City of Cambridge
Executive Department

YI-AN HUANG
City Manager

CMA 2025 #55
IN CITY COUNCIL
March 24, 2025

To the Honorable, the City Council:

To the honorable the City Council, residents, and community members:

I am very pleased to share that the City of Cambridge has again received a AAA rating from each of the nation's three major credit rating agencies.

Cambridge is one of only 22 cities nationwide to earn the highest credit rating possible from Moody's Investors Service, S&P Global Ratings, and Fitch Ratings. The City has achieved this distinction every year since 1999. This is particularly noteworthy given current economic challenges, as well as a significant level of uncertainty related to future impacts on the City.

Even as some economic impacts have already begun to manifest, and we are still closely monitoring developments at the federal level, our fiscal strength provides resiliency and some measure of confidence moving forward.

Continued adherence to the City's strong financial policies, which factor into our credit rating, have positioned us to remain a leader even as we continue to work to understand our role in this new and uncertain environment.

Working in partnership with, and under the policy guidance of, the City Council, we will continue to leverage community and institutional resources, as well as the local economy to build up reserves and maintain a level of financial strength and flexibility that is not only unique in the Commonwealth, but will be critical in the face of new pressures in both the macroeconomic environment as well as from the federal level.

In determining the City's credit rating, the rating agencies consider criteria related to the City's management; the strength of the local economy; the city's financial condition and reserves; and our debt burden.

The favorable ratings are also a compelling reminder of the importance of establishing and adhering to strong fiscal policies. This practice has allowed us to be in a position today in which we can continue investing in our buildings and infrastructure; maintain and enhance important ongoing programs and initiatives; and support the most vulnerable members of our community, especially during economic downturns.

These ratings are in conjunction with the City's sale of $165.9 million in General Obligation bonds. The competitive sale took place on March 5, 2025. The bonds were sold at a True Interest Cost of 2.96%. Capital projects funded through this bond issuance include: Tobin and Vassal Lane Upper Schools construction; open space and path projects; Fire Station headquarters; Street infrastructure projects including bike lanes and sidewalk reconstruction; Sewer reconstruction projects; water works construction projects; municipal facilities; and school building repairs.

In their opinions, the rating agencies highlighted the City's ample reserves; strong, forward-thinking management; financial and budgetary flexibility; stable, strong local economy and institutions. While factors that can lead to a downgrade include significant decline in reserves; sustained local economic decline; long term liabilities related to pension and OPEB obligations.

Below and the pages that follow highlight key points from the Moody's, Standard and Poor's, and Fitch credit reports. Attached are the individual rating opinions.

Moody's Investors Services

Summary

Cambridge (Aaa stable) reflects very strong credit fundamentals. The city benefits from a strong economy that is anchored by world renowned higher education institutions and a substantial research and development sector. The city has a diverse population with high resident income ratio of 144% and $724,819 full (equalized) value per capita. The city is anticipating tax base value declines related to commercial office space and a slow down in new development that will inform their budget forecasts beginning in fiscal 2026.

The city has a very healthy financial position with $587 million in available reserves and net unrestricted assets equal to 53% of revenue. The strong finances are maintained by comprehensive and forward-looking fiscal management. To that end, the city's forecast reflects more modest budget increases beginning in fiscal 2026 with the potential to rely on its ample unused tax levy capacity and use of reserves as a revenue source when prudent.

Credit Strengths

- Healthy economy anchored by institutional presence
- Ample operating flexibility given a large amount of unused levy capacity under the tax levy limit
- Strong reserves and liquidity

Credit Challenges

- Taxpayer concentration in research and development
- Maintaining service levels in line with community expectations
- Projected decline in commercial tax base value and new development

Rating Outlook

The stable outlook reflects the city's strong fiscal management and governance that is committed to maintaining a healthy financial position based on conservative budget forecasting and formal policies. The outlook also incorporates the significant institutional presence that is expected to help maintain a strong labor force, tax base stability and attract private investment in the city.

Factors That Could Lead To A Downgrade

- Decline in available fund balance ratio to less than 40%
- Significant increase in the leverage ratio to 350%
- Sustained decline in economic metrics and tax base value

Credit Considerations

Economy: challenges from CRE will limit tax base growth over next few years while overall economy remains sound Cambridge's economy benefits from the presence of Harvard and MIT which together enroll around 33,000 students and provide employment to over 22,000 full-time positions (roughly 16% of the city's workforce).

The city is not immune to the commercial real estate challenges experienced across the US. The city's vacancy rate has increased to just over 15% due to increased inventory, stagnant demand and expansion of capitalization rates. The trend led to a 7.2% decline in the commercial sector in 2025 while increases in residential, industrial and personal property values led to a relatively flat, 0.5% increase, total assessed value.

While the city's new development pipeline may decline over the next couple years, especially compared to the all-time highs of the last five years, the interest in tapping the city's robust talent pool remains a long-term strength.
Cambridge's financial position is likely to remain healthy over the next couple years due to strong fiscal management, significant revenue flexibility and large reserves. As the fiscal 2026 budget begins to take shape, the city is focused on resetting its expenditure growth rate to more modest levels that aline with its projections for tax base trends, economic uncertainty and ability to maintain service levels and address capital needs.

Cambridge's leverage is likely to remain in line with AAA-rated peers given the city's capital plans, rapid amortization of existing debt, and strong funding commitment towards pension and OPEB. In step with the city's plans to moderate operating expenses the city's capital plans are relatively level funded compared to last year. Additionally, in an effort to smooth out annual pension contributions between 2025 and 2028 the city has extended the funding date to 2029 from 2026.

Cambridge's pension and OPEB liabilities are larger than its debt burden and though manageable at this time, represent a potential future credit challenge. The city participates in the Cambridge Retirement Plan, a multi-employer defined benefit plan and makes annual required contributions.

Additionally, the city's annual pension contributions for the last five years have been significantly higher than the Moody's tread water indicator, which is the amount required to keep the unfunded liability from increasing if all actuarial assumptions are realized, a reflection of the commitment to meet the 2029 pension funding date.

Environmental, Social, And Governance

Cambridge's social considerations are strong. The city benefits from favorable educational attainment, a strong labor force and positive health and safety. City residents also have access to basic services and the city benefits from stable demographics.

The city has a favorable institutional structure, transparency and disclosure. The city also consistently approves and releases its budgets and audited financial statements in a timely manner. Cambridge’s budget management and policy credibility and effectiveness are strong and is reflected in its healthy financial position and trend of balanced operations.

S&P Global

Credit Overview

Cambridge is an affluent community adjacent to Boston, with many leading science and technology companies and major universities providing stability to the city. Its management team operates with established and well-embedded policies and procedures, with a focus on forward-looking planning that allows for key city priorities to be addressed while sustaining financial stability and flexibility. While growth in the tax base will be slower due to changes in the lab and office market, the tax base will remain a significant source of strength and revenue for the city.

The rating also reflects our opinion of the city's:

- Robust economic profile, with high incomes and a large tax base supported by corporate and institutional presences with ongoing investment, despite some tax base concentration;

- Stable revenue base, with property taxes accounting for most general fund revenues, allowing the city to sustain very strong reserves even as additional services such as pre-kindergarten education have been introduced;

- Generally conservative management, with robust forward-looking planning that identifies needs and financing for capital improvement and an ongoing conversation regarding operational goals and funding opportunities for additional positions and services as needed--the city also maintains and adheres to robust policies pertaining to investments, debt management, and reserves;

- Stable debt profile, with continuous debt issuance to support capital priorities expected to continue, and a large other postemployment benefits (OPEB) obligation.

Environmental, Social, And Governance

We consider Cambridge vulnerable to physical factors, including rising water levels from climate change that could directly affect taxable properties due to its location along the Charles River. The city has been proactively addressing these challenges and maintains long-term environmental resiliency plans. We have analyzed Cambridge's social and governance factors relative to its economy, management, financial measures, and debt and liability profile; we view both as neutral in our credit rating analysis.

Outlook

The stable outlook reflects S&P Global Ratings' opinion of Cambridge's economic profile and management environment, which allows the city to manage financial performance to include the maintenance of high reserves that offset elevated debt, pension, and OPEB liabilities.

Downside Scenario

We could lower the rating if reserves were to decrease significantly without a plan for restoration or if debt service and retirement costs were to pressure the city's finances.

Credit Opinion

Economy

Cambridge is an integral part of the regional Boston economy and benefits from Harvard University and Massachusetts Institute of Technology (MIT), its two leading employers and two of the leading taxpayers, which serve as knowledge centers and origins of startups, research centers, and life-science and high-technology companies that promote economic activity. Microsoft, Google, Amazon, Apple, Facebook, Pfizer, and IBM are among companies with offices or labs in the city. While there is some concentration in the tax base, due primarily to MIT's land holdings, we believe the overall size of the tax base and the stability of these institutions are mitigating factors to the risk associated with concentration. While office vacancy rates have risen, the city has seen office-to-lab conversions and an increase in smaller firms subletting office space. The city's new lab development has slowed as vacancy has increased, but residential development has remained steady, supported by state and local efforts on growing the housing supply. We expect development will likely continue, leading to continued tax base growth, albeit slower than in the last several years.

Management

Highlights of the city's management include:

- The budget development process supports Cambridge's goals, including investments in education, housing, transportation, environment, and other quality-of-life issues, while maintaining financial balance. Budget planning is comprehensive and considers multiple scenarios and uses generally conservative assumptions. Ongoing monitoring of spending ensures adherence to the adopted budget. Management makes quarterly budget-to-actual and investment management reports to finance and investment committees, respectively, and uses historical trend analysis to develop departmental expenditure and revenue assumptions.

