

## CREDIT OPINION

17 February 2022

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# Cambridge (City of) MA

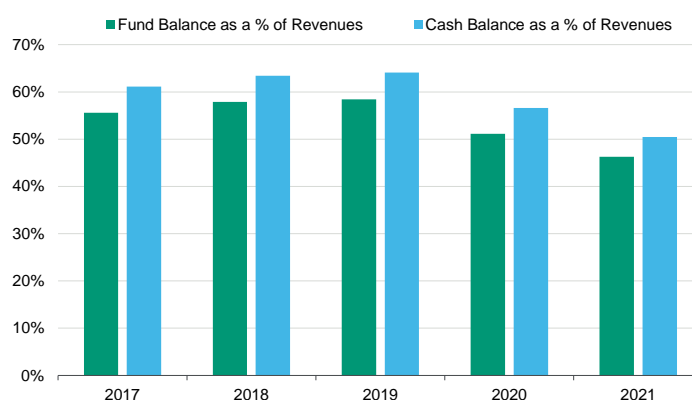
## Update to credit analysis

### Summary

[Cambridge](#) (Aaa stable) benefits from a large and diverse tax base that continues to experience strong growth. The city's economy is driven 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 reserves and liquidity (see exhibit) that are maintained by formal policies and conservative fiscal management. Both the debt burden and long-term liabilities for pension and OPEB are conservatively managed and are likely to remain manageable.

Exhibit 1

**Cambridge's reserves and liquidity are likely to remain healthy; recent declines as a result increased of capital spending**



As of June 30 fiscal year-end

Source: Cambridge, MA's audited financial statements

### Credit strengths

- » Large tax base anchored by institutional presence and robust commercial sector
- » Healthy financial position guided by formal policies and strong fiscal management
- » Ample operating flexibility with excess levy capacity under the tax levy limit, Proposition 2 ½
- » Aggressive funding schedule for unfunded pension liability

## Credit challenges

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

## Rating outlook

The stable outlook reflects the city's strong fiscal management that is committed to maintaining a healthy financial position given conservative multiyear budget forecasting and adherence to formally adopted fiscal policies. The outlook also incorporates the stabilizing presence of Harvard University and MIT as well as the long historical trend of positive valuation growth in the tax base.

## Factors that could lead to an upgrade

- » Not applicable

## Factors that could lead to a downgrade

- » Significant growth in the debt burden or unfunded long-term liabilities
- » Material decline in the tax base or weakening of the local economy
- » Decline in reserves to below comparable levels of the highest rating category

## Key indicators

Exhibit 2

### Cambridge (City of) MA

	2017	2018	2019	2020	2021
<b>Economy/Tax Base</b>					
Total Full Value (\$000)	\$39,570,829	\$39,570,829	\$49,449,366	\$49,449,366	\$63,505,736
Population	110,893	115,665	116,632	116,632	116,632
Full Value Per Capita	\$356,838	\$342,116	\$423,978	\$423,978	\$544,497
Median Family Income (% of US Median)	167.1%	170.7%	174.5%	174.5%	174.5%
<b>Finances</b>					
Operating Revenue (\$000)	\$594,597	\$632,640	\$658,347	\$698,158	\$738,834
Fund Balance (\$000)	\$330,342	\$366,134	\$384,406	\$356,931	\$341,633
Cash Balance (\$000)	\$363,415	\$401,145	\$422,033	\$394,925	\$372,582
Fund Balance as a % of Revenues	55.6%	57.9%	58.4%	51.1%	46.2%
Cash Balance as a % of Revenues	61.1%	63.4%	64.1%	56.6%	50.4%
<b>Debt/Pensions</b>					
Net Direct Debt (\$000)	\$417,765	\$457,347	\$492,508	\$482,543	\$489,433
3-Year Average of Moody's ANPL (\$000)	\$853,029	\$837,254	\$792,646	\$799,364	-
Net Direct Debt / Full Value (%)	1.1%	1.2%	1.0%	1.0%	0.8%
Net Direct Debt / Operating Revenues (x)	0.7x	0.7x	0.7x	0.7x	0.7x
Moody's - ANPL (3-yr average) to Full Value (%)	2.2%	2.1%	1.6%	1.6%	-
Moody's - ANPL (3-yr average) to Revenues (x)	1.4x	1.3x	1.2x	1.1x	-

As of June 30 fiscal year-end; 2021 adjusted pension data is not yet available

Sources: US Census Bureau, Cambridge (City of) MA's financial statements and Moody's Investors Service

