

Massachusetts

Primary Credit Analysts:

Karl Jacob
New York
(1) 212-438-2111
karl_jacob@
standardandpoors.com

Secondary Credit Analysts:

Robin Prunty
New York
(1) 212-438-2081
robin_prunty@
standardandpoors.com

Credit Profile

US\$665. mil GO bnds due 08/01/2038

Long Term Rating	AA/Stable	New
Massachusetts GO		
Long Term Rating	AA/Stable	Affirmed

Rationale

Standard & Poor's Ratings Services has assigned its 'AA' rating with a stable outlook to Massachusetts' \$665 million general obligation (GO) bonds consolidated loan of 2008, series A. At the same time Standard & Poor's affirmed the 'AA' rating and stable outlook on Massachusetts' GO parity bonds.

The rating reflects the commonwealth's:

- Strong reserve levels, which have been rebuilt since fiscal 2004 and provide a cushion in the event of a drop in revenues in the current economic slowdown;
- High income and wealth levels;
- Strong management, with a focus on conservative revenue assumptions; and
- A deep and diverse economy.

The commonwealth's high debt burden and large unfunded pension liability restrain the rating. The rating also reflects the current revenue structure in place to fund budget requirements. Personal income tax revenues account for nearly 60% of total tax revenues in fiscal 2008. An initiative petition will appear on the statewide general election ballot that reduces personal income tax by half in January 2009 and entirely one year later. It must be approved by a majority of voters and the legislature has the option to amend or repeal the petition if it is approved by the voters. If this ballot initiative receives voter approval and is implemented as per the initiative, there could be serious credit implications.

**RatingsDirect
Publication Date**

Aug. 26, 2008

The bonds will be used to refund bonds outstanding and provide \$500 million to support the current capital spending plan.

Massachusetts' financial performance remains strong with good reserves. Following a period during the last recession when reserves were drawn down (although not fully exhausted), balances have been rebuilt. Stabilization balances have grown (on a statutory basis) from \$1.14 billion in fiscal 2004 to \$2.33 billion in fiscal 2007 (8.2% of budgeted revenues and other sources). Contributing to the growth in balances has been a strong economy and conservative revenue assumptions, with actual revenues exceeding forecasts annually since fiscal 2004. The commonwealth estimates fiscal 2008 ending with a \$2.25 billion stabilization balance. A strong reserve position is important, given Massachusetts' dependence on personal income (and related capital gains) taxes, which tend to run up rapidly during economic expansions and dissipate just as quickly when the economy cools. While not yet a strong trend, there is evidence of a slowing of revenues at the tail end of fiscal 2008 and the first month of fiscal 2009. In addition, the current economic forecasts suggest fiscal 2009 tax revenues could be \$400 million below consensus revenue estimates on which the budget was based and there exists a potential increase of \$600 million related to safety net services (health care and subsidized health insurance) that could arise as the slowdown evolves. The administration has outlined a plan to manage the commonwealth's financial exposure.

By most measures, Massachusetts' debt burden remains high. As of July 2, 2008, the commonwealth had about \$15.9 billion of GO debt. Including appropriation, contingent liability, special obligation, and moral obligation debt, total tax-supported debt rises to about \$27.1 billion. Total tax-supported debt includes special obligation gas tax, convention center bonds, and appropriation debt. Also included in the total tax-supported debt is a significant amount of debt for the Massachusetts Bay Transportation Authority sales tax bonds (\$4.34 billion supported by sales tax); and Massachusetts School Building Authority sales tax-backed debt (\$4.2 billion also supported by sales tax). Debt per capita stands at \$4,196 and debt to personal income at 8.5%. The Executive Office for Administration and Finance sets an annual administrative limit on certain types of capital expenditures by state agencies. The state currently has \$4.0 billion of variable-rate debt outstanding, including \$552 million of auction-rate securities.

Massachusetts' economy is deep and diverse. Expansion in the higher education, health care, financial, and service sectors has offset the evolutionary decline in manufacturing. After significant declines in employment in 2002-2003, total nonagricultural employment leveled in 2004 and increased 0.5% in 2005, 1.0% in 2006, and 2.0% in 2007. However, the commonwealth still has 62,000 fewer employees (1.9% less) than in its peak employment of 3.3 million in 2002. The unemployment rate of 4.5% in 2007 was slightly below the national average (4.6%).

