S&P Global Ratings

U.S. Transportation Infrastructure Transit Sector Update And Medians: Long-Term Funding Decisions Loom For Many Mass Transit Operators

September 8, 2022

Key Takeaways

- Many mass transit operators that depend on fare revenue face uncertainty as pandemic-related federal aid runs out over the next few years. We expect providers will have to make tough decisions about sustainable tax and revenue models.
- S&P Global Ratings does not expect a full recovery to pre-pandemic ridership in the foreseeable future. We thus believe the credit quality of many transit operators will depend on their ability to adjust operations and align financial performance to achieve structural balance after federal aid is depleted.
- Our mass transit sector median analysis shows only modest erosion of credit quality, which highlights the significance of \$71.7 billion in federal aid. The Infrastructure Investment and Jobs Act will provide another \$108 billion for the sector to fund capital projects and environmental, social, and governance (ESG) initiatives over the next five years.
- Our data suggest mass transit operators receiving significant tax support will continue to demonstrate relative credit stability, with those in the 'AAA' and 'AA' category that generally derive more than 60% of revenues from taxes maintaining debt service coverage (DSC) and debt-to-net revenue metrics near pre-pandemic levels.

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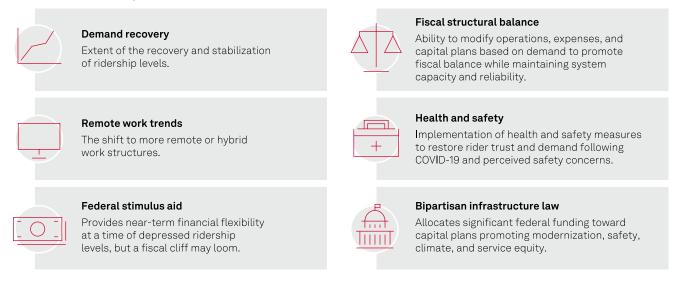
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What We're Watching - Mass Transit Sector

The Pandemic Has Changed Mass Transit, Possibly Permanently

The COVID-19 pandemic and its impact on how and where we work has reshaped the mass transit sector. First, we saw a precipitous drop in ridership (with peak declines averaging about 80% nationally at the onset of the pandemic) before easing mobility restrictions, vaccine progress, and elevated fuel prices contributed to a significant recovery. However, U.S. ridership remains materially depressed at about 61% of pre-pandemic levels as of late August. We expect ridership will only recover to about 75% of pre-pandemic levels by 2025, and will remain weaker due to the pandemic's secondary impact: a significant increase in remote work or hybrid work arrangements. This, combined with, in some instances, riders' reluctance to return to mass transit because of reliability, service-level, or safety concerns, has hampered a return to normal that might never come for many operators. As a result, we view issuers with a heavier reliance on farebox revenues as more exposed to near-term credit risk. Nevertheless, the sector has benefited from a significant infusion of federal stimulus aid totaling \$71.7 billion that provided short-term financial flexibility. Longer term, we believe the key question for the sector is whether mass transit operators can achieve structural balance once federal aid is depleted, assuming ridership remains materially weakened.

This report provides an update on the U.S mass transit sector, and highlights of our analysis of mass transit mean and median statistics for 2019-2021. For our metrics, certain data have been grouped by fiscal-year reporting period or analyzed on a calendar-year basis to allow for better comparability and a more accurate interpretation of the results. Mean and median results include data sets from both public and obligor's creditworthiness ratings.

A Tale Of Two Transit Operators--Significant Tax Support Versus Historical Reliance On Fare Revenue

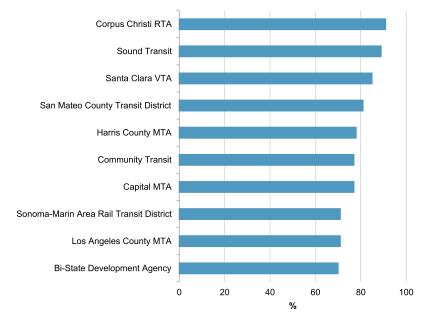
Mass transit operators benefiting from significant tax revenues to fund operations (sales, property, excise, or income taxes) exhibited relative credit stability throughout the pandemic

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(chart 1), with bolstered tax revenues in some cases more than offsetting farebox declines. In contrast, those that rely heavily on farebox revenues (chart 2) to fund operations (typically more than 25% of revenue) have seen negative rating actions (downgrades or negative outlooks) due to deteriorating financial metrics, including financial performance, debt and liabilities capacity, and liquidity and financial flexibility; or weakening market positions due to depressed ridership levels that we anticipate could weaken financial risk profiles and continue.