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## Profile

Cambridge is a large, diverse community that neighbors the City of [Boston](#) (Aaa stable) across the Charles River. The city's population totals 116,632 as of the 2019 American Community Survey and its 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 around 33,000 students and provide employment to almost 21,000 full-time positions (roughly 16% of the city's workforce). In addition, the city is home to a vibrant commercial sector including biotechnology and pharmaceutical industries. The global response to the coronavirus pandemic also has roots in the city including Moderna's global headquarters and presence of [Pfizer, Inc.](#) (A2 positive) and [Johnson & Johnson](#) (Aaa negative). Together the universities and mentioned industries comprise around 60% of the jobs provided by the top 25 employers. The top 10 taxpayers are concentrated, representing 24% of 2021 assessed value. Although MIT with its significant taxable property, is the largest taxpayer, representing 9.6% of the city's base. Overall, commercial property pays 65% of the city's fiscal 2021 property tax levy. The city also benefits from a commercial property tax rate of \$11.23 per \$1,000 of value, which is well below Boston and other large surrounding cities.

The \$63.5 billion tax base (2021-22 equalized value) is large and will continue to grow given strong housing demand and the strength of the overall economy continuing to drive the commercial sector. The two-year equalized value increased 28.4% since 2019's certification. Additionally, the 2022 assessed value grew by 6.2%, bringing the five-year compound annual growth rate to 10.7%. The city is projecting a steady increase in assessed value of 16% from fiscal 2023-26 based on new construction, appreciation of existing property and major renovations. While hospitality property like hotels, restaurants and retail are likely to see modest declines in value, the strong demand for lab space and continues interest in class-A office space will continue to drive growth over the next few years.

The city's wealth and resident income are strong relative to the commonwealth and US medians. Generally, by the second quarter of 2021 the city's workforce levels had fully recovered from the impacts of the pandemic. The city's December 2021 unemployment rate of only 1.8% is back to 2019 levels and is likely to continue to trend well below the Commonwealth and US rates.

### Financial operations and reserves: healthy position likely to continue with conservative budgeting and ample revenue flexibility

Cambridge's financial position will likely remain strong over the near term given ample liquidity, robust revenue growth and operating flexibility under the tax levy limit that are maintained by conservative fiscal management. Similar to fiscal 2020, the fiscal 2021 audited financials reflect the general fund producing \$12.2 million of revenue in excess of expenses and a transfer out of the general fund of \$56.4 million. Around \$52 million of the transfers out went toward capital expenditures. The net result was a general fund deficit of \$20.1 million. The available general fund reserves declined to \$341.6 million representing a still very healthy 46% of revenue. The primary revenue source is property taxes representing 65% of 2021 general fund revenue. The largest expenses are education and public safety representing 34% and 19% of 2021 expenditures, respectively.

The fiscal 2022 operating budget increased by 1.1% or \$8.2 million over the prior year driven by salaries, health insurance and pension costs. The budget is balanced with a 4.7% increase in the tax levy and \$22.5 million of reserves used to lower the tax rate. The budget also includes a \$2 million deposit into the OPEB trust. The city also continues to appropriate reserves toward capital and other one-time costs. Year-to-date operations are on budget.

The city's fiscal 2023-26 budget projections indicate balanced annual operations using conservative assumptions. The expense projections include a 2.5% annual increase in salaries in most years, pension contribution will increase by 12.1% annually through 2025 and education costs increase by the value of a 6.5% property tax levy increase as a funding source for the budget. The revenue projections include funding of state aid in line with the current budget recommendation for next year and flat thereafter, and an average annual tax levy increase of 7%. The city also has \$196 million of unused levy capacity, equal to 26% of general fund revenue. 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.

The total amount of ARPA funding allocated to the city is \$88.1 million. City commitments to date total \$19.5 million with an additional \$37.9 million in initiatives under review, leaving \$30.7 million remaining. The focus of the spending includes the maintenance of a strong testing program that the city started two years ago, replacement of lost revenue, economic stabilization efforts for small businesses and residents in need and increased funding toward the public health department.

### Liquidity

The cash position at the end of fiscal 2021 was \$372.6 million representing a healthy 50.4% of general fund revenue. The cash position is not likely to materially change by the end of fiscal 2022.

