

CREDIT OPINION

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New Issue

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Contacts

Ryan Patton 312-706-9954
Associate Analyst
ryan.patton@moodys.com

David Levett 312-706-9990
AVP-Analyst
david.levett@moodys.com

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Americas 1-212-553-1653
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City of Naperville, IL

New Issue - Moody's assigns Aaa to Naperville, IL's GO Bonds

Summary Rating Rationale

Moody's Investors Service has assigned a Aaa rating to the City of Naperville, IL's \$8.0 million General Obligation Bonds, Series 2017. Concurrently, Moody's affirms the Aaa rating on the city's outstanding general obligation (GOULT) debt and assigns a stable outlook. Following the sale, the city will have \$163 million of GOULT debt.

The Aaa rating reflects Naperville's integral role in the Chicago (Ba1 rating under review for downgrade) regional economy; substantial tax base supported by a diverse commercial sector and an affluent residential base; sound financial operations; considerable budgetary flexibility provided by the city's home rule status; and low debt levels. These credit strengths somewhat mitigate the challenge associated with an above average unfunded pension burden.

Credit Strengths

- » Large and diverse tax base plays a key role in the Chicago regional economy
- » Resident income levels are among the strongest in the nation among cities with a population over 100,000 and it maintains relatively low unemployment levels
- » Significant financial flexibility afforded by the city's home rule status

Credit Challenges

- » Cash relative to operating revenues is modest compared to similarly rated entities
- » Above average pension burden
- » Narrow enterprise fund cash

Rating Outlook

The stable outlook reflects the city's robust tax base and broad revenue raising ability which should allow the city to manage pressure from rising pension burdens. It also reflects the expectation that operations and liquidity in the city's electric utility will continue to improve and allow for repayment of interfund loans.

Factors that Could Lead to an Upgrade

- » Not applicable

Factors that Could Lead to a Downgrade

- » Declines in liquidity and/or fund balances
- » Growth in the city's debt or pension burdens
- » Failure of the city's enterprise funds to continue improving as projected

Key Indicators

Exhibit 1

Naperville (City of) IL	2011	2012	2013	2014	2015*	Draft 2016
Economy/Tax Base						
Total Full Value (\$000)	\$ 20,176,396	\$ 19,307,714	\$ 18,237,168	\$ 17,797,597	\$ 17,995,657	\$ 20,023,030
Full Value Per Capita	\$ 142,689	\$ 135,833	\$ 127,334	\$ 123,502	\$ 124,058	\$ 138,035
Median Family Income (% of USMedian)	194.6%	194.9%	193.2%	194.9%	193.6%	193.6%
Finances						
Operating Revenue (\$000)	\$ 114,516	\$ 115,303	\$ 116,350	\$ 118,165	\$ 217,106	\$ 132,250
Fund Balance as a % of Revenues	23.4%	27.9%	31.2%	26.1%	15.7%	24.9%
Cash Balance as a % of Revenues	17.9%	22.1%	27.5%	24.6%	9.7%	14.5%
Debt/Pensions						
Net Direct Debt (\$000)	\$ 115,824	\$ 104,237	\$ 90,642	\$ 130,831	\$ 124,069	\$ 103,943
Net Direct Debt / Operating Revenues (x)	1.0x	0.9x	0.8x	1.1x	0.6x	0.8x
Net Direct Debt / Full Value (%)	0.6%	0.5%	0.5%	0.7%	0.7%	0.5%
Moody's-adjusted Net Pension Liability (3yr avg) to Revenues (x)	N/A	2.1x	2.4x	2.4x	1.4x	2.6x
Moody's-adjusted Net Pension Liability (3yr avg) to Full Value (%)	N/A	1.2%	1.5%	1.6%	1.7%	1.7%

Post-sale, net direct debt will be 0.9x revenues and 0.6% of full value. Fiscal 2015 represents a 20-month period.