- As part of the annual budget process, the city develops five-year financial and capital investment plans, outlining immediate fiscal challenges and prioritizing capital needs. These plans are thoroughly integrated into the city's management culture and allow Cambridge to adapt to macroeconomic conditions and meet internal objectives.

Financial performance, reserves, and liquidity

Cambridge's revenue and expenditure profile is predictable, with local property taxes accounting for about 63% of fiscal 2024 operating revenue. Departmental revenue was about 13% and intergovernmental aid was 9%, with investment income and hotel and meals taxes exhibiting strength as well.

We expect available fund balance will likely remain more than 30% of expenditures, including the budget stabilization fund, which the city accounts for in committed general fund reserves. The overall reserve profile and $199 million in unused levy capacity (about 21% of fiscal 2025 budgeted operating expenditures) provide budgetary flexibility and stability.

The city is developing the fiscal 2026 budget, aiming to sustain all services and address demands from wages and new positions. The budget will reflect the city's efforts to slow budget growth as new growth from development slows. One of the city's major initiatives is expanded early childhood education, and management has invested in administration and capital needs for the program. The city had created a $10 million stabilization fund to phase in budgetary support for this program, and about $8.5 million of this reserve was used in fiscal 2025. Over the long term, its unfunded retirement liability carrying charges may increase, but we expect it will continue to incorporate these into the annual levy. As management considers future budgets, there is a focus on sustainable budget growth as revenues increase at a slower pace than in the last five years.

Debt and liabilities

Cambridge has about $788 million of total direct debt outstanding, leading to elevated liabilities relative to peers; the city's capital plan calls for issuance of additional debt each year. The city's debt profile is reinforced by a robust debt management policy that calls for 70% of debt to be amortized in 10 years. The city is looking for opportunities to limit debt issuance over the next several years to constrain cost growth and maintain compliance with debt policies, and has already eliminated about $50 million in projected issuance. We do not believe there is likely to be a significant change in our view of the city's debt profile.

Cambridge's large pension and OPEB obligation is a credit weakness, in our opinion. We believe some assumptions used to build the required pension contribution are permissive, which could lead to fluctuating costs. In addition, the adopted funding schedule relies on significant cost escalation to meet a rapid-amortization goal. Cambridge contributes $2 million annually above the OPEB pay-as-you-go cost, and its plan to address these costs relies on full pension plan funding. In the interim, we expect costs will likely continue to increase.

Fitch Ratings

The 'AAA' rating on the city's IDR and GO bonds reflects the application of Fitch Ratings' new "U.S. Public Finance Local Government Rating Criteria" and Fitch's expectation for the city to maintain healthy financial flexibility through future economic cycles, consistent with its history of strong operating performance and robust reserves. The 'AAA' IDR incorporates the city's 'aaa' financial resilience assessment, which reflects a 'high-midrange' level of budgetary flexibility and an expectation that unrestricted general fund reserves (the sum of committed, assigned and unassigned) will be maintained at or above 10% of spending. The city's unrestricted reserves have been maintained well above this level for several years and were at 44% of spending in fiscal 2024.

Current Developments

Cambridge's financial profile remains very strong. General fund net operating results for fiscal 2024 reflect a $61.8 million net operating surplus (7% of spending), increasing the city's unrestricted fund balance to $385 million from $320 million, or a healthy 44% of general fund spending.

New development and construction activity for office, lab, residential and mixed-use has begun to slow due to relatively high rates in office vacancies, reduced demand for lab space and peak valuations of residential properties, resulting a slowdown of sales activity. Fitch expects long-term demand to be sound due to Cambridge's central location near the city of Boston, its importance as a research center for life and sciences companies and the presence of the country's leading higher education institutions, Harvard University and Massachusetts Institute of Technology (MIT).

Profile

The city is an important economic component of the Boston metropolitan area and Massachusetts as a whole and benefits from the presence of both Harvard and MIT. Cambridge continues to strengthen its position as a national leader in the life sciences and high-tech sectors. Expansion in these sectors has contributed to a notable tax base, employment and resident income growth over the past several years, and is projected by the city to continue for at least the near term. Cambridge also continues to attract research and development companies, ranging from startups to international companies.

For FY26, the city is projecting that commercial/industrial values will decline by 15%, whereas residential values will increase by 4%. Declines in commercial/industrial values are projected to continue to increase, although at a lesser degree, until 2029, when they are expected to stabilize. Fitch considers these projections to be reasonable based on higher-than-usual vacancy rates and new commercial and residential construction underway and proposed.

Long-Term Liability Burden

The city updated the pension funding strategy to smooth out annual contributions between fiscal 2025 and fiscal 2028 to fully fund the unfunded pension liability by fiscal 2029. The change to fiscal 2029 was due to the city's aggressive funding scheduling and an actuarial loss in fiscal 2024, which would have resulted in substantially higher contributions over the near term to meet the prior fully funded date.

Financial Resilience

Cambridge's financial resilience is driven by the combination of its 'High' revenue control assessment and 'Midrange' expenditure control assessment, culminating in a 'High Midrange' budgetary flexibility assessment.

- Revenue control assessment: High
- Expenditure control assessment: Midrange
- Budgetary flexibility assessment: High Midrange

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade:

- A substantial increase in long-term liabilities associated with debt or increased NPLs that begins to negatively impact future budget decisions and operating results, assuming current levels of resident income, governmental expenditures and revenues;

- A decline in unrestricted general fund balances sustained at or below 10% of spending, leading to a lower assessment of financial resilience;

A material sustained weakening of demographic and economic metrics

Yi-An Huang
City Manager

FitchRatings

Public Finance
Tax Supported
United States

Cambridge, Massachusetts

The 'AAA' rating on the city's IDR and GO bonds reflects the application of Fitch Ratings' new "U.S. Public Finance Local Government Rating Criteria" and Fitch's expectation for the city to maintain healthy financial flexibility through future economic cycles, consistent with its history of strong operating performance and robust reserves. The 'AAA' IDR incorporates the city's 'aaa' financial resilience assessment, which reflects a 'high-midrange' level of budgetary flexibility and an expectation that unrestricted general fund reserves (the sum of committed, assigned and unassigned) will be maintained at or above 10% of spending. The city's unrestricted reserves have been maintained well above this level for several years and were at 44% of spending in fiscal 2024.

The rating also captures the city's 'midrange' long-term liability metrics associated with direct governmental debt (net of self-supporting debt) and Fitch-adjusted net pension liabilities (NPLs). Liability metrics are expected to remain 'midrange' over the near-term given the city's plans for additional governmental debt and amortization of existing debt.

Demographic and economic level metrics on a composite basis are considered 'strongest', including unemployment rates below the national average, high rates of educational attainment and very high median household income (MHI) levels when compared to Fitch portfolio averages.

Additionally, the rating reflects the application of a positive one-notch Additional Analytical Factor, which recognizes the city's revenue raising capacity due to its exceptionally large market value per capita of over $600,000 and high revenue control.

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

- A substantial increase in long-term liabilities associated with debt or increased NPLs that begins to negatively impact future budget decisions and operating results, assuming current levels of resident income, governmental expenditures and revenues;
- A decline in unrestricted general fund balances sustained at or below 10% of spending, leading to a lower assessment of financial resilience;
- A material sustained weakening of demographic and economic metrics.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

- Not applicable given the 'AAA' rating and Stable Outlook.

Security

The bonds are a general obligation of the city and are backed by its full faith and credit and a property tax levy that is limited by state statute.

Ratings

Long-Term IDR	AAA

Outlooks

Long-Term IDR	Stable

New Issues

$165,860,000 General Obligation Municipal Purpose Loan Bonds, Series 2025	AAA

Sale Date

March 5, 2025

Outstanding Debt

General Obligation Bonds	AAA
General Obligation Municipal Purpose Loan Bonds	AAA

Applicable Criteria

U.S. Public Finance Local Government Rating Criteria (April 2024)

Related Research

Fitch Rates Cambridge, MA's $180.1MM Series 2024 GO Bonds 'AAA'; Outlook Stable (February 2024)

Analysts

Arthur Tildesley III
+1 646 582-4749
arthur.tildesley@fitchratings.com

Kevin Dolan
+1 212 908-0538
kevin.dolan@fitchratings.com

Rating Headroom & Positioning

Cambridge Model Implied Rating: 'AAA' (Numerical Value: 11.56)

- **Metric Profile:** 'AAA' (Numerical Value: 10.56)
- **Net Additional Analytical Factor Notching:** +1.0

Individual Additional Analytical Notching Factors:

- **Revenue Capacity:** +1.0

Cambridge's Model Implied Rating is 'AAA'. The associated numerical value of 11.56 is at the upper end of the range for a 'AAA' rating.

The Local Government Rating Model generates Model Implied Ratings, which communicate the issuer's credit quality relative to Fitch's local government rating portfolio. (The Model Implied Rating will be the Issuer Default Rating except in certain circumstances explained in the applicable criteria.) The Model Implied Rating is expressed via a numerical value calibrated to Fitch's long-term rating scale, which ranges from 10.0 or higher (AAA), 9.0 (AA+), 8.0 (AA) and so forth down to 1.0 (BBB– and below).

Model Implied Ratings reflect the combination of issuer-specific metrics and assessments to generate a Metric Profile and a structured framework to account for Additional Analytical Factors not captured in the Metric Profile that can either mitigate or exacerbate credit risks. Additional Analytical Factors are reflected in notching from the Metric Profile and are capped at +/-3 notches.

Current Developments

Cambridge's financial profile remains very strong. General fund net operating results for fiscal 2024 reflect a $61.8 million net operating surplus (7% of spending), increasing the city's unrestricted fund balance to $385 million from $320 million, or a healthy 44% of general fund spending. Results include transfers out of $19 million for capital projects, following positive variances in both revenues and expenditures.

