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**Summary:**

**Massachusetts; Appropriations; CP;  
General Obligation; General  
Obligation Equivalent Security; Joint  
Criteria**

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## Summary:

# Massachusetts; Appropriations; CP; General Obligation; General Obligation Equivalent Security; Joint Criteria

### Credit Profile

US\$423.51 mil go rfdg bnds ser 2016B due 07/01/2038

*Long Term Rating* AA+/Negative New

US\$250.0 mil go bnds consolidated loan of 2016 Series F (Federally Taxable) due 07/01/2046

*Long Term Rating* AA+/Negative New

Massachusetts GO

*Long Term Rating* AA+/Negative Affirmed

## Rationale

S&P Global Ratings has assigned its 'AA+' rating and negative outlook to the Commonwealth of Massachusetts' \$423.5 million general obligation (GO) refunding bonds of 2016 series B, and its \$250 million GO bonds, consolidated loan of 2016 series F (green bonds-federally taxable).

At the same time, S&P Global Ratings affirmed its 'AA+' rating on the commonwealth's GO bonds, consolidated loan of 2014, series D (multi-modal bonds) subseries D-1 on conversion from a SIFMA index mode to a fixed-rate term mode that will expire July 1, 2020, at which time the bonds will be subject to mandatory tender. S&P Global Ratings also affirmed its 'AA+' rating on the commonwealth's approximately \$20.9 billion of parity GO bonds outstanding, its 'AA' rating Massachusetts' appropriation secured debt, its 'A+' rating on the commonwealth's moral obligation debt, and its 'A-1+' short-term commercial paper rating on Massachusetts. The outlook on all long-term ratings is negative.

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

- Strong historical budget performance, with timely monitoring of revenues and expenditures and swift action when needed to make adjustments, with a focus on structural solutions to budget balance;
- Strong financial, debt, and budget management policies, including annualized formal debt affordability statements, and multiyear capital investment and financial planning;
- Adequate budget stabilization fund (BSF) balance;
- High wealth and income levels; and
- Deep and diverse economy, which continues its steady recovery.

S&P Global Ratings believes the commonwealth's high debt burden and high unfunded pension and other postemployment benefit (OPEB) liabilities are offsetting considerations to the current rating. Although we view Massachusetts' total postretirement liabilities as relatively high, we believe the commonwealth has been actively managing these liabilities with a focus on cost control and reform in recent years.

Massachusetts' economy has recovered steadily, outpacing national and regional trends by most measures. Real state GDP rose 2.1% in 2014, compared with 2.2% for the nation. The commonwealth's average annual unemployment rate in 2015 was 5.0% compared with 5.3% for the nation. The commonwealth's unemployment rate has fallen further to 4.2% as of April 2016, compared with 5.0% for the nation. Employment growth following the financial crisis was strong relative to that of other states and Massachusetts regained its pre-recession employment peak in 2013, according to the Bureau of Labor Statistics. However, IHS Global Insight Inc. forecasts slightly lower state employment growth in 2016, 2017, and 2018 at 1.7%, 1.2%, and 0.9%, respectively, in those years, compared with its forecast of 1.7%, 1.4%, and 1.0% for the U.S. in the same time frame. In our view, Massachusetts' economic fundamentals and key anchors, which center on higher education, technology, and health care, should contribute to continued expansion. Income growth has also been strong compared with that of other states, with Massachusetts' 2015 per capita personal income ranked second in the U.S. behind that of Connecticut, at 128% of the U.S. average.

We believe the commonwealth's budget has generally been structurally balanced in recent years with good reserves, although Massachusetts needed two rounds of midyear budget adjustments in fiscal 2015, primarily prompted by higher-than-budgeted spending and some revenue shortfalls. The commonwealth expects another round of midyear budget adjustments in fiscal 2016 to end the fiscal year in balance. At this point, Massachusetts does not expect to dip into its BSF in fiscal 2016, assuming the midyear adjustments.

The commonwealth currently anticipates fiscal 2016 general fund revenues will be \$320 million-\$370 million short of the revised 2016 budget forecast year-to-date for the fiscal year ending June 30, 2016. As of the end of May 2016, preliminary revenues were \$311 million short of, or 1.2% lower than, Massachusetts' revised tax revenue forecast. The commonwealth expects to make midfiscal 2016 adjustments to fully correct for this modest revenue deficiency, although it is near the end of the fiscal year. Massachusetts represents that it can accomplish most of these as executive actions without the need for legislative approval. Previously, it calculated one-time budget items in the 2016 budget at \$629 million, or only 1.5% of projected expenditures, indicating in our view near structural balance, despite the projected small drawdown in overall reserves. Nevertheless, with expected midyear corrections, we calculate fiscal year-end 2016 will end with operating funds balances, including the BSF, at \$1.3 billion and only 3.2% of budgeted expenditures and other uses, down from 4.0% at fiscal year-end 2015, based on state projections.

