

RatingsDirect[®]

Metropolitan Transportation Authority of New York; Joint Criteria; Note; Transit

Primary Credit Analyst: Joseph J Pezzimenti, New York + 1 (212) 438 2038; joseph.pezzimenti@spglobal.com

Secondary Contact: Paul J Dyson, San Francisco + 1 (415) 371 5079; paul.dyson@spglobal.com

Table Of Contents

Rating Action

Stable Outlook

Credit Opinion

Enterprise Risk Profile--Very Strong

Financial Risk Profile—Vulnerable

Significant Tax Support

Related Research

Metropolitan Transportation Authority of New York; Joint Criteria; Note; Transit

Credit Profile			
US\$200.0 mil transp rev rfdg bnds ser 2002D-2 RMKT due 11/01/2032			
Long Term Rating	BBB+/Stable	New	
Metropolitan Transp Auth transit			
Long Term Rating	BBB+/Stable	Affirmed	

Rating Action

S&P Global Ratings revised the outlook to stable from negative and affirmed its ratings on the Metropolitan Transportation Authority (MTA) of New York's transportation revenue bonds (TRBs) outstanding. At the same time, S&P Global Ratings assigned its 'BBB+' long-term rating to the MTA's \$200 million subseries 2002D-2 remarketed transportation revenue refunding bonds (secured overnight financing rate tender notes), using its "Global Not-For-Profit Transportation Infrastructure Enterprises" (TIE) criteria (published Nov. 2, 2020).

The following ratings were affirmed:

- 'BBB+' long-term rating and underlying rating (SPUR) on the MTA's TRBs outstanding;
- 'SP-2' short-term rating on the MTA's previously issued TRB bond anticipation notes (BANs);
- 'AA-/A-1+' dual ratings on various MTA variable-rate TRBs with enhancement by letters of credit from Toronto Dominion Bank and U.S. Bank N.A.; and
- 'AA-/A-1' dual ratings on various MTA variable-rate TRBs with enhancement by letters of credit from Bank of America N.A., Bank of Montreal, Barclays Bank PLC, PNC Bank N.A., and Landesbank Hessen-Thueringen Girozentrale.

The outlook revision reflects our expectation that the substantial amount of additional federal grants the MTA has received or anticipates receiving, totaling an estimated \$10.5 billion, will allow the authority to address projected deficits through 2023, mitigating near-term downward rating pressure and afford management more time to better assess the recovery, while implementing necessary adjustments to achieve a sustainable structural balance.

The remarketed subseries 2002D-2 bonds will bear interest at a variable rate based on the secured overnight financing rate (SOFR) index in term rate mode; may be offered as three-, four-, and five-year floating-rate notes, subject to market conditions; and subject to mandatory tender for purchase on April 1, corresponding to the bonds tenure. The bonds will be subject to optional redemption and mandatory tender six months prior to the corresponding mandatory tender date. The MTA plans to remarket the subseries 2002D-2a-1, 2002D-2a-2, and 2002D-2b bonds on or before the mandatory purchase date and apply the remarketing proceeds to pay the tender price. The authority expects to appoint a remarketing agent to offer for sale and use its best efforts to find purchasers for all tendered bonds. A failed remarketing would not constitute an event of default, although the interest rates would increase to 9% until the bonds

are remarketed.

The 'SP-2' short-term rating on the BANs reflects what we consider to be a low market risk profile, strong market access, strong information disclosure, and our 'BBB+' long-term rating and SPUR on the MTA's TRBs. The dual ratings reflect the application of our joint criteria, assuming low correlation, and our 'BBB+' SPUR on the MTA's existing TRBs.

