

# RatingsDirect®

---

**Summary:**

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

**Primary Credit Analyst:**

David G Hitchcock, New York (1) 212-438-2022; david.hitchcock@spglobal.com

**Secondary Contact:**

Timothy W Little, Chicago + 1 (212) 438 7999; timothy.little@spglobal.com

### Table Of Contents

---

Rationale

Outlook

## Summary:

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

### Credit Profile

US\$500.0 mil GO bnds consolidated loan ser 2018 E due 09/01/2048		
<i>Long Term Rating</i>	AA/Stable	New
US\$226.31 mil GO rfdg bnds ser 2018 C due 09/01/2032		
<i>Long Term Rating</i>	AA/Stable	New
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed

## Rationale

S&P Global Ratings has assigned its 'AA' rating to the Commonwealth of Massachusetts' \$500 million general obligation (GO) bonds consolidated loan of 2018 series E, and \$226.31 million GO refunding bonds 2018 series C. The outlook is stable.

In addition, S&P Global Ratings has affirmed its 'AA' rating on approximately \$23 billion of parity GO bonds outstanding, and its 'A' rating on Boston Housing Authority housing project bonds, West Broadway Homes IV project, series 2003, supported by a commonwealth annually appropriated state-operating subsidy, subject to the terms of a trust agreement. Finally, S&P Global Ratings has affirmed its 'A-1+' short-term rating on the state's GO-secured commercial paper. The outlook on all long-term ratings is stable.

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

- Deep and diverse economy, which continues to outperform the nation on several economic indicators;
- High income levels, with per capita income at 131% of the nation in 2017;
- 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; and
- Good budget stabilization fund (BSF) balance, equal to an estimated 4.1% of expenditures at fiscal year-end 2018.

Offsetting factors include high debt, pension, and other postemployment benefit (OPEB) liabilities. In particular, the commonwealth has a low 59.5% combined pension-funded ratio and has contributed less to its pension funds than the actuarial annual required contribution (ARC) in every fiscal year since 2011; however, Massachusetts has put in place a plan to increase annual pension contributions 8.9% per year in order to fully amortize unfunded pension liabilities by 2036; furthermore, the \$898 million shortfall against ARC in fiscal 2018, which we view as a structural deficit, is only about 2.0% of estimated budgetary operating expenditures. The commonwealth paid 73% of the ARC in fiscal 2018,

about the same level as the 72% paid in fiscal 2017.

We understand consolidated loan 2018 series E bond proceeds will be used to fund various capital projects included within the commonwealth's five-year capital improvement plan, while the refunding 2018 series C bonds will refund previously issued debt.

Massachusetts' economy has grown steadily in recent years, outpacing national and regional trends by most measures. State personal income rose 3.3% in 2017, rising to 131% of that of the nation (second only to Connecticut) from 130% the year before. The commonwealth's average annual unemployment rate in 2017 was 3.7% compared with 4.4% for the nation. This steady growth has continued into 2018; IHS Markit reports 2.1% private sector job growth for the three months ending May 2018 led by technical services and health care. Massachusetts has an above-average hi-tech employment sector, estimated by IHS Markit at about 10% of state employment, compared to 6.5% for the country as a whole. Following the financial crisis, employment growth was strong relative to that of other states and the commonwealth regained its pre-recession employment peak in 2013, according to the Bureau of Labor Statistics. However, IHS Markit forecasts slightly lower state employment growth in 2018, 2019, and 2020 at 1.3%, 1.2%, and 0.7%, respectively, in those years, compared to its forecast of 1.7%, 1.4%, and 0.8% for the U.S. in those years, respectively. In our view, Massachusetts' economic fundamentals and key anchors, which center on higher education, technology, finance, and health care, should contribute to continued expansion.

The commonwealth has operated with thin operating margins in recent years, despite generally positive revenue trends. As a consequence of revenue coming in below budgeted levels, the state had to make midyear budget adjustments in the three fiscal years 2015-2017 and in essence keep its BSF level after drawdowns in fiscal years 2012-2014. The state originally budgeted for a small operating deficit in fiscal 2018. However, stronger-than-anticipated revenue, particularly capital gains tax, has resulted in an actual estimated \$831.9 million operating surplus in fiscal 2018, or 1.9% of expenditures and other uses. The commonwealth estimates strong fiscal 2018 capital gains taxes will require a net \$462.5 million transfer to its BSF and, along with a deposit of \$30 million from other sources, will bring the total BSF balance to \$1.8 billion, or a good 4.1% of fiscal 2018 operating expenditures, up from 3.1% the year before. The commonwealth has budgeted originally for only a \$66 million transfer to the BSF, the larger estimated figure is primarily the result of capital gains tax well in excess of forecasted levels, which current law directs into the BSF.

