

## CREDIT OPINION

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### New Issue

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## New York (City of), NY

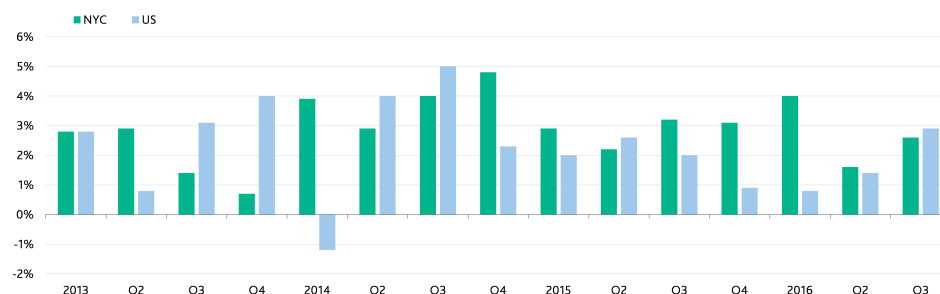
New Issue - Moody's Assigns Aa2 to \$800M NYC GO Bonds Fiscal 2017 Series C & D; Outlook Stable

### Summary Rating Rationale

Moody's Investors Service has assigned Aa2 ratings to the City of New York's \$780 million General Obligation Bonds, Fiscal 2017 Series C and \$20 million Series D. The outlook is stable. The ratings reflect the city's large and resilient economy, its extraordinarily large tax base, its institutionalized budgetary and financial management controls, its proactive responses to budget strain during economic downturns, the key but diminishing role of the volatile financial services sector, and moderate but growing costs for the combination of debt service, pension, and employee and retiree healthcare.

Exhibit 1

#### New York City GDP Growth Largely Outpaces the Nation City leads in eight of 15 quarters



Source: New York City Comptroller

### Credit Strengths

- » Exceptionally large and diverse economy driven by city's position as an international center of the high-income financial services industry
- » Strong governance and financial best practices, tested through periods of fiscal stress
- » Strong liquidity

### Credit Challenges

- » Fixed costs that will require economic and revenue growth to remain affordable
- » Cyclical economic base driven by the financial services industry
- » Ongoing need to close out-year budget gaps

## Rating Outlook

The outlook for New York City's general obligation bonds is stable. The city's institutionalized budgetary controls and early recognition of future budget pressure help it maintain a balanced financial position and weather economic downturns. The city's economy is reliant on a volatile financial services sector, but it continues to diversify, and its finances will benefit. Even with strong budgetary controls, growth in costs for debt service, pensions and retiree health care will continue to be a challenge for the city.

## Factors that Could Lead to an Upgrade

- » Sustained reduction in the growth of the city's debt burden and other fixed costs, and establishment of formal policy for managing debt within prescribed constraints
- » Establishment of significant formal budget reserves to buffer the inherent volatility of the financial services sector
- » Improved and continuing growth in city employment and the property tax base

## Factors that Could Lead to a Downgrade

- » Inability to manage rapidly rising costs in non-discretionary spending such as debt service, personnel costs, or pensions
- » Divergence from well-established fiscal practices
- » Emergence of significant liquidity strain and the need for large cash-flow borrowings

## Key Indicators

Exhibit 2

New York City	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Total Full Value (000s)	814,422,100	838,003,200	858,102,400	906,273,800	969,430,400
Full Value Per Capita	97,691	101,343	102,707	108,472	116,032
Median Family Income as % of US	106.5%	108.3%	106.7%	N/A	N/A
Operating Revenue (000s)	66,603,415	70,631,865	72,387,292	77,608,673	79,487,118
Available Fund Balance as a % of Revenue	6.9%	5.9%	6.1%	9.8%	11.2%
Cash Balance as a % of Revenue	12.4%	12.8%	16.4%	17.4%	17.9%
Net Direct Debt (000's)	65,703,394	67,000,247	68,940,172	69,071,880	69,457,542
Net Direct Debt to Operating Revenue (x)	1.0x	0.9x	1.0x	0.9x	0.9x
Net Direct Debt as % of Full Value	8.1%	8.0%	8.0%	7.6%	7.2%
Moody's ANPL (3-Year Average) to Full Value (x)	8.8x	10.3x	11.2x	11.1x	11.9x
Moody's ANPL (3-Year Average) to Operating Revenues (x)	1.1x	1.2x	1.3x	1.3x	1.4x