While these are positive trends, Massachusetts (like all states) will remain challenged by rising health care costs and ongoing spending pressures for public safety. The commonwealth's overall debt ratios are among the highest of all states. In addition, Massachusetts has authorized about an additional \$11.9 billion in debt over 10 years. While the state adheres to a debt affordability model and an annual bond cap, this still represents a significant increase of authorized unissued debt. Furthermore, recent legislation authorizing the Governor the option of using the commonwealth's appropriation pledge to help the Massachusetts Turnpike refinance \$800 million of debt related to swaps outstanding, if utilized, will drive the debt burden even higher. The unfunded pension liability is large (\$13.35 billion or 75.2% funded) and will not be fully funded until 2023. Beginning with the fiscal 2008 audit, the

commonwealth must report its other postretirement benefit (OPEB) liability. Its accrued OPEB liability as of Jan. 1, 2006, was \$13.287 billion assuming no prefunding of the liability. If prefunded, the liability is significantly reduced to \$7.56 billion.

Standard & Poor's maintains a "strong" Financial Management Assessment (FMA) score for Massachusetts. A "strong" FMA indicates that practices are strong, well embedded, and likely sustainable. Many of the commonwealth's management practices related to debt and financial management are embedded in statute.

Standard & Poor's maintains a Debt Derivative Profile (DDP) overall score of '1.5' on Massachusetts' GO-related swaps. The DDP score is based on a scale of '1' to '4', with '1' representing the lowest risk and '4' the highest. The overall score of '1.5' reflects Standard & Poor's view that the swaps do not pose a significant risk to credit quality.

Outlook

The stable outlook reflects strong revenue trends in recent years, which have eased budget pressures and allowed stabilization reserves to increase to their current strong levels. A solid financial reserve position is an important credit factor for the commonwealth given its existing high debt burden, above-average unfunded pension liabilities, and dependence on personal income (and related capital gains) taxes, which have been volatile during economic cycles. Massachusetts' economy is substantial, with above-average income levels. However, the economy and revenue base have been cyclical over time, which, along with demonstrated prudent management, underscores the importance of maintaining financial reserves.

Finances

Fiscal 2008 results

Preliminary tax revenue collections for fiscal 2008 total \$20.88 billion, an increase of \$1.14 billion, or 5.8%, from fiscal 2007. The rise is attributable in large part to several increases: approximately \$433 million, or 5.0%, in withholding collections; approximately \$389 million, or 18.5%, in income tax estimated payments; approximately \$299 million, or 15.2%, in income tax payments with returns and extensions; approximately \$21 million, or 0.5%, in sales and use tax collections; and \$72 million, or 2.9%, in corporate and business tax collections, which are partially offset by changes in other revenues (net of refunds). The preliminary fiscal 2008 collections are \$655.6 million above the fiscal 2008 consensus tax estimate of \$20.225 billion adjusted for subsequent tax law changes. Of this above-benchmark performance in revenues, \$218 million is due to three one-time settlement payments representing prior years' liabilities received in February and March. Estimated fiscal 2008 results project a \$2.25 billion stabilization balance.

Fiscal 2009 budget

The adopted fiscal 2009 budget authorizes \$28.16 billion in spending. The budget assumes the use of a \$401 million transfer from the Stabilization Fund, suspension of the statutorily required Stabilization Fund deposit equal to 0.5% of fiscal 2009 tax revenues (approximately \$107 million), \$285 million in new tax revenue as a result of the recently passed corporate tax reform legislation, and \$157 million in additional revenues generated through enhanced collection and enforcement measures. The fiscal 2009 budget also relies

on approximately \$174 million in additional revenue from the \$1-per-pack cigarette tax increase that the Governor signed into law on July 1, 2008.