The TRBs are secured by MTA gross revenue before expenses of the MTA, the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority (MaBSTOA), the Long Island Rail Road Co. (LIRR), Metro-North Commuter Railroad Co. (MNCRC), and MTA Bus Co. The pledged revenue consists of fares and other operating receipts from MTA subsidiaries (MTA Bus, LIRR, and MNCRC) and affiliates (the New York City Transit Authority and MaBSTOA). MTA nonoperating revenue, which consists of Triborough Bridge and Tunnel Authority surplus revenue, various tax revenue, subsidies, interest, and other miscellaneous MTA income, also secures the bonds. The MTA also receives a cash subsidy from the U.S. Treasury for its Build America bonds. The subsidy payments are not part of the trust estate of the transportation resolution. The MTA's BANs are payable solely from the proceeds of other notes; the proceeds of takeout bonds; and, with respect to interest payable, amounts available for payment of subordinated debt. The BANs are not secured by any other funds, accounts, or amounts that are pledged to the payment of bonds or parity obligations issued under the resolution.

TRB provisions include a gross revenue pledge and a rate covenant that requires sufficiency, whereby pledged revenue is sufficient to cover annual operating expenses and debt service. The authority is statutorily required to achieve a balanced budget each year, although we understand this includes the use of cash balances carried over from previous years. Although the bonds lack a debt service reserve fund, the MTA's liquidity, including its lines of credit, and strong market access offset this.

As of Feb. 2, 2021, the MTA had consolidated, all-inclusive debt of approximately \$47.5 billion, which includes \$2.9 billion from a deficit financing done toward the end of 2020 to ensure a budgetary balance is achieved in 2020 and provide some additional liquidity for operating costs in 2021. Due to favorable final estimated 2020 results the MTA did not need to use the 2020 deficit-financing proceeds in 2020. The MTA's February financial plan shows the authority using the 2020 deficit-financing proceeds in 2021 and 2022. We expect, however, timing on when the MTA will use such proceeds, if at all, will likely be further pushed out over the 2021-2024 plan period now that the authority estimates it will receive \$6.5 billion in additional federal grants, which was not assumed in its February financial plan.

Credit overview

The 'BBB+' SPUR reflects a very strong enterprise risk profile, a vulnerable financial risk profile, and significant support by various tax revenue. The MTA entered the pandemic already financially and operationally stressed. In our opinion, this has been exacerbated by the pandemic's negative effects; activity-based revenue such as passenger fares have been significantly affected since March 2020, and continue to be materially depressed and slow to recover as a result of social risks and related measures to promote health and safety and associated effects that are outside of management's control. However, we view the substantial additional federal aid as a positive credit development in terms mitigating near-term downward rating pressure and bolstering the MTA's near-term liquidity position and financial flexibility. We assess the MTA's market position as very strong instead of extremely strong to reflect the pandemic's negative effects, resulting in an enterprise risk profile assessment of very strong. We assessed the MTA's financial risk profile as vulnerable, reflecting our expectation that key financial metrics such as coverage (S&P Global Ratings-calculated), debt to net revenue, and days' cash on hand will be pressured. The federal relief the MTA has received and has been granted to date in response to the pandemic has provided some stability. Had the MTA not received \$4 billion in federal relief for operating costs in 2020 and been granted an estimated \$10.5 billion in additional federal aid, consisting of \$4 billion of Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) funds and an estimated \$6.5 billion of American Recovery Plan (ARP) funds, to cover operating losses in 2021 and beyond, our financial risk profile assessment likely would have been weaker. Although the MTA's 2021 adopted budget February financial plan for 2021-2024 projects an \$8 billion deficit through 2024, the estimated \$6.5 billion of ARP funds (not assumed in the February plan) will help address projected deficits through 2023, allowing management more time to better assess the recovery and make adjustments as needed. Financial support provided by various tax revenue the MTA receives, which is not sensitive to ridership trends, also was an important credit consideration along with the MTA's relatively diverse revenue mix. Tax-supported subsidies have historically accounted for about 36% of the authority's total revenue.

