

CREDIT OPINION

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City of Boston, MA

Update to credit analysis

Summary

Boston's (Aaa stable) strong credit profile benefits from a resilient economy with a healthy mix of industries anchored by significant and world-renowned higher education and healthcare institutions. The city's current economic growth rate of 0.3% is favorable; however, we expect the city's resiliency to be challenged over the next several years. The credit negative impacts of federal policies around tariffs, immigration and federal funding cuts involving the National Institutes of Health (NIH) could result in rising unemployment, a negative economic growth rate and demographic shifts. How the city's economic growth rate compares to US trends and its impact on the city's operating budget will be key considerations in future analysis.

The city's financial position is strong and a mitigant to an expected negative economic cycle, ending fiscal 2024 with an available fund balance ratio of 41% and liquidity ratio of 52%. In response to emerging economic uncertainty, the mayor has proposed a constrained growth budget for fiscal 2026 increasing the operating budget by 2% over fiscal 2025. The city plans to continue to leverage its strong tax base to increase revenue by levying to the statutory limit in 2026 and beyond (see exhibit).

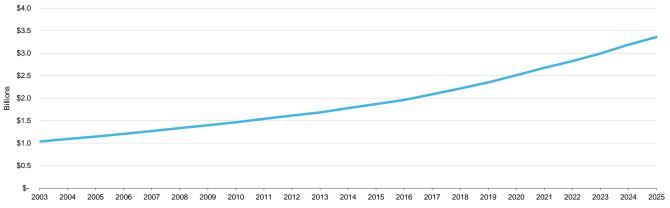
From 2024 to 2025 the commercial tax base value declined by 2.9%, marking the first reduction in value since 2011. Despite expectations that the commercial sector value could continue to decline, the city remains committed to leveraging the tax levy across both the residential and commercial sector as needed. While this commitment is credit positive, significant erosion of commercial assessed values would put increasing pressure on the residential tax burden. As the city navigates through a difficult economic cycle, loss of financial flexibility reflected in inability to grow revenues or erosion of reserves would put downward pressure on the credit profile.

The city ended fiscal 2024 with a favorable long-term liabilities ratio of 167% and a low fixed-costs ratio of 9.3%. It is likely that the city's leverage and fixed costs will remain manageable given a reduction in the five-year capital plan and commitments to make annual contributions towards reducing the large unfunded pension and OPEB liabilities.

Exhibit 1

Boston's property tax levy has increased by an average 5.5% annually since 2003

Boston's property tax levy by fiscal year



Source: Massachusetts Division of Local Services

Credit strengths

- » Strong regional economy
- » High reliance on stable property tax revenue
- » Strong fiscal management including maintenance of healthy reserves and liquidity

Credit challenges

- » High exposure to potential negative economic impacts related to recent federal policy decisions
- » High dependance on commercial sector for property tax revenue
- » Large personnel related costs subject to collective bargaining with strong employee unions

Rating outlook

The stable outlook reflects the city's sound fiscal management that acknowledges the economic uncertainty driven by federal policy decisions. The city remains steadfast in maintaining a strong financial position with a commitment to generating revenue growth through its property tax levy. The city's dependence on property tax, which accounts for 70% of revenue, limits its direct exposure to economic volatility. While we anticipate a slow down in the city's economy, the magnitude of the impact of emerging federal policy changes will have is unclear given ongoing uncertainty around tariff implementation and outstanding legal appeals related to immigration, NIH funding and education.

Factors that could lead to an upgrade

» Not applicable

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Factors that could lead to a downgrade

- » Failure to maintain consistent property tax levy growth in order to keep pace with rising operational expenses
- » Multiyear decline of 10% or more in commercial sector assessed value
- » Decline in the economic growth rate to -1% or lower
- » Decline in available fund balance ratio to less than 30%

