FitchRatings

RATING ACTION COMMENTARY

Fitch Assigns 'AA+'to \$1.4B Massachusetts GO Bonds; Outlook Stable

Wed 03 Jun. 2020 - 4:28 PM ET

Fitch Ratings - New York - 03 Jun 2020: Fitch Ratings has assigned a 'AA+' rating to approximately \$1.4 billion in Commonwealth of Massachusetts general obligation (GO) bonds, consisting of:

- --\$175,000,000 GO refunding bonds, 2020 series A (multi-modal bonds);
- --\$500,000,000 GO bonds, consolidated loan of 2020, series D;
- --\$750,000,000 GO refunding bonds, 2020 series B.

The par amounts for both series of refunding bonds are subject to change pending final sale.

The 2020 series A multi-modal GO refunding bonds will be offered by negotiated sale the week of June 8, 2020. The 2020 series D GO bonds and the 2020 series B GO refunding bonds will be offered by negotiated sale the week of June 22, 2020.

In addition, Fitch has affirmed the Commonwealth's long-term Issuer Default Rating (IDR) at 'AA+' and the long-term and short-term ratings on GO and other bonds linked to the IDR of the state as detailed at the end of this release.

The Rating Outlook is Stable.

SECURITY

The GO bonds are general obligations of the Commonwealth, to which its full faith and credit are pledged. A statutory state tax revenue growth limit does not exclude principal and interest on debt obligations from the limit.

ANALYTICAL CONCLUSION

The 'AA+' IDR on the Commonwealth of Massachusetts is linked to its considerable economic resources, strong budget controls and a record of careful financial management. The Commonwealth carries a long-term liability burden that is well above average for a U.S. state but remains a moderate burden on resources. The Stable Outlook on the long-term ratings reflects the expectation that the Commonwealth will continue to act as needed to ensure budget balance and maintain an adequate reserve position.

ECONOMIC RESOURCE BASE

The Commonwealth has a broad and diverse economy. Education levels are high, and although population growth is below the U.S. average, it continues to lead the region. Economic fundamentals include significant strength in the health care, technology and education sectors, leaving it well positioned for solid gains going forward. Measured by per capita personal income, Massachusetts is the second wealthiest state in the nation. Economic performance in the expansion that followed the Great Recession was strong, with solid employment growth.

KEY RATING DRIVERS

6/3/2020

Revenue Framework: 'aaa'

Tax revenues, while diverse, are dominated by individual income taxes, which are sensitive to economic conditions, particularly those related to capital gains. Baseline growth prospects for taxes are strong, driven by the Commonwealth's solid economic fundamentals.

Expenditure Framework: 'aaa'

Consistent with most states, the natural pace of spending growth is expected to marginally exceed expected revenue growth over time, requiring ongoing cost control. The Commonwealth has ample ability to reduce spending throughout the economic cycle.

Long-Term Liability Burden: 'aa'

Liability levels in Massachusetts, while high for a U.S. state, are a moderate burden on resources. The Commonwealth's above-average liability position is partly the result of state funding for needs that are more commonly funded at the local level.

Operating Performance: 'aaa'

The Commonwealth has exceptional fiscal resilience, with strong gap-closing capacity stemming from a practice of building solid reserve balances and making revenue and spending changes as needed in response to changing circumstances. Conservative budgeting, ongoing economic and revenue monitoring, and mechanisms to protect the general fund from economically sensitive individual income tax and judgment and settlement receipts, support the Commonwealth's fiscal flexibility.

RATING SENSITIVITIES

Factors that could, individually or collectively, lead to positive rating act ion/upgrade:

--A sustained reduction in the long-term liability burden accompanied by a reduction in carrying costs.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

- --Evidence that the Commonwealth is challenged in addressing the fiscal impact of the short but severe downturn expected under Fitch's coronavirus baseline scenario:
- --An economic decline that is more severe and prolonged, corresponding to Fitch's downside scenario, and that leads to lower financial resilience relative to cyclical economic and revenue performance;
- --Deterioration of strong financial management practices that have preserved budgetary flexibility and enabled it to manage its relatively high long-term liability position.

BEST/WORST CASE RATING SCENARIO

International scale credit ratings of Public Finance issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit https://www.fitchrat ings.com/site/re/10111579.