Although subway, bus, and commuter rail ridership have been improving, they are all still materially depressed with average monthly ridership for January 2021 down 69%, 52%, and 77%, respectively, compared with pre-COVID-19 levels; and average monthly ridership for February 2021 down 66%, 51%, and 78%, respectively, compared with pre-pandemic levels. January and February 2021 average monthly tunnels and bridges tolled traffic was down 18% and 24%, respectively, compared with pre-COVID-19 levels. Like the December plan, the February plan (MTA's adopted 2021 budget and 2021-2024 financial plan) prudently incorporates the McKinsey worst-case ridership scenario, which assumes ridership only reaching 80% of pre-COVID-19 levels by the end of 2024. By comparison, our current baseline and downside activity estimates show ridership for the mass transit sector improving to levels 15% and 20% lower than pre-COVID-19 levels in 2023, respectively. S&P Global Ratings believes there remains high, albeit moderating, uncertainty about the evolution of the coronavirus pandemic and its economic effects. Vaccine production is ramping up and rollouts are gathering pace around the world. Widespread immunization, which will help pave the way for a return to more normal levels of social and economic activity, looks to be achievable by most developed economies by the end of the third quarter. We use these assumptions about vaccine timing in assessing the economic and credit implications associated with the pandemic (see our research here: www.spglobal.com/ratings). As the situation evolves, we will update our assumptions and estimates accordingly. For additional information, see "Updated Activity Estimates For U.S. Transportation Infrastructure Show Public Transit And Airport Operators Still Face A Long Recovery," published Jan. 13, 2021.

We expect the estimated \$10.5 billion in additional federal aid in combination with favorable preliminary 2020 operating results from higher farebox and toll revenue, lower spending, and higher subsidy receipts; additional cost savings; receiving \$220 million in anticipated Federal Emergency Management Agency funding; additional revenues from planned toll rate increases in April 2021 and March 2023 and fare increases in September 2021 and March 2023; receiving city mansion real estate tax and state internet sales tax revenues through 2021; and available liquidity, should allow MTA to achieve a budgetary balance through 2023, avoiding the need to implement wage freezes and cutting the authority's workforce by 9,367 positions from reducing subway and bus service by 40% and commuter rail

service by 50% to accommodate current ridership levels. We understand, however, that some of the February plan measures mentioned above may not happen or may be pushed out further because of the \$6.5 billion in additional federal grants, which was not assumed in the plan. We expect the MTA's July plan will detail when and how much such additional aid will be used over the plan period as well as the timing of certain measures. Longer term, we believe the MTA's creditworthiness will largely depend on how successful the authority is in adjusting revenues, expenses, and capital spending to better align with lower ridership levels to achieve a sustainable structural balance.

The enterprise risk profile assessment reflects our view of the MTA's:

- Very strong market position, reflecting its monopolistic business position, high essentiality, and strong political support because of its status as a critical service provider to the New York metro area, tempered by exposure to potentially prolonged weak or unpredictable ridership as a result of the ongoing pandemic and lingering ancillary effects (such as a weaker-than-expected economic recovery, shifting travel restrictions, stay-at-home and social-distancing restrictions, or behavioral changes with respect to use of public transit) that are outside of management's control;
- Extremely strong service area economic fundamentals, including favorable levels of economic activity as measured by GDP per capita and a populous service area that more than offsets an elevated unemployment rate due to the effects of COVID-19 and projected population decline;
- · Low industry risk relative to that of other industries; and
- Extremely strong management and governance, reflective of an experienced management team with a strong track record of achieving recurring savings, accomplishing near-term budgetary balance, and that has successfully managed historical shocks, although none as acute as COVID-19.

The financial risk profile assessment reflects our view of the MTA's:

- Vulnerable financial performance, reflecting our expectation that MTA's all-in consolidated net revenue debt service coverage (DSC; S&P Global Ratings-calculated) will be near 1x the long term comparable with levels achieved in fiscal years 2017-2019 and DSC (without inclusion of cash reserves or federal aid to cover operating losses) below 1x in the near term because of COVID-19-related effects on the economy, ridership, traffic, subsidies, and taxes that have challenged the MTA's ability to maintain a structural balance given the reluctance to reduce service if ridership quickly rebounds;
- Vulnerable debt and liabilities capacity, reflecting the MTA's stressed financial condition and ongoing significant capital needs, with a capital program of \$54.8 billion for fiscal years 2020-2024, which is more than 65% higher than the fiscal years 2015-2019 program, with as much as \$35 billion, or 60%, debt-financed, of which only federally funded portions are being done currently while many funding sources remain negatively affected by the pandemic; and
- Vulnerable liquidity and financial flexibility, reflecting our expectation that the MTA will be able to maintain at least about 90-120 days' cash on hand, helped by an estimated \$10.5 billion of federal aid this year and beyond and strong market access. Our overall assessment incorporates some downside risk in the event MTA experiences unforeseen additional costs although its current available liquidity (not including federal aid) is at a level we consider adequate. As of March 1, 2021, the MTA had approximately \$6.775 billion of available liquidity (or 171 days' cash on hand based on 2021 adopted budgeted operating expenses of about \$14.4 billion and 142 days when including estimated debt service for 2021 of about \$2.9 billion).

