

CREDIT OPINION

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Contacts

Nicholas Lehman +1.617.535.7694
 VP-Senior Analyst
 nicholas.lehman@moody.com

Thomas Jacobs +1.212.553.0131
 Senior Vice President/Manager
 thomas.jacobs@moody.com

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Japan 81-3-5408-4100

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Cambridge (City of) MA

Update to credit analysis

Summary

Cambridge, Massachusetts (Aaa stable) benefits from a sizeable and diverse tax base that continues to grow significantly year over year. The city's economy is driven largely by the presence of [Harvard University](#) (Aaa stable) and [Massachusetts Institute of Technology](#) (MIT, Aaa stable) and the impressive research and development sector. The city's financial position is strong with very healthy liquidity and reserves that are maintained by strong fiscal management. Both the debt burden and long term liabilities for pension and OPEB are conservatively managed and will remain manageable over the near term.

Credit strengths

- » Large and diverse tax base anchored by institutional presences and robust commercial sector
- » Healthy financial position guided by formal policies
- » Strong fiscal management
- » Ample operating flexibility with excess levy capacity under Proposition 2½
- » Expected to fully fund pension liability by 2026

Credit challenges

- » High regional cost of living and cost of business
- » Taxpayer concentration in research and development

Rating outlook

The stable outlook reflects the strong fiscal management team that we expect to maintain a healthy financial position based on conservative multi-year budget forecasting and adherence to formally adopted fiscal policies. The outlook also incorporates the stabilizing presence of Harvard University (Aaa stable) and Massachusetts Institute of Technology (Aaa stable) as well as the long historical trend of tax base expansion.

Factors that could lead to an upgrade

- » Not applicable

Factors that could lead to a downgrade

- » Material growth in the debt burden or unfunded pension liability
- » Deterioration in the tax base or weakening of the local economy
- » Trend of operating deficits that lead to significant reduction in cash and reserves

Key indicators

Exhibit 1

Cambridge (City of) MA	2014	2015	2016	2017	2018
Economy/Tax Base					
Total Full Value (\$000)	\$26,640,125	\$29,733,818	\$29,733,818	\$39,570,829	\$39,570,829
Population	106,844	107,916	108,757	110,893	110,893
Full Value Per Capita	\$249,337	\$275,527	\$273,397	\$376,284	\$376,284
Median Family Income (% of USMedian)	151.9%	158.2%	159.0%	159.0%	159.0%
Finances					
Operating Revenue (\$000)	\$520,910	\$541,899	\$560,698	\$594,597	\$632,640
Fund Balance (\$000)	\$225,692	\$273,670	\$299,408	\$330,342	\$366,134
Cash Balance (\$000)	\$260,517	\$306,259	\$333,793	\$363,415	\$401,145
Fund Balance as a % of Revenues	43.3%	50.5%	53.4%	55.6%	57.9%
Cash Balance as a % of Revenues	50.0%	56.5%	59.5%	61.1%	63.4%
Debt/Pensions					
Net Direct Debt (\$000)	\$351,692	\$399,159	\$405,399	\$417,765	\$457,347
3-Year Average of Moody's ANPL (\$000)	\$829,503	\$815,568	\$832,179	\$853,029	\$837,254
Net Direct Debt / Full Value (%)	1.3%	1.3%	1.4%	1.1%	1.2%
Net Direct Debt / Operating Revenues (x)	0.7x	0.7x	0.7x	0.7x	0.7x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	3.1%	2.7%	2.8%	2.2%	2.1%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.6x	1.5x	1.5x	1.4x	1.3x

As of June 30 fiscal year end; Full value = equalized value; Net Direct Debt is net of self-supporting water fund debt

Sources: Moody's Investors Service and Cambridge's audited financial statements

Profile

Cambridge is a sizeable community in Massachusetts (Aa1 stable) with approximately 110,893 (2017 ACS) residents adjacent to the City of Boston (Aaa stable). The city's economy and tax base are anchored by two world renowned higher education institutions.

Detailed credit considerations

Economy and tax base: Strong economy and tax base anchored by world renowned institutions

Cambridge's economy will continue to benefit from the presence of Harvard and MIT which together enroll 33,000 students and provide employment equivalent to around 22,000 full-time positions (roughly 18% of the city's workforce). In addition, the city is home to a vibrant commercial sector including biotechnology and pharmaceutical industries, which together employ an additional 26,000 people.

Together the universities and mentioned industries comprise just under 60% of the jobs provided by the top 25 employers. The strong economy is further reflected in very low vacancy rates of 1.2% for lab space and 3.8% for office space as of the third quarter of 2018 according to CB Richard Ellis. Rents have also risen in the last year with average rents of \$82.2 per square foot for office space, more than \$15 per square foot more than in some areas of Boston. The top ten taxpayers represent a slightly concentrated 22% of 2019 assessed value. MIT, with its significant taxable property, is the largest taxpayer, accounting for 9% of the city's base.

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The \$49.4 billion tax base (2019-20 equalized value) is large and will likely continue to grow over the next several years given strong housing demand and the strength of the overall economy. The 2019-20 equalized value growth of 25% since the 2017-18 certification is one of the largest in Massachusetts and brings the six year compound annual growth rate to an impressive 11%. Given the redevelopment success of Kendall Square, new development in other parts of the city will continue to contribute to tax base growth with projects that include the MBTA green line extension, the long term development of the Volpe center and focus on the neighborhoods of Porter Square, Central Square, Cambridgeport, Cambridge Crossing and Alewife.