Source: New York City financial statements, Moody's Investors Service

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## Recent Developments

- » On January 31, the city and its rank and file police union reached a tentative contract settlement that largely follows the same pattern agreed to by the other city unions. The costs of these settlements is already reflected in the city's financial plan, and any incremental costs and savings will be rectified in the June executive budget.
- » On January 24, the city released an updated to its financial plan (the fiscal 2018 "preliminary budget"). For the current estimated tax revenue is \$365 million more than the prior estimate, primarily to reflect stronger property tax collections but slightly weaker personal income tax collections. Forecasted budget gaps in future years are overall smaller than they prior financial plan revisions, totaling \$3.3 billion in fiscal 2019, \$2.5 billion in fiscal 2020, and \$1.8 billion in fiscal 2021. The gaps reflect a manageable average of about 3% of city-funds revenue, which the city has significant budgetary flexibility to close.

## Detailed Rating Considerations

### Economy and Tax Base

New York City's economy is [notably large](#), with real GDP greater than all but four US states, and expanding at a rate that outpaces the nation (see exhibit on first page). The city's labor market has recovered remarkably well. Private sector employment recovered quickly post-recession and in 2016 was 16% greater than the prerecession peak of August 2008. In 2015 it increased 3.2% and by 2.3% in 2016, both faster than the nation. The city's labor force increased at more than twice the US rate between 2011 and 2016. As a result, the unemployment rate has been just above the national rate as city residents seek jobs. The December 2016 unemployment rate was 5.2%, compared to 4.7% for the US.

The important financial activities sector, which accounts for 10.7% of the city's employment in 2016, played a key role in helping the city regain jobs following the early 2000s recession, but employment performance is volatile. Jobs in the sector are still lower than their pre-recession levels but still account for 25% of earnings in the city.

Tourism continues to hit record levels, even with a strong dollar, with an 58.3 million visits in 2015 and an estimated 60.3 million in 2016. Foreign tourism is likely to slow, however, as the dollar strengthens more, especially against the British pound following the "[Brexit](#)" vote; the [United Kingdom](#) (Aa1 negative) is the largest source of foreign visitors to the city. The city's tourism bureau estimates tourism generates \$10.5 billion in tax revenue. The city's economy continues to diversify, with strong higher education and health care sectors and a burgeoning high tech industry. Growth in those areas will continue to mitigate the volatility of finance.

Similar to the size of the city's economy overall, New York's real property tax base is the largest of any US city, with a fiscal 2016 full value of \$969 billion; for fiscal 2017, full value has topped \$1 trillion. State law that limits the amount of real property tax that a municipality may levy in any year do not apply to New York City. Proposals from time to time would extend the limitation to the city and while one has never passed, if it did it would significantly constrain the city's financial flexibility.

### Financial Operations and Reserves

In addition to the changes cited above in "Recent Developments," in recent years the city has buttressed its reserves, including \$1 billion in its General Reserve, approximately \$4 billion in the Retiree Health Benefits Trust, and established a new Capital Stabilization Reserve (\$250 million per year between fiscal 2018-2021). While those reflect a stronger reserve position than the city has had in some recent years, they are slightly lower than the Aa2 large city median which is more than 12%.

Last year's proposed New York state (Aa1 stable) budget included several provisions that would have pushed certain costs to the city. Those didn't pass but the enacted budget withholds \$600 million of city sales tax and instead keeps it for the state between the current fiscal year and fiscal 2019; the move illustrates the relative strength of states and how their decisions can impact their local governments. Similarly, changes in federal aid could impact both the state and city budgets.