The fiscal 2025 $955.6 million general fund budget is up $72 million, or 8%, over the fiscal 2024 adopted operating budget. The tax levy was raised 9.21%, reaching $628.4 million. Budget increases are attributable to employee salary and benefit costs, higher debt service costs and an increase in school department funding to support, in part, an extension of kindergarten to full day. In addition, the budget includes a $10 million appropriation from the debt stabilization fund, similar to fiscals 2024 and 2023, and is being used to support debt service related to reconstruction of an elementary school. This fund is reported as a committed fund in the general fund.

Following an extended period of yoy growth in tax base values, fiscal 2025 total assessed values (TAVs) were flat yoy, growing approximately 0.5%. Commercial and industrial properties represent 44% of the city's fiscal 2025 TAV. Combined office/lab vacancy rates were 15.2% for third quarter of 2024, up from 7.3% during the same period the prior year, according to CB Richard Ellis reports. The combined office/lab vacancy rate was 17.9% for Boston and 20.5% for the metro suburbs. Cambridge reports that the lab market has faced some challenges, with increased inventory, high interest rates and rising inflation. YOY lab vacancy increased to 12.2% in 3Q24 from 5% in 3Q23, but remains one of the lowest in the region. Similarly, the office vacancy rate rose to 20% in 3Q24 from 12.5% in 3Q23.

New development and construction activity for office, lab, residential and mixed-use has begun to slow due to relatively high rates in office vacancies, reduced demand for lab space and peak valuations of residential properties, resulting a slowdown of sales activity. Fitch expects long-term demand to be sound due to Cambridge's central location near the city of Boston, its importance as a research center for life and sciences companies and the presence of the country's leading higher education institutions, Harvard University and Massachusetts Institute of Technology (MIT).

Profile

The city is an important economic component of the Boston metropolitan area and Massachusetts as a whole and benefits from the presence of both Harvard and MIT. These institutions are the city's top two employers, while other major employers include the city itself, Mt. Auburn Hospital and a number of biotechnology companies including Takeda Pharmaceuticals, Biogen, Novartis and Sanofi.

Cambridge continues to strengthen its position as a national leader in the life sciences and high-tech sectors. Expansion in these sectors has contributed to a notable tax base, employment and resident income growth over the past several years, and is projected by the city to continue for at least the near term. Wealth levels are above state and national averages and the unemployment rate (3.2% as of December 2024) is consistently below them. Cambridge also continues to attract research and development companies, ranging from startups to international companies.

Several major software and internet companies have established research and development operations in Cambridge, including Microsoft, Google, Amazon and Meta.

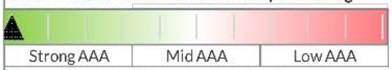
While space for new development is somewhat limited in Cambridge, new construction or rehabilitation of existing properties is underway in various areas of the city and should support demand. TAV performance reflects this activity as well as growth in residential values. TAV of $76.2 billion for fiscal 2025 on a per capita basis is a very high $645,000.

Economic development districts located in the city continue to provide opportunities for current and future economic expansion and new housing opportunities. The city is projecting that TAV through 2029 will remain close to current levels, driven by slower demand in commercial real estate market offset by growth in residential values. For FY26, the city is projecting that commercial/industrial values will decline by 15%, whereas residential values will increase by 4%. Declines in commercial/industrial values are projected to continue to increase, although at a lesser degree, until 2029, when they are expected to stabilize. Fitch considers these projections to be reasonable based on higher-than-usual vacancy rates and new commercial and residential construction underway and proposed.

Key Drivers

Issuer: Cambridge (MA)		Financial Profile	1.0
Type: City General Obligation		Demographic & Economic Strength	0.0
Current: AAA, RO:Sta (2024/02/20)		Long-Term Liability Burden	0.0
Fiscal Year	2024	AAF Notching Total(4)	1.0
Metric Profile	10.56	MIR - Metric	11.56
Metric Profile Mapping	AAA	MIR - Mapping	AAA

Issuer Position Within AAA Model Implied Rating



Rating position post application of analytical overlay

		Analyst Input	Metric		Composite		
Metric	2024	2024	Percentile	Weight	Percentile / Value	Assessment	Weight
Financial Profile							
Financial Resilience Components							
Available Reserves (FB/Expenditures: 5-Year Low) (%)	38.2					aaa	35%
Revenue Control Assessment	High	High					
Expenditure Control Assessment	Midrange	Midrange					
Budgetary Flexibility	High Midrange	High Midrange					
Financial Resilience	aaa	aaa		100%			
Lowest Cumulative 3 Year Revenue Performance (+/-) since 2008 (%)	3.9					Strongest	0%
Revenue Volatility(1)			93%	100%			
Demographic and Economic Strength							
Trend							
Population Trend (%)(2)	0.7		38%	100%	38%	Weak	8%
Unemployment Rate as Percentage of National Rate (%)(5)		66.7	91%	33%	92%	Strongest	26%
Population w/ Bachelor's Degree and Higher (%)(2)	80.2		100%	33%			
MHI as a % of the Portfolio Median (2)	142.3		85%	33%			
Concentration & Size							
Population Size(2)(3)	118,214		100%	50%	100%	Strongest	9%
Economic Concentration (%)(2)(3)	46.0		100%	50%			
Long-Term Liability Burden							
Liabilities/Personal Income (%)	6.1	6.7	39%	35%	56%	Midrange	21%
Liabilities/Governmental Revenues (%)(6)	81.9	89.8	89%	25%			
Carrying Costs/Governmental Expenditures (%)	14.7		50%	40%			

(1) Model directly uses revenue volatility. Percentiles are for information only: metric percentile represents the issuer; composite percentile represents the average of the issuer's class. The Revenue Volatility metric represents the issuer's revenue volatility relative to the median revenue volatility of the total issuer portfolio.
Revenue Volatility is treated asymmetrically, where weight is marginal for issuers that exhibit low to moderate revenue volatility. For issuers with higher revenue volatility, this factor will moderately lower the metric profile, implying a somewhat reduced weighting for all other variables in these instances.
(2) Population, Concentration, MHI and Educational Attainment data is lagged by one year e.g. 2021 data is used and displayed for fiscal year 2022.
(3) Percentiles represent the class. Economic concentration is defined as the sum of the absolute deviation of the issuer from the national average proportion across major economic sectors.
Sector data is on the county level for all entities or the MSA level for cities that span multiple counties. If data is unavailable for an issuer, median figures based on reported data for all counties within the issuer's state are used as proxy values.
(4) Additional Analytical Factors (AAF) have a potential notching range of +2/-2 for each of the three categories and an overall IDR notching range of +3/-3.
(5) County level data used for sub-county entities when prior year's data is unavailable. If county data is unavailable, MSA data is used. MSA level data is used for cities that span multiple counties.
(6) As a proxy for per capita personal income for sub-county levels of local government, Fitch calculates the ratio of money income to per capita income for the county in which the rated entity is located and applies that ratio to the entity's money income. The estimated per capita personal income figure is multiplied by population to estimate total personal income.
Source: Fitch Ratings

Financial Profile

Financial Resilience — 'aaa'

Cambridge's financial resilience is driven by the combination of its 'High' revenue control assessment and 'Midrange' expenditure control assessment, culminating in a 'High Midrange' budgetary flexibility assessment.

- **Revenue control assessment:** High
- **Expenditure control assessment:** Midrange
- **Budgetary flexibility assessment:** High Midrange
- **Minimum fund balance for current financial resilience assessment:** >=10.0%
- **Current year fund balance to expenditure ratio:** 43.9% (2024)
- **Lowest fund balance to expenditure ratio for the fiscal-year period 2020-2024:** 38.2% (2023)

Revenue Volatility — 'Strongest'

Cambridge's weakest historical three-year revenue performance is neutral to the Model Implied Rating.

The revenue volatility metric is an estimate of potential revenue volatility based on the issuer's historical experience relative to the median for the Fitch-rated local government portfolio. The metric helps to differentiate issuers by the scale of revenue loss that would have to be addressed through revenue raising, cost controls or utilization of reserves through economic cycles.

- **Lowest three-year revenue performance (based on revenues dating back to 2005):** 3.9% increase for the three-year period ending fiscal 2010
- **Median issuer decline:** -4.5% (2024)

Additional Analytical Factors and Notching

Financial Profile Additional Analytical Factors and Notching: +1.0 notch (for Revenue Capacity)

The Model Implied Rating includes a +1 notch Additional Analytical Factor due to the city's exceptionally high taxable assessed value per capita of $645,000, which would suggest a greater capacity to tap into revenue-generating resources to support governmental costs and fiscal resilience than that communicated by the metric profile.

State-Specific Revenue/Expenditure Context & Budgetary Control

Pursuant to state law, Proposition 2 1/2 limits the city's ability to levy property taxes by: 1) a “levy ceiling,” an absolute cap on the level of property taxation, set at 2.5% of the overall property tax valuation (primary limit); and 2) a levy limit that restricts the annual growth in taxation to 2.5% over the previous year's levy plus the value of new growth (secondary limit). Taxation in excess of the levy limit (plus any new growth) requires voter approval.

Management has typically levied below the ceiling each year. Any excess in levy capacity is carried forward and available for use at any time. The city's excess tax levy limit is approximately $189 million, down slightly from fiscal 2024. This excess levy capacity totals approximately 20% of the fiscal 2025 budgeted general fund revenues and provides for high revenue raising flexibility if needed.

Demographic and Economic Strength

Population Trend — 'Weak'

Based on the median of 10-year annual percentage change in population, Cambridge's population trend is assessed as 'Weak'.