Environmental, social, and governance factors

We analyzed the MTA's risks related to environmental, social, and governance factors and view its governance favorably, given its comprehensive financial planning and disclosure practices and experience achieving near-term budgetary balance. We believe these governance practices are consistent with the standard for the mass transit sector. The environmental and social risks, however, are above the sector standard, in our view. More specifically, portions of the MTA system are exposed to the coastline and the long-term effects of sea level rise and severe weather events, which is consistent with transportation infrastructure providers in other coastal municipalities. The MTA and the city have mitigated this risk by implementing various infrastructure projects to harden assets and raising sea walls to protect vulnerable areas of the city and buffer residents from the effects of climate change. Also, the MTA is exposed to significant health and safety social risks related to COVID-19 that have resulted in significant ridership and revenue declines leading to operating and financial pressures. However, despite the city's elevated social risks stemming from its high cost of living and housing affordability concerns, we believe the MTA somewhat mitigates this risk as a low-cost and reliable provider of transportation. We will monitor how these risks could affect the MTA's credit profile over the long term.

Stable Outlook

Downside scenario

We could lower the rating or revise the outlook to negative over the next 12-24 months if the authority projects deficits much worse than current estimates such that federal grants will only address projected deficits into 2022. Credit deterioration is also possible if MTA's financial metrics suffer sustained weakness absent offsetting expenditure adjustments, revenue recovery, and additional federal grants, if received. DSC (S&P Global Ratings-calculated) or liquidity that are consistently and materially lower than our expectations, or sustained and depressed transit activity could result in a lower rating, although we believe operating grants and tax support bolster and stabilize the authority's revenue-diversity.

Upside scenario

We could raise the rating over the next two years if ridership recovers and stabilizes enough for management to be able to implement measures to achieve a structural balance on a sustainable basis that we believe is consistent with a higher rating. Our analysis of these items will consider the extent to which such solutions rely on recurring or nonrecurring measures and constrain future budgetary flexibility.

Credit Opinion

Enterprise Risk Profile--Very Strong

Our enterprise risk profile assessment of the MTA considers its service area economic fundamentals, market position, industry risk, and management and governance.

Extremely strong economic fundamentals

We consider MTA's service area--which includes the New York City regional economy--economic fundamentals extremely strong, reflecting a high GDP capita of almost \$100,000, and a large regional population of almost 20 million, somewhat offset by above-average unemployment levels and projected population declines. We believe the MTA's populous service area with favorable levels of economic activity will provide a robust base for transit demand over the long term. Nevertheless, the pace of the economic recovery is another factor that will determine how quickly ridership rebounds. MTA's BudgetWatch February 2021 Flash Report indicated that preliminary December 2020 employment numbers in New York City show a loss of 578,000 jobs compared with December 2019 level. December marks the 10th consecutive month in which employment has declined from the level one year earlier, after 119 consecutive months of increases ended with declines in March 2020. Job losses were significant across all sectors, but hardest hit were leisure and hospitality, down 223,200 jobs; and professional and business services, down 88,000 jobs.