Key indicators

Exhibit 2
Boston (City of) MA

	2021	2022	2023	2024	Aaa Medians
Economy					
Resident income ratio (%)	107.8%	105.8%	108.1%	N/A	168.9%
Full Value (\$000)	\$203,894,526	\$203,894,526	\$226,367,657	\$226,367,657	\$9,011,663
Population	672,814	665,945	663,972	N/A	36,103
Full value per capita (\$)	\$303,047	\$306,173	\$340,930	N/A	\$218,941
Annual Growth in Real GDP	7.0%	2.4%	1.5%	N/A	2.4%
Financial Performance		 ,	 ,		
Revenue (\$000)	\$4,165,565	\$4,676,012	\$5,197,869	\$5,610,600	\$108,194
Available fund balance (\$000)	\$1,553,574	\$1,667,128	\$1,997,877	\$2,306,586	\$68,159
Net unrestricted cash (\$000)	\$2,334,067	\$2,795,910	\$3,025,326	\$2,936,129	\$99,090
Available fund balance ratio (%)	37.3%	35.7%	38.4%	41.1%	62.6%
Liquidity ratio (%)	56.0%	59.8%	58.2%	52.3%	95.0%
Leverage				·	
Debt (\$000)	\$1,501,389	\$1,766,477	\$2,027,799	\$2,098,320	\$72,678
Adjusted net pension liabilities (\$000)	\$6,560,441	\$6,015,162	\$3,598,372	\$3,545,414	\$89,696
Adjusted net OPEB liabilities (\$000)	\$3,867,867	\$3,136,196	\$2,967,692	\$3,078,883	\$10,915
Other long-term liabilities (\$000)	\$534,915	\$533,260	\$562,937	\$666,063	\$4,029
Long-term liabilities ratio (%)	299.2%	244.9%	176.2%	167.3%	217.2%
Fixed costs		,			
Implied debt service (\$000)	\$102,208	\$105,307	\$123,370	\$140,862	\$4,949
Pension tread water contribution (\$000)	\$125,089	\$101,173	\$159,316	N/A	\$2,629
OPEB contributions (\$000)	\$170,560	\$172,149	\$167,968	\$183,864	\$594
Implied cost of other long-term liabilities (\$000)	\$35,465	\$37,519	\$37,243	\$39,105	\$274
Fixed-costs ratio (%)	10.4%	8.9%	9.4%	9.3%	10.0%

The real GDP annual growth metric cited above is for the Boston-Cambridge-Newton, MA-NH Metropolitan Statistical Area Metropolitan Statistical Area. For definitions of the metrics in the table above please refer to the <u>US Cities and Counties Methodology</u> 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 <u>US Cities and Counties Median Report</u>.

Sources: US Census Bureau, Boston (City of) MA's financial statements and Moody's Ratings, US Bureau of Economic Analysis

Profile

Boston is the capital and largest city in Massachusetts (Aa1 stable) as well as New England. It has a population of 675,647 (2020 Census) and is New England's principal regional economic center. The city provides governmental services include K-12 public education, public safety, public health, public works, public library system and parks and recreation.

Detailed credit considerations

Economy: Boston's resiliency is expected to be tested over the next few years

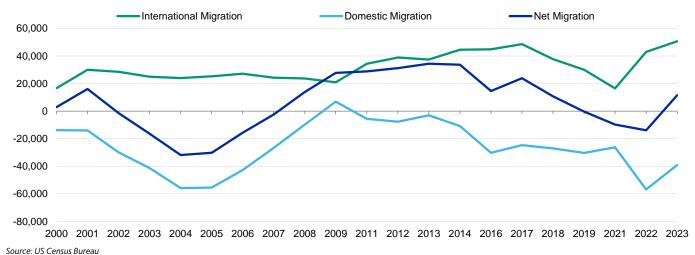
Boston's economy includes a healthy mix of industries anchored by significant and world-renowned higher education and healthcare institutions. The institutional presence in the city contributes to a large life science industry within the city and across the region. The city's current economic growth rate of 0.3% is favorable; however, we expect the city's resiliency to be challenged over the next couple of years. The credit negative impacts of federal policies around tariffs, immigration and federal funding cuts involving the National Institutes of Health (NIH) could result in rising unemployment, a negative economic growth rate and demographic shifts.

An initial economic indicator is the city's unemployment rate that as of December 2024 increased above the nation's rate for the first time since September 2022. The city's March 2025 unemployment rate was 4.5% compared to the Massachusetts and US rates of 5.0% and 4.2%, respectively. The city's foreign-born population represents 26.6% of the city's population and is a material contributor to important economic sectors including services, construction and health care. Many local universities also rely on a significant international student enrollment. Additionally, international migration significantly contributes to mitigating domestic out-migration from the city and state (see exhibit). A trend that could change given current federal immigration policy.

Exhibit 3

Massachusetts relies on international migration to mitigate domestic out-migration

Massachusetts annual migration trend



The city's exposure to the commercial sector's assessed value decline remains a concern. Ongoing valuation declines could lead to increases in residential tax burden to a degree that jeopardizes the city's historically strong commitment to increasing the property tax levy to the levy limit year over year. While 2025 total assessed value increased by 2.5% over 2024 bolstered by growth in all sectors except for commercial, the commercial sector declined by 2.9% driven by large value losses in the office market (see exhibit).