Population trend: 0.7% 2023 median of 10-year annual percentage change in population (38th percentile)

Unemployment, Educational Attainment and MHI Level — 'Strongest'

The overall strength of Cambridge's demographic and economic level indicators (unemployment rate, educational attainment, MHI in 2024 are assessed as 'Strongest' on a composite basis, performing at the 92nd percentile of Fitch's local government rating portfolio. This is due to relatively strong education attainment levels, median-issuer indexed adjusted MHI and unemployment rate.

- **Unemployment rate as a percentage of national rate:** 66.7% 2023 (91st percentile), relative to the national rate of 3.6%
- **Percentage of population with a bachelor's degree or higher:** 80.2% (2023) (100th percentile)
- **MHI as a percentage of the portfolio median:** 142.3% (2023) (85th percentile)

Economic Concentration and Population Size — 'Strongest'

Cambridge's population in 2023 was of sufficient size and the economy was sufficiently diversified to qualify for Fitch's highest overall size/diversification category.

The composite metric acts asymmetrically, with most issuers (above the 15th percentile for each metric) sufficiently diversified to minimize risks associated with small population and economic concentration. Downward effects of the metric on the Metric Profile are most pronounced for the least economically diverse issuers (in the fifth percentile for the metric or lower). The economic concentration percentage shown below is defined as the sum of the absolute deviation of the percentage of personal income by major economic sectors relative to the U.S. distribution.

- **Population size:** 118,214 (2023) (above the 15th percentile)
- **Economic concentration:** 46.0% (2024) (above the 15th percentile)

Long-Term Liability Burden

Long-Term Liability Burden — 'Midrange'

Cambridge's long-term liability metrics range from 'weak' to 'strong' across each of the three dimensions: liabilities to personal income, liabilities to governmental revenue and carrying costs to governmental expenditures. The long-term liability composite metric in 2024 is at the 56th percentile, roughly in line with Fitch's local government rating portfolio.

- **Liabilities to personal income:** 6.7% analyst input (39th percentile) (vs. 6.1% 2024 actual)
- **Liabilities to governmental revenue:** 89.8% analyst input (89th percentile) (vs. 81.9% 2024 actual)
- **Carrying costs to governmental expenditures:** 14.7% (2024) (50th percentile)

Additional Insight

The OPEB contribution requirements of OPEB plan members and the city are established and may be amended by the city. Ten percent of the calculated contribution is currently paid by retirees through pension benefit deductions. The state allows up to 50% to be paid by retirees. The remainder of such cost is funded by the city. The city currently contributes enough money to the OPEB plan to satisfy current obligations on a pay-as-you-go basis, but has historically overfunded to support fund assets. The city's net OPEB liability of $756 million was 5% funded as of fiscal 2024 and represents 5% of personal income.

The city updated the pension funding strategy to smooth out annual contributions between fiscal 2025 and fiscal 2028 to fully fund the unfunded pension liability by fiscal 2029. The change to fiscal 2029 was due to the city's aggressive funding scheduling and an actuarial loss in fiscal 2024, which would have resulted in substantially higher contributions over the near term to meet the prior fully funded date. In fiscal 2025, the city contributed $78.8 million, which was reset to $62.6 million in this actuarial valuation following the change in the fully funded date. The excess $16.2 million above the $62.6 million actuarily determined contribution (ADC) will be used to offset fiscal 2026 and fiscal 2027 actuarial contributions and move the estimated fully funded out to fiscal 2029.

Analyst Inputs to the Model

Analyst inputs to the model reflect metric adjustments to account for historical data anomalies, forward-looking performance shifts or non-recurring events that may otherwise skew the time series.

Fitch adjusted the city's debt liabilities to reflect amortization of principal on outstanding debt since the end of fiscal 2024 and the current 2025 issuance.

ESG Considerations

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to either their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/topics/esg/products#esg-relevance-scores.

Additional information is available on www.fitchratings.com

Financial Summary

($000, audited fiscal years ended June 30)	2020	2021	2022	2023	2024
General fund revenues					
Property tax	439,072	477,369	497,042	530,537	579,388
Sales tax	26,713	12,017	20,401	30,112	32,976
Income tax	—	—	—	—	—
Other tax	8,029	8,219	8,535	8,455	8,683
Total taxes - undifferentiated	—	—	—	—	—
Intergovernmental	82,997	88,639	71,847	76,348	82,213
Other revenue	141,347	152,589	143,334	174,699	211,853
Total	**698,158**	**738,834**	**741,159**	**820,151**	**915,114**
General fund expenditures					
General government	41,729	49,577	49,050	53,528	58,884
Public safety	143,442	147,363	158,856	170,269	178,812
Educational	**234,864**	**258,815**	**242,833**	**252,436**	**272,012**
Debt service	74,276	78,833	82,107	86,986	89,251
Capital outlay	—	—	—	—	—
Other expenditures	165,223	192,006	201,407	214,812	232,934
Total	**659,533**	**726,594**	**734,253**	**778,030**	**831,894**
Transfers in and other sources	25,649	45,952	20,661	21,297	22,580
Transfers out and other sources	87,941	77,878	50,676	59,032	44,000
Net transfers & other	**-62,291**	**-31,926**	**-30,015**	**-37,735**	**-21,420**
Adjustment for bond proceeds and extraordinary one-time uses	—	21,456	—	—	—
Net Op. surplus (Deficit) after transfers	-23,666	-19,686	-23,109	4,386	61,800
Net Op. surplus (Deficit)/ (total expenditures + transfers out and other uses)(%)	-3.17	-2.51	-2.94	0.52	7.06
Total fund balance	364,065	344,379	321,270	325,656	387,456
Unrestricted fund balance	356,931	341,633	317,212	319,567	384,565
Other available fund balances	—	—	—	—	—
Total available unrestricted reserves (GF + Other)	**356,931**	**341,633**	**317,212**	**319,567**	**384,565**
Available reserves as % of spending (Adj for bond proceeds and other one-time uses)	47.75	43.63	40.41	38.18	43.91

Sources: Fitch Ratings, Fitch Solutions, Cambridge

Long-Term Liability Burden

($000, audited fiscal year ended June 30)	2024
Direct debt	622,308
Less: Self-supporting debt	113,852
Net direct debt	508,456
Fitch adjusted NPL	382,283
Net direct debt + Fitch-adjusted net pension liabilities (NPL)	**890,739**
Population	118,214
Per capita personal income	123,795
Estimated personal income ($000)	14,634,298
Net debt + Fitch-adjusted NPL /personal income (%)	**6.1**
Total governmental revenues	1,088,133
Net direct debt + Fitch adjusted NPL as percentage of governmental revenue (%)	**81.86**
Debt service (net of state support)	89,251
Actuarially determined pension contributions	50,481
Actual OPEB contributions	27,818
Total Governmental expenditures	1,143,235
Carrying costs/governmental expenditures (%)	**14.66**

Note: Figures above do not reflect any analyst input adjustments.
Sources: Fitch Ratings, Fitch Solutions, Cambridge

Summary

Description	Final value
Budgetary flexibility assessments	
Revenue control assessment	High
Expenditure control assessment	Midrange
Collective bargaining and resolution framework	Midrange
Workforce outcomes	Midrange
Cost drivers	Midrange
Metrics assessments	
Financial profile - financial resilience	aaa
Financial profile - revenue volatility	Strongest
Demographic & economic strength - trend	Weak
Demographic & economic strength - level	Strongest
Demographic & economic strength - concentration & size	Strongest
Long-Term liability burden	Midrange
Metric profile mapping	AAA
Metric profile	10.56
Additional analytical Factors	
Total notching - capped	**1**
Financial profile	**1**
Fiscal oversight	
Revenue capacity	1
Contingent risks	
Non-recurring support or spending deferrals	
Political risks	
Management practices	
Demographic & economic strength	
Economic and institutional strength	
Revenue concentration risks	
School district resources	
Long-term liability burden	
Pension funding assumptions	
Pension contributions	
OPEB	
Debt structure	
Capital demands and affordability	
Model implied rating - mapping	AAA
Model implied rating - metric	11.56
Outliers and developing situations considerations	No
Notching rationale - 1	
Notching rationale - 2	
Issuer default rating/ issuer default credit opinion	AAA
Outlook/Watch	RO:Sta

Source: Fitch Ratings

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

MOODY'S RATINGS

CREDIT OPINION
14 February 2025

Send Your Feedback

Contacts

Nicholas Lehman +1.781.672.1124
VP-Senior Analyst
nicholas.lehman@moodys.com

Thomas Jacobs +1.212.553.0131
Associate Managing Director
thomas.jacobs@moodys.com

City of Cambridge, MA

Update to credit analysis

Summary

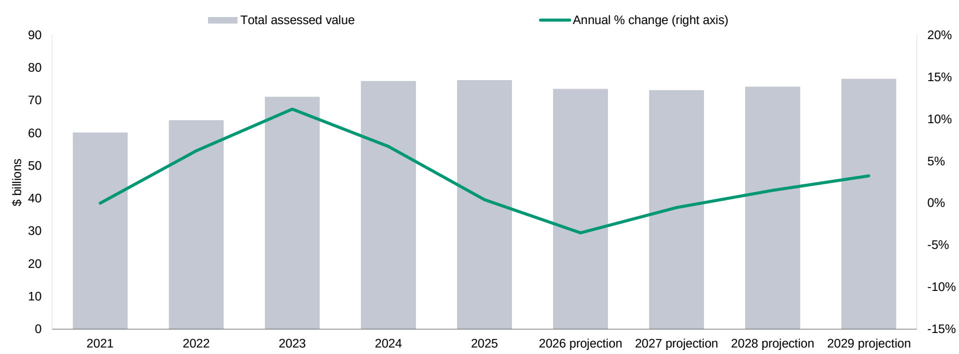
Cambridge (Aaa stable) reflects very strong credit fundamentals. The city benefits from a strong economy that is anchored by world renowned higher education institutions and a substantial research and development sector. The city has a diverse population with high resident income ratio of 144% and $724,819 full (equalized) value per capita. The city is anticipating tax base value declines related to commercial office space and a slow down in new development that will inform their budget forecasts beginning in fiscal 2026.

