

## CREDIT OPINION

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New Issue

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## New York (City of)

New Issue - Moody's assigns Aa2 to \$1.1B of NYC GO bonds Fiscal 2017 Series A and Series 1; outlook stable

### Summary Rating Rationale

Moody's Investors Service has assigned Aa2 rating to the City of New York's \$800 million General Obligation Bonds, Fiscal 2017 Series A, Subseries A-1, \$174.2 million Subseries A-2, \$75.8 million Subseries A-3, and \$55.5 million Fiscal 2017 Series 1. The Subseries A-1 through A-3 bonds are scheduled to price August 2. The Fiscal 2017 Series 1 bonds reflect a reoffering and conversion to fixed rates of certain variable rate demand bonds with liquidity support provided by letters of credit that expire soon. The reoffering is scheduled to price August 2 and close August 18.

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 a high budgetary burden from the combination of debt service, pension, and employee and retiree healthcare costs.

### Credit Strengths

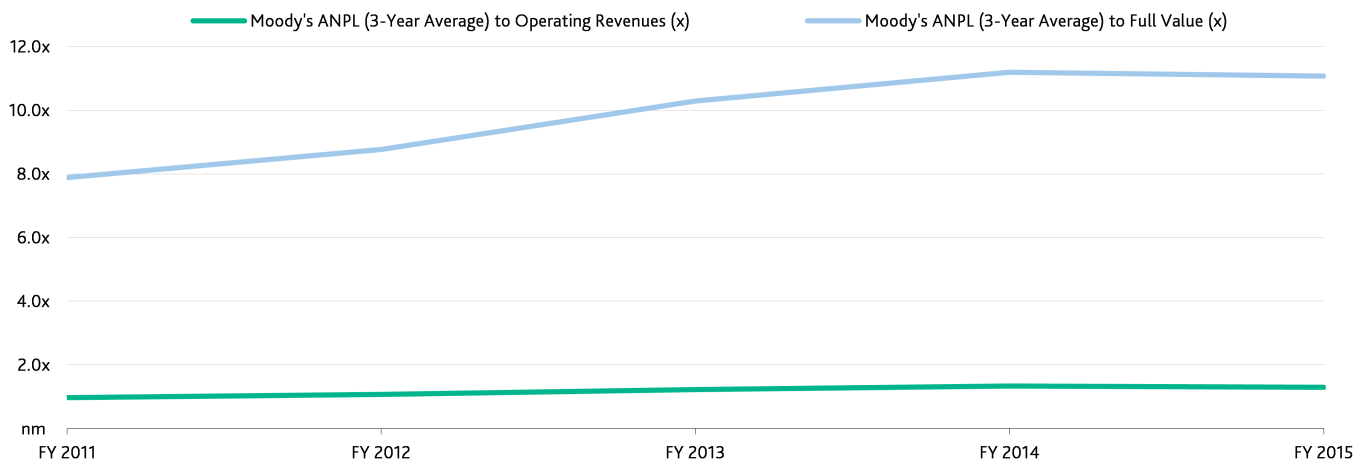
- » Exceptionally large and diverse economy driven by city's position as an international center of the high-income financial services industry
- » Strong governance and financial best practices, tested through periods of fiscal stress
- » Strong liquidity

### Credit Challenges

- » High and growing burden from debt service, pension and retiree health care costs
- » Cyclical economic base driven by the financial services industry
- » Ongoing need to close out-year budget gaps

Exhibit 1

### New York City's Three Year Average ANPL More Moderate as Percentage of Operating Revenue than Full Value



Source: Moody's Investors Service

### 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. Despite its strong budgetary controls, high 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