Very strong market position

We assess the MTA's market position as very strong, reflecting an essential, historically highly utilized, well-integrated, and extensive system that serves the very large and congested New York City metropolitan and surrounding areas as a compelling transportation alternative. Although ridership before the pandemic was experiencing year-over-year declines like many transit providers around the country, the level of system usage was and is still much higher than that of any other transit provider. In 2019, the MTA's subway, commuter rail, and bus ridership totaled approximately 1.7 billion, 182 million, and 677 million, respectively, generating approximately \$6.4 billion in farebox revenue. Our assessment also considered strong political support for the system, as evidenced by receiving significant tax-supported subsidies from state, city, and local sources. Our assessment also considered the MTA's public transit service offerings, which we viewed as generally safe, reliable, and convenient; and its various fare offerings across its subway, commuter rail, and bus service. We also considered the support the MTA receives from toll revenues from a multi-bridge system serving the New York City area that has demonstrated historically good revenue growth from frequent toll-rate increases and generally good demand through different economic conditions. In 2019, tolled traffic totaled approximately 329 million, generating about \$2.1 billion in toll revenue. COVID-19 and associated impacts that have materially depressed ridership, which we believe will be unpredictable and slow to recover and outside of management's control, tempered our assessment.

Extremely strong management and governance

Our management and governance assessment considers the MTA's strategic positioning, risk management and financial management, and organizational effectiveness.

The MTA's budget and multiyear financial plan includes, among other things, cost-saving targets and initiatives, fare and toll adjustments, debt management, pay-as-you-go capital funding, and other postemployment benefit (OPEB) contributions. The MTA's management and governance have demonstrated a history of achieving recurring savings, effectively managing the agency's operations and finances through economic cycles and external unexpected shocks (like Superstorm Sandy), repeatedly achieving a near-term budgetary balance, while making continued investments to maintain, preserve, and expand a system that has generally been reliable and safe.

The MTA maintains generally prudent financial policies when it comes to transparency and disclosure, liquidity, long-term financial planning, and debt management. The authority has in place various formal board-approved

financial policies. To provide a cushion from short-term events, the MTA maintains a general reserve equal to approximately 1% of its operating budget and has a working capital line of credit. Management has a record of implementing policies and strategies to mitigate key operational and financial risks, adjusting rates, capital spending, operating costs, cash management, accessing the capital markets, and obtaining local or federal support, when necessary, to achieve a structural balance and funding for critical capital needs. We consider the MTA's budgeting and financial forecasting assumptions generally reasonable. The MTA maintains multiyear financial forecasts on a rolling basis that include capital needs, justification for them, and a summary of the most likely capital program funding sources. More specifically, every year the MTA prepares a detailed February, July, and November financial plan, and finalizes these materials in December. Each plan includes four-year projections. The February plan includes the adopted budget for the year. The July plan includes a revised forecast and, if necessary, a series of gap-closing proposals to maintain a balanced budget, and a preliminary budget for the upcoming year. The November plan is an update to the July one and includes a revised current-year and finalized proposed budget for the upcoming year, as well as projections for the three following years. In December, the November plan is updated to capture further developments, risks, and actions that are necessary to ensure a balanced budget (a key financial goal) and is presented to the MTA board for review and adoption of the budget for the next year. On the capital side, the MTA conducts a 20-year needs assessment about every five years, which defines the agency's long-term goals and objectives of maintaining a system in a state of good repair, providing a system that can accommodate future demand, and providing a context for MTA's near-term five-year capital program. The MTA's capital plan also includes projects to harden assets to mitigate the effects of climate change.

Operating the nation's largest public transit system, MTA management has considerable expertise, experience, and a record of success in operating all of its major lines of business and restoring service quickly after severe weather events. We view the experience, depth, and breadth of the management and governance teams favorably.

Financial Risk Profile—Vulnerable

Our financial risk profile assessment of the MTA considers its financial performance, debt and liabilities capacity, and liquidity and financial flexibility. Our assessments are based on analyzing MTA's historical and projected consolidated financial results.

The MTA was financially challenged heading into the pandemic due to declining ridership levels, rising significant capital needs, and expenses growing faster than revenue sources. The situation was exacerbated by the severe, sudden, and prolonged drop in ridership and slowdown in general mobility in the region, which depressed all of the MTA's revenue sources. Despite lower ridership, MTA services are mostly operating at pre-pandemic levels, except for commuter railroads with Metro-North Railroad operating at 63% weekday service and 66% weekend service, and Long Island Rail Road operating at 90% weekday service and 100% weekend service. This created significant revenue losses in 2020, which we expect will continue this year. However, we expect a combination of favorable estimated 2020 operating results, \$10.5 billion in additional federal aid for operations, various management actions, and proceeds from a \$2.9 billion deficit financing in 2020 will allow the MTA to balance its budget for 2020-2023. The substantial injection of additional federal aid delays the need for the MTA to implement service reductions and wage freezes this year and

next.