Recognizing the potential exposure to higher energy costs and a slowing economy which could cause state revenues to drop below fiscal 2009 budgeted estimates, Governor Patrick recently outlined a five-point plan to manage state finances through these challenges. The plan recognizes approximately \$503 million in projected deficiencies and assumes approximately \$534 million in revenue exposures. The plan includes imposing spending restraint through veto recommendations, spending and management controls, a new health care reform proposal, capturing departmental revenue that had been recently identified by the administration but not included in the fiscal 2009 budget (\$80 million of which was captured in early August due to a one-time tax settlement), and use of reserves that were generated through a combination of higher-than-projected revenue collections during fiscal 2008 and spending controls that were imposed by the Executive Office for Administration and Finance in April, 2008. Several of the Governor's proposals require legislative approval. For the first month of the fiscal year, July tax revenue increased \$86.8 million, attributable in large part various increases: approximately \$29.3 million, or 5.3%, in withholding collections; approximately \$69.9 million, or 139.6%, in corporate and business tax collections that are partially offset by changes in other revenues (net of refunds); and by the decline of \$18.7 million, or 4.9%, in sales and use tax collections. The July 2008 collections were \$38 million above the July 2008 benchmark, which was based on the fiscal 2009 estimate of \$21.402 billion (consensus fiscal 2009 estimate of \$20.987 billion adjusted for subsequent tax law changes). However, all of the July growth and more than the entire July surplus was accounted for by a corporate settlement payment of \$80 million that was received in July.

Financial Management Assessment: 'Strong'

Standard & Poor's maintains a 'strong': Financial Management Assessment (FMA) score for Massachusetts. A strong FMA indicates that practices are strong, well embedded, and likely sustainable. Many of the commonwealth's management practices related to debt and financial management are embedded in statute.

Highlights include the following:

- Massachusetts uses outside economic forecasting firms to forecast revenues and expenditures.
- The commonwealth provides monthly revenue estimates and quarterly budget reviews.
- The commonwealth provides five-year revenue/expenditure forecasts, which it updates annually and integrates with its capital improvement plan (CIP).
- A five-year CIP (administrative in intent, not binding) is in place that coordinates every facet of debt issuance.
- The commonwealth has detailed and frequently reviewed investment policies managed through the office of the treasurer.
- There are statutory limits on debt issuance. For direct debt, there is a limit allowing the issue of up to 105% of the previous year's limit. There is also a limit on annual debt service of 10% of the then-current year's budget appropriation.
- In addition to the aforementioned statutory requirement, the governor's office adheres to an administrative bond cap, which sets the annual limit on debt issuance.
- The commonwealth targets a 4% net present value savings for refundings.

- The treasurer's office maintains a swap policy that Standard & Poor's has reviewed and considers good.
- The commonwealth has a statutorily established rainy day/stabilization fund that prescribes a mechanism for funding, as well as funding levels.
- Statute requires the deposit of 100% of consolidated net surplus in any given year into the rainy day/stabilization fund. In addition, since fiscal 2004, the commonwealth has deposited 0.5% of the current-year net tax revenues into the fund.
- The statute also provides that the stabilization fund's maximum amount cannot exceed 15% of the current year's revenues. The commonwealth must use any excess above that for tax reduction.

Economy: Sound and Diverse, With Continued Expansion

High-tech industries, financial services, education, and health care drive Massachusetts' diverse and fundamentally sound economy. The combination of research laboratories and venture capital gives the commonwealth a leading edge in emerging industries, such as biotechnology, software, communications equipment, and surgical instruments. The increasing role of services in the economy reflects growth in research laboratories, computer software, management consulting, other business services, and health care.

While Massachusetts' economy is deep and diverse, it has experienced slow job growth since the recession, compared with the rest of the nation. Despite 0.5%, 1.0%, and 1.1% job growth in 2004, 2005 and 2006, respectively, Massachusetts still has 62,000 fewer jobs (negative 1.9%) than at the peak employment pre-recession peak in 2001. On an annual basis, the state's unemployment rate (4.5% in 2007) was slightly below the national average of 4.6%. Massachusetts' recovery is being led by biotech, professional, and business services, as well as health care and higher education. Global Insight projects that, led by rebounds in business service sectors in 2009, Massachusetts will experience only modest job growth (2.2%) between 2009 and 2011. Average employment gains of 0.7% are projected between 2009 and 2014.

With a population of 6.45 million in 2007, Massachusetts is the 13th-largest state based on population. Population growth has been slow but steady, averaging about 1.0% annually in the past decade. The state is highly urbanized and because of its small geographic area, has the third-highest population density of all 50 states. The state's population is concentrated in the eastern portion, with Boston containing 9.3% of the state's population. Income levels are high. Per capita personal income stood at \$49,082 in 2007, about 127% of the nation and third behind only Connecticut and New Jersey.