Chart 1



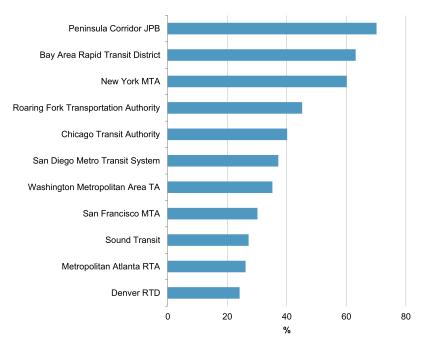


Source: S&P Global Ratings.

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Chart 2

Top 10 Mass Transit Issuers, 2019 Farebox Recovery Ratio



Peninsula Corridor JPB approved a sales tax measure in November 2020. Source: S&P Global Ratings. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Table 1

Mass Transit Rating Or Outlook Changes, 2020-2022

Issuer	Rating action	New rating	Previous rating	Reason for rating action*	Rating criteria	Date
New York Metropolitan Transportation Authority	Downgrade	A-	А	Activity levels	Global TIE	March 24, 2020
Sector outlook revision	Negative outlook	-	-	COVID-19 pandemic	Global TIE	March 26, 2020
Bi-State Development Agency Metro District	Downgrade	AA-	AA+	Activity levels	Priority lien	June 29, 2020
New York Metropolitan Transportation Authority	Downgrade	BBB+	A-	Activity levels	Global TIE	July 7, 2020
Sector outlook revision	Stable outlook	-	-	Improving health and safety conditions	Global TIE	April 22, 2021
Utah Transit Authority, Senior Lien	Positive outlook	AA	AA	Tax revenue growth	Priority lien	October 12, 2021
Utah Transit Authority, Second Lien	Upgrade	AA-	A+	Tax revenue growth	Priority lien	October 12, 2021
VIA Metro Transit Authority	Positive outlook	AA-	AA-	Tax revenue growth	Global TIE	March 30, 2022
San Francisco Municipal Transit Agency	Downgrade	A+	AA-	Activity levels	Global TIE	July 20, 2022
San Francisco Municipal Transit Agency	Negative outlook	A+	AA-	Activity levels	Global TIE	July 20, 2022
Roaring Fork Transportation Authority	Positive outlook	AA-	AA-	Tax revenue growth	Priority lien	July 22, 2022

*This list excludes rating actions due to Global TIE criteria implementation.

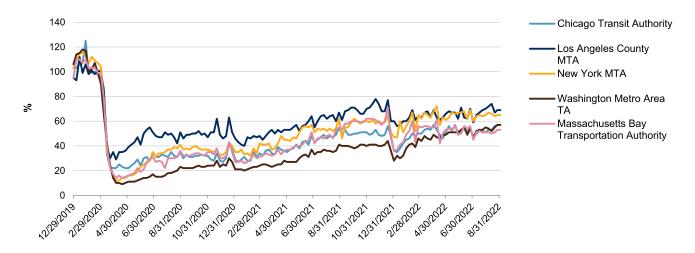
Ridership Recovery Will Be A Slow Uphill Journey

S&P Global Ratings believes the ridership recovery could be slow and gradual, adversely affected by evolving remote or hybrid work practices or erosion in health and safety conditions. Longer term, the question remains whether ridership will fully recover. In short, we do not expect a full recovery and believe mass transit operators will have to adjust operations (service levels, headcount, and routes) to achieve structural balance due to a materially weakened ridership base.

Ridership remains depressed, at approximately 61% of pre-pandemic levels during the week of Aug. 21-Aug. 27, 2022 (chart 3). Disparities in ridership recovery remain across regions and travel modes (rail, subway, light rail, and bus) due to remote working trends and lingering local restrictions. The recovery within large coastal cities in the northeast and on the west coast is lagging somewhat compared with that of other operators; suburban commuter rail systems remain more depressed relative to other modes of transit.