CURRENT DEVELOPMENTS

Sector-WideCoronavirus Implications

The recent outbreak of the coronavirus and related government containment measures worldwide creates an uncertain global environment for U.S. state and local governments and related entities in the near term. As severe limitations on economic activity only began very recently, most state governments' fiscal and economic data do not reflect any credit impairment. Material changes in revenues and expenditures are occurring across the country and likely to worsen in the coming weeks and months as economic activity suffers and public health spending increases. Fitch's ratings are forward looking, and Fitch will monitor developments in state and local governments as a result of the virus outbreak as it relates to severity and duration, and incorporate revised expectations for future performance and assessment of key risks.

In its baseline scenario, Fitch assumes sharp economic contractions hit major economies in the first half of 2020 at a speed and depth that is unprecedented since World War 11. Recovery begins from the third quarter of 2020 onward as the health crisis subsides after a short but severe global recession. GDP remains below its fourth quarter 2019 level until mid-2022. Additional details, including key assumptions and implications of the baseline scenario and a downside scenario, are described in the April 2020 report 'Fitch Ratings Coronavirus Scenarios: Baseline and Downside Cases- Update' and 'Fitch Ratings Updates Coronavirus Scenarios for US. State and Local Tax-Supported Issuers' on www.fitchratings.com.

Federal Aid Provides Some Support for State Budgets

Federal aid measures enacted since the pandemic began are benefiting state budgets. The Families First Coronavirus Response included a 6.2% increase in the Federal Medical Assistance Percentage (FMAP) for Medicaid for every quarter of the national emergency declared by the president on March 13. FMAP is the rate at which the federal government reimburses states for Medicaid spending.

Massachusetts estimates it will receive \$530 million under this provision during fiscal 2020, corresponding to two quarters of the national emergency. The ultimate value of the FMAP rate increase will depend primarily on the Commonwealth's actual Medicaid spending.

Under the Coronavirus Aid, Relief and Economic Security (CARES) Act, the U.S. Treasury department distributed \$150 billion to state and local governments using a population-based formula. The statute limits the use of funds to coronavirus expense reimbursement rather than to offset state tax revenue losses.

Massachusetts and its eligible local governments (with a population of 500,000 or

more) received almost \$2.7 billion from the U.S. Treasury, with almost \$2.6 billion flowing directly to the state.

CARES also provides for supplemental federal aid for local school districts, passed through state departments of education with the Elementary and Secondary School Emergency Relief Fund (ESSER). The act allocates \$215 million to Massachusetts, with a minimum of approximately \$193 million designated for local school districts, all to be spent within one year of receipt for a fairly broad set of allowable uses.

The Federal Reserve's \$500 billion Municipal Liquidity Facility (MLF) provides a potential source of short-term liquidity for state and local governments. Under the MLF, the Federal Reserve Bank will set up a special purpose vehicle to directly purchase short-term debt issued by states, the District of Columbia and the largest counties and cities. Under terms of the program, Massachusetts could borrow over \$7.8 billion to address cash flow needs, although it is still assessing the program and whether it could be used to meet liquidity needs.

Coronavirus - Massachusetts Liquidity Impacts

Fitch anticipates that Massachusetts, consistent with all states, will address short-term liquidity pressure with no interruption in timely payments for key operating expenses, including debt service. Massachusetts extended its deadline for filing individual income tax returns to July 15, in step with the federal filing delay, which has delayed collection of final income tax payments for the 2019 tax year. April receipts from the non-withholdingcomponents of the tax were nearly \$1.9 billion below the benchmark, much of which will likely be collected in July. A range of other taxpayer relief measures affecting corporate taxes, sales and use tax, motor vehicle-related taxes and fees and other receipts were announced, but their impact on liquidity appears far more limited to date. The state plans on accruing deferred individual income tax receipts back into fiscal 2020.

Although fiscal 2020 operating cash is being affected by the tax filing delays noted above and the initial revenue impact of the economic shock, the Commonwealth has solid cash balances and has put in place measures to augment existing liquidity through fiscal 2021, if needed. The Commonwealth had \$3.4 billion in non-segregated operating cash available as of Jan. 31,2020, its last update, and another \$3.4 billion in the stabilization fund, the Commonwealth's budget reserve. It issued \$1.4 billion in revenue anticipation notes (RANs) for fiscal 2020 cash needs, with

two of three maturities, \$500 million each in April and May, already paid and the final \$400 million maturity payable in June.

