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Summary:

Massachusetts Boston Housing Authority Massachusetts Bay Transportation Authority; Appropriations; CP; General Obligation; General Obligation Equivalent Security; Sales Tax

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Summary:

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Credit Profile		
US\$850.0 mil GO bnds cons loan ser 2024A due 12/15/2053		
Long Term Rating	AA+/Stable	New
US\$600.0 mil GO rfdg bnds ser 2024B due 12/15/2053		
Long Term Rating	AA+/Stable	New
US\$350.0 mil GO rfdg bnds ser 2024A due 12/15/2053		
Long Term Rating	AA+/Stable	New
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed

Credit Highlights

- S&P Global Ratings assigned its 'AA+' long-term rating to the Commonwealth of Massachusetts' general obligation (GO) bonds consolidated loans of 2024, series A, as well as the commonwealth's GO refunding bonds of 2024, series A and B.
- At the same time, S&P Global Ratings affirmed its 'AA+' rating on the commonwealth's GO debt outstanding as well as on various other bonds secured by annual appropriations from the commonwealth.
- We have also affirmed our 'A+' long-term rating on the Boston Housing Authority's series 2003 housing project bonds (West Broadway Homes IV project), supported by a commonwealth annually appropriated state-operating subsidy, subject to the terms of a trust agreement.
- We have also affirmed our 'AA+' long-term ratings on the Massachusetts Bay Transportation Authority (MBTA)'s sales tax bonds outstanding, along with our 'AA+/A-1+' dual rating on the MBTA's variable-rate demand purchase debt, our 'A-1+' short-term rating on the authority's commercial paper, and our 'AA+' rating on a U.S. Department of Transportation third-lien Railroad Rehabilitation & Improvement Financing (RRIF) loan agreement for the authority's commuter rail safety and resiliency program.
- The outlook on all ratings is stable.

Security

Massachusetts' full faith and credit are pledged to the GO bonds. Proceeds from the 2024 consolidated bonds will fund various capital expenditures authorized in the capital investment plan (CIP). Proceeds from the GO refunding bonds

will refund a portion of the commonwealth's GO debt outstanding.

Credit overview

Our rating on Massachusetts reflects its strong economic metrics, with the second-highest per capita income level in the nation, partly the result of the strong presence of high-technology companies in the Boston metropolitan statistical area (MSA). The rating further reflects some historical cyclicality in financial results due to volatile revenue sources, although recent strong growth in tax collections and federal aid have led to large operating surpluses and reserves, as well as high debt, pension, and other postemployment benefits (OPEB) liabilities, with a history of funding less than full annual actuarial recommendations to its pension and OPEB funds.

Strong revenue growth, combined with extra federal aid and strong budgetary management practices, helped the commonwealth end its last two fiscal years in an extremely strong financial position, with the highest level of reserves in its history. At fiscal year-end June 30, 2022, the budget stabilization fund (BSF) stood at \$6.9 billion, or a strong 12.4% of operating expenditures and other uses on a budgetary basis of accounting (excluding interfund transfers). The trend of adding to its reserves continued in fiscal 2023, with the year ending with a BSF balance of \$7.98 billion, or a strong 13% of budgeted operating expenditures and other uses. The 2024 enacted budget also projects another deposit into the BSF, to end fiscal 2024 at about \$8.75 billion. The commonwealth's most recent preliminary revenue collections summary shows state tax revenue about 4.3% below benchmarked expectations for the fiscal year, based on year-to-date collections for November. However, the most recent consensus revenue hearing held in December 2023, with updated projections for fiscal year 2024, shows marginally declining revenues compared with the previous forecast but 1.1% higher than fiscal 2023 revenues, excluding the impact of projected 4% surtax collections.