Chart 3

Indexed Weekly Ridership Trends, Five Largest Mass Transit Issuers January 2020-August 2022



Source: American Public Transportation Association. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Despite improving trends, we believe mass transit operators face headwinds related to remote working trends and perceived health and safety concerns. Higher gasoline prices might have boosted ridership in the past; however, we expect this dynamic will be muted and will be offset by longer-term ridership losses due to the shift to remote work. For additional information, see "Will Prolonged Higher Fuel Prices Slow The Rebound In U.S. Transportation Demand?," published May 12, 2022, on RatingsDirect.

Remote And Hybrid Work Arrangements Are Evolving

We believe evolving remote or hybrid work practices could affect issuers' creditworthiness. A permanent shift for U.S. workers and businesses to hybrid work arrangements would result in a sustained loss in ridership demand materially below pre-pandemic levels. Some of the ridership base might only return to the office a few days a week, or in some cases with full remote flexibility, not at all.

According to McKinsey's American Opportunity survey, approximately 58% of Americans (or about 92 million people) can work from home at least one day a week (35% fully remote; 23% one-to-four days a week). Notably, about 87% of survey respondents that can work remotely embrace the option. Furthermore, a significant 68% of workers in North America said they would consider looking for another job if their managers require a return to office full-time, according to a November 2021 survey by payroll provider ADP. We note remote working arrangements may vary significantly by education level, occupation, role, and location.

These studies suggest that workers with hybrid or remote work flexibility might only return to the office two-three days a week. In 2017, about 49% of riders used mass transit for commuting to and from work, according to the American Public Transportation Association (APTA). Since about 58% of workers can work remotely, this could indicate a sustained loss in ridership of 17% if workers return to the office two days a week, or 11% if they go back three days a week.

Although employee preferences can be a leading indicator of work trends, office occupancy levels based on employee security badge swipes show that as of August 2022, office attendance is only about 44% of pre-pandemic levels, according to Kastle Systems. Office occupancy lags most in larger cities such as New York (40% as of Aug. 3, 2022), San Francisco (38%), and Chicago (41%), where workers might have longer commutes or more hybrid or fully remote working opportunities. In smaller cities or in regions with smaller populations, fewer or limited mass transit alternatives with more commuting by auto, less restrictive pandemic policies, or in industries where remote work is less of an option, more employees are returning to the office. Nevertheless, we believe evolving return-to-office mandates, or the lack thereof, could have a lasting impact on longer-term ridership trends.

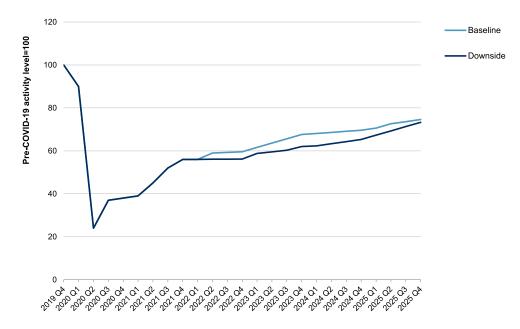
Ridership Recovery Forecast

Our current baseline activity estimates show public transit recapturing about 60% of pre-pandemic activity by the end of 2022 and only about 75% by the end of 2025, due to a slow or partial return to commuting patterns. Our current downside activity estimates show public transit ridership returning to only 70% of pre-pandemic levels by the end of 2025. For additional information, see "Updated U.S. Transportation Infrastructure Activity Estimates Show Air Travel Normalizing And It's A Long Road Back For Transit Operators," July 27, 2022.

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Chart 4





Source: S&P Global Ratings' activity estimates, July 2022. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Table 2

S&P Global Ratings' Transit Activity Estimates

Estimates as of July 2022

	Baseline (%)	Downside (%)
2020	45	45
2021	50	50
2022	60	55
2023	65	60
2024	70	65
2025	75	70

Transit Operators Are Adjusting Service Levels To Meet Demand--Will Reliability And Convenience Falter?

During the pandemic, there was a material decrease in service levels as demand tumbled for many mass transit providers, including reductions in the number of buses or trains per hour or eliminating service routes altogether. Many management teams face the dilemma of operating at reduced service levels to match demand, while still providing reliable, convenient, and timely service. Reduced service levels could further negatively affect demand in addition to other operational challenges, including reducing unionized labor or addressing increased safety concerns. Modifying service levels can provide material cost savings and mitigate farebox revenue declines, and we expect management teams will eventually need to rationalize portions of their networks and service levels to match demand.