Debt: High

By most measures, Massachusetts's debt burden remains high. As of July 2, 2008, the commonwealth had about \$15.9 billion of GO debt. Including appropriation, contingent liability, special obligation, and moral obligation debt, total tax-supported debt rises to about \$27.1 billion. Debt per capita stands at \$4,196 and debt to personal income 8.5%. When debt service as a fixed cost is measured against budgeted expenditures and other uses, it is a manageable 5.6% in fiscal 2007. Total tax-supported debt includes a special obligation gas tax (\$620 million), convention center bonds (\$639 million), and appropriation debt (including Plymouth County certificates of participation and Route 3 North and Saltonstall Redevelopment Corp. bonds totaling \$718 million). Also included in the total tax-supported

debt is a significant amount of debt for the Massachusetts Bay Transportation Authority sales tax bonds (\$4.35 billion supported by sales tax); Massachusetts School Building Authority sales tax-backed debt (\$4.18 billion also supported by sales tax); and a moral obligation pledge for approximately \$387 million of Massachusetts Housing bonds. The Executive Office for Administration and Finance sets an annual administrative limit on certain types of capital expenditures by state agencies. The state currently has \$4.0 billion of variable-rate general obligation debt outstanding, including \$552 million of auction-rate securities that are being refinanced with proceeds of this sale. While a significant amount of debt has been recently authorized (\$11.9 billion for life science, higher education, environmental, general, and housing projects, the Executive Office for Administration and Finance sets an annual limit (“bond cap”) on the amount of projects funded with debt. The bond cap amount is tied into a debt affordability model, in which annual borrowings are kept at a limit designed to keep debt service within 8% of budgeted revenues for tax-backed debt (excluding separately secured Massachusetts Bay Transportation Authority and Massachusetts School Building Authority sales tax backed bonds). The bond cap for fiscal 2009 is \$1.625 billion and will increase approximately \$125 million annually through fiscal 2012.

Massachusetts Turnpike

In 2001, the Turnpike Authority entered into certain contracts with UBS AG, giving UBS the right to enter into five separate interest rate swap agreements. The UBS swaptions have an aggregate notional amount of \$800 million and pertain to an equal amount of Turnpike Authority bonds outstanding. Three of the UBS swaptions have been exercised by UBS, with two becoming effective on Jan. 1, 2008, in the aggregate notional amount of \$126,725,000 and a third becoming effective on July 1, 2008, in the notional amount of \$207,665,000. The two remaining UBS swaptions, if exercised on the next possible exercise date, would take effect on Jan. 1, 2009. The Turnpike Authority believes it is likely that UBS will exercise the remaining swaptions if current market conditions continue. These UBS swaptions and related interest rate swap agreements provide for the Turnpike Authority to make fixed-rate payments to UBS and to receive variable-rate payments from UBS. In 2002, the Turnpike Authority also entered into five additional swaptions with Lehman Brothers Special Financing Inc., which mirror the notional amounts and maturities of the swaptions described above and, if exercised, provide for the Turnpike Authority to make variable-rate payments to the counterparty and to receive fixed-rate payments from the counterparty. To date, the Lehman swaptions have not been exercised. It was originally expected in 2001 that if any UBS swaptions were exercised, the Turnpike Authority would refund the related fixed-rate bonds with variable-rate bonds and a commitment for bond insurance was purchased from Ambac Assurance Corporation (Ambac) in 2001 to insure the anticipated refunding bonds. As a result of the recent adverse market conditions in the municipal bond market and the recent downgrades on Ambac, and the Turnpike Authority’s own underlying financial condition and credit ratings, the Turnpike Authority has been unable to date to refund the bonds related to the UBS swaptions that have taken effect. Consequently, it is continuing to pay interest on its fixed-rate bonds outstanding and a synthetic fixed rate to UBS, while receiving only a variable rate on the related UBS swaptions. In addition, the Authority faces a potential termination cost associated with the UBS swaps and swaptions if the credit rating on Ambac were to fall below a certain level and a potential termination cost associated with the Lehman swaptions if the ratings on the Authority’s

bonds were to fall below certain levels. The termination costs of these interest rate swap agreements are based on the market values of the agreements, which have recently exceeded \$200 million in total.

