
Financial performance		
Revenue	Sum of revenue from total governmental funds, operating and non-operating revenue from total business-type activities, and non-operating revenue from internal services funds, excluding transfers and one-time revenue, e.g., bond proceeds or capital contributions	Audited financial statements
Available fund balance	Sum of all fund balances that are classified as unassigned, assigned or committed in the total governmental funds, plus unrestricted current assets minus current liabilities from the city's or county's business-type activities and internal services funds	Audited financial statements
Net unrestricted cash	Sum of unrestricted cash in governmental activities, business type activities and internal services fund, net of short-term debt	Audited financial statements
Available fund balance ratio	Available fund balance (including net current assets from business-type activities and internal services funds) / Revenue	
Liquidity ratio	Net unrestricted cash / Revenue	
Leverage		
Debt	Outstanding long-term bonds and all other forms of long-term debt across the governmental and business-type activities, including debt of another entity for which it has provided a guarantee disclosed in its financial statements	Audited financial statements; official statements
Adjusted net pension liabilities (ANPL)	Total primary government's pension liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits	Audited financial statements; Moody's Investors Service
Adjusted net OPEB liabilities (ANOL)	Total primary government's net other post-employment benefit (OPEB) liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits	Audited financial statements; Moody's Investors Service
Other long-term liabilities (OLTL)	Miscellaneous long-term liabilities reported under the governmental and business-type activities entries	Audited financial statements
Long-term liabilities ratio	Debt + ANPL + ANOL + OLTL / Revenue	
Fixed costs		
Implied debt service	Annual cost to amortize city or county's long-term debt over 20 years with level payments	Audited financial statements; official statements; Moody's Investors Service
Pension tread water contribution	Pension contribution necessary to prevent reported unfunded pension liabilities from growing, year over year, in nominal dollars, if all actuarial assumptions are met	Audited financial statements; Moody's Investors Service
OPEB contribution	City or county's actual contribution in a given period	Audited financial statements
Implied cost of OLTL	Annual cost to amortize city or county's other long-term liabilities over 20 years with level payments	Audited financial statements; Moody's Investors Service
Fixed-costs ratio	Implied debt service + Pension tread water + OPEB contributions + Implied cost of OLTL / Revenue	

*Note: If typical data source is not available then alternative sources or proxy data may be considered. For more detailed definitions of the metrics listed above please refer to the [US City and Counties Methodology](#).

Source: Moody's Investors Service

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