Resident incomes remain above average relative to the commonwealth and national medians, despite the large student population with median family income equal to 120% and 159% of the commonwealth and national medians, respectively. Also, the unemployment rate of 1.6% as of December 2018 remains below Massachusetts' and the nation's rates of 2.7% and 3.7%.

Financial operations and reserves: Strong financial position is expected to continue through conservative fiscal management

The city's financial position will remain healthy over the near term given ample liquidity and reserves that are maintained by conservative fiscal management. The fiscal 2018 audited financials reflect an operating surplus of \$35.8 million due to positive variance in revenues mostly from property taxes and excise taxes (hotel/meals) as well as conservative budgeting for expenditures. The surplus, the city's seventh in a row, increased available general fund balance (assigned, unassigned and committed) to \$366 million representing a very healthy 55.9% of revenues. As a percentage of revenues the city's reserves are the strongest of any Massachusetts Aaa rated municipality. Property taxes are the city's largest revenue source accounting for 60% of fiscal 2018 general fund revenues while education at 34% of expenditures and public safety at 21% were the largest expenses.

The fiscal 2019 operating budget increased 4.2% over last year's adjusted operating budget driven by salaries, benefits and pension contributions. The city also added 25 full time employees. The budget included a 5.3% increase in the tax levy and \$9 million of free cash for operations. Free cash appropriations year to date total \$32 million mostly funding reserves and capital needs. Six months through the year, recurring revenues and expenses are on budget. Although, the city has planned for an increase in transfers out of general fund reserves into capital and other funds. A small year end general fund decline in reserves is possible, depending on the positive variance in recurring revenues and expenditures that could replenish the reserve use and transfers.

The city's fiscal 2020-2023 budget projections indicate balanced annual operations based on conservative assumptions. The expenditure projections include a 2.5% annual increase in salaries, 5.9% growth in pension contributions and school department cost increase tied to a 7% increase in property taxes. The revenue projections include level funding of state aid while real and personal property taxes increase by an average 7.7% annually.

As of fiscal 2019, the city also maintains \$189 million in unused levy capacity, equal to just under 30% of revenues. This provides significant operating flexibility under Proposition 2½ that is not available to most municipalities in Massachusetts given the need to levy to the tax levy limit each year.

LIQUIDITY

Cash and investments at the end of fiscal 2018 totaled \$401.1 million representing an ample, 61.2% of general fund revenues.

Debt and pensions: Debt burden and long term liabilities will remain manageable over near term

Incorporating planned 2019 issuance, the net direct debt burden of 1.1% of equalized value and 0.9 times general fund revenues is average and will likely remain manageable over the near term despite the heavy reliance on bond issuance to fund the capital plan. Of the \$548 million of net direct debt based on our definition, 26% of outstanding debt is supported by sewer, water and other user fees. The fiscal 2019 capital budget totals \$105 million, down from \$125 million last year. Major projects include schools, sewer, water and stormwater projects and the River street construction. The 2019-23 public investment program totals \$539.2 million, an increase of \$31.7 million from last years plan. Bond proceeds continue to be the primary source of funds at \$434.4 million or almost 81% of the program. After the 2019 issuance the city has \$97.3 million of authorized unissued debt.

DEBT STRUCTURE

The entire debt portfolio is fixed rate with over 80% of principal retired within ten years. Fiscal 2018 debt service totaled \$61.8 million representing 10% of general fund expenditures.

DEBT-RELATED DERIVATIVES

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

PENSIONS AND OPEB

City employees, other than teachers, participate in the City of Cambridge Retirement System, a multi-employer defined benefit pension plan. Teachers participate in the Massachusetts Teachers Retirement System (TRS) employee contributions to which are covered through on behalf payments made by the commonwealth. Based on the valuation report dated January 1, 2016 as disclosed in the fiscal 2018 audit, the city's proportional share of its retirement system's net pension liability is \$138 million based on a 7.5% discount rate and an expected funding date of 2026. The 2018 three-year average Moody's Adjusted Net Pension Liability, under Moody's methodology for adjusting reported pension data, was \$837.3 million, which is 2.1% of equalized value and 1.3 times general fund revenue. The city's latest valuation report dated January 1, 2018 includes a reduced discount rate of 7.5% with a 87.7% funded ratio and requires pension contributions increase 5.9% annually for two years and then remain level until the 2026 funding date.

The city's annual contribution to the plan was \$30.5 million in 2018, representing 4.9% of general fund expenditures. For 2018, the city's total pension contribution was 109% of the 'tread water' benchmark, the contribution amount needed to cover the year's newly accrued service costs and implied interest on the reported net pension liability, resulting in no increase in unfunded liability.

The city funds OPEB on a pay-as-you-go basis and makes annual planned deposits into an OPEB trust fund. The city's 2018 contribution was \$22.3 million. The city's net OPEB liability was \$622.3 million with a 2% funded ratio based on the June 30, 2017 valuation date and using a 3.9% discount rate.

Total fixed costs for 2018 including debt service, required pension contributions and retiree healthcare payments totaled \$114.6 million representing a modest 18.5% of general fund expenditures.

Management and governance: Strong management is apparent in all credit factors

The city's proactive and conservative management are apparent in the fiscal policies that include formal metrics to maintain its financial position, debt burden and capital planning. The city also annually updates its multi-year budget forecast and capital plan. The city's efforts in economic development and commitment to not providing any commercial tax incentives is also a material strength given the new development throughout the city over the last decade.

Massachusetts cities have an Institutional Framework score of Aa, which is high compared to the nation. 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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