As a result of these circumstances facing the Turnpike Authority, Governor Patrick approved legislation on Aug. 11, 2008, authorizing the Secretary of Administration and Finance, with the approval of the Governor, to provide certain types of credit support for payment obligations of the Turnpike Authority on certain Turnpike bonds and interest rate swap agreements. To address the incremental interest costs being incurred by the Turnpike Authority as a result of its inability to issue the \$334.9 million of variable-rate refunding bonds associated with the UBS swaptions that have been exercised by UBS, the legislation authorizes the commonwealth to agree to pay debt service on such bonds in the event that the Turnpike Authority fails to do so. In addition, if UBS gives notice to the Turnpike Authority that it intends to exercise the two remaining swaptions effective as of Jan. 1, 2009, the legislation authorizes the commonwealth to provide similar credit support for the \$465.1 million of variable-rate refunding bonds the Turnpike Authority would issue in connection with those swaptions. The legislation provides that any payment obligations of the commonwealth pursuant to any such credit support be subject to appropriation by the Legislature and not secured by a pledge of the faith and credit of the commonwealth. To address the increased risk of termination of swaptions in the event of further downgrades on Ambac or on the Turnpike Authority, the legislation also authorizes the commonwealth to guarantee the Turnpike Authority's payment obligations to the counterparties under the swap agreements described above if the Secretary and the Turnpike Authority determine such a guaranty to be necessary to avoid a termination of the swaptions. The Secretary may provide for any payment obligations of the commonwealth pursuant to such a guaranty to be secured by a pledge of the faith and credit of the commonwealth or to be subject to appropriation by the legislature. The authorization to provide any such guaranty of the Turnpike Authority's payment obligations to counterparties under the swap agreements is not effective until Oct. 1, 2008, and expires on Jan. 15, 2009.

Ballot Initiative

On Nov. 4, 2008, an initiative petition will appear in the statewide general election asking voters to reduce the personal income tax for all categories of income in two phases. The first phase would reduce the rate from 5.3% for the tax year beginning on or before Jan. 1, 2009, and eliminate the tax entirely beginning on or before Jan. 1, 2010. This tax is by far the commonwealth's largest revenue source, comprising about 60% of total tax revenues in fiscal 2008. A majority of voters must approve the initiative, and a similar measure failed in 2002. Should this ballot initiative receive voter approval and be implemented, there could be serious credit implications.

Pension Update: Funding Shows Some Improvement

The commonwealth is responsible for payment of pension benefits for commonwealth employees (members of the State Employees' Retirement System) and for local municipal and regional school district teachers throughout the commonwealth. Based on an actuary report, as of Jan. 1, 2007, the unfunded actuarial accrued liability totaled \$13.35 billion (75.2% funded) for the three plans: state employees, teacher retirement, and Boston teachers' retirement systems. While the Jan. 1, 2007, valuation shows a \$1.1 billion improvement in funding from the previous year and progress has been made in the past five years, it still remains well below the 85.2% funded ratio reported based on the

Jan. 1, 2000, actuary report. Breaking down the unfunded liability, the State Employees' Retirement System portion of the unfunded liability was approximately \$3.2 billion. The unfunded actuarial accrued liability for the State Teachers' Retirement System was approximately \$8.5 billion. The Boston teachers' unfunded liability stood at \$1.22 billion. By legislation, the commonwealth must fully fund the pension liability by June 30, 2023. Under the current schedule, the amortization payments to eliminate the unfunded liability increase 4.5% per year.

OPEB

The Government Accounting Standards Board's (GASB) new accounting standards will require the commonwealth to begin disclosing its OPEBs beginning in fiscal 2008. An independent actuarial firm contracted by the commonwealth released an initial valuation report pertaining to the liability for these health care and life insurance benefits in June 2006. The report presented two separate calculations of the commonwealth's OPEB liability, depending on whether the liability would be prefunded in a manner meeting the requirements of GASB Statement 45.

According to the report, assuming no prefunding, the actuarial accrued liability of the commonwealth for OPEB obligations earned through Jan. 1, 2006, is \$13.287 billion. Full amortization of this liability over a 30-year period (using an amortization growth rate of 4.5% per year) would require annual required contributions commencing at \$1.062 billion for fiscal 2006 and increasing to a projected \$2.758 billion in fiscal 2016. However, if prefunding is assumed, the actuarial accrued liability is reduced to \$7.562 billion and the annual required contribution is calculated to commence at \$702.9 million for fiscal 2006 and increase to a projected \$1.205 billion for fiscal 2016. The independent actuarial firm updated these projections on Jan. 24, 2007, for the purpose of providing estimates for the Governor's fiscal 2008 budget recommendations. Assuming prefunding, the annual required contribution was calculated to be \$763.1 million in fiscal 2008, increasing to \$1.223 billion in fiscal 2016. The Jan. 24, 2007, update reported that without the prefunding assumption the commonwealth would be required to record a projected \$1.203 billion expense in fiscal 2008, increasing to \$2.818 billion in fiscal 2016.

