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CREDIT OPINION
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Boston (City of) MA

Update to credit analysis

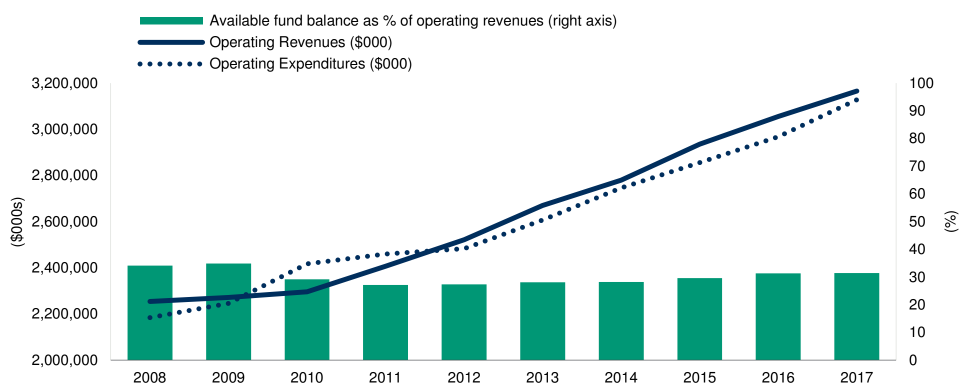
Summary

Boston (Aaa stable) benefits from a stable and growing tax base that is bolstered by significant institutional presence as the state capital and home to a large number colleges and universities and hospitals. The financial operations are conservatively managed and continue to produce year over year balanced operations while maintaining healthy reserves and liquidity. The debt burden is manageable although capital funding could increase in the coming years. The size of the city's significant unfunded pension and OPEB liabilities is mitigated by the city's annual allocation of substantial resources to address the liabilities including a goal to fully fund the pension plan by 2025.

Exhibit 1

Boston continues to maintain balanced operations and stable reserves

City has produced six years of surplus while maintaining reserves around 30% of revenues



Fiscal 2011-2017 operating revenues, expenditures and available fund balance includes general fund and debt service fund (Prior years are general fund only).

Source: Moody's Investors Service and Boston's audited financial statements

Credit strengths

» Strong regional economy stabilized by position as state capital and home to significant number of higher education and health care institutions

» Positive financial performance and maintenance of healthy reserves and liquidity

» High reliance on stable property tax revenues

» Adherence to comprehensive financial policies including plan to fund long-term liabilities

» Manageable debt burden

Credit challenges

» High personnel-related costs subject to collective bargaining with very strong employee unions

» Large long-term liabilities for pension and OPEB

» Rising costs of charter schools with limited growth in state aid

Rating outlook

The stable outlook reflects Boston's strong financial position with healthy reserves and liquidity that will remain strong given conservative budget practices. The outlook also incorporates the historic tax base growth over the last five years and a positive economic trend that continues to anchor New England.

Factors that could lead to an upgrade

» Not applicable

Factors that could lead to a downgrade

» Trend of structurally imbalanced financial operations leading to a decline in reserves

» Failure to continue to reduce unfunded pension liability

» Material downturn in commercial, industrial and residential development

» Significant increase in the debt burden

Key indicators

Exhibit 2
Boston (City of) MA

Boston (City of) MA	2013	2014	2015	2016	2017
Economy/Tax Base					
Total Full Value ($000)	$103,127,476	$103,127,476	$110,810,609	$110,810,609	$143,576,210
Population	-	639,594	650,281	658,279	672,840
Full Value Per Capita	$163,907	$161,239	$170,404	$168,334	$213,388
Median Family Income (% of US Median)	95.8%	95.3%	95.1%	96.1%	96.1%
Finances					
Operating Revenue ($000)	$2,669,645	$2,780,061	$2,916,483	$3,055,781	$3,165,494
Fund Balance ($000)	$755,033	$789,400	$868,719	$957,005	$994,757
Cash Balance ($000)	$950,682	$1,006,750	$1,050,399	$1,114,681	$1,163,309
Fund Balance as a % of Revenues	28.1%	28.2%	29.6%	31.3%	31.4%
Cash Balance as a % of Revenues	35.6%	36.2%	35.8%	36.5%	36.7%
Debt/Pensions					
Net Direct Debt ($000)	$1,260,477	$1,315,422	$1,339,391	$1,387,545	$1,421,746
3-Year Average of Moody's ANPL ($000)	$3,579,642	$3,671,785	$3,603,846	$3,575,929	$3,939,516
Net Direct Debt / Operating Revenues (x)	0.5x	0.5x	0.5x	0.5x	0.4x
Net Direct Debt / Full Value (%)	1.2%	1.3%	1.2%	1.3%	1.0%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.3x	1.3x	1.2x	1.2x	1.2x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	3.5%	3.6%	3.3%	3.2%	2.7%