The city has subsidized its large public hospital system, New York City Health + Hospitals (formerly the Health and Hospitals Corporation, or HHC) since it was created, providing both operating and capital support, as well as a capital reserve replenishment obligation on the system's \$870 million of outstanding bonds. Amid increasing healthcare costs, declining federal reimbursements for the uninsured and underperforming patient revenue, the system faces significant financial challenges. The city has increased its financial support of the hospital system significantly. That support includes both direct operating support payments and eliminating

debt service reimbursements from the hospitals for capital projects financed with city-issued debt. The city and hospital system have formulated multi-year plan to increase revenue and decrease expenditures to stabilize the system's financial position. The increased size of the subsidies illustrates the enterprise risk the hospital system poses to the city, especially during a period of cost-cutting and considering the city's high fixed costs for debt service, pensions, and retiree health care.

#### LIQUIDITY

The city's liquidity is strong. Cash balances increased to record levels through fiscal 2014 and 2015 and ended fiscal 2016 at \$11.7 billion, the highest ever. The average cash balance during the year was \$10.7 billion. Balances in the remainder of fiscal 2017 are expected to be lower amid lower revenues, averaging \$9.5 billion according to the city comptroller.

### Debt and Pensions

#### DEBT STRUCTURE

The city has \$38 billion of general obligation debt outstanding. Of that, \$5.5 billion is variable rate demand debt (15% of outstanding GO debt). The New York City [Transitional Finance Authority](#) (TFA, senior lien Aaa stable, subordinate lien Aa1 stable) has a total of \$3.6 billion of outstanding variable rate demand debt. Additionally, the city has \$30 million of appropriation-backed variable rate debt outstanding. Counterparty risk is mitigated through the use of a diverse array of liquidity providers: 19 banks provide liquidity support for general obligation variable rate debt and 16 support TFA variable rate demand debt.

The city manages its variable rate portfolio proactively to renew or replace expiring liquidity facilities or to convert variable rate bonds to fixed rate or other interest rate modes if necessary. In an effort to reduce its overall borrowing costs and mitigate bank exposure, the city has converted various variable demand bonds to floating rate index modes. Those bonds do not have the put risk associated with demand debt but the city must refinance most of them at specific dates or interest rates will step up to higher levels. Those risks are manageable given the city's record of market access. The city currently has \$866 million of general obligation index mode bonds outstanding and \$534 million outstanding issued through TFA. The city also has \$635 million of general obligation auction rate bonds outstanding, and \$222 million issued through TFA.

#### DEBT-RELATED DERIVATIVES

The city has eight outstanding interest rate swap agreements associated with its general obligation bonds, with five separate counterparties, and two swaps related to city-appropriation backed debt issued through the Dormitory Authority of the State of New York (DASNY) with two counterparties. In our analysis, the swap portfolio's potential risks to the city are manageable: rating triggers that would cause the agreements to terminate early or post collateral are low, ranging between Baa1 and Baa3. As of December 31, 2016 the combined outstanding notional amount of the swaps was \$1.4 billion, with a mark-to-market value of -\$129 million.

#### PENSIONS AND OPEB

Unlike most other large cities, no separate school district or county government exists that also finances New York City's capital costs, which results in a relatively greater bonded debt load when compared to similarly-rated local governments: New York City net debt as a percentage of full value is 7.2% compared to 3.1% for Aa2-rated large local governments, although unlike most property-tax dependent local governments, New York City's revenue base includes personal income taxes, sales taxes and other taxes.