Massachusetts has attributed fiscal 2016 revenue shortfalls to legislative spending overrides of Gov. Charlie Baker's budget vetoes, a two-day state sales tax holiday, and lower-than-estimated business and individual income tax revenues because of increased tax refunds and lower-than-expected payments with returns and estimated payments. It has also indicated that fiscal 2016 general fund expenditures are also slightly exceeding budgeted appropriations, both in Medicaid and non-Medicaid areas, although the commonwealth believes that higher federal cost reimbursements will fully offset the increased Medicaid-related expenditures. The governor has proposed a fiscal 2017 budget that further reduces the use of one-time revenues and makes a modest deposit to Massachusetts' rainy-day fund, although overall reserves would still be less than at fiscal year-end 2015 (for more information, see "Massachusetts Governor's Budget Proposal is Mildly Positive," published Feb. 4, 2016, on RatingsDirect). However, the commonwealth now projects revenue in fiscal 2017 will be \$450 million-\$750 million below the consensus revenue forecast used in the governor's executive budget forecast.

At this point, both the state senate and house of representatives have passed separate budget bills. We believe these are largely in line with the governor's overall revenue and expenditure growth recommendations, as well as his proposal to add \$206 million to the BSF, based on Massachusetts' executive budget revenue forecast for capital gains tax and the commonwealth's formula for depositing excess capital gains tax into the BSF. However, based on recent downwardly revised revenue projections, we believe Massachusetts may lower its official capital gains tax projection, which could decrease the amount of BSF build-up in fiscal 2017 when the final budget is enacted.

In 2015, Massachusetts had originally budgeted a drawdown in its BSF, but with the help of two rounds of midfiscal 2015 budget adjustments, the commonwealth produced an operating surplus, of which \$124 million was deposited into the BSF. This was slightly more than the originally budgeted BSF drawdown, producing what we view as a nominal \$4 million increase in the BSF. Combined operating fund balances at fiscal year-end 2015, including the BSF, were \$1.57 billion, or 4.0% of expenditures and other uses. State tax revenues have been at or slightly above budgeted levels in recent years; midyear shortfalls have largely been the result of above-budgeted spending or nontax revenues coming in below budget, in our opinion.

The commonwealth drew down its BSF by \$308 million in fiscal 2014 to end with a total operating fund balance of 3.9% of expenditures, on a budgetary basis. The most recent peak of the BSF was in 2012, when it reached \$1.65 billion, or 4.9% of operating expenditures, and when total operating reserves, including the BSF, reached 5.9%.

On a generally accepted accounting principles (GAAP) basis, Massachusetts ended fiscal 2015 (the most recent audited year) with an available assigned and unassigned general fund balance of \$1.49 billion, plus a BSF balance of \$1.25 billion. This led to a combined balance that we view as strong at 7.5% of general fund expenditures and transfers out, down somewhat from 8.3% at fiscal year-end 2015 and 10.1% at fiscal year-end 2014.

By most measures, we believe Massachusetts' debt burden remains high compared with that of other states. At fiscal year-end 2015, we calculate GO debt of \$20.8 billion and total tax-supported debt of \$34.5 billion, producing total tax-backed debt per capita of \$5,084, and 8.3% of personal income. The commonwealth reports it had \$20.9 billion of GO debt outstanding as of April 30, 2016. Planned debt issuance remains within the parameters of the commonwealth's debt affordability policy and bond cap. A capital and debt affordability committee includes seven voting and eight nonvoting members from the legislature and is charged with formally reviewing the capital investment plan and providing an estimate of debt authorization for each year to stay within certain debt parameters. Massachusetts' current capital plan calls for \$2.19 billion of capital debt issuance in fiscal 2017, similar to the amount in last year's capital plan for fiscal 2016. We calculate fiscal 2015 total tax-backed debt service at 7.7% of general governmental spending, a level we view as moderately high.