For liquidity needs going forward, the Commonwealth entered into a line of credit agreement with a syndicate of banks in May to provide up to \$1.75 billion, due no later than May 10, 2021, the expiration date; to date, no funds have been drawn. The legislature also authorized the issuance of cash flow notes during fiscal 2020 that mature no later than June 30, 2021. Based on expected cash needs, issuance could move forward as early as mid-June.

Coronavirus - Massachusetts Budgetary Update

Beyond the initial liquidity impact of the coronavirus shock, the emerging recession is likely to have a severe impact on the Commonwealth's budgetary framework; however Fitch views it as being well-positioned to absorb near-term fiscal uncertainty.

The Commonwealth's operating performance was solid in the years leading up to the pandemic, and tax collections in fiscal 2020 had continued this solid trend through most of the fiscal year. Given coronavirus-related tax-filing deferrals and the initial impact of the lockdowns on economic activity, total tax collections YTD through April are 6% below the prior year and 7.7% below benchmark. The variance is largely due to individual income tax collections, which are 11.5% below the prior year driven by the non-withholdingcomponent of receipts; withholding receipts year-to-date through April remained 4% over the prior year level. Sales tax collections YTD through April were 3.4% over the prior year, but 2.9% below benchmark. Collections in April were down sharply, driven by the meals and motor vehicle components of the tax, although collection lags from vendors suggests declines in May will be more severe.

The Commonwealth has not updated its formal consensus tax revenue forecast for fiscal 2020 and 2021 to reflect the pandemic and emerging recession but has modified expectations for some non-tax revenues and is expected to further refine its revenue outlook as it deliberates on the fiscal 2021 budget. As of the January consensus, the Commonwealth forecasted fiscal 2020 and 2021 tax collections rising 1.8% and 2.8%, respectively, to \$30.3 billion (in fiscal 2020) and \$31.2 billion (infiscal 2021.

Federal aid in fiscal 2020 is now expected to be \$1.3 billion higher due to pandemic-related funding, including the FMAP increase. The governor has filed a bill appropriating \$1 billion for supplemental spending in fiscal 2020 related to the coronavirus response. The Commonwealth's revised expenditure estimates before interfund transfers are nowforecasted to rise 6.9%, which assumes \$1 billion in additional spending in health and human services, primarily Medicaid.

Massachusetts' credit quality has been supported by its adroit management of economic and revenue cyclicality, and Fitch's rating assumes the Commonwealth maintains this approach despite the magnitude of uncertainties it faces in fiscal 2021. Massachusetts has noted potential fiscal 2021 pandemic-related tax revenue gaps ranging from \$2 billion to \$8 billion off the January consensus, based on legislative and outside groups' estimates. Budget agreement for fiscal 2021, which begins on July 1, is likely to be delayed into the new fiscal year, although the Commonwealth routinely passes interim budgets to authorize continued spending until budget consensus is finalized. Fitch expects the Commonwealth will ultimately reach consensus on a plan that matches spending to available revenues while maintaining sufficient flexibility to absorb further weakness.

FAST Scenario Analysis

The Fitch Analytical Stress Test (FAST) scenario analysis tool, which relates historical tax revenue volatility to GDP to support the assessment of operating performance under Fitch's criteria, has now been adjusted to reflect GDP parameters consistent with Fitch's global coronavirus forecast assumptions. FAST is not a forecast, but it represents Fitch's estimate of possible revenue behavior in an unaddressed downturn scenario based on historical revenue performance, providing a relative sense of a state's risk exposure related to other states. Actual revenue declines will vary from FAST results.