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## Key Indicators

Exhibit 2

| New York City   | FY 2011     | FY 2012     | FY 2013     | FY 2014     | FY 2015     |
|---|-------------|-------------|-------------|-------------|-------------|
| Total Full Value (000s)                                 | 793,742,000 | 814,422,100 | 838,003,200 | 858,102,400 | 906,273,800 |
| Full Value Per Capita                                   | 97,643      | 97,691      | 101,343     | 101,059     | 106,732     |
| Median Family Income as % of US                         | 106.1%      | 106.5%      | 108.3%      | 106.7%      | N/A         |
| Operating Revenue (000s)                                | 64,889,788  | 66,603,415  | 70,631,865  | 72,387,292  | 77,608,673  |
| Available Fund Balance as a % of Revenue                | 9.8%        | 6.9%        | 5.9%        | 6.1%        | 9.1%        |
| Cash Balance as a % of Revenue                          | 7.3%        | 12.4%       | 12.8%       | 16.4%       | 17.4%       |
| Net Direct Debt (000's)                                 | 63,431,639  | 65,703,394  | 67,000,247  | 68,940,172  | 69,071,880  |
| Net Direct Debt to Operating Revenue (x)                | 1.0x        | 1.0x        | 0.9x        | 1.0x        | 0.9x        |
| Net Direct Debt as % of Full Value                      | 8.0%        | 8.1%        | 8.0%        | 8.0%        | 7.6%        |
| Moody's ANPL (3-Year Average) to Full Value (x)         | 7.9x        | 8.8x        | 10.3x       | 11.2x       | 11.1x       |
| Moody's ANPL (3-Year Average) to Operating Revenues (x) | 1.0x        | 1.1x        | 1.2x        | 1.3x        | 1.3x        |

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

## Recent Developments

Recent developments are incorporated into the sections below.

## Detailed Rating Considerations

### Economy and Tax Base

New York City's economy is notably large, with real GDP larger than all but four US states. The city's labor market has recovered remarkably well. Private sector employment in 2015 was nearly 14% greater than the pre-recession peak in August 2008; for the year it increased 2.8%, slightly faster than the US rate but somewhat slower than in recent years. The city's unemployment rate had remained high as residents re-entered the labor force to seek jobs, but it has decreased to 5.0% as of June, just slightly higher than the US rate of 4.9%.

The important financial activities sector, which accounts for 10.9% of the city's employment, 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 29% of wages in the city.

Tourism continues to hit record levels, even with a strong dollar, with an estimated 58.3 million visits in 2015, 3.2% more than 2014. 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 \$986 billion; for fiscal 2017, full values is estimated to have 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

The city's updated financial plan reflects continued economic and financial health and a cautious approach to outyear challenges. Looking forward to a potential economic slowdown, the city has both buttressed its reserves and undertaken a savings program that reduces expenditures by \$1.64 billion in fiscal 2016, \$1.13 billion in fiscal 2017, \$1.06 billion in fiscal 2018, and \$1.11 billion in fiscal 2019. Forecasted budget gaps in future years are of similar magnitude to earlier estimates, at \$2.8 billion, \$2.9 billion and \$2.3 billion in fiscal years 2018, 2019 and 2020, respectively. Those gaps are manageable by: the gaps equal 4.6%, 4.6%, and 3.5% of estimated city-funds revenue, respectively. By comparison, over the prior 12 years gaps average 7.8% of revenue.

Taxes are forecasted to grow in fiscal years 2016, 2017, 2018, 2019 and 2020 by 3.6%, 1.6%, 4.7%, 4.4%, and 4.0% respectively, moderate estimates in our opinion since they include the phase-in of current property tax assessments as well as the city's other

more economically sensitive taxes. The budget also continues the city's recent efforts to bolster its reserves. The budget maintains the General Reserve at \$1 billion for all years of the financial plan, an increase from the \$300 million it had been for many years. The Retiree Health Benefits Trust Fund is increased from \$3.4 billion to \$3.9 billion, and the budget maintains a \$500 million Capital Stabilization Reserve in fiscal 2017. These funds can be used to cash fund capital expenditures, to defease debt, or pay for other capital-related costs and position the city in a favorable position to be able to weather the next economic downturn. The city's fiscal 2015 GAAP-basis available fund balance increased to 9.1% of revenue, good progress but still lower than the fiscal 2014 Aa2 large local government median fund balance ratio of 12.3%

The originally-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.