Massachusetts was the last state to enact its fiscal 2019 budget in July; however, we do not consider the delay significant from a credit standpoint due to the adoption of a temporary interim budget. The final fiscal 2019 budget projects 2.2% growth in operating funds tax revenue and 2.1% overall growth in total budgeted operating funds revenue and other sources, including federal revenue and transfers in. The fiscal 2019 budget projects 4.0% growth in total budgeted operating expenditures and other uses, including transfers out. The faster growth in expenditures than revenues brings the fiscal 2019 budget to essentially breakeven operations, with a small \$16.6 million operating deficit projected. However, it still allows for a \$368 million transfer into the BSF due to a \$410.8 million reduction in reserved and designated fund balances. If the 2019 budget assumptions are realized, the BSF would rise to \$2.16 billion at fiscal year-end 2019, or a good 4.7% of budgeted operating expenditures, while overall operating funds balances of combined BSF, reserved, designated, and unreserved operating fund balances would remain essentially stable at 4.9%.

In previous years, the commonwealth had transferred less to the BSF than the statutory transfer would have otherwise required as the result of budgets that overrode a formula that transferred excess capital gains tax above a trigger amount to the BSF. As a result, the BSF had basically been held constant since 2014.

Other budgetary pressures for fiscal 2019 and beyond include MassHealth expenses that are rising at a faster rate than revenues and that have been one of main sources of previous midyear budget adjustments. This pressure has been mitigated in part by greater scrutiny of Medicaid eligibility, which has caused Medicaid enrollment member months to decline slightly in fiscal 2018, particularly as adults are moved to the commonwealth's Health Insurance Connector Authority. Additional long-term stresses include a state pension payment schedule that increases annual pension contributions by 8.9% annually, a pace we believe is likely to exceed revenue growth. Although we recognize that Massachusetts has made budgeting its fixed costs a priority, we also view the growth in these areas as placing increased pressure on the commonwealth's ability to maintain structural balance. We calculate that combined fiscal 2018 operating funds debt service, state pension contributions, and OPEB are projected to total \$5.3 billion, or 12% of estimated operating expenditures and other uses. Medicaid is projected to cost an additional \$15.7 billion in fiscal 2018 (36%), while transfers to the commonwealth's Medical Assistance Trust Fund are projected to be \$582.8million.

We do not see the state's active voter initiative process as posing a credit problem for this November's ballot. A citizens' initiative petition for a 4% income tax surcharge on individuals making more than \$1 million per year gathered enough signatures to qualify for the ballot, but was thrown out by the courts for not satisfying state constitutional requirements. Another initiative to lower the sale tax rate to 5.00% from 6.25% had gathered enough signatures to be placed before the legislature, but was not pursued further by the sponsors after the legislature adopted certain business-friendly statutes.

On a generally accepted accounting principles (GAAP) basis, Massachusetts ended fiscal 2017 (the most recent audited year) with an available assigned and unassigned general fund balance of \$1.04 billion, plus a BSF balance of \$1.3 billion. This led to a combined balance of \$2.34 billion, which we view as still good at 5.9% of general fund expenditures and transfers out, but down from 6.7% at fiscal year-end June 30, 2016, and 7.5% at fiscal year-end 2015.

By most measures, we believe Massachusetts' debt burden remains high compared with that of other states. At fiscal year-end 2017, we calculate GO debt of \$22.7 billion and total tax-supported debt of \$37.1 billion, producing total tax-backed debt per capita of \$5,411, and 8.2% of personal income. As of June 30, 2018, the commonwealth had \$23.1 billion of GO debt outstanding. Planned debt issuance remains within the parameters of Massachusetts' 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 improvement plan (CIP) and providing an estimate of debt authorization for each year to stay within certain debt parameters. Massachusetts currently anticipates selling about \$2.34 billion of new capital debt in fiscal 2019, similar to issuance levels in each of the past two years. We calculate fiscal 2017 total tax-backed debt service at 7.2% of general governmental spending on a GAAP audited basis, a level we view as moderately high.

Other long-term liabilities are also large, in our opinion. We believe Massachusetts' share of the net pension liability for combined state pensions systems is high at \$37.3 billion as of the Jan. 1, 2017, valuation date on a Governmental Accounting Standards Board (GASB) 67/68 basis, or \$5,438 per capita, and 8.3% of personal income. The aggregate

funded ratio improved slightly to 59.5% from 57.3% the year before on a GASB basis, but the three-year average declined to 59% from 62% in 2016. A decline in the commonwealth's actuarial pension-funded ratio as of the Jan. 1, 2016, actuarial valuation date was primarily due to Massachusetts' decision to lower assumed actuarial returns to a less aggressive 7.50% in 2016 from 7.75%, after previously lowering it to 7.75% from 8.00% in 2015. Massachusetts sets its annual pension contribution based on its own methodology under state statute; it has not fully funded its ARC since fiscal 2011, but currently plans to increase pension contributions 8.9% per year to fully amortize the unfunded liability by 2036.