Massachusetts has robust financial resilience that should allow it to absorb the budgetary effects of Fitch's coronavirus baseline scenario and ultimately rebuild that resilience through the eventual recovery period, despite an above-average exposure to economic cyclicality. The coronavirus baseline scenario results in a first-year revenue decline of 23.3%, followed by a 10.3% increase and cumulative result over the three-year scenario of an 11.5% decline. This compares to the state median declines of 16.6% in the first year and 8.7% over the three-year scenario. A downside scenario would pose more of a challenge to the Commonwealth's financial resilience, with a first year decline 40%, and a cumulative three-year decline of 28%, weaker

than the median 20.6% decline for all states, consistent with its greater historical susceptibility to national economic downturns.

CREDIT PROFILE

Massachusetts' 'AA+' IDR reflects its solid credit attributes. The Commonwealth's dynamic, service-oriented economy, anchored by numerous institutions of higher education and health care, has solid growth prospects despite remaining sensitive to national trends. Tax-supported debt and net pension liabilities, recalculated based on a 6% discount rate, are high for a state but represent only a moderate burden on resources. The comparatively high debt level is partly explained by the Commonwealth's role in funding local capital needs.

Fitch believes the Commonwealth retains a high capacity to address cyclical downturns and operating under-performance and has repeatedly demonstrated its commitment to maintaining a solid financial posit ion. Sources of fiscal flexibility include the balance in the stabilization fund, which has reached \$3.4 billion as of fiscal 2019. Budgetary mechanisms shift cyclical windfalls from volatile capital gains-related individual income tax receipts and judgment and settlement payments to the stabilization fund. Moreover, in the event of a mid-year forecast deficiency, the governor is required to reduce allotments or identify other balancing measures.

For additional information on the Commonwealth of Massachusetts, please see Fitch's rating action commentary, "Fitch Rates Massachusetts' \$650MM GO Bonds 'AA+'; Affirms IDR at 'AA+'; Rating Outlook Stable", dated Feb. 11, 2020, at www.fitchrat ings.com.

Related Affirmations

Fitch affirms the ratings on the Commonwealth's GO and GO-linked bonds of the Commonwealth as follows:

- --Approximately \$24.1 billion in GO bonds at 'AA+';
- --Approximately \$182 million in Massachusetts Development Finance Agency (MDFA) special obligation bonds (Commonwealth contract assistance) at 'AA+';

- --Approximately \$178 million in Commonwealth guaranteed bonds, issued by the University of Massachusetts Building Authority (UMBA) and the MBTA, at 'AA+';
- --Approximately \$94 million in UMBA (Commonwealth Guaranteed) refunding revenue bonds, series 2011-2 at 'AA+'/'F1+';
- --Approximately \$772 million in Massachusetts Department of Transportation (MassDOT) metropolitan highway system (MHS) revenue bonds (subordinate), Commonwealth contract assistance secured at AA+.

The Rating Outlook on the long-term ratings is Stable.

The long-term GO bonds carry the Commonwealth's full faith and credit pledge.

For the Commonwealth contract assistance bonds issued by MDFA and Commonwealth guaranteed bonds issued by UMBA and MBTA, the Commonwealth's obligation under the contract to make payments equal to debt service is a general obligation of the Commonwealth, to which its full faith and credit are pledged.

The short-term 'F1+' rating on the UMBA series 2011-2 bonds is based on the long-term 'AA+' rating of the Commonwealth.

For the MassDOT MHS subordinate revenue bonds, the Commonwealth's annual fixed, dedicated payments are a full faith and credit obligation of the Commonwealth and are expected to cover all subordinated debt service, linking the rating to the 'AA +' rating of the Commonwealth, rather than to the MHS toll revenues, which are also pledged to the bonds on a subordinated basis. Although about half of outstanding debt is variable rate and thus exposed to potential, though unlikely, risks associated with variable rate debt, Fitch expects that MassDOT would work with the commonwealth if necessary to ensure that the annual payments are sufficient for debt service.

CRITERIA VARIATION

There were no criteria variations.

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG CONSIDERATIONS

The highest level of ESG credit relevance, if present, is a score of 3. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity(ies), either due to their nature or to the way in which they are being managed by the entity(ies). For more information on Fitch's ESG Relevance Scores, visit www.fitchrat_ings.com/esg.