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 significantly, by \$497 million in fiscal 2016 (to a total of \$2 billion) and \$180 million, \$173 million and \$179 million in fiscal years 2017, 2018 and 2019, respectively. 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 position continues to be strong. The highest fiscal year ending cash balances ever recorded were in fiscal 2014, while fiscal 2015 results were only slightly lower: the ending cash balance was \$9.50 billion and the average daily cash balance was \$9.46 billion. Fiscal 2016 is expected to exceed both those amounts: amid the city's strong economic performance, the cash balance on May 27, 2016 was \$12.4 billion and had averaged \$10.6 billion during the prior twelve months.

#### Debt and Pensions

##### DEBT STRUCTURE

New York City, through general obligation, Transitional Finance Authority (TFA) and other debt issuance vehicles uses variable rate debt to lower its borrowing costs. Variable rate debt (reflecting general obligation, lease and TFA debt) amounts to 16% of the city's total outstanding net tax-supported debt. While that amount is sizeable, the annual interest rate risk it poses is manageable in the context of the city's \$82 billion fiscal 2017 all-funds budget, its strong liquidity, and the favorable terms of its bank liquidity facilities and interest rate agreements

The city has \$5.2 billion of general obligation variable rate demand debt outstanding, and the [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: 18 banks provide liquidity support for general obligation variable rate debt and 17 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 \$1.0 billion of general obligation index mode bonds outstanding and \$434 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 June 30, 2016 the combined outstanding notional amount of the swaps was \$1.5 billion, with a mark-to-market value of -\$180 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 7.6% 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. Based on the current financial plan, costs for debt service, pensions, employee and retiree health benefits (OPEB) are high, nearly 31% of fiscal 2017 estimated revenue.

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 55.5%, 97.3% and 99.9%, respectively. Reflecting those plans, the city's fiscal 2015 Moody's-adjusted net pension liability (ANPL) is \$100.4 billion, or 1.32 times operating revenues. While the city's three-year adjusted ANPL as a percentage of full value is the fourth largest of the 50 largest local governments, at 11%, the burden is more moderate as percentage of operating revenue: 129%, ranking 34th. Moody's adjustments improve comparability of reported pension liabilities, but the adjustments are not intended to replace the city's reported liability information.

#### 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 Fiscal 2017 Series A, Subseries A-1 through A-3 bonds will be used to help finance the city's capital program. The Fiscal 2017 Series 1 bonds are a reoffering and conversion to fixed rates of certain variable rate demand bonds.

#### Obligor Profile

In addition to the notable size of its economy discussed above, New York City has 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 January 2014. Please see the Ratings Methodologies page on [www.moody.com](http://www.moody.com) for a copy of this methodology.

## Ratings

Exhibit 3

### New York (City of) NY

| Issue   | Rating             |
|---|--------------------|
| General Obligation Bonds, Fiscal 2017 Series 1                | Aa2                |
| Rating Type   | Underlying LT      |
| Sale Amount   | \$55,510,000       |
| Expected Sale Date  | 08/18/2016         |
| Rating Description  | General Obligation |
| General Obligation Bonds, Fiscal 2017 Series A, Subseries A-1 | Aa2                |
| Rating Type   | Underlying LT      |
| Sale Amount   | \$800,000,000      |
| Expected Sale Date  | 08/02/2016         |
| Rating Description  | General Obligation |
| General Obligation Bonds, Fiscal 2017 Series A, Subseries A-2 | Aa2                |
| Rating Type   | Underlying LT      |
| Sale Amount   | \$174,185,000      |
| Expected Sale Date  | 08/02/2016         |
| Rating Description  | General Obligation |
| General Obligation Bonds, Fiscal 2017 Series A, Subseries A-3 | Aa2                |
| Rating Type   | Underlying LT      |
| Sale Amount   | \$75,815,000       |
| Expected Sale Date  | 08/02/2016         |
| Rating Description  | General Obligation |

Source: Moody's Investors Service

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