However, operators face political and practical challenges in implementing substantial service reductions during times of budgetary stress. During the pandemic, some issuers, such as the New York Metropolitan Transportation Authority (MTA), avoided implementing major service reductions in order to provide reliable service to their broad customer base by using federal stimulus aid to offset revenue losses and support operations despite weaker ridership. We believe longer-term credit quality will hinge on mass transit operators' ability to right-size operations to meet demand while maintaining fiscal structural balance following the depletion of federal aid.

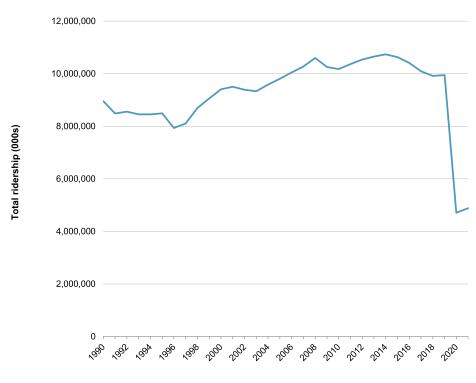
Operators must also evaluate changing demographics within the urban and suburban areas where most transit systems operate. Over the past decade or so, relatively wealthier residents have moved closer into urban cores and more densely populated areas, following the redevelopment efforts municipal officials have undertaken to revitalize neighborhoods and increase the value of tax bases, and the revenues flowing from them.

Along with these redevelopment efforts, lower-income individuals and families have increasingly been priced out of some urban neighborhoods, relocating to less dense and more affordable suburban communities--a phenomenon referred to as the suburbanization of poverty. In their place are relatively wealthier residents who are more willing and able to pay for other means of transportation, such as their own vehicle or a ride-sharing option, and less likely to use transit frequently to commute to work or run errands. In addition, it is much more challenging for transit operators to efficiently serve more sparsely populated areas where portions of their ridership base have relocated.

We believe these population shifts are one reason ridership growth stalled beginning in 2014 for many transit operators (chart 5). Other challenges, such as relatively low borrowing rates boosting private vehicle ownership and persistently low gasoline prices, also stymied ridership growth before the pandemic.

Chart 5

Total U.S. Transit Ridership (1990-2021)



Source: American Public Transportation Association. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Federal Stimulus Aid Provides Near-Term Financial Flexibility, But A Fiscal Cliff Looms For Many

Crucial to the sector's financial flexibility and credit stability during the ongoing pandemic has been the unprecedented federal assistance the federal government provided to subsidize transit operations, as operators received \$71.7 billion in federal grants (table 3). However, a fiscal cliff looms once federal stimulus aid is depleted if operators are unable to right-size operations at lower expected ridership levels.

Federal Stimulus Aid By The Numbers--Allocations To Mass Transit Providers

Act	Date enacted	Total amount	Amount allocated to mass transit
Coronavirus Aid, Relief, and Economic Security Act (CARES Act)	March 27, 2020	\$2.2 trillion	\$25 billion
Coronavirus Response and Relief Supplemental Appropriation Act (CRRSAA)	Dec. 27, 2020	\$2.3 trillion	\$14 billion
American Rescue Plan Act (ARPA)	March 11, 2021	\$1.9 trillion	\$30.5 billion
American Rescue Plan (ARP) additional assistance funding	Sept. 27, 2021	\$2.2 billion	\$2.2 billion
Total			\$71.7 billion

Source: American Public Transportation Association (APTA)

Federal assistance mitigated the number of downgrades by S&P Global Ratings since 2020, as we viewed federal aid as providing financial flexibility and credit stability to a sector already receiving local tax support as activity levels gradually recovered. However, as mass transit operators deplete remaining federal stimulus aid, we will evaluate whether they can achieve structural balance from recurring operating revenues or tax support to maintain financial metrics comparable with historical levels. Longer term, we could take negative rating actions if operators are unable to right-size operations or expenses to provide structural balance at lower ridership levels.

In our view, management teams have generally acted prudently in mitigating the financial and operational effects of the pandemic. This includes cutting service significantly to counter lower ridership; suspending certain routes or service offerings; instituting hiring or pay freezes; reducing operating expenses; and modifying capital improvement plans, including