The city has a very healthy financial position with $587 million in available reserves and net unrestricted assets equal to 53% of revenue. The strong finances are maintained by comprehensive and forward-looking fiscal management. To that end, the city's forecast reflects more modest budget increases beginning in fiscal 2026 with the potential to rely on its ample unused tax levy capacity and use of reserves as a revenue source when prudent. The city's leverage, currently equal to 177% of fiscal 2024 revenue is likely to remain manageable given the city's capital plans and recent extension of the pension plan funding date.

Exhibit 1

Total AV projected to decline in 2026 and 2027 driven by a 24% decline in the commercial sector 2026-29

Cambridge's actual and projected total assessed value



Cambridge projections include existing commercial value change of -15% in 2026, -9% in 2027, -4% in 2028, 0% in 2029. Existing residential value change of 4% in 2026, 3% in 2027 to 2029. New construction assumptions are conservative.
Source: City of Cambridge, MA

Credit strengths

» Healthy economy anchored by institutional presence

» Ample operating flexibility given a large amount of unused levy capacity under the tax levy limit

» Strong reserves and liquidity

Credit challenges

» Taxpayer concentration in research and development

» Maintaining service levels in line with community expectations

» Projected decline in commercial tax base value and new development

Rating outlook

The stable outlook reflects the city's strong fiscal management and governance that is committed to maintaining a healthy financial position based on conservative budget forecasting and formal policies. The outlook also incorporates the significant institutional presence that is expected to help maintain a strong labor force, tax base stability and attract private investment in the city.

Factors that could lead to an upgrade

» Not applicable

Factors that could lead to a downgrade

» Decline in available fund balance ratio to less than 40%

» Significant increase in the leverage ratio to 350%

» Sustained decline in economic metrics and tax base value

Key indicators

Exhibit 2

Cambridge (City of) MA

	2021	2022	2023	2024	Aaa Medians
Economy					
Resident income ratio (%)	148.4%	144.1%	144.3%	N/A	168.9%
Full Value ($000)	$63,505,736	$63,505,736	$70,337,059	$70,337,059	$9,011,663
Population	116,892	117,962	117,794	N/A	36,103
Full value per capita ($)	$543,286	$538,358	$597,119	N/A	$218,941
Annual Growth in Real GDP	7.0%	2.4%	1.5%	N/A	2.4%
Financial Performance					
Revenue ($000)	$842,183	$887,598	$952,847	$1,107,683	$108,194
Available fund balance ($000)	$441,368	$435,189	$461,527	$587,056	$68,159
Net unrestricted cash ($000)	$755,692	$836,477	$867,098	$979,836	$99,090
Available fund balance ratio (%)	52.4%	49.0%	48.4%	53.0%	62.6%
Liquidity ratio (%)	89.7%	94.2%	91.0%	88.5%	95.0%
Leverage					
Debt ($000)	$526,962	$553,675	$575,045	$681,103	$72,678
Adjusted net pension liabilities ($000)	$994,266	$855,937	$572,427	$608,449	$89,696
Adjusted net OPEB liabilities ($000)	$853,904	$822,104	$642,836	$616,946	$10,915
Other long-term liabilities ($000)	$44,180	$46,840	$49,462	$54,319	$4,029
Long-term liabilities ratio (%)	287.3%	256.7%	193.1%	177.0%	217.2%
Fixed costs					
Implied debt service ($000)	$36,326	$36,961	$38,669	$39,946	$4,949
Pension tread water contribution ($000)	$22,235	$18,603	$10,014	N/A	$2,629
OPEB contributions ($000)	$23,460	$24,151	$26,418	$27,817	$594
Implied cost of other long-term liabilities ($000)	$3,059	$3,099	$3,271	$3,436	$274
Fixed-costs ratio (%)	10.1%	9.3%	8.2%	7.3%	10.0%

For definitions of the metrics in the table above please refer to the US Cities and Counties Methodology or see the Glossary in the Appendix below. Metrics represented as N/A indicate the data were not available at the time of publication. The medians come from our most recently published US Cities and Counties Median Report.
The real GDP annual growth metric cited above is for the Boston-Cambridge-Newton, MA-NH Metropolitan Statistical Area Metropolitan Statistical Area.
Sources: US Census Bureau, Cambridge (City of) MA's financial statements and Moody's Ratings, US Bureau of Economic Analysis

Profile

Cambridge is a large and diverse community that neighbors the City of Boston (Aaa stable) across the Charles River. The city's population is around 118,000 and its economy is anchored by Harvard University (Aaa stable) and the Massachusetts Institute of Technology (MIT, Aaa stable). The city provides general governmental services including police and fire protection, public preK-12 education, parks and recreation, health and social services, libraries and culture, and maintenance of streets and highways.

Detailed credit considerations

Economy: challenges from CRE will limit tax base growth over next few years while overall economy remains sound

Cambridge's economy benefits from the presence of Harvard and MIT which together enroll around 33,000 students and provide employment to over 22,000 full-time positions (roughly 16% of the city's workforce). The city's economic growth as measured by the Boston MSA's five year CAGR of real GDP compared to the US real GDP remains positive at 0.3%. The city's largest industries are professional and business services and education and health services including the vibrant biotechnology and pharmaceutical sectors. The top 10 taxpayers are concentrated and represent 32% of 2025 total assessed value. Although, MIT with its significant taxable property is the largest taxpayer representing 12% of AV.

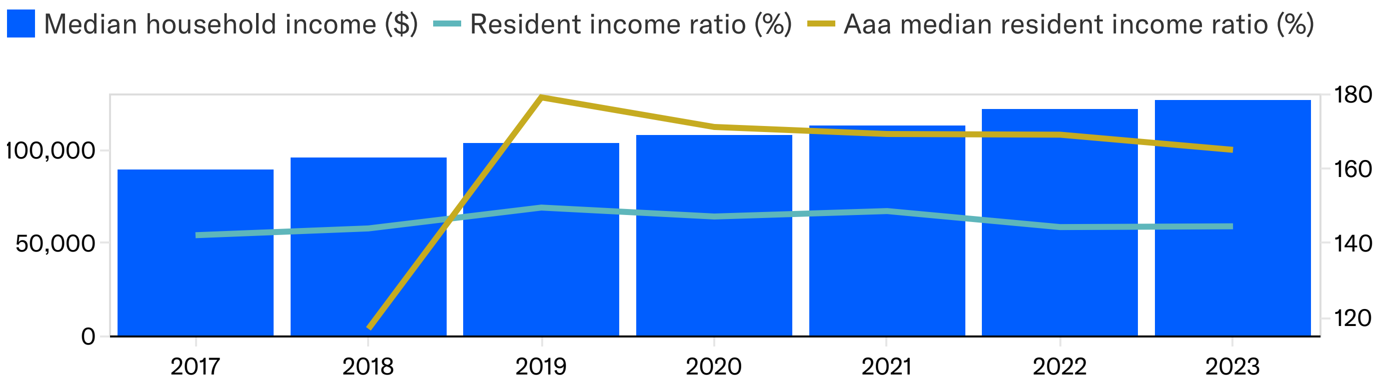
The city is not immune to the commercial real estate challenges experienced across the US. The city's vacancy rate has increased to just over 15% due to increased inventory, stagnant demand and expansion of capitalization rates. The trend led to a 7.2% decline in the commercial sector in 2025 while increases in residential, industrial and personal property values led to a relatively flat, 0.5% increase, total assessed value.

The city is projecting a 3.5% decline in 2026 total AV followed by relatively stagnant growth until 2029. The total value trend includes projected declines in existing commercial value of 15% in 2026, 9% in 2027, 4% in 2028 and 0% in 2029. Despite this challenge, the city remains a very attractive and desired location for business. The city's 2025 residential and commercial tax rates of $6.35 per $1,000 of value and $11.52, respectively, continue to be well below Boston's rates of $11.58 and $25.96, respectively. The average 2025 residential tax rate is $12.40 across all Massachusetts municipalities.

The headquarters of Moderna was completed in 2024 and the US headquarters for Takeda (Baa1 stable) and Astra Zeneca (A2 positive) are currently under construction. While the city's new development pipeline may decline over the next couple years, especially compared to the all-time highs of the last five years, the interest in tapping the city's robust talent pool remains a long-term strength.

On February 10, the city council eliminated single-family zoning as part of an overhaul to zoning and land-use policies, providing for up to six story developments on any lot. This dramatic step is expected to increase housing production across the city.