Exhibit 4

Boston's commercial real estate risk is more apparent based on 2025 AV trends
Boston assessed value % changes for commercial sector and office subsectors for 2024 and 2025



Moody's estimates Boston's office subsectors represent around 15% of 2025 total assessed value. Source: City of Boston

Financial operations: prudent use of strong financial resources is key to managing through a negative economic cycle

Boston's financial position is strong. The city maintains very healthy reserves and liquidity, year-over-year structurally balanced operations, and relies on stable property taxes as its primary revenue source (see exhibit). Prudent use of these financial resources is expected to mitigate potential economic challenges over the next few years.

While the city's commitment to increasing the property tax levy is a credit positive, there is potential for the commercial real estate stress to disproportionately increase the residential tax burden. While we view the current tax burden as manageable and in line with peers (see exhibit), ongoing CRE stress could cause the residential tax burden to escalate. In the last five years, fiscal 2020-25 the average single family tax bill has increased annually by an average 9.7% including a 10.4% increase in 2025. We view this dynamic as a potential increasing risk to the city's historical willingness to levy to the tax levy limit. The city has resubmitted a home rule petition to the state legislature to allow for a temporary increase in the commercial tax shift cap. We expect the legislature to consider the petition after the November election. This tool would provide the city the option to maintain its roughly 60/40 tax burden on commercial and residential sectors.

Exhibit 5
Boston's residential tax burden is comparable for the region
Average residential tax bill: Greater Boston Single Family Homes, FY2025



*includes residential property tax exemption Source: City of Boston

In response to emerging economic uncertainty, the mayor's proposed budget reflects a 2% increase in the operating budget. A slower growth rate compared to the average annual budget increase of 5.8% over the last five years. Fiscal 2025 operations are trending favorably with no revenue or expenditure concerns. The city has appropriated \$110 million from budgetary fund balance to create the Housing Accelerator Fund, a reflection of the city addressing social priorities in a material way while maintaining services and long-term liability commitments.

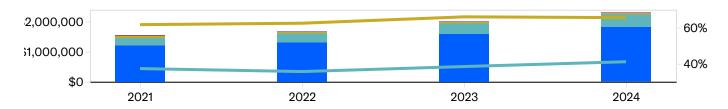
The city's budget forecast is updated in September once the fiscal year budget is finalized. The 2025 forecast reflected budget gaps in 2026 and 2027 of \$25.1 million and \$144.2 million, respectively. We expect the city to close budget gaps that represent less than 3% of 2024 general fund revenues, to be closed as the budget year approaches.

Exhibit 6
Fund Balance has grown both nominally and as a percentage of revenue

General fund(\$000) Other governmental funds(\$000) Internal service funds(\$000)

Business-type activities(\$000) — Available fund balance ratio (%)

Aaa median available fund balance ratio (%)

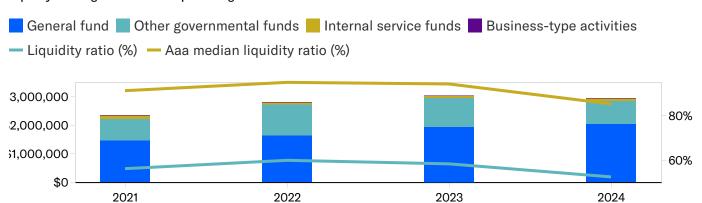


Source: Audited financial statements; Moody's Ratings

Liquidity

The city's unrestricted cash and investments at the end of fiscal 2024 totaled \$2.9 billion equal to a strong 52.82% of revenue. Management does not expect the cash position at the end of fiscal 2025 to be materially different.

Exhibit 7
Liquidity is strong at \$2.9 billion representing 52% of revenue



Source: Moody's Ratings

Leverage: CIP expected to remain affordable and inline with budget expectations while city maintains commitment to funding pension and OPEB

Boston's leverage is average for the highest rating category and will likely remain relatively stable over the next few years given the city's capital plan and ongoing aggressive funding of the pension and OPEB obligations. At the close of fiscal 2024 the city's long-term liabilities totaled \$9.39 billion representing 167.3% of revenue (see exhibit). The city's debt accounts for 22% of the total leverage ratio while adjusted net pension liability and adjusted net OPEB liability represent 38% and 33%, respectively.