Source: Audited financial statements, draft 2016 financial statements, US Census, Moody's Investors Service

Detailed Rating Considerations

Economy and Tax Base: Large Chicago area tax base supported by diverse commercial sector and affluent residential community

Naperville's tax base will remain healthy due to the city's diverse commercial sector, affluent residential base, and proximity to commuting centers throughout the Chicago metropolitan region. Located 28 miles southwest of Chicago in Du Page County (Aaa), Naperville's tax base is primarily residential but also boasts a diverse commercial sector. Edward Hospital is the city's top employer with approximately 4,500 employees. Several large governmental research facilities (Argonne National Laboratory and Fermi Lab) are in the near vicinity and complement a corporate research presence within the city.

The city's population increased by more than 500% during the past four decades (from 22,617 residents at the 1970 census to 141,853 in 2010). Residential development, driven in large part by teardowns and new construction, combined with ongoing commercial development, brought strong valuation growth. The city's \$20 billion tax base declined a cumulative 17% between 2011 and 2014 but has since recovered to 99% of its pre-recession peak. Naperville is one of the wealthiest rated large cities (population over 100,000) in the nation, as evidenced by a median family income that is 194% of the US level.

Financial Operations and Reserves: Healthy general fund reserves though cash levels trail other highly rated entities; home rule unit of government

The city's reserves will likely remain healthy given sound financial operations and considerable revenue raising flexibility. In September 2015, city council approved the transition to a calendar year audit period. Combined audited figures from fiscal 2015 (concluding April 30, 2015) and an 8-month stub year (May 1, 2015 to December 31, 2015) reflect a \$3.5 million operating surplus. The surplus increased

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operating reserves (across the general and debt service funds) to \$34 million, or 16% of revenues received during the 20-month period. While final audited results for fiscal 2016 are not yet available, a draft audit reflects a \$1.3 million use of reserves due to planned capital spending that decreased the operating fund balance to \$33 million or 25% of fiscal 2016 revenues. The city has budgeted for a \$2 million operating surplus in fiscal 2017 and reports that revenues and expenditures through June are tracking close to budget.

Naperville enjoys a wide array of revenue raising options afforded by the city's home rule status, including the unlimited ability to raise property taxes, implement a local option sales tax, and increase utility rates. In September 2015, the city implemented its first home rule sales tax of 0.5%. Proceeds of the tax are dedicated to reducing existing debt and increasing cash reserves across various operating funds. The home rule sales tax generates \$8.5 million annually.

LIQUIDITY

The city's 2015 net operating cash in its operating funds was \$21 million, or 9.7% of operating revenues. Net cash at the close of fiscal 2016 is estimated at \$19.1 million or 14.5% of operating revenues. The city's cash position declined largely due to borrowing from the electric fund, which owes the General Fund \$5.7 million. The city's two enterprise funds (electric and water/sewer) did not hold any cash at the close of fiscal 2015. Significant rate increases are expected to improve system liquidity and repay the interfund advance. The city increased electric rates by 6% in 2014, 7% in 2015 and 8.3% in 2016. Annual increases of 2.4% have been approved for 2017 and 2018. Water rates are also scheduled to increase by 3%-5% annually over the next three years. Failure of the enterprises to improve as expected could place negative pressure on the city's rating given city liquidity trails other highly rated entities.

The city also holds substantial liquidity in other funds, which partly mitigates the narrow operating fund cash. The city's nonmajor funds held an estimated \$27.9 million at the close of 2016, and the city's library, a discretely presented component unit, also held an estimated \$4.5 million. Across all governmental funds and the library, net cash at the close of 2016 is estimated at \$50.4 million or 30% of revenues.

Debt and Pensions: Low debt burden; above average pension burden

Inclusive of the current sale, the city's debt burden remains moderate at 0.6% of full value, or 0.9 times operating revenue. Total fixed costs inclusive of retirement contributions and debt service comprise roughly 20% of revenues. The city plans to issue between \$8 million and \$15 million in bonds annually over the next four years to finance a portion of its capital improvement plan. Despite these expected issuances, officials plan to reduce the city's debt burden by 25% over the next eight years. A substantial portion of the city's direct debt is supported by non-property tax sources. Naperville's overall debt burden is average at 2.2% of full value and incorporates \$303 million of debt from overlapping governments, most of which is attributable to school districts.