In making these calculations, the independent actuarial firm used employment figures and other data provided by the commonwealth and assumed annual claims growth at an initial 10.5%, declining to 5.0% after 10 years, with a continuation of current benefit levels and current retiree contribution requirements. The commonwealth has not yet made any decision as to when or how it will fund the liability. The report covered only the commonwealth's OPEB obligations for commonwealth employees and their survivors. Municipalities and authorities of the commonwealth, even if their health care coverage is administered by the Group Insurance Commission, will perform their own valuations, as the commonwealth acts only as an agent for these entities with respect to OPEBs and does not assume the risk or financial burden of their health care costs.

The difference between the value of prefunded and nonprefunded OPEB liabilities is due to the discount rate used in the calculation. In the absence of prefunding, the discount rate must approximate the commonwealth's rate of return on nonpension (liquid) investments over the long term, estimated at 4.5% for the purpose of this study. In the event of prefunding, the discount rate would increase to a standard return on long-term investments, estimated at 8.25% for the purpose of this study. In order to qualify its OPEB liabilities as prefunded, the commonwealth would have to enact legislation providing for the escrowing of annual contributions in the manner required by GASB 45. GASB 45 requires the

recalculation of OPEB obligations at two-year intervals. Many factors may affect such calculations, such as changing experience and assumptions regarding future health care claims, whether or not the commonwealth enacts legislation that qualifies its OPEB obligations to be calculated on a prefunded basis, changes in the commonwealth’s employee profile, and possibly changes in OPEB coverage levels and retiree contribution requirements. Accordingly, it should be expected that the actuarial accrued liability of the commonwealth for OPEB liabilities could fluctuate.

The fiscal 2008 budget created a State Retiree Benefit Trust Fund. This fund is an irrevocable trust fund created to begin funding the commonwealth’s OPEB liability. For fiscal 2008, the current-year cost of state retiree health benefits will be funded through the new trust fund. The fiscal 2008 budget directed a one-time transfer of \$400 million to support such costs. The fiscal 2008 budget also established a study commission relative to the commonwealth’s OPEB liability.

Debt Derivative Profile: ‘1.5’

The commonwealth is currently entered into 25 interest-rate swap agreements. Following a review of these agreements, Standard & Poor’s has assigned a DDP score of ‘1.5’, with ‘1’ representing the lowest risk and ‘4’ the highest risk. The DDP score of ‘1.5’ indicates that the commonwealth’s hedging program is very low risk and reflects:

- Low counterparty risk, due to highly rated counterparties and collateral posting requirements;
- The strong economic viability of its swap structures over stressful economic cycles, in which the swap floating rate received by the commonwealth from its counterparties approximates the actual floating rates on the bonds, providing a favorable hedge that reduces basis risk; and
- The commonwealth’s formalized swap policy and debt-management policies.

The notional amount of the 13 swaps outstanding is approximately \$3.0 billion. All of the swaps are floating-to-fixed agreements, with good diversification of nine different counterparties. Counterparties include Citibank N.A., New York, NY (AA/Negative/A-1+), Goldman Sachs Mitsui Marine Derivative Products LP (AAA/Stable/—), Merrill Lynch & Co. Inc. (A/Negative/A-1), JP Morgan Chase Bank, N.A. (AA/Negative/A-1+), and Morgan Stanley Derivative Products Inc. (AAA/—/—). Most of the swaps are coterminous with the life of the related bonds, and are therefore long term. All of the floating-to-fixed swaps are structured as cost-of-funds swaps in order to reduce basis risk, including the CPI bonds. The commonwealth is not required to post collateral under any of the agreements. There is limited involuntary termination risk under the swaps due to broad ratings trigger spreads with several of the swaps. Standard & Poor’s is not factoring in the value at risk as a contingent liability because termination is remote. The commonwealth extensively monitors and reports on its swap exposure.