Nevertheless, the commonwealth still faces headwinds as very strong revenue performance in previous fiscal years transitions to more subdued revenue estimates across states. Although national recessionary pressures have waned to a more tepid slowdown in growth, when combined with the commonwealth's long-term liabilities that remain among the highest in the nation, and with persistent underfunding of its pensions, this could lead to budgetary pressures as revenue growth softens and tests the commonwealth's commitment to strong BSF levels in the long term. S&P Global Market Intelligence, however, forecasts that real gross state product (GSP) will experience stronger growth than the nation overall through 2026, at 7.14%, compared with the nation's real GDP growth of 6.75%.

S&P Global Ratings' baseline forecast continues to project a growth slowdown, driven in part by real interest rates remaining comparatively higher for the year, leading to higher costs of capital for businesses resulting in slower hiring and capital expenditures. Additionally, while consumer spending has proven resilient, it is expected to moderate and align with real income growth. The U.S. economy is expected to expand by 1.5% in 2024 and 1.4% in 2025, before converging to longer-run sustainable growth of 1.8% in 2026. S&P Global Market Intelligence also expects the national unemployment rate to rise to 4.6% in 2025, higher than the longer-run steady state of 4.0%-4.5%. S&P Global Ratings forecasts sufficient macro momentum to support economic growth in the coming year, but cautions that subdued business investment, alone or together with a consumer spending pullback, could tilt the broader economy into a recession. (For additional information, see "Economic Outlook U.S. Q1 2024: Cooling Off But Not Breaking," published Nov. 27, 2023, on RatingsDirect, and "Credit Conditions North America Q1 2024: A Cluster of Stresses," published Nov. 28, 2023.)

The state enacted its 2024 budget in August, after its June 30 fiscal year-end (using an interim budget in the meanwhile). The enacted 2024 budget reflects a 3.2% increase in tax revenue (excluding new surtax revenue), based on the previously announced revenue estimate of \$40.4 billion. The budget also includes about \$1 billion in surtax revenue, which is proposed to be segregated for education and transportation programs outside of the general funds. The surtax revenue is derived from a new 4% tax, approved by voters in 2022, on tax residents' earnings above \$1 million. The budget sets aside \$580 million for various tax relief initiatives, which were subsequently approved in October 2023 with an estimated revenue impact of \$519 million, including new family and child tax credits and real estate tax relief. The budget provides for a total of \$56 billion in authorized spending, including projected transfers to the Medical Assistance Trust Fund. This represents an increase of 5.1% above the fiscal 2023 budget, including new investments supported by the surtax revenue. Total operating expenditure and uses is expected to increase by 3%, leading to expenses exceeding revenues by about \$1.5 billion, or 2.4% of budget expenditures after adjusting for nonrecurring appropriations. However, the deficits are being funded using prior-year surplus revenues that were previously set aside. The 2024 proposed budget does not anticipate any tax rebates paid for fiscal 2023, as fiscal 2023 revenues did not exceed the allowable limit as defined by Chapter 62F Massachusetts General Laws.

We believe that Massachusetts' economy, with a substantial high-technology sector presence in the Boston MSA, has been a bright spot, with a substantial proportion of highly skilled workers with strong income levels supporting the commonwealth's revenue growth. Although higher than those of the previous year, state year-to-date tax revenues are slightly below those forecast in the fiscal 2024 budget. Nonetheless, strong tax growth is expected to boost the commonwealth's BSF balance, which receives both excess general fund revenue as well as capital gains tax above an annual benchmark, along with certain other lesser revenue sources.

Despite the commonwealth's strong finances and economy, financial risks remain. We believe Massachusetts has an above-average dependence on cyclical capital gains tax revenue, which has benefited from the high stock market but could recede in future years with national economic contraction, thereby pressuring the state's commitment to its financial goals. The state has also had large recent increases in Medicaid enrollment, a potential budgetary concern if the federal government no longer pays the higher Medicaid reimbursement rate it implemented during the pandemic. Other long-term pressures for the commonwealth include its high debt levels and moderately high OPEB, exacerbated by persistent underfunding of its annual actuarial pension contribution, which we believe could significantly increase liabilities. At fiscal year-end 2023, the last audited fiscal year, we calculate the commonwealth had net total tax-backed debt per capita of \$5,954 and 7% of personal income, including tax-supported revenue debt.