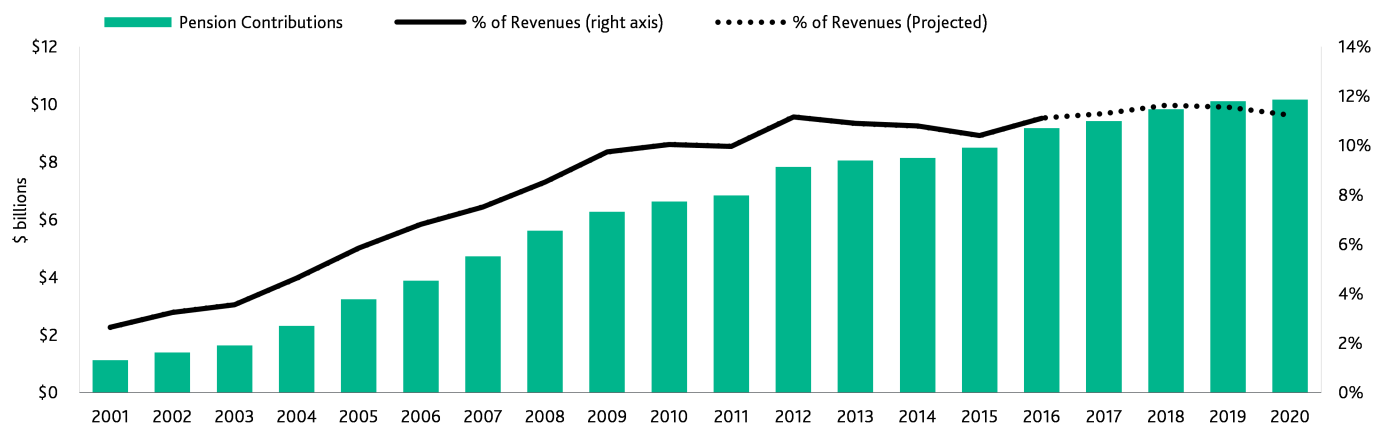
The city's pension system includes three multi-employer cost-sharing plans (the New York City Employees Retirement System, Teachers Retirement System, and Board of Education Retirement System), and separate plans for fire and police. The city's shares of the multi-employer plans are 54.8%, 97.1% and 99.9%, respectively. Reflecting those plans, New York City's fiscal 2016 Moody's adjusted net pension liability (ANPL) is \$144.5 billion, or 182% of operating revenues. Compared to the 50 largest local governments, New York City's ANPL ranks 31st (based on fiscal 2015 data, the most current comparable data available).

The city's combined pension contributions of \$8.5 billion in fiscal 2015 were 129% of the Moody's-calculated "tread water" level of \$6.5 billion, and were 11% of revenue (see exhibit). Contributions at the "tread water" level would be 8% of revenue. The "tread water" indicator measures the annual government contribution required to prevent the reported net pension liability from growing, under reported assumptions. Contributions above this level cover all net pension liability interest plus pay down some principal; this is stronger from a credit perspective compared to contributions below this level. Ratios comparing government contributions to the "tread water" level and "tread water" costs to government revenues shed light on budgetary fixed cost burdens. Based on actual

fiscal 2016 contributions, the city's fixed costs (debt service, pension contribution and OPEB requirement) are 20% of operating fund revenues.

Exhibit 3

### Once Negligible in New York City's Budget, Pension Costs Now Represent a Significant Line Item



Source: New York City CAFRs; New York City financial plans

## Management and Governance

The city's financial management is characterized by strong, institutional financial management practices that emerged from the 1970s fiscal crisis. These include four-year financial planning and quarterly updates, which must be submitted to a state oversight board; the segregation of real property tax revenue into a General Debt Service Fund, held by the state comptroller, and the state's covenant not to impair the rights of city bondholders to be paid when due; a statutory requirement to phase-in changes in property tax billable assessed value over five years evens out ups and downs in the city's real estate market; quarterly interest rate derivatives reporting, submitted to a state oversight board; and oversight by a state control board and by the state comptroller.

## Legal Security

The bonds are general obligation, full faith and credit obligations of the city, secured by a real property tax levied without limitation as to rate or base.

## Use of Proceeds

Proceeds of the bonds will be used to refund outstanding general obligation bonds for debt service savings.

## Obligor Profile

In addition to the notable size of its economy discussed above, New York City has a population of 8.5 million people and personal income per capita that is 128% of the US level.

## 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](http://www.moody.com) for a copy of this methodology.

## Ratings

Exhibit 4

### New York (City of) NY

Issue	Rating
General Obligation Bonds, Fiscal 2017 Series C	Aa2
Rating Type	Underlying LT
Sale Amount	\$780,000,000
Expected Sale Date	02/07/2017
Rating Description	General Obligation
General Obligation Bonds, Fiscal 2017 Series D	Aa2
Rating Type	Underlying LT
Sale Amount	\$20,000,000
Expected Sale Date	02/07/2017
Rating Description	General Obligation

Source: Moody's Investors Service

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