Exhibit 3
Resident Income remains strong for a sizeable city like Cambridge



Source: Moody's Ratings

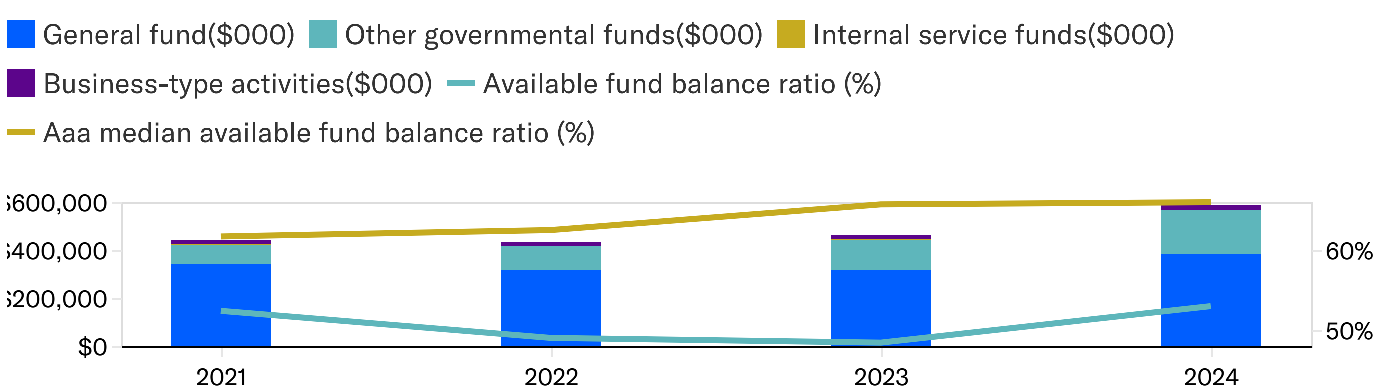
Financial operations: city plans to manage expense growth and leverage revenue flexibility

Cambridge's financial position is likely to remain healthy over the next couple years due to strong fiscal management, significant revenue flexibility and large reserves. As the fiscal 2026 budget begins to take shape, the city is focused on resetting its expenditure growth rate to more modest levels that aline with its projections for tax base trends, economic uncertainty and ability to maintain service levels and address capital needs.

The current budget forecast indicates that fiscal 2026 operating expenses will increase by 3.9% and annual increases from 2026 through 2029 will average 4.7%. Revenue projections include the annual tax levy increasing by 7.5% per year, level funding of state education aid, and use of $18 million in reserves per year as a revenue source. The city has the largest amount of unused levy capacity than any other Massachusetts community. As of 2025 the unused levy capacity totaled $189.1 million equal to 17% of revenue. The city projects tapping the unused capacity annually, bringing the amount down to $143 million at the end of 2029.

Fiscal 2025 operations are trending generally on budget. The city increased the budget by 8.1% over 2024 driven by a 3% increase in salaries, 2% increase in health insurance costs, 12.1% increase in pension costs and 9.5% increase in the school department budget to support an extended school day. The budget included a 9.2% increase in the tax levy.

Exhibit 4
Reserves are likely to remain healthy while still below Aaa median



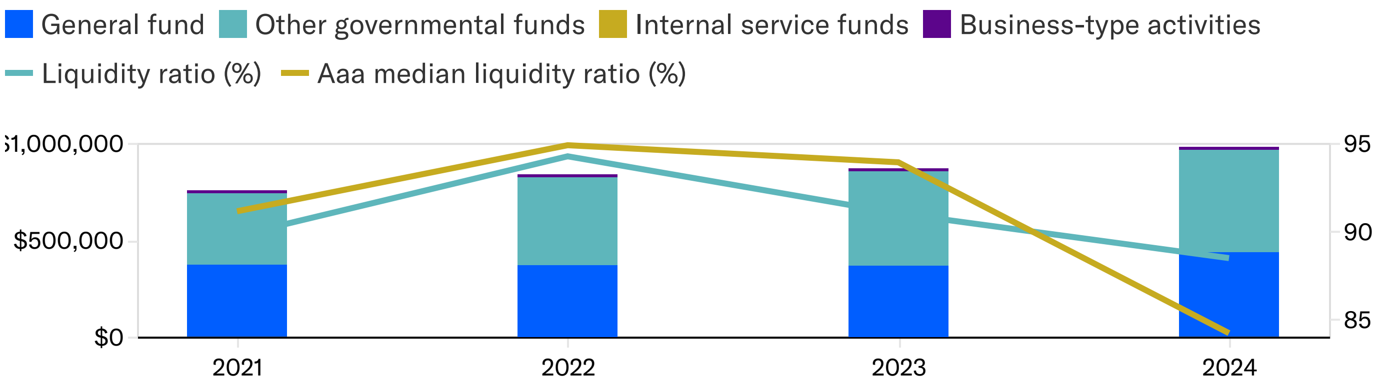
Source: Moody's Ratings

Liquidity

The city's net unrestricted cash and investments at the end of fiscal 2024 was $979.8 million representing a high 88.5% of revenue. The cash position is significantly higher than the available reserves due to $216.2 million in bond proceeds held as restricted fund balance in the capital fund. The amount is for the capital spending on the new Tobin School project. The liquidity position is not expected to materially change through fiscal 2025.

Exhibit 5

Cash position is strong and likely to remain stable



Source: Moody's Ratings

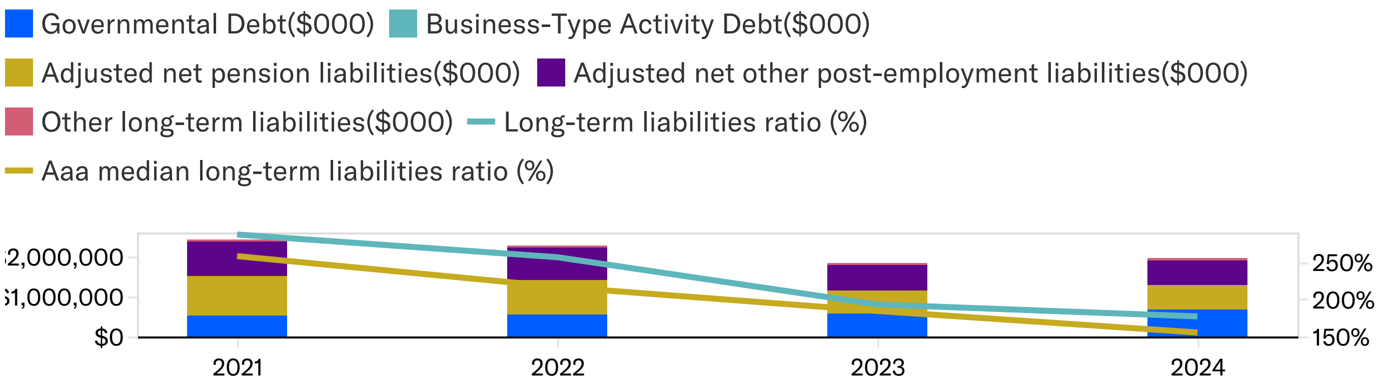
Leverage: city capital plan levels off while pension funding date pushed three years to 2029

Cambridge's leverage is likely to remain in line with Aaa-rated peers given the city's capital plans, rapid amortization of existing debt, and strong funding commitment towards pension and OPEB. In step with the city's plans to moderate operating expenses the city's capital plans are relatively level funded compared to last year. Additionally, in an effort to smooth out annual pension contributions between 2025 and 2028 the city has extended the funding date to 2029 from 2026.

The fiscal 2025 capital budget totals $74.9 million representing a 60% decrease from the prior year. The fiscal 2025-29 public investment program totals $726.1 million an increase of only $28.5 million from last year. Bond financings of $580.2 million is the largest funding source, most of which willl be offset by amortization of existing principal.

The city ended fiscal 2024 with a long-term liabilities ratio of 177% of revenue. The city's debt accounts for 35% of the total leverage ratio while adjusted net pension liability and adjusted net OPEB liability represent another 31% and 31%, respectively. Assuming Moody's adjusted discount rates remain level, the city issues the full bonding amount under the current CIP and maintains the pension funding schedule, the leverage ratio would stay below 200% through 2029.

Exhibit 6
Long-term liabilities are likely to remain relatively on par with Aaa median



Source: Moody's Ratings

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

Debt structure
All of the city's debt is fixed rate and amortizes over the long-term with a final maturity of 2045. Approximately 50% of principal is retired in five years and over 80% retired in 10 years.

Debt-related derivatives
Cambridge is not party to debt-related derivatives.

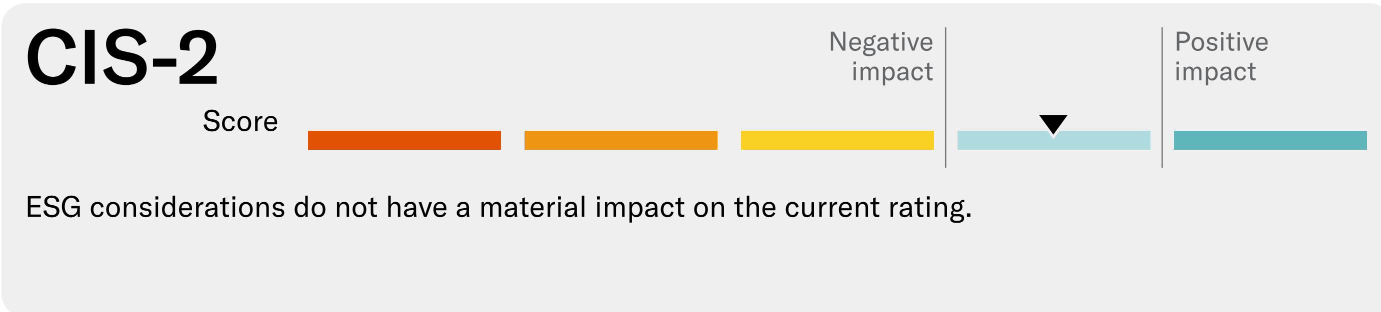
Pensions and OPEB
Cambridge's pension and OPEB liabilities are larger than its debt burden and though manageable at this time, represent a potential future credit challenge. The city participates in the Cambridge Retirement Plan, a multi-employer defined benefit plan and makes annual required contributions. The latest actuarial report assumes a 7.1% discount rate and recently increased the funding date to 2029 from 2026 on a reported basis. The city's teachers participate in the Massachusetts Teachers Retirement System in which the city receives on-behalf payments toward that liability that is covered by the Commonwealth.