As of June 30 fiscal year end; operating funds = general fund and debt service fund
Source: Moody's Investors Service and Boston's audited financial statements

Profile

Boston is the capital and largest city in Massachusetts, with a population of 658,279, and is the economic driver for much of New England.

Detailed credit considerations

Economy and tax base: Strong institutional presence provides anchor as the tax base continues to experience historic growth

Boston has a substantial and diverse tax base totaling $143.6 billion (2017-18 equalized value), is the capital of the Commonwealth of Massachusetts (Aa1 stable), and center of economic activity for New England. The 2017-18 equalized value reflects two-year growth of 29.6% since 2015. As a reflection of the tax base strength and growth, taxable assessed value has increased 67% since 2013. In 2018, taxable assessed value grew 6.9% to $153.9 billion. The increase was driven by residential developments that contributed to 60% of the valuation increase followed by commercial and personal property. Additionally, the tax-exempt property has an estimated assessed value of $51.1 billion that increases total assessed value to around $205 billion.

The city continues to benefit from its biggest expansion in modern history with new development contributing to very strong new growth revenue. In fiscal 2018, new growth revenue (new growth levy) totaled $77 million, well above the $46 million ten-year average. We expect this above average new growth to continue over the near term.

Boston's economy is centered around life sciences, finance, business and professional services, with a concentration of hospital and higher education facilities that continue to provide economic stimulus and represent the top four largest employers. Although the majority of the hospital and university property is tax-exempt, the city benefits from the sector's stable employment base. The labor force as of December 2017 totaled 371,191, up almost 17% from a 2011 recession low of 318,475. Unemployment in Boston remains low at 2.7% (December 2017), continuing to trend below the commonwealth's 3.1% and US 3.9%.

Residential income levels are weak relative to those of the state, but on par with the US, with median family income equivalent to 96% of the nation. This relative weakness partially reflects the estimated 152,000 students who reside in the city with low personal income, but typically higher spending ability. Fiscal 2017-18 equalized value per capita is strong at $213,388, reflecting the significant commercial sector and its high quality development, and it is also significantly understated given the portion of the city that is tax-exempt.

Financial operations and reserves: Stability expected to continue, driven by strong property tax revenue

Boston's financial position will remain stable with healthy reserves, liquidity, and operating flexibility to address future budget challenges. Strong and proactive management strategies have enabled the city to achieve year over year balanced operations for six consecutive years. The primary driver is property taxes, the city's largest revenue source representing 70% of 2017 general fund revenues, with a strong current year collection rate of 99%. The steady annual increase in property taxes along with new growth revenue helps revenues keep pace with the expenditure growth rate. The second largest revenue source is state aid representing 14% of revenues. State funding continues to be a challenge for the city's financial operations due to the increase in state assessments for charter school tuition. As a result of increasing state assessments, net state aid has declined annually since 2008, representing the primary revenue constraint that will continue to be a challenge. In addition to property taxes mitigating the stagnant net state aid, the city plans to leverage the strong economy by improving local receipts from increased parking fines and new small revenue streams from recreational marijuana and transportation network companies. The additional parking revenue will be dedicated towards the transportation operating and capital budgets.

Fiscal 2017 audited results reflect an operating surplus of $36.3 million in the general fund due to positive variance in revenues and in all major expense departments except for snow and ice removal. The surplus increased the available general fund reserves to $985.3 million or 31.1% of revenues. When incorporating a small amount of reserves in the debt service fund, available operating funds (general and debt service) increase to $994.8 million or 31.4% of operating revenues.