Naperville's pension burden is above average. The city's fiscal 2015 three-year average adjusted net pension liability (ANPL), our measure of a local government's pension burden, is \$309 million. The estimated ANPL for fiscal 2016 is \$346 million, a growth of 12%. The fiscal 2016 ANPL is 1.7% of full value and 2.6x the estimated operating revenues.

DEBT STRUCTURE

All of the city's debt is fixed rate. Amortization is rapid with 84% of principal retired within ten years.

DEBT-RELATED DERIVATIVES

The city is not a party to any derivative agreements.

PENSIONS AND OPEB

City employees participate in one of two single employer defined benefit pension plans (police and fire) or the Illinois Municipal Retirement Fund (IMRF) a multiple employer agent plan. Factors contributing to recent unfunded liability growth include updated mortality assumptions, weak investment returns relative to assumed rates of return, and city contributions that, while closely conforming with actuarially determined contributions, were not sufficient to fully cover annual interest accruals on accumulated unfunded liabilities. Furthermore, new accounting standards resulted in increased reporting of both assets and liabilities of the city's account with the IMRF.

Fiscal 2016 city contributions to its pensions plans are estimated to be 92% of our "tread water" indicator across all plans (net of enterprise support). The "tread water" indicator measures the annual employer contribution required to prevent reported net pension

liabilities from growing, under plan assumptions. After accounting for employee contributions, annual government contributions that tread water equal the sum of employer service cost and interest on reported net pension liabilities at the start of the fiscal year.

The state requires 90% of public safety unfunded pension liabilities be amortized over 30 years commencing in 2010. The city has structured its contributions to achieve 100% funding by 2033 and has occasionally contributed more than would be required annually to meet this target under plan assumptions. In fiscal 2014, the city made an additional \$6 million payment to its public pension funds to offset growth in the unfunded liabilities. The city does not intend to contribute more than required under its plan assumptions in 2017.

The city has a modest other post employment benefit (OPEB) unfunded liability of \$10.6 million, which primarily represents the implicit rate subsidy of the state mandate to allow retirees to stay on the city's health care plans.

Management and Governance: Moderate institutional framework

Illinois cities have an institutional framework score of "A," or moderate. Revenue predictability is moderate, with varying dependence on property, sales, and state-distributed income taxes. Revenue-raising ability is also moderate but varies. Home rule entities have substantial revenue-raising authority. Non-home rule entities are subject to tax rate limitations, and total operating tax yield for non-home rule entities subject to the Property Extension Limitation Law (PTELL) is capped at the lesser of 5% or CPI growth, plus new construction. Expenditures are moderately predictable but cities have limited ability to reduce them given costs for pension benefits that enjoy strong constitutional protections.

As a home rule government, the city has significant financial flexibility as it is not subject to caps on its property tax levy and it has the power to impose variety of taxes without voter approval. The state recently imposed a 2% fee on sales tax collections, which is expected to cost the city \$175,000 in fiscal 2018. A 10% reduction in payments from the state's local government distributive fund will also cost the city \$750,000 in the first half of fiscal 2018.

Legal Security

The bonds are secured by the city's authorization and pledge to levy taxes unlimited as to rate and amount.

Use of Proceeds

Proceeds of the 2017 bonds will be used to finance \$8.0 million in new-money projects, including building improvements, stormwater, traffic and e-government capital initiatives.

Obligor Profile

The City of Naperville is located in DuPage County in northeastern Illinois, approximately 28 miles southwest of downtown Chicago. The city has a population of 141,853 according to the 2010 census.

Methodology

The principal methodology used in this rating was US Local Government General Obligation Debt published in December 2016. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology.

Ratings

Exhibit 2

Naperville (City of) IL

Issue	Rating
General Obligation Bonds, Series 2017	Aaa
Rating Type	Underlying LT
Sale Amount	\$8,010,000
Expected Sale Date	09/20/2017
Rating Description	General Obligation

Source: Moody's Investors Service

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