The city also funds its OPEB liability on a pay-go basis plus annual budgeted deposits into an OPEB trust based on its funding policy. The OPEB plan fiduciary net position is 5% of the total OPEB liability as of the end of fiscal 2024.

The 2024 fixed costs ratio of 7.3% is very favorable and will likely remain low. Additionally, the city's annual pension contributions for the last five years have been significantly higher than the Moody's tread water indicator, which is the amount required to keep the unfunded liability from increasing if all actuarial assumptions are realized, a reflection of the commitment to meet the 2029 pension funding date.

ESG considerations

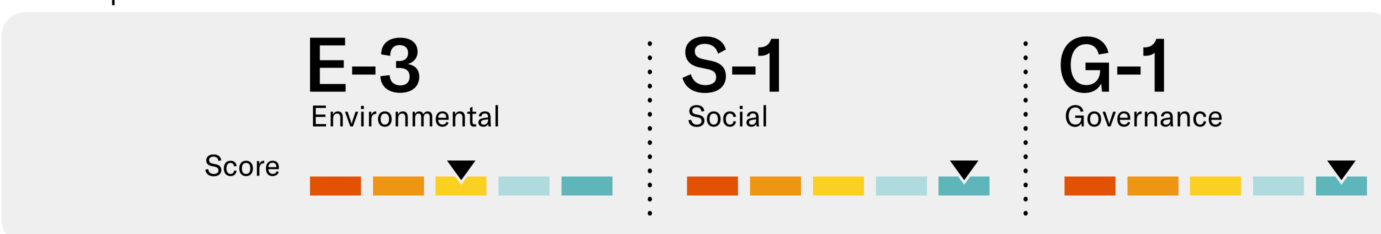
Exhibit 7
ESG credit impact score



Source: Moody's Ratings

Cambridge's ESG credit impact score of **CIS-2** reflects above-average environmental exposure and strong social and governance considerations that reflect in the city's credit quality, resiliency and ability to respond to shocks.

Exhibit 8
ESG issuer profile scores



Source: Moody's Ratings

Environmental

Cambridge has above-average exposure to environmental considerations given its physical climate risks associated with hurricanes and other weather events given its geographical location. Other environmental considerations for carbon transition, natural capital, and water and pollution risks are considered low.

Social

Cambridge's social considerations are strong. The city benefits from favorable educational attainment, a strong labor force and positive health and safety. City residents also have access to basic services and the city benefits from stable demographics. Housing affordability is a neutral to low risk but is a growing challenge.

Governance

Cambridge's governance considerations are strong. The city has a favorable institutional structure, transparency and disclosure. The city also consistently approves and releases its budgets and audited financial statements in a timely manner. Cambridge's budget management and policy credibility and effectiveness are strong and is reflected in its healthy financial position and trend of balanced operations.

Rating methodology and scorecard factors

The US Cities and Counties Methodology includes a scorecard, which summarizes the rating factors generally most important to city and county credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 9
Cambridge (City of) MA

	Measure	Weight	Score
Economy			
Resident income ratio	144.3%	10.0%	Aaa
Full value per capita	724,819	10.0%	Aaa
Economic growth metric	0.3%	10.0%	Aaa
Financial Performance			
Available fund balance ratio	53.0%	20.0%	Aaa
Liquidity ratio	88.5%	10.0%	Aaa
Institutional Framework			
Institutional Framework	Aa	10.0%	Aa
Leverage			
Long-term liabilities ratio	177.0%	20.0%	Aa
Fixed-costs ratio	7.3%	10.0%	Aaa
Notching factors			
Additional Strength in Local Resources	0.5		
Scorecard-Indicated Outcome			Aaa
Assigned Rating			**Aaa**

The Economic Growth metric cited above compares the five-year CAGR of real GDP for Boston-Cambridge-Newton, MA-NH Metropolitan Statistical Area Metropolitan Statistical Area to the five-year CAGR of real GDP for the US.
Sources: US Census Bureau, Cambridge (City of) MA's financial statements and Moody's Ratings

Appendix

Exhibit 10
Key Indicators Glossary

	Definition	Typical Source*
Economy		
Resident income ratio	Median Household Income (MHI) for the city or county, adjusted for Regional Price Parity (RPP), as a % of the US MHI	MHI: US Census Bureau - American Community Survey 5-Year Estimates RPP: US Bureau of Economic Analysis
Full value	Estimated market value of taxable property in the city or county	State repositories; audited financial statements; continuing disclosures
Population	Population of the city or county	US Census Bureau - American Community Survey 5-Year Estimates
Full value per capita	Full value / population	
Economic growth metric	Five year CAGR of real GDP for Metropolitan Statistical Area or county minus the five-year CAGR of real GDP for the US	Real GDP: US Bureau of Economic Analysis
Financial performance		
Revenue	Sum of revenue from total governmental funds, operating and non-operating revenue from total business-type activities, and non-operating revenue from internal services funds, excluding transfers and one-time revenue, e.g., bond proceeds or capital contributions	Audited financial statements
Available fund balance	Sum of all fund balances that are classified as unassigned, assigned or committed in the total governmental funds, plus unrestricted current assets minus current liabilities from the city's or county's business-type activities and internal services funds	Audited financial statements
Net unrestricted cash	Sum of unrestricted cash in governmental activities, business type activities and internal services fund, net of short-term debt	Audited financial statements
Available fund balance ratio	Available fund balance (including net current assets from business-type activities and internal services funds) / Revenue	
Liquidity ratio	Net unrestricted cash / Revenue	
Leverage		
Debt	Outstanding long-term bonds and all other forms of long-term debt across the governmental and business-type activities, including debt of another entity for which it has provided a guarantee disclosed in its financial statements	Audited financial statements; official statements
Adjusted net pension liabilities (ANPL)	Total primary government's pension liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits	Audited financial statements; Moody's Ratings
Adjusted net OPEB liabilities (ANOL)	Total primary government's net other post-employment benefit (OPEB) liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits	Audited financial statements; Moody's Ratings
Other long-term liabilities (OLTL)	Miscellaneous long-term liabilities reported under the governmental and business-type activities entries	Audited financial statements
Long-term liabilities ratio	Debt + ANPL + ANOL + OLTL / Revenue	
Fixed costs		
Implied debt service	Annual cost to amortize city or county's long-term debt over 20 years with level payments	Audited financial statements; official statements; Moody's Ratings
Pension tread water contribution	Pension contribution necessary to prevent reported unfunded pension liabilities from growing, year over year, in nominal dollars, if all actuarial assumptions are met	Audited financial statements; Moody's Ratings
OPEB contribution	City or county's actual contribution in a given period	Audited financial statements
Implied cost of OLTL	Annual cost to amortize city or county's other long-term liabilities over 20 years with level payments	Audited financial statements; Moody's Ratings
Fixed-costs ratio	Implied debt service + Pension tread water + OPEB contributions + Implied cost of OLTL / Revenue	

*Note: If typical data source is not available then alternative sources or proxy data may be considered. For more detailed definitions of the metrics listed above please refer to the US Cities and Counties Methodology .
Source: Moody's Ratings

REPORT NUMBER 1438475

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

S&P Global Ratings

RatingsDirect®

Summary:

Cambridge, Massachusetts; General Obligation

Primary Credit Analyst:
Tyler Fitman, Boston (1) 617-530-8021; tyler.fitman@spglobal.com

Secondary Contact:
Melissa Stoloff, Boston (1) 617-530-8030; melissa.stoloff@spglobal.com

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Summary:

Cambridge, Massachusetts; General Obligation

Credit Profile		
US$165.86 mil GO mun purp loan bnds ser 2025 due 02/15/2045		
Long Term Rating	AAA/Stable	New
Cambridge GO		
Long Term Rating	AAA/Stable	Affirmed
Cambridge GO		
Long Term Rating	AAA/Stable	Affirmed

Credit Highlights

- S&P Global Ratings assigned its 'AAA' rating to Cambridge, Mass.' roughly $165.86 million series 2025 general obligation (GO) municipal-purpose loan bonds.
- At the same time, S&P Global Ratings affirmed its 'AAA' rating on the city's existing GO debt.
- The outlook is stable.
- The rating reflects the application of our "Methodology For Rating U.S. Governments" criteria, published Sept. 9, 2024.

Security

The city's full-faith-and-credit pledge, subject to Proposition 2 1/2 limitations, secures the GO debt. Despite commonwealth levy-limit laws, we did not make a rating distinction between Cambridge's limited-tax GO pledge and general creditworthiness because our analysis of its financial and economic conditions already includes the tax limitation imposed on its revenue-raising ability.

We understand that officials intend to use series 2025 bond proceeds to fund various capital projects.

Credit overview

Cambridge is an affluent community adjacent to Boston, with many leading science and technology companies and major universities providing stability to the city. Its management team operates with established and well-embedded policies and procedures, with a focus on forward-looking planning that allows for key city priorities to be addressed while sustaining financial stability and flexibility. While growth in the tax base will be slower due to changes in the lab and office market, the tax base will remain a significant source of strength and revenue for the city.

The rating also reflects our opinion of the city's:

- Robust economic profile, with high incomes and a large tax base supported by corporate and institutional presences with ongoing investment, despite some tax base concentration;
- Stable revenue base, with property taxes accounting for most general fund revenues, allowing the city to sustain

very strong reserves even as additional services such as pre-kindergarten education have been introduced;

- Generally conservative management, with robust forward-looking planning that identifies needs and financing for capital improvement and an ongoing conversation regarding operational goals and funding opportunities for additional positions and services as needed--the city also maintains and adheres to robust policies pertaining to investments, debt management, and reserves; and
- Stable debt profile, with continuous debt issuance to support capital priorities expected to continue, and a large other postemployment benefits (OPEB) obligation.
- For more information on our institutional framework assessment for Massachusetts municipalities, see "Institutional Framework Assessment: Massachusetts Local Governments," published Sept. 9, 2024.