Preliminary results to date in the MTA's BudgetWatch March 2021 Flash Report compared favorably overall with the 2021 adopted budget, as summarized below:

- Passenger revenues through February were favorable by \$155 million (77%), primarily reflecting higher-than-budgeted ridership.
- Toll revenue through February is \$101 million (65%) favorable due to higher-than-budgeted traffic volume.
- Year-to-date MTA total operating expenses were favorable by \$205 million (9%), including lower labor expenses of \$110 million, mainly from timing-related lower health and welfare/OPEB expenses, as well as vacancy-related savings, and lower non-labor expenses of \$95 million, primarily from lower material and supply, and lower electric power and fuel costs, although fuel prices have been rising over the past few weeks.
- Overtime spending year to date is \$3 million (2%) unfavorable.
- Debt service was favorable by \$15.2 million (6%) for the month of February and favorable by \$20.5 million (4%) year to date due to timing and lower-than-budgeted variable rates.
- Overall subsidies received year to date were \$218 million favorable. despite receipts for the petroleum business tax
 and the for-hire vehicle still pending. Year to date, Payroll Mobility Tax receipts were favorable by \$172 million, the
 real estate transaction taxes were a combined \$90 million favorable, and MTA Aid receipts were favorable by \$8
 million. The favorable variances were partially offset by unfavorable Petroleum Business Tax receipts of \$24 million
 and For-Hire-Vehicle Surcharge receipts of \$27 million; MMTOA was on budget.
- Combined receipts of the mansion tax and New York State portion of the internet sales tax, which fund the capital lockbox and are available through 2021 to assist in funding operations, were \$32 million favorable through March.

Vulnerable financial performance

The MTA's historical consolidated coverage (S&P Global Ratings-calculated) that has been near 1x may not be sustainable, in our opinion, unless savings from the authority's transformation plan and ridership levels recover and stabilize to the point that management has a firm idea of how much revenue, expense, and capital spending adjustments are required to achieve a balanced budget on a sustainable basis, without neglecting critical state-of-good-repair projects.

For 2017-2019, coverage, per our calculations, was near 1x and was well below 1x for 2020, which excludes \$4 billion in federal aid for covering operating losses, deficit-financing proceeds, and other sources we consider nonrecurring in nature. For 2021, we expect coverage will continue to be below 1x, per our calculations. Including federal relief and deficit-financing proceeds and other nonrecurring sources, coverage, per our calculations, improves to near 1x for 2020 and 2021. In contrast, coverage computed per the transportation revenue bond resolution for fiscal years 2017-2019 has been no lower than 8x and is about 5x for 2020 based on the MTA's 2020 final estimate and about 4.7x based on 2021 adopted budgeted figures. This coverage calculation, however, is based on gross revenue.

Vulnerable debt and liabilities capacity

The MTA's debt and liabilities capacity will be pressured given its stressed financial condition, and the significant ongoing capital needs necessary to keep the system in a state of good repair, which require significant additional debt to finance.

Our assessment considered the MTA's historical debt to net revenue for 2017-2019, which averaged about 15x, a level we consider adequate-to-strong, that we expect will be materially weakened due to the MTA's debt burden, ongoing significant capital and additional debt needs, and revenue losses from lower ridership and potentially lower taxes and subsidies.

To take advantage of the drop in ridership, the MTA has been able to accelerate certain projects included in its 2015-2019 capital program. As of late March 2020, new commitments for the MTA's 2020-2025 capital program have been put on hold, while projects funded with other resources such as usual federal capital funding grants are being done. The MTA's construction and development teams revised capital program commitment schedule for 2021, based on availability of funding resources, totals \$6.2 billion. Key capital project focuses for 2021 include leveraging federal funding opportunities, state of good repair work and asset normal replacement (including in-house work), and critical MTA system improvement priorities such as ADA and signal modernization..