Other long-term liabilities are also large, in our opinion. We believe the commonwealth's share of the combined net pension liability for Massachusetts employees' and teachers' retirement systems of \$30.2 billion as of the most recent Jan. 1, 2015, valuation date, or \$4,451 per capita, and 7.3% of personal income, is high. Massachusetts continues to fully fund its actuarial annual determined contribution (ADC) based on its own methodology, which is on a lagged statutory basis; on a GAAP basis, it has not fully funded its ADC since fiscal 2011. A decline in the commonwealth's actuarial pension funded ratio as of the Jan. 1, 2015, actuarial valuation date was in part due to lower actuarial return assumptions and new experience data, which we believe shows conservative management of pension liabilities. In our

opinion, Massachusetts' unfunded OPEB is also moderately high, at \$15.9 billion as of Jan. 1, 2015, net of \$610.0 million of actuarial assets in an OPEB trust fund, or \$2,339 per capita. Massachusetts intends to make payments to the OPEB trust fund with 5% of excess capital gains tax distributed to the BSF (although this requirement was suspended in fiscal 2015), and a portion of tobacco settlement money that increases in 10% increments each year. In fiscal 2016, the incremental tobacco money increase to the OPEB trust was suspended and we expect the commonwealth to contribute 30% of tobacco settlement money, or approximately \$73 million, to the OPEB trust fund, contingent on unexpended debt service appropriations.

The commonwealth estimates that its combined budgetary debt service, pension payments, and OPEB payments will be about 12% of budgeted expenditures in fiscal 2016.

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 '1.9' to Massachusetts.

Although a score of '1.9' is indicative under our criteria of a rating of 'AA', we have notched up the rating to reflect the commonwealth's strong financial management practices, such as timely proactive midyear budget adjustments, and a recent move to more conservative pension investment return assumptions that, while temporarily lowering pension funded ratios, position them better in our opinion.

For more information on the Commonwealth of Massachusetts, please refer to our most recent full analysis published June 7, 2016, on RatingsDirect.

## Outlook

The negative outlook reflects a projected decline in financial reserves in fiscal 2016 from what we view was an adequate level at the end of fiscal 2015, despite a period of economic expansion and generally positive revenue trends, and which follows previous drawdowns in 2013 and 2014. The commonwealth also suspended scheduled transfers of excess capital gains tax revenue to the BSF in fiscal years 2015 and 2016, although the governor has proposed partially resuming such transfer in fiscal 2017. We had viewed the policy of setting aside above-trend capital gains tax during good times as a positive budget management tool that could mitigate potential future budget volatility.

### Downside scenario

Reduction of reserves could contribute to a downgrade over the two-year outlook horizon if we believe that financial flexibility is impaired--especially in light of relatively high fixed costs related to debt and retirement funding.

### Upside scenario

Should Massachusetts reverse the trend of reserve reductions, we could revise the outlook to stable.

## Related Criteria And Research

### Related Criteria

- USPF Criteria: Assigning Issue Credit Ratings Of Operating Entities, May 20, 2015
- Criteria: Use of CreditWatch And Outlooks, Sept. 14, 2009

- USPF Criteria: Debt Statement Analysis, Aug. 22, 2006
- USPF Criteria: Financial Management Assessment, June 27, 2006
- USPF Criteria: State Ratings Methodology, Jan. 3, 2011
- USPF Criteria: Appropriation-Backed Obligations, June 13, 2007
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- USPF Criteria: Commercial Paper, VRDO, And Self-Liquidity, July 3, 2007
- USPF Criteria: Bank Liquidity Facilities, June 22, 2007
- USPF Criteria: Standby Bond Purchase Agreement Automatic Termination Events, April 11, 2008
- Criteria: Toll Road And Bridge Revenue Bonds In The U.S. And Canada, Feb. 25, 2014
- USPF Criteria: Methodology: Definitions And Related Analytic Practices For Covenant And Payment Provisions In U.S. Public Finance Revenue Obligations, Nov. 29, 2011
- USPF Criteria: Methodology: Rating Approach To Obligations With Multiple Revenue Streams, Nov. 29, 2011
- USPF Criteria: Rating Government Department Appropriation-Backed Debt In U.S. Public Finance, Nov. 7, 2007

