

ISSUER COMMENT

7 October 2019

RATING

Revenue ¹

A1	No Outlook
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City of Ypsilanti, MI Water & Sewer Enterprise

Annual Comment on Ypsilanti Water & Sewer

Issuer Profile

Ypsilanti Water & Sewer provides water and wastewater service to Washtenaw County, Michigan, which has a population of 361,509 and a moderate population density of 509 people per square mile. The county's median family income is \$94,640 (1st quartile) and the August 2019 unemployment rate was 3.3% (3rd quartile) ². Water is purchased from the City of Detroit and distributes via a series of water mains.. The Authority collects sewage and treats it at its wastewater treatment plant

Credit Overview

Ypsilanti Water & Sewer has a sound credit position, though its A1 rating is slightly weaker than the median rating of Aa3 for US water and wastewater systems. The notable credit factors include robust liquidity, an inflated debt profile, but a below-average income service area, a moderate system size, and weak debt service coverage.

System Characteristics: The system profile of Ypsilanti Water & Sewer is satisfactory when compared to the A1 rating assigned. The median family income equals a weak 69.7% of the US level. The system size, measured as operating and maintenance expenses (\$8.3 million), is consistent with the US median.

Financial Strength: Overall, the financial position of Ypsilanti Water & Sewer is weak relative to its A1 rating. The days cash on hand (510 days) is excellent and greatly exceeds the US median, and it has increased significantly between 2014 and 2018. However, the debt to operating revenues (5.8x) is very heavy and well above other Moody's-rated water and wastewater systems nationwide. Moreover, the coverage of the annual debt service by net revenues (0.77x) is slim and much lower than the US median.

Legal Provisions: Legal provisions, which typically include a rate covenant requiring a minimum of 1.0x coverage of debt service, are adequate for this sector.

Sector Trends - Michigan Water and Sewer

Water and sewer systems in Michigan are relatively old and need significant ongoing maintenance. Financial metrics slightly lag US medians. Median debt service coverage (1.6x) is slightly weaker the national median. Median liquidity (377 days cash) is slightly weaker than the national median but still considered to be robust. Debt levels (2.2x debt to operating revenue) approximate those of the US. Given its location within the Great Lakes region, most of the state benefits from an abundance of fresh water, and few utilities face supply constraints. Both water and sewer utilities in Michigan benefit from unlimited rate-

setting autonomy. Water and sewer enterprises in the US are heavily regulated both at the federal and state levels, and frequently incur heavy capital costs in order to comply with environmental requirements. Some sewer systems within the state have combined sewer overflow (CSO) consent decrees that will require significant future debt.

EXHIBIT 1

Key Indicators ³/₄ Ypsilanti Water & Sewer

Credit Metrics	2014	2015	2016	2017	2018	US Median	Credit Trend
Annual Debt Service Coverage (x)	1.20x	1.03x	1.61x	1.61x	0.77x	2.30x	Stable
Days Cash on Hand (Days)	359	263	348	471	510	440	Improved
Debt to Operating Revenues (x)	7.8x	7.5x	6.7x	6.3x	5.8x	1.9x	Improved
Median Family Income (% of US Median)	69%	68%	70%	70%	70%	91%	Stable
Remaining Useful Life of Capital Assets (Years)	89	82	78	74	71	27	Weakened

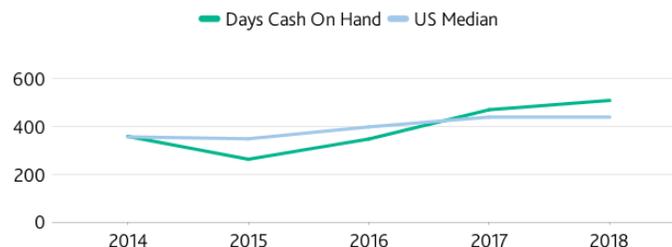
Debt and Financial Data (\$000s)	2014	2015	2016	2017	2018	US Median
Net Funded Debt	\$71,579	\$69,053	\$65,059	\$64,445	\$60,471	\$47,783
Total Revenues	\$9,192	\$9,253	\$9,815	\$10,239	\$10,438	\$29,141
Operating and Maintenance Expenses	\$5,720	\$6,372	\$5,274	\$5,784	\$8,283	\$16,759
Net Revenues	\$3,472	\$2,880	\$4,541	\$4,455	\$2,154	\$12,262
Debt Service	\$2,890	\$2,800	\$2,813	\$2,766	\$2,786	\$5,182

Governance/Legal Provisions	Score
Rate Management	Aa
Regulatory Compliance and Capital Planning	A
Rate Covenant	Aa
Debt Service Reserve Requirement	Aa

Source: Moody's Investors Service

EXHIBIT 2

Days cash on hand has increased from 2014 to 2018

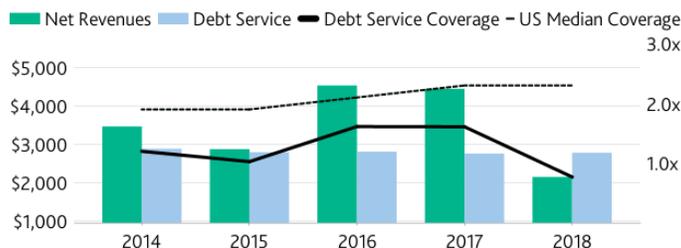


Source: Moody's Investors Service

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EXHIBIT 3

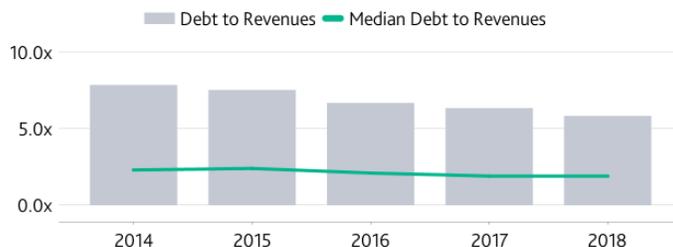
Debt service coverage decreased from 2014 to 2018



Source: Moody's Investors Service

EXHIBIT 4

Debt to operating revenues decreased from 2014 to 2018



Source: Moody's Investors Service

Endnotes

- 1 The rating referenced in this report is the rating of the senior most lien on the relevant pledged revenues. Some utilities have bonds separately secured by distinct revenue sources. For these utilities, the rating referenced in this report is the senior most rating only on the relevant revenue pledge (e.g., water); the utility could have a higher rating on a different type of revenue bond (e.g., sewer).
- 2 The demographic data presented, including population, population density, per capita personal income and unemployment rate are derived from the most recently available US government databases. Population, population density and per capita personal income come from the American Community Survey while the unemployment rate comes from the Bureau of Labor Statistics.

The largest industry sectors are derived from the Bureau of Economic Analysis. Moody's allocated the per capita personal income data and unemployment data for all counties in the US census into quartiles. The quartiles are ordered from strongest-to-weakest from a credit perspective: the highest per capita personal income quartile is first quartile, and the lowest unemployment rate is first quartile.

- 3 Moody's calculations of various statistics can be different than calculations reported in audited financial statements or offering documents. Moody's makes standard adjustments to reported financial data, to facilitate comparisons across issuers. For definitions of the metrics in the Key Indicators Table, see our [US Municipal Utility Revenue Debt](#) methodology.
- 4 The medians come from our most recently published report, [Medians - Solid financial metrics, ability to raise rates underpin stable sector](#).

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