Massachusetts has underfunded its actuarially required annual pension contribution over the years. Pension contributions are statutorily determined based on a funding schedule set every three years, and the state has made contributions in accordance with its schedule set in 2023. The latest schedule targets a fully funded retirement system by 2036 by increasing annual contributions by 9.63% per year through 2028, a steep increase that we believe defers current pension pressure to future years. Contribution increases are scheduled at a slower rate of 4% afterward through 2036. The commonwealth has contributed less than its actuarial annually recommended contribution since 2011, funding an estimated 95% (including supplemental contributions) of its annual actuarial recommendation in fiscal 2023, which has contributed to what we consider a relatively low combined three-year average pension-funded ratio, on a Governmental Accounting Standards Board (GASB) basis, of 63%. At fiscal year-end 2022, the

commonwealth's net pension liability (NPL) on a GASB basis was a high \$5,909 per capita, or 7% of state personal income. Net OPEB liability on a GASB basis at fiscal year-end 2022 was also high, at \$1,912 per capita, although the state has made efforts in recent years to prefund a portion of OPEB through a trust fund.

Factors supporting the 'AA+' GO rating include what we view as Massachusetts':

- Deep and diverse economy;
- High income levels, with per capita income at 128% of the nation in 2022, the second-highest among the states;
- History of timely monitoring of revenues and expenditures, and swift action when needed to make adjustments;
- Strong financial, debt, and budget management policies, including annualized formal debt affordability statements and multiyear capital investment planning;
- Strong BSF balance, equal to about 12.8% of expenditures and other uses on a budgetary basis at fiscal year-end 2023; and
- High debt, pension, and OPEB liabilities.

Based on the analytic factors we evaluate for states, on a scale of '1.0' (strongest) to '4.0' (weakest), we have assigned a composite score of '1.8' to Massachusetts, which is consistent with an 'AA+' indicative rating. (For more information, see our full analysis on Massachusetts, published Oct. 6, 2023, on RatingsDirect.)

Environmental, social, and governance

We consider Massachusetts' physical risks moderately negative in our credit rating analysis because of the commonwealth's coastal exposure to rising sea levels, with about two-thirds of its population in the Boston MSA and substantial property value in the combined Boston and Cape Cod area, exposing the state to significant economic disruption following a high-impact event. However, we also note that the commonwealth has been addressing environmental risks since 2004 through its Climate Protection Plan, and has historically maintained a stable management and policy framework to respond to developing risks. We view social and governance risks as neutral in our credit rating analysis.

Outlook

The stable outlook reflects our view that Massachusetts' underlying economy and currently very strong reserves support its rating, despite its economically sensitive revenues and the potential for a nationwide economic slowdown.

Downside scenario

We could downgrade our rating if we believe Massachusetts will fail to make necessary budget adjustments to maintain structural balance or maintain strong reserves if its revenue weakens. Other factors that could lead to a downgrade include significant increases in debt or other fixed costs, or a significant decline in pension-funded levels due to the commonwealth falling significantly behind required pension funding contribution levels.

Upside scenario

If Massachusetts significantly reduces its pension and debt obligation while demonstrating continued commitment to

strong budgetary policies and pension funding discipline, especially during periods of economic contraction, we could raise our rating.

Related Research

• Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of January 3, 2024)		
Massachusetts Bay Transp Auth sales tax		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transp Auth sales tax		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transp Auth CP		
Short Term Rating	A-1+	Affirmed
Massachusetts Bay Transp Auth CP		
Short Term Rating	A-1+	Affirmed
Massachusetts Bay Transp Auth CP		
Short Term Rating	A-1+	Affirmed
Massachusetts Bay Transp Auth CP		
Short Term Rating	A-1+	Affirmed
Massachusetts Bay Transp Auth CP		
Short Term Rating	A-1+	Affirmed
Massachusetts Bay Transp Auth CP		
Short Term Rating	A-1+	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed

Ratings Detail (As Of January 3, 2024) (co	ont.)	
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts GO (AGM)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (AMBAC)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (BAM)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (FGIC)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (MBIA) (National)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts GO (SYNCORA GTY)		
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed

Ratings Detail (As Of January 3, 2024) (cont.)