The February plan assumes the following borrowing schedule for 2021-2024:

- \$2.91 billion for 2021: \$1.3 billion of new money TRBs, \$1.3 billion of TRBs to retire BANs, \$328 million of new money TBTA bonds, and \$136 million new money Central Business District Tolling Program (CBDTP) Lockbox Revenues BANs;
- \$4.65 billion for 2022: \$399 million of new money TRBs, \$2.9 billion of TRBs to retire BANs, \$617 million of DTF bonds to retire BANs, \$706 million of new money TBTA bonds, and \$122 million new money CBDTP Lockbox Revenues BANs;
- \$4.64 billion for 2023: \$1.3 billion of TRBs to retire BANs, \$918 million of new money TBTA bonds, \$2.4 billion of PMT bonds to retire BANs, and 92 million new money CBDTP Lockbox Revenues BANs; and
- \$800 million for 2024: \$685 million of new money TBTA bonds, \$56 million new money CBDTP Lockbox Revenues BANs, and \$115 million of CBDT-supported bonds to retire CBDT BANs.

The CBDTP Lockbox Revenues borrowings listed above are for the 2020-2024 capital program.

Vulnerable liquidity and financial flexibility

With reluctance to reduce service to match lower ridership, the MTA will rely on cash reserves to achieve a budgetary balance until activity levels recover and stabilize.

The MTA's days' cash on hand for 2017-2019 has fluctuated around 100-125 days, including available capacity under its working capital lines of credit, and about 90-115 days without. These are levels we generally view as vulnerable under our criteria. In 2020, the MTA increased the capacity of its working capital line of credit to \$2.15 billion. Our overall assessment incorporates some downside risk in the event MTA experiences unforeseen additional costs although its current available liquidity is at a level we consider adequate. As of March 1, 2021, the MTA had liquidity resources totaling about \$6.775 billion (or 171 days' cash on hand based on 2021 adopted budgeted operating expenses of about \$14.4 billion and 142 days when including estimated debt service for 2021 of about \$2.9 billion), consisting of a \$885 million current running cash balance, \$1.313 billion of internal available flexible funds, \$2.903 billion in deficit-financing proceeds, and \$1.674 billion available under commercial bank working capital lines of credit.

With regard to the \$10.5 billion in additional federal aid from CRRSAA and ARP, MTA plans to submit claims monthly

once actuals are available to submit claims (similar to the CARES Act). MTA has not yet begun seeking reimbursements under CRRSAA.

The MTA has some direct-purchase or privately placed debt outstanding that has no acceleration provisions. The authority also has swaps outstanding that pose no contingent liquidity risk at this time, given the rating differential between the rating on the TRBs and swap-termination rating triggers.

Significant Tax Support

The MTA benefits from receiving significant tax support, providing good revenue diversity and enhanced financial stability. In 2019, the MTA received tax-supported subsidies totaling \$6.2 billion, accounting for approximately 37% of total revenues, a percentage comparable with that in previous years. The \$6.2 billion consists of about \$5 billion (or 80%) of state taxes and \$1.2 billion (or 20%) of city and local taxes. The largest components are the Metropolitan Mass Transportation Operating Assistance (MMTOA) and payroll mobility tax subsidies (PMT), each making up about 30% of the \$6.2 billion. The PMT taxing base consists of the New York City area and multi-county region. Such tax sources have historically trended generally well. Mansion real estate taxes and internet sales taxes the MTA receives that were intended to help with funding its capital needs are being made available as a resource for paying operating expenses for 2020 and 2021. The use of these funds in 2021 may now change due the \$6.5 billion in additional federal aid. We expect to see more details regarding this in the July plan.

The \$6.2 billion in tax-supported subsidies the MTA received in 2019 as reported in its audited financial statements are as follows:

- \$1.8 billion MMTOA
- \$1.8 billion PMT (including PMT tax replacement funds)
- \$650 million petroleum business tax
- \$640 million urban tax
- \$470 million mortgage recording tax
- \$313 million MTA aid trust account
- \$375 million assistance fund (for-hire vehicle surcharge)
- \$85 million internet sales tax
- \$74 million mansion tax

Preliminary actual numbers for 2020 for the various tax-supported subsidies total approximately \$5.4 billion as reported in the MTA's BudgetWatch January 2021 Special 2020 Year-End Flash Report.