Environmental, social, and governance

We consider Cambridge vulnerable to physical factors, including rising water levels from climate change that could directly affect taxable properties due to its location along the Charles River. The city has been proactively addressing these challenges and maintains long-term environmental resiliency plans. We have analyzed Cambridge's social and governance factors relative to its economy, management, financial measures, and debt and liability profile; we view both as neutral in our credit rating analysis.

Ratings above the sovereign

Cambridge's GO bonds are eligible to be rated above the sovereign because we believe the city can maintain better credit characteristics than the nation in a stress scenario. The city has a predominantly locally derived revenue source, with 63% of governmental activity revenue from property taxes and with independent taxing authority and treasury management from the federal government. (For further information, see "Ratings Above The Sovereign: Corporate And Government Ratings--Methodology And Assumptions," published Nov. 19, 2013, on RatingsDirect.)

Outlook

The stable outlook reflects S&P Global Ratings' opinion of Cambridge's economic profile and management environment, which allows the city to manage financial performance to include the maintenance of high reserves that offset elevated debt, pension, and OPEB liabilities.

Downside scenario

We could lower the rating if reserves were to decrease significantly without a plan for restoration or if debt service and retirement costs were to pressure the city's finances.

Credit Opinion

Economy

Cambridge is an integral part of the regional Boston economy and benefits from Harvard University and Massachusetts Institute of Technology (MIT), its two leading employers and two of the leading taxpayers, which serve as knowledge centers and origins of startups, research centers, and life-science and high-technology companies that promote economic activity. Microsoft, Google, Amazon, Apple, Facebook, Pfizer, and IBM are among companies with offices or labs in the city. While there is some concentration in the tax base, due primarily to MIT's land holdings, we believe the overall size of the tax base and the stability of these institutions are mitigating factors to the risk associated with concentration.

The tax base is about 53% residential and 45% commercial and industrial properties. While office vacancy rates have risen, the city has seen office-to-lab conversions and an increase in smaller firms subletting office space. The city's new lab development has slowed as vacancy has increased, but residential development has remained steady, supported by state and local efforts on growing the housing supply. The city has completed a rezoning effort in the Alewife area to allow for mixed-use development and is pursuing a citywide rezoning effort to allow for denser residential development. We expect development will likely continue, leading to continued tax base growth, albeit slower than in the last several years.

Management

Highlights of the city's management include:

- The budget development process supports Cambridge's goals, including investments in education, housing, transportation, environment, and other quality-of-life issues, while maintaining financial balance. Budget planning is comprehensive and considers multiple scenarios and uses generally conservative assumptions. Ongoing monitoring of spending ensures adherence to the adopted budget. Management makes quarterly budget-to-actual and investment management reports to finance and investment committees, respectively, and uses historical trend analysis to develop departmental expenditure and revenue assumptions.
- As part of the annual budget process, the city develops five-year financial and capital investment plans, outlining immediate fiscal challenges and prioritizing capital needs. These plans are thoroughly integrated into the city's management culture and allow Cambridge to adapt to macroeconomic conditions and meet internal objectives.
- The city invests in the state-run Massachusetts Municipal Depository Trust and bank deposits and has an investment policy that outlines objectives, standards of care, permitted investments, and reporting requirements. Its formal debt management policy goes beyond debt limits prescribed by commonwealth statute and includes informal targets for debt service-to-budget limits and net-present-value-savings thresholds for refunding transactions. City policy calls for maintaining an unassigned fund balance of at least 15% of the ensuing fiscal year's operating revenue as well as a total general fund balance of at least 25% of the following fiscal year's operating revenue. These policies have been adhered to over the long term and have supported fiscal stability.

Financial performance, reserves, and liquidity

Cambridge's revenue and expenditure profile is predictable, with local property taxes accounting for about 63% of fiscal 2024 operating revenue. Departmental revenue was about 13% and intergovernmental aid was 9%, with investment income and hotel and meals taxes exhibiting strength as well.

Cambridge has continued to use reserves to support capital initiatives while controlling tax rate growth, including a budgeted use of reserves in fiscal 2024 of about $11 million. In fiscal 2024, the transfer into the capital fund was about $18.9 million; however, these appropriations were lower than in previous years. The fiscal 2025 budget totals $956 million, an 8.1% increase over fiscal 2024, with most of the increase in the budget attributable to an increase in compensation, benefits, and retirement liability costs, and management reports no significant variances to date. We expect available fund balance will likely remain more than 30% of expenditures, including the budget stabilization fund, which the city accounts for in committed general fund reserves. The overall reserve profile and $199 million in unused levy capacity (about 21% of fiscal 2025 budgeted operating expenditures) provide budgetary flexibility and stability.

The city is developing the fiscal 2026 budget, aiming to sustain all services and address demands from wages and new positions. The budget will reflect the city's efforts to slow budget growth as new growth from development slows. One of the city's major initiatives is expanded early childhood education, and management has invested in administration and capital needs for the program. The city had created a $10 million stabilization fund to phase in budgetary support for this program, and about $8.5 million of this reserve was used in fiscal 2025. Over the long term, its unfunded retirement liability carrying charges may increase, but we expect it will continue to incorporate these into the annual levy. As management considers future budgets, there is a focus on sustainable budget growth as revenues increase at a slower pace than in the last five years.

Debt and liabilities

Cambridge has about $788 million of total direct debt outstanding, leading to elevated liabilities relative to peers; the city's capital plan calls for issuance of additional debt each year. The city's debt profile is reinforced by a robust debt management policy that calls for 70% of debt to be amortized in 10 years. The city is looking for opportunities to limit debt issuance over the next several years to constrain cost growth and maintain compliance with debt policies, and has already eliminated about $50 million in projected issuance. We do not believe there is likely to be a significant change in our view of the city's debt profile.

Cambridge's large pension and OPEB obligation is a credit weakness, in our opinion. We believe some assumptions used to build the required pension contribution are permissive, which could lead to fluctuating costs. In addition, the adopted funding schedule relies on significant cost escalation to meet a rapid-amortization goal. Cambridge contributes $2 million annually above the OPEB pay-as-you-go cost, and its plan to address these costs relies on full pension plan funding. In the interim, we expect costs will likely continue to increase.

As of June 30, 2024, the city participated in:

- Cambridge Retirement System, which is 87.6% funded, with a $188 million proportionate share of the net pension liability; and
- Cambridge's single-employer, defined-benefit OPEB plan, which is 5% funded, with a $750 million net OPEB liability.

The pension system's discount is 7.1%, above the 6% rate we view as likely to mitigate contribution volatility. The city recently updated the system's funding schedule, which now calls for achievement of full funding by June 2029; however, it will have to balance contributions to maintain full funding. We believe management plans for these costs as part of its long-term financial planning; the high funding ratio could mitigate potential cost volatility. While the OPEB liability decreased during the past year, we expect costs will likely continue to increase, and the liability will remain large.

Table 1

Cambridge, Massachusetts--Credit summary	
Institutional framework (IF)	2
Individual credit profile (ICP)	1.75
Economy	1.0
Financial performance	2
Reserves and liquidity	1
Management	1.00
Debt and liabilities	3.75

Table 2

Cambridge, Massachusetts--Key credit metrics				
	Most recent	2024	2023	2022
Economy				
Real GCP per capita % of U.S.	--	--	--	181
County PCPI % of U.S.	--	--	--	157
Market value ($000s)	--	75,883,595	71,139,913	63,952,954
Market value per capita ($)	--	636,933	597,117	547,847
Top 10 taxpayers % of taxable value	--	31.7	29.8	26.0
County unemployment rate (%)	--	3.4	2.9	3.0
Local median household EBI % of U.S.	--	--	152	151
Local per capita EBI % of U.S.	--	--	174	178
Local population	--	--	119,139	116,735
Financial performance				
Operating fund revenues ($000s)	--	915,114	841,062	761,481
Operating fund expenditures ($000s)	--	831,894	837,062	784,929
Net transfers and other adjustments ($000s)	--	(21,421)	386	339
Operating result ($000s)	--	61,799	4,386	(23,109)
Operating result % of revenues	--	6.8	0.5	(3)
Operating result three-year average %	--	1.4	(1.7)	(3)
Reserves and liquidity				
Available reserves % of operating revenues	--	37.7	33.5	36.8
Available reserves ($000s)	--	344,931	281,626	280,445
Debt and liabilities				
Debt service cost % of revenues	--	8.2	9.3	9.4
Net direct debt per capita ($)	6,616	5,223	4,442	4,380
Net direct debt ($000s)	788,167	622,308	529,266	511,339
Direct debt 10-year amortization (%)	79	81	--	--
Pension and OPEB cost % of revenues	--	7.0	8.0	7.0
NPLs per capita ($)	--	1,579	1,867	24

Table 2

Cambridge, Massachusetts--Key credit metrics (cont.)				
	Most recent	**2024**	**2023**	**2022**
Combined NPLs ($000s)	--	188,107	222,398	2,830

Financial data may reflect analytical adjustments and are sourced from issuer audit reports or other annual disclosures. Economic data is generally sourced from S&P Global Market Intelligence, the Bureau of Labor Statistics, Claritas, and issuer audits and other disclosures. GCP--Gross county product. PCPI--Per capita personal income. EBI--Effective buying income. OPEB--Other postemployment benefits. NPLs--Net pension liabilities.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.spglobal.com/ratings for further information. Complete ratings information is available to RatingsDirect subscribers at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.spglobal.com/ratings.