Fiscal 2018 operations are trending on budget with revenues expected to surpass 2017 results by 5.4% while expenditures including health benefits are reflecting positive variance. Operating deficits related to snow and ice and public safety are expected to be covered by the positive overall trend. To date, the city has not decided whether or not recurring revenues will be used to cover the $40 million in reserves appropriated in the budget towards the annual deposit into the OPEB trust.

The fiscal 2019 recommended budget of $3.29 billion is an increase of 4.3% from 2018 driven by education, public safety, employee benefits and fixed costs. Education represents 40% of the total budget with Boston Public Schools representing 34% and 6% towards charter school assessments. The budget is balanced with 5.4% increase in the net tax levy, 0.6% increase in state education aid, and 2.9% increase in local receipts.

LIQUIDITY

Cash and investments at the end of fiscal 2017 in the general fund and debt service fund totaled $1.2 billion representing a very healthy 36.7% of revenues.

Debt and pensions: Conservative debt profile remains manageable; aggressive funding of pension liability mitigates large size

The direct debt burden of 1.1% of 2017-18 equalized value will remain moderate over the medium term due to a conservative debt policy and manageable capital improvement plan. At this level, the city remains well below its debt limit policy of 3% of assessed value. The fiscal 2019-2023 capital plan proposes $2.4 billion in projects over the next five years with 61% funded through debt. In fiscal 2019 capital needs total $334.8 million, $177 million of which the city plans to fund with general obligation debt. The capital plan addresses needs outlined in the city's Imagine Boston 2030 planning efforts that include BuildBPS, Go Boston 2030 and Climate Ready Boston. In 2017, the city committed $1 billion investment in schools over the next ten years. The city anticipates funding the future CIP without revising its debt policies which include an upper limit on debt service at 7% of the operating budget.

DEBT STRUCTURE

All debt is fixed rate with level debt service which totaled $171 million representing a manageable 5.5% of fiscal 2017 general fund expenditures. Principal amortization is average with 78% retired in ten years.

DEBT-RELATED DERIVATIVES

Boston is not party to any interest rate swaps or other derivative agreements.

PENSIONS AND OPEB

The city contributes to the Boston Retirement System (BRS), a cost-sharing, multi-employer pension plan. The plan includes retirement benefits for city teachers however, the commonwealth has historically made the employer contribution for all teachers. The city's annual contribution to the plan was $179.5 million in fiscal 2017, or 5.7% of general fund expenditures. As of the January 1, 2016 valuation report, the plan is 75% funded with a net pension liability of $1.5 billion. Currently, the plan assumes a 7.5% rate of return with a fully funded date of 2025, 15 years shorter than the maximum funding deadline of 2040 allowed by the commonwealth. This aggressive funding schedule is a strong credit characteristic relative to comparable cities.nationwide. Additionally, to meet the 2025 funding target, pension contributions will have to increase by 8% annually based on the latest valuation, which will be a budget challenge over the next seven years but manageable given the city's financial performance.

The 2017 three-year average Moody's Adjusted Net Pension Liability (ANPL), under Moody's methodology for adjusting reported pension data, is $3.9 billion, or an average 1.2 times revenues and 2.7% of equalized value.

In addition, Boston continues to aggressively fund its OPEB liability. The latest valuation report, dated June 30, 2015 and noted in the 2017 audit, reflects an improved funding ratio of 13%, well above most local governments. In fiscal 2017, the city contributed $159.2 million, or 95% of the ARC, plus an additional deposit of $40 million of recurring revenues into the OPEB trust fund.

Fiscal 2017 fixed costs made up of debt service, required pension contributions and retiree healthcare payments, represented $509.8 million, or a moderate 16.3% of general fund expenditures, a level that has remained stable over the past seven years.

Management and governance: Management team expected to continue to adhere to conservative fiscal practice and policies

Within the past year the city has hired a new chief financial officer, treasurer and budget director. We expect the management team to maintain comprehensive and conservative fiscal management based on formally adopted financial, debt and capital policies and multiyear planning.

Massachusetts cities have an Institutional Framework score of Aa, which is high. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Massachusetts cities major revenue source, property taxes, are subject to the Proposition 2 1/2 cap which can be overridden with voter approval only. However, the cap of 2.5% still allows for moderate revenue-raising ability. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed and mandated costs are generally greater than 25% of expenditures. However, Massachusetts has public sector unions, which can limit the ability to cut expenditures. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

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