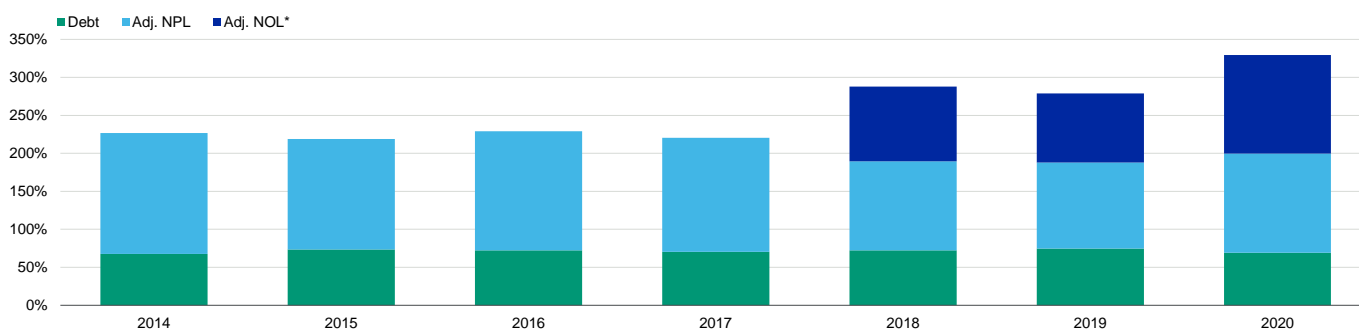
### Debt, pension and OPEB liabilities: long-term liabilities and annual fixed costs likely to remain manageable

The debt and long term liabilities will remain manageable over the near term given conservative debt management and aggressive funding toward the city's unfunded pension liability (see exhibit). Including the 2022 issuance, the city has \$519 million in net direct debt outstanding equal to 0.8% of equalized value and 0.7 times general fund revenue. The metrics are average for the rating category and will remain manageable. The city's debt management policies include maintaining a debt to assessed value of less than 1.5%, gross debt service under 12.5% of operating expenses and 85% of principal retired in 10 years. The fiscal 2022-26 public investment program totals \$524.5 million. Bond proceeds of \$343 million or 65% of the program will be the largest source of funding. The program will focus on public building renovations, energy improvements, streets and sidewalks, sewer reconstruction and for elementary and upper school reconstruction.

Exhibit 3

### Cambridge's leverage is likely to remain manageable given strong funding policies

Leverage as a % of revenue



Adj. NOL not available pre-GASB 75; fiscal 2021 pension data not yet available  
Sources: Moody's Investors Service and Cambridge's audited financial statements

### Legal security

The bonds are secured by the city's full faith and credit general obligation limited tax pledge because not all debt service has been voted by the city as excluded from the tax levy limitations of Proposition 2 ½.

### Debt structure

The city's entire debt portfolio is fixed rate with 83% of principal retired in 10 years. Fiscal 2021 debt service was \$78.8 million representing 10.4% of general fund expenditures.

### Debt-related derivatives

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

### Pensions and OPEB

Cambridge's pension and OPEB liabilities are larger than its bonded debt, but will likely decline in the coming years given very strong contribution practices. The city participates in the City of Cambridge Retirement System, a cost sharing multiple employer defined benefit retirement plan and makes annual required contributions based on its proportional share. The plan is likely to be fully funded by 2026. Additionally, the city's teachers participate in the Massachusetts Teachers Retirement System in which the city receives on behalf payments toward the liability that is covered by the Commonwealth. The city also funds its OPEB liability on a pay-go basis and makes

modest annual deposits to an OPEB trust. The table below summarizes the city's 2020 debt, pension and OPEB unfunded liabilities and contributions.

Exhibit 4

#### Cambridge's fiscal 2020 debt, pension and OPEB liabilities and contributions

2020	\$\$\$ (000)	% of Operating Revenues	Discount Rate
Operating Revenue	698,158	n/a	n/a
Reported Unfunded Pension Liability	183,560	26%	7.25%
Moody's Adjusted Net Pension Liability	912,206	131%	3.22%
Reported Net OPEB Liability	880,394	126%	3.49%
Moody's Adjusted Net OPEB Liability	903,985	129%	3.37%
Net Direct Debt	482,543	69%	n/a
Debt & unfunded retirement benefits (Moody's adjusted)	2,298,733	329.26%	
Pension Contribution	34,956	5.01%	n/a
OPEB Contribution	22,240	3.19%	n/a
Debt Service	74,276	10.64%	n/a
Total Fixed Costs	131,471	18.83%	n/a
Tread Water Gap	(7,435)	-1.06%	n/a
Moody's Adjusted Fixed Costs	124,036	17.77%	n/a

Fiscal 2021 pension data not yet available

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

The city's 2021 pension tread water data is not yet available, but annual contributions over the last five years, 2016-20, have averaged a strong 132% of the tread water indicator which is the amount required to keep the unfunded liability from increasing if all actuarial assumptions are realized. Fixed costs in 2020 were manageable at under 19% of revenue. Fixed costs are likely to remain around this level through 2026.