In our opinion, Massachusetts' unfunded OPEB is also moderately high, at \$19.4 billion as of Jan. 1, 2017, net of \$817.4 million of actuarial assets in an OPEB trust fund, or \$2,834 per capita. Massachusetts has in recent years made payments to an OPEB trust fund, with the increase in unfunded OPEB from \$16.3 billion the year before; this is primarily attributable to use of a more conservative 3.6% actuarial discount rate. In 2018, the commonwealth originally budgeted to transfer 10% of tobacco settlement revenue, equal to about \$25 million, into its OPEB trust fund. Pending legislation would raise that transfer to 30% of tobacco settlement revenue, or approximately \$73 million, in fiscal 2018.

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, which is consistent with a 'AA' indicative rating.

For more information on the state of Massachusetts, please refer to our most recent full analysis published April 9, 2018, on RatingsDirect.

## **Outlook**

The stable outlook reflects our view that Massachusetts' strong economic growth and proactive management that will allow the commonwealth to continue to manage its budgetary pressures, even if potential midyear budget shortfalls develop. At this point in the economic cycle and at the current rating level, we expect the commonwealth to modestly improve its BSF and maintain good balances to prepare for the next recession. Massachusetts has chosen to budget for essentially breakeven financial operations in fiscal 2019, and we expect it to similarly aim for breakeven operations during our two-year outlook horizon, making midyear budget corrections should revenues turn downward, and to bank a portion of unexpected revenue windfalls in its BSF.

### **Upside scenario**

Should the commonwealth continue to set aside budget reserves during periods of economic growth as a matter of policy, absent rising long-term liability funding pressures, we could raise the rating or revise the outlook.

### **Downside scenario**

The rating could see downward pressure if Massachusetts fails to maintain near-structural balance during periods of economic expansion. Among the factors that could further pressure the rating are Medicaid costs outpacing revenue growth, reduced revenues in recessions due to income tax cyclicity because of the above-average presence of high-tech sector employment, the economic impact of federal tax reform on high tax states, and growing state fixed costs in excess of revenue growth that might lead to significant structural imbalance and greatly diminished reserves. Structural balance could specifically be pressured to the extent that Massachusetts fails to adhere to its current plan to

increase annual pension contributions by 8.9% per year to amortize unfunded pension liabilities or if this proves insufficient to keep GASB pension-funded ratios from materially declining.

Ratings Detail (As Of August 9, 2018)		
Massachusetts CP		
<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		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO VRDB		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts GO VRDB		
<i>Long Term Rating</i>	AA/A-1+/Stable	Affirmed
Massachusetts GO VRDB		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts GO (wrap of insured) (ASSURED GTY & AMBAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (wrap of insured) (FGIC & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (AGM) (SEC MKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (BAM) (SEC MKT)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (FGIC)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
Massachusetts GO (MBIA) (Assured Gty)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed

<b>Ratings Detail (As Of August 9, 2018) (cont.)</b>		
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
<b>Massachusetts GO</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>The Commonwealth Of Massachusetts General Obligation Bonds Consolidated Loan of 2006 Series A</b>		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
<b>Boston Hsg Auth, Massachusetts</b>		
Massachusetts		
Boston Hsg Auth (Massachusetts) APPROP		
<i>Long Term Rating</i>	A/Stable	Affirmed
<b>Massachusetts Bay Transp Auth, Massachusetts</b>		
Massachusetts		
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV RMKTD		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts) GOEQUIV (AGM)		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Massachusetts Bay Transp Auth transp sys bnds (Massachusetts)</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Massachusetts Bay Transp Auth (Massachusetts)</b>		
<i>Unenhanced Rating</i>	AA(SPUR)/Stable	Affirmed
<b>Massachusetts Dept of Transp, Massachusetts</b>		
Massachusetts		
Massachusetts Dept of Transp (Massachusetts) GO		

Ratings Detail (As Of August 9, 2018) (cont.)		
<i>Long Term Rating</i>	AA/Stable	Affirmed
<b>Massachusetts Development Finance Agency, Massachusetts</b>		
Massachusetts		
Massachusetts Dev Fin Agy (Massachusetts) GO		
<i>Long Term Rating</i>	AA/Stable	Affirmed
<b>Univ of Massachusetts Bldg Auth, Massachusetts</b>		
Massachusetts		
University of Massachusetts Bldg Auth (Massachusetts) GOEQUIV		
<i>Long Term Rating</i>	AA/A-1/Stable	Affirmed
Univ of Massachusetts Bldg Auth (Massachusetts) GOEQUIV		
<i>Long Term Rating</i>	AA/A-1+/Stable	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.capitaliq.com](http://www.capitaliq.com). All ratings affected by this rating action can be found on S&P Global Ratings' public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.



Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.