Boston Housing Authority, Massachusetts		
Massachusetts		
Boston Hsg Auth (Massachusetts) APPROP		
Long Term Rating	A+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mas	sachusetts	
Massachusetts		
Massachusetts Bay Transp Auth sales tax		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) sales ta	Х	
Long Term Rating	AA+/A-1+/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) sales ta	Х	
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQU	JIV	
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQI	JIV	
Long Term Rating	AA+/A-1+/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQU	JIV	
Long Term Rating	AA+/A-1+/Stable	Affirmed
Massachusetts Department of Transportation, Ma	ssachusetts	
Massachusetts		
Massachusetts Dept of Transp (Massachusetts) GO		
Long Term Rating	AA+/A-1+/Stable	Affirmed
Massachusetts Dept of Transp (Massachusetts) GO		
Long Term Rating	AA+/A-1/Stable	Affirmed
Massachusetts Dept of Transp (Massachusetts) GO		
Long Term Rating	AA+/A-1/Stable	Affirmed
Massachusetts Development Finance Agency, Mas	sachusetts	
Massachusetts		
Massachusetts Dev Fin Agy (Massachusetts) GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mas	sachusetts	
Massachusetts		
Massachusetts Bay Transportation Authority, Massachus	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales ta		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mas	sachusetts	
Massachusetts	buchubettb	
Massachusetts Bay Transportation Authority, Massachus	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales ta		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mas		
Massachusetts Bay Transportation Authority, Mas	Juchujenj	
Massachusetts Bay Transportation Authority, Massachus	etts	
massachuseus Day Transportation Authonity, Massachus		

Ratings Detail (As Of January 3, 2024) (cont.)		
Massachusetts Bay Transp Auth (Massachusetts) sales ta	x	
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mass	sachusetts	
Massachusetts		
Massachusetts Bay Transportation Authority, Massachuse	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales ta		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mass	sachusetts	
Massachusetts		
Massachusetts Bay Transportation Authority, Massachuse	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales ta	x	
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mass	sachusetts	
Massachusetts		
Massachusetts Bay Transportation Authority, Massachuse	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales ta	x	
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mass	sachusetts	
Massachusetts		
Massachusetts Bay Transportation Authority, Massachuse	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales ta	x (AGM) (MBIA)	
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts Bay Transportation Authority, Mass	sachusetts	
Massachusetts		
Massachusetts Bay Transportation Authority, Massachuse	etts	
Massachusetts Bay Transp Auth (Massachusetts) sales tax	x (MBIA) (National)	
Unenhanced Rating	AA+(SPUR)/Stable	Affirmed
Massachusetts Department of Transportation, Mas	sachusetts	
Massachusetts		
Metropolitan Highway System, Massachusetts		
Massachusetts Dept of Transp (Massachusetts) GO		
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Department of Transportation, Mas	sachusetts	
Massachusetts		
Metropolitan Highway System, Massachusetts		
Massachusetts Dept of Transp (Metropolitan Hwy Sys) G	0	
Long Term Rating	AA+/Stable	Affirmed
Massachusetts Department of Transportation, Massachusetts		
Massachusetts		
Metropolitan Highway System, Massachusetts		
Massachusetts Dept of Transp (Metropolitan Hwy Sys) G		
Long Term Rating	AA+/Stable	Affirmed

Ratings Detail (As Of January 3, 2024) (cont.)		
Massachusetts Department of Transportation, Massachusetts		
Massachusetts		
Metropolitan Highway System, Massachusetts		
Massachusetts Dept of Transp (Metropolitan Hwy Sys) GO		
Long Term Rating	AA+/Stable	Affirmed
Many issues are enhanced by bond insurance.		

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