## ESG considerations

### Environmental

Environmental risks are not material to the city's credit profile at this time. Moody's ESG Solutions indicates that Middlesex County in which the city resides has high exposure to hurricanes, medium exposure to extreme rainfall, water stress and sea level rise and low exposure to heat stress. The city is committed to addressing environmental risk associated with flooding and heat exposure. In July 2021, the city released the Resilient Cambridge Plan that with benchmarks for 2030 and 2070. The plan details 34 strategies to increase physical and social resilience focusing on closer neighborhoods, better buildings, strong infrastructure and a greener city. The city continues to coordinate efforts regionally with neighboring cities, the state and other environmental associations.

### Social

Cambridge leverages its strong credit profile by focusing on significant community initiatives. These initiatives include a robust bike ordinance, participatory budgeting that gives residents a voice in capital and other spending, providing a proportional share of funding toward the MBTA green line extension, and offering a small business personal property tax exemption. Additionally, the city continues to increase its funding toward affordable housing projects. The fiscal 2022 budget included over \$32 million from property taxes, department revenue and the Community Preservation Act fund directed to the affordable housing trust. The trust helps to preserve existing affordable housing units throughout the city and help finance construction toward new affordable housing options.

## Governance

The city's experienced management team is very strong, as evidenced by the maintenance of very healthy liquidity and reserves as well as adherence to formal fiscal policies, conservative multiyear budgeting and capital planning. The city's longtime city manager is retiring at the end of the current fiscal year in July 2022 and the city is at the beginning stages of hiring for the position.

Massachusetts cities have an institutional framework score<sup>1</sup> of "Aa", which is strong. The sector's major revenue source of property taxes, are subject to the Proposition 2 1/2 tax levy cap which can be overridden with voter approval only. However, the cap of 2.5% still allows for moderate revenue-raising ability. Expenditures primarily consist of personnel costs, as well as education costs for cities that manage school operations, and are highly predictable given state-mandated school spending guidelines and employee contracts. Unpredictable revenue fluctuations tend to be minor, or under 5% annually. Across the sector, fixed costs are generally less than 25% of expenditures. Fixed costs are driven mainly by debt service and pension costs. Unpredictable expenditure fluctuations tend to be minor, under 5% annually.

## Rating methodology and scorecard factors

The US Local Government General Obligation Debt methodology includes a scorecard, a tool providing a composite score of a local government's credit profile based on the weighted factors we consider most important, universal and measurable, as well as possible notching factors dependent on individual credit strengths and weaknesses. Its purpose is not to determine the final rating, but rather to provide a standard platform from which to analyze and compare local government credits.

Exhibit 5

### Cambridge (City of) MA

#### Cambridge (City of) MA

Scorecard Factors and Subfactors	Measure	Score
<b>Economy/Tax Base (30%)</b> <sup>[1]</sup>		
Tax Base Size: Full Value (in 000s)	\$63,505,736	Aaa
Full Value Per Capita	\$544,497	Aaa
Median Family Income (% of US Median)	174.5%	Aaa
<b>Notching Adjustments:</b> <sup>[2]</sup>		
Institutional Presence		Up
<b>Finances (30%)</b>		
Fund Balance as a % of Revenues	46.2%	Aaa
5-Year Dollar Change in Fund Balance as % of Revenues	5.7%	A
Cash Balance as a % of Revenues	50.4%	Aaa
5-Year Dollar Change in Cash Balance as % of Revenues	5.3%	A
<b>Management (20%)</b>		
Institutional Framework	Aa	Aa
Operating History: 5-Year Average of Operating Revenues / Operating Expenditures (x)	1.0x	A
<b>Notching Adjustments:</b> <sup>[2]</sup>		
Unusually Strong or Weak Budgetary Management and Planning		Up
<b>Debt and Pensions (20%)</b>		
Net Direct Debt / Full Value (%)	0.8%	Aa
Net Direct Debt / Operating Revenues (x)	0.7x	A
2-Year Average of Moody's Adjusted Net Pension Liability / Full Value (%)	1.3%	Aa
2-Year Average of Moody's Adjusted Net Pension Liability / Operating Revenues (x)	1.1x	A
	Scorecard-Indicated Outcome	Aaa
	Assigned Rating	Aaa

[1] Economy measures are based on data from the most recent year available.

[2] Notching Factors are specifically defined in the US Local Government General Obligation Debt methodology.

[3] Standardized adjustments are outlined in the GO Methodology Scorecard Inputs publication.

Sources: US Census Bureau, Cambridge MA's financial statements and Moody's Investors Service

## Endnotes

- The institutional framework score assesses a municipality's legal ability to match revenues with expenditures based on its constitutionally and legislatively conferred powers and responsibilities. See [US Local Government General Obligation Debt \(July 2020\)](#) methodology report for more details.

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