Exhibit 8

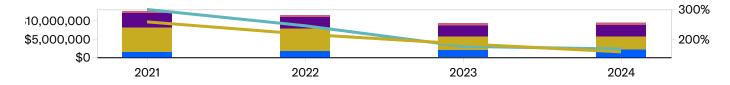
Total Primary Government - Long Term Liabilities

Governmental Debt(\$000) Business-Type Activity Debt(\$000)

Adjusted net pension liabilities(\$000) Adjusted net other post-employment liabilities(\$000)

Other long-term liabilities(\$000) — Long-term liabilities ratio (%)

Aaa median long-term liabilities ratio (%)



Source: Moody's Ratings

The city's proposed fiscal 2026-30 capital plan totals \$4.5 billion, a reduction from last year's \$4.7 billion. The plan continues to prioritize school buildings, city transportation and mobility and climate resiliency efforts. Debt issuance is the largest funding source representing 77.6% of project costs.

Debt-related derivatives

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

Pensions and OPEB

Boston'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 Boston Retirement Plan, a multi-employer defined benefit plan, to which it makes annual required contributions. The latest actuarial report assumes a 6.9% discount rate or assumed return on pension assets, and projects that the plan will be fully funded based on plan assumptions by 2028. The city's annual pension contributions are scheduled to increase by 8.85% annually. The city's teachers participate in the Massachusetts Teachers Retirement System the city's contributions to which are covered by on-behalf payments made by the Commonwealth of Massachusetts.

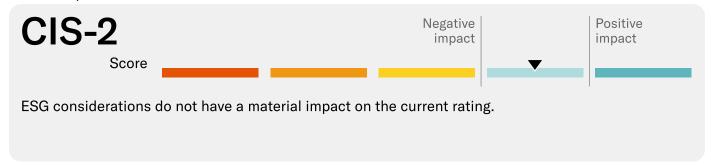
The city funds its OPEB liability on a pay-go basis plus annual budgeted deposits into an OPEB trust. The OPEB plan fiduciary net position is 30.2% of the total OPEB liability as of the end of fiscal 2024, well above most cities with an OPEB liability.

In fiscal 2024 the city's fixed costs (adjusted debt service plus pension and OPEB contributions) totaled 9.3% of revenue, which compares very favorable to fixed costs of other large cities and will likely be stable over the next several years. 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 2027 pension funding date.

ESG considerations

Exhibit 9

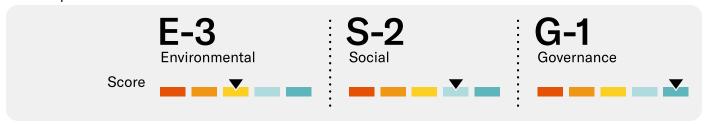
ESG credit impact score



Source: Moody's Ratings

Boston's ESG Credit Impact Score of **CIS-2** reflects elevated exposure to environmental risks, modest exposure to social risks and a very strong governance profile that supports the city's credit rating, resilience and capacity to respond to shocks.

Exhibit 10
ESG issuer profile scores



Source: Moody's Ratings

Environmental

Boston, MA's overall Environmental issuer profile score is **E-3** reflecting moderate physical climate risks associated with the city's geographical location and exposure to sea level rise and weather events including hurricanes. The score also incorporates lower risks associated with carbon transition, natural resources management, waste and pollution. Mitigating factors reflected in the score include the city's very strong underlying economy, robust financial reserves and the Climate Ready Boston initiative which includes long-term capital planning around resilience to climate change.

Social

Boston, MA's social issuer profile score is **S-2** indicating the city benefits from strong educational attainment and access to health and safety given access to world-renowned healthcare institutions. City residents also have access to basic services, and the city benefits from favorable demographics trends. Housing affordability is a growing challenge that the city has prioritized with financial resources and developer incentives.

Governance

Boston, MA's governance issuer profile score is positive, **G-1**. The city benefits from strong institutional structure, budget management and demonstrated policy effectiveness. The city also maintains favorable transparency and disclosure.

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 11
Boston (City of) MA

	Measure	Weight	Score
Economy			
Resident income ratio	108.1%	10.0%	Aa
Full value per capita	364,115	10.0%	Aaa
Economic growth metric	0.3%	10.0%	Aaa
Financial Performance			
Available fund balance ratio	41.1%	20.0%	Aaa
Liquidity ratio	52.3%	10.0%	Aaa
Institutional Framework			
Institutional Framework	Aa	10.0%	Aa
Leverage			
Long-term liabilities ratio	167.3%	20.0%	Aa
Fixed-costs ratio	9.3%	10.0%	Aaa
Notching factors			
No notchings applied			
Scorecard-Indicated Outcome			Aa1
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, Boston (City of) MA's financial statements and Moody's Ratings

Appendix

Exhibit 12 **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 o 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	t	
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	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		
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		

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

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