Ratings Detail (As Of June 24, 2016)		
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts tax exempt comm pap nts ser L due 01/27/2021		
<i>Short Term Rating</i>	A-1+	Affirmed
Massachusetts CP A		
<i>Short Term Rating</i>	A-1+	Affirmed
Massachusetts CP B		
<i>Short Term Rating</i>	A-1+	Affirmed
Massachusetts GO VRDBs - C		
<i>Long Term Rating</i>	AA+/A-1+/Negative	Affirmed
Massachusetts GO VRDBs 2000A		
<i>Long Term Rating</i>	AA+/A-1/Negative	Affirmed
Massachusetts GO VRDBs 2000B		
<i>Long Term Rating</i>	AA+/A-1/Negative	Affirmed
Massachusetts GO VRDBs 2006A		
<i>Long Term Rating</i>	AA+/A-1+/Negative	Affirmed
Massachusetts GO (wrap of insured) (ASSURED GTY & AMBAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
Massachusetts GO (wrap of insured) (FGIC & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
Massachusetts GO (AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
Massachusetts GO (FGIC)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
Massachusetts GO (MBIA) (Assured Gty)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed

Ratings Detail (As Of June 24, 2016) (cont.)		
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
<b>Massachusetts GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
<b>Boston Hsg Auth, Massachusetts</b>		
Massachusetts		
Boston Hsg Auth (Massachusetts) APPROP		
<i>Long Term Rating</i>	A+/Negative	Affirmed
<b>Massachusetts Bay Transp Auth, Massachusetts</b>		
Massachusetts		
Massachusetts Bay Transp Auth (Massachusetts) var rate gen transp sys bnds 2000A-1 & A-2 ser dtd 03/09/2000 RMKTD dtd 09/30/2011 due 03/01/2030		
<i>Long Term Rating</i>	AA+/A-2/Negative	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV		
<i>Long Term Rating</i>	AA+/A-1/Negative	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GO (AGM)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
<b>Massachusetts Bay Transp Auth transp sys bnds (Massachusetts)</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
<b>Massachusetts Bay Transp Auth (Massachusetts)</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Negative	Affirmed
<b>Massachusetts Dept of Transp, Massachusetts</b>		
Massachusetts		
Massachusetts Dept of Transp (Massachusetts) GO		
<i>Long Term Rating</i>	AA+/A-1/Negative	Affirmed
<i>Unenhanced Rating</i>	NR(SPUR)	
Massachusetts Dept of Transp (Massachusetts) GO		
<i>Long Term Rating</i>	AA+/Negative	Affirmed
Massachusetts Dept of Transp (Massachusetts) GO VRDO 2010A-1		
<i>Long Term Rating</i>	AA+/A-1+/Negative	Affirmed
Massachusetts Dept of Transp (Massachusetts) GO VRDO 2010A-2 A-7		

Ratings Detail (As Of June 24, 2016) (cont.)		
Long Term Rating	AA+/A-1	Affirmed
Unenhanced Rating	AA+(SPUR)/Negative	Affirmed
Massachusetts Dept of Transp (Massachusetts) GO VRDO 2010B		
Long Term Rating	AA+/Negative	Affirmed
Massachusetts Dept of Transp (Massachusetts) JOINTCRIT		
Long Term Rating	AA+/A-1	Affirmed
Unenhanced Rating	AA+(SPUR)/Negative	Affirmed
Massachusetts Dept of Transp (Massachusetts) VRDBs 2010A-7		
Long Term Rating	AA+/A-1+/Negative	Affirmed
<b>Massachusetts Dept of Transp, Massachusetts</b>		
Metro Hwy Sys, Massachusetts		
Massachusetts Dept of Transp (Metropolitan Highway System) (VRDO)		
Long Term Rating	AA+/A-1	Affirmed
Unenhanced Rating	A+(SPUR)/Stable	Affirmed
<b>Massachusetts Development Finance Agency, Massachusetts</b>		
Massachusetts		
Massachusetts Dev Fin Agy (Massachusetts) GO		
Long Term Rating	AA+/Negative	Affirmed
<b>Univ of Massachusetts Bldg Auth, Massachusetts</b>		
Massachusetts		
University of Massachusetts Bldg Auth (Massachusetts) GO		
Long Term Rating	AA+/A-2/Negative	Affirmed
Univ of Massachusetts Bldg Auth (Massachusetts) GOEQUIV		
Long Term Rating	AA+/A-1+/Negative	Affirmed

Many issues are enhanced by bond insurance.

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.standardandpoors.com](http://www.standardandpoors.com) for further information. Complete ratings information is available to subscribers of RatingsDirect at [www.globalcreditportal.com](http://www.globalcreditportal.com). All ratings affected by this rating action can be found on the S&P Global Ratings public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.



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