<i>Ratings Detail (As Of 26-Aug-2008) (cont.'d)</i>		
Massachusetts GO bnds cons loan of 2006 (var rate demand bnds) ser A		
<i>Long Term Rating</i>	AA/A-1+/Stable	Affirmed
Massachusetts GO bnds cons loan of 2006 (var rate demand bnds) ser B		
<i>Long Term Rating</i>	AA/A-1+/Stable	Affirmed
Massachusetts GO var rate 2000a		
<i>Long Term Rating</i>	AA/A-1+/Stable	Affirmed

Ratings Detail (As Of 26-Aug-2008) (cont. 'd)		
Massachusetts GO var rate 2000 B		
Long Term Rating	AA/A-1+/Stable	Affirmed
Massachusetts GO var rate 2001 C		
Long Term Rating	AA/A-1+/Stable	Affirmed
Massachusetts GO var rate 2005 A		
Long Term Rating	AA/A-1+/Stable	Affirmed
Massachusetts GO var rate 2001 B		
Long Term Rating	AA/A-1+/Stable	Affirmed
Massachusetts GO		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Boston Metro Dist, Massachusetts		
Massachusetts		
Boston Metro Dist (Massachusetts) GO		
Long Term Rating	AA/Stable	Affirmed
Massachusetts Bay Transp Auth, Massachusetts		
Massachusetts		
Massachusetts Bay Transp Auth transp sys bnds (Massachusetts)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Massachusetts Bay Transp Auth (Massachusetts)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
University of Massachusetts Bldg Auth, Massachusetts		
Massachusetts		
University of Massachusetts Bldg Auth (Massachusetts)		
Long Term Rating	AA/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	
University of Massachusetts Bldg Auth (Massachusetts) GO		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed

Many issues are enhanced by bond insurance.

Published by Standard & Poor's, a Division of The McGraw-Hill Companies, Inc. Executive offices: 1221 Avenue of the Americas, New York, NY 10020. Editorial offices: 55 Water Street, New York, NY 10041. Subscriber services: (1) 212-438-7280. Copyright 2008 by The McGraw-Hill Companies, Inc. Reproduction in whole or in part prohibited except by permission. All rights reserved. Information has been obtained by Standard & Poor's from sources believed to be reliable. However, because of the possibility of human or mechanical error by our sources, Standard & Poor's or others, Standard & Poor's does not guarantee the accuracy, adequacy, or completeness of any information and is not responsible for any errors or omissions or the result obtained from the use of such information. Ratings are statements of opinion, not statements of fact or recommendations to buy, hold, or sell any securities.

Standard & Poor's uses billing and contact data collected from subscribers for billing and order fulfillment purposes, and occasionally to inform subscribers about products or services from Standard & Poor's, our parent, The McGraw-Hill Companies, and reputable third parties that may be of interest to them. All subscriber billing and contact data collected is stored in a secure database in the U.S. and access is limited to authorized persons. If you would prefer not to have your information used as outlined in this notice, if you wish to review your information for accuracy, or for more information on our privacy practices, please call us at (1) 800-852-1641 or write us at: privacy@standardandpoors.com. For more information about The McGraw-Hill Companies Privacy Policy please visit www.mcgraw-hill.com/privacy.html.

Analytic services provided by Standard & Poor's Ratings Services ("Ratings Services") are the result of separate activities designed to preserve the independence and objectivity of ratings opinions. Credit ratings issued by Ratings Services are solely statements of opinion and not statements of fact or recommendations to purchase, hold, or sell any securities or make any other investment decisions. Accordingly, any user of credit ratings issued by Ratings Services should not rely on any such ratings or other opinion issued by Ratings Services in making any investment decision. Ratings are based on information received by Ratings Services. Other divisions of Standard & Poor's may have information that is not available to Ratings Services. Standard & Poor's has established policies and procedures to maintain the confidentiality of non-public information received during the ratings process.

Ratings Services receives compensation for its ratings. Such compensation is normally paid either by the issuers of such securities or by the underwriters participating in the distribution thereof. The fees generally vary from US\$2,000 to over US\$1,500,000. While Standard & Poor's reserves the right to disseminate the rating, it receives no payment for doing so, except for subscriptions to its publications.

Permissions: To reprint, translate, or quote Standard & Poor's publications, contact: Client Services, 55 Water Street, New York, NY 10041; (1) 212-438-7280; or by e-mail to: research_request@standardandpoors.com.