To help the MTA, the state's fiscal 2022 budget proposal includes converting to bond financing its \$10.3 billion contribution for the MTA's 2015-2019 and 2020-2024 capital plans instead of sending the MTA additional local-aid payments. In fiscal 2021, the state issued \$2.8 billion of personal income tax bonds for MTA projects included in the authority's 2015-2019 capital plan. The state expects to provide in fiscal 2022 more than \$5.7 billion in operating aid to

mass transit systems, including \$2.2 billion from the direct remittance of various dedicated taxes and fees to the MTA and \$232 million annually from a state supplement to the PMT tax collections. The MTA receives approximately 90% of the state's mass transit aid, given its role as the nation's largest transit and commuter rail system.

Related Research

- Through The ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, April 28, 2020
- How We Apply Our Global Not-For-Profit Transportation Infrastructure Enterprise Criteria, Nov. 2, 2020

Ratings Detail (As Of March 18, 2021)		
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed

Ratings Detail (As Of March 18, 2021) (con	nt.)	
Metropolitan Transp Auth transit		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit	DDT7 Stable	Allinnied
Long Term Rating	BBB+/Stable	Affirmed
Unenhanced Rating	NR(SPUR)	
Metropolitan Transp Auth transit		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transit		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (wrap of insured	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (wrap of insured		A 65
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		Aminieu
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)	, , , , , , , , , , , , , , , , , , ,	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		A ffunn o d
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
ononnunceu nuing		/ mmmou

Ratings Detail (As Of March 18, 2021) (cont.)		
Metropolitan Transp Auth transit (AGM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)	、 <i>,</i>	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)	, , , , , , , , , , , , , , , , , , ,	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed

Ratings Detail (As Of March 18, 2021) (cont.)		
Metropolitan Transp Auth transit (AGM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		A 67 1
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT)		A filiway o d
	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AGM) (SEC MKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
		Ammed
Metropolitan Transp Auth transit (AGM) (SEC MKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (AMBAC)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (ASSURED GTY) (SEC	. ,	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM)	(, ,	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed

Ratings Detail (As Of March 18, 2021) (cont.)		
Metropolitan Transp Auth transit (BAM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)	(== ==); ======	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
0		

Ratings Detail (As Of March 18, 2021) (cont.)		
Metropolitan Transp Auth transit (BAM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)	/	
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	DDD+(CDIID)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)	BBB+(SPUR)/Stable	Ammed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT)		1 477 1
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SECMKT) Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SEC MKT)	bbb (or on) stable	Ammined
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (BAM) (SEC MKT)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (FGIC) (National)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (MBIA) (National)		
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (SECMKT)		Affirment of
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transit (Wrap of Insured) (FGI Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth transp rev bnds (Mandatory T		
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transp rev green bnds (climate	bnd certified) ser 2020D due 11/15/20	50
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transp rev green bnds (climate	e bnd certified-fed)	
Long Term Rating	BBB+/Stable	Affirmed
Metropolitan Transp Auth transp rev rfdg green bnds ser		
Long Term Rating	BBB+/Stable	Affirmed

Ratings Detail (As Of March 18, 2021) (cont.)		
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth BANs		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1+	Affirmed Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Allirmed
Metropolitan Transp Auth JOINTCRIT Long Term Rating	AA-/A-1+	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1+	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed

Ratings Detail (As Of March 18, 2021) (cont	.)	
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth JOINTCRIT		
Long Term Rating	AA-/A-1	Affirmed
Unenhanced Rating	BBB+(SPUR)/Stable	Affirmed
Metropolitan Transp Auth Note		
Short Term Rating	SP-2	Affirmed
Metropolitan Transp Auth Note		
Short Term Rating	SP-2	Affirmed
Many issues are enhanced by bond insurance.		

Copyright © 2021 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 CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, 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. Ratingrelated 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 (free of charge), and www.ratingsdirect.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.

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