RATING ACTIONS

ENTITY/DEBT	RATIN	G	
Massachusetts, Commonwealth of	LT IDR	AA+	Affirmed
(MA) [General			
Government]			
 Massachusetts 	LT	AA+	Affirmed
Turnpike			
Authority			
Metropolitan			
Highway System			
(MA)/Metro			
Highway System			
Revenues-			
Subordinated			
Obligations/1 LT			

VIEW ADDITIONAL RATING DETAILS

FITCH RATINGS ANALYSTS

Douglas Offerman

Senior Director

Primary Rating Analyst

+1212 908 0889

Fitch Ratings, Inc. Hearst Tower 300 W. 57th Street New York 10019

Kevin Dolan

Director

Secondary Rating Analyst

+1212 908 0538

Karen Krop

Senior Director

Committee Chairperson

+1212 908 0661

MEDIA CONTACTS

Sandro Scenga

New York

+1212 908 0278

sandro.scenga@thefi tchgroup.com

Additional information is available on www.fitchratings.com

APPLICABLE CRITERIA

U.S. Public Finance Tax-Supported Rating Criteria (pub. 27 Mar 2020) (including rating assumption sensitivity)

APPLICABLE MODELS

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

FAST States & Locals - Fitch Analytical Stress Test Model, v2.4.0 (1)

ADDITIONAL DISCLOSURES

Dodd-Frank Rating Information Disclosure Form

Solicitation Status

Endorsement Policy

ENDORSEMENT STATUS

Massachusetts Bay Transportation Authority (MA) EU Endorsed
Massachusetts Department of Transportation (MA) EU Endorsed
Massachusetts Development Finance Agency EU Endorsed
M assachusett s, Commonwealth Of (MA) EU Endorsed
University of Massachusetts Building Authority (MA) EU Endorsed

DISCLAIMER

ALL FITCH CREDIT RATINGS ARE SUBJECT TO CERTAIN LIMITATIONS AND DISCLAIMERS. PLEASE READ THESE LIMITATIONS AND DISCLAIMERS BY FOLLOWING THIS LINK:

HTTPS://WW W.FITCHRATINGS.COM/UNDERSTANDINGCREDITRATINGS.IN ADDITION, THE FOLLOWING HTIPS://WWW.FITCHRATINGS.COM/RATING-DEFINITIONS-DOCUMENT DETAILS FITCH'S RATING DEFINITIONS FOR EACH RATING SCALE AND RATING CATEGORIES, INCLUDING DEFINITIONS RELATING TO DEFAULT. PUBLISHED RATINGS, CRITERIA, AND METHODOLOGIES ARE AVAILABLE FROM THIS SITE AT ALL TIMES. FITCH'S CODE OF CONDUCT, CONFIDENTIALITY, CONFLICTS OF INTEREST, AFFILIATE FIREWALL, COMPLIANCE.AND OTHER RELEVANT POLICIES AND PROCEDURES ARE ALSO AVAILABLE FROM THE CODE OF CONDUCT SECTION OF THIS SITE. DIRECTORS AND SHAREHOLDERS RELEVANT INTERESTS ARE AVAILABLE AT HTTPS://WWW.FITCHRATINGS.COM/SITE/REGULATORY.FITCH MAY HAVE PROVIDED ANOTHER PERMISSIBLE SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES, DETAILS OF THIS SERVICE FOR RATINGS FOR WHICH THE LEAD ANALYST IS BASED IN AN EU-REGISTERED ENTITY CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH WEBSITE.

READ LESS

COPYRIGHT

Copyright© 2020 by Fitch Rat ings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved. In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual

information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third- party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely

responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securit ies. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurer s, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement flied under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license {AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization {the "NRSRO"}. While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO {see https://www.fltchratings.com/sit e/regulatory }, other credit rating subsidiaries are not listed on Form NRSRO {the "non-NRSROs"} and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

READ LESS

SOLICITATION STATUS

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

ENDORSEMENT POLICY

Fitch's approach to ratings endorsement so that ratings produced outside the EU may be used by regulated entities within the EU for regulatory purposes, pursuant to the terms of the EU Regulation with respect to credit rating agencies, can be found on the EU Regulatory Disclosures page. The endorsement status of all International ratings is provided within the entity summary page for each rated entity and in the transaction detail pages for all structured finance transactions on the Fitch website. These disclosures are updated on a daily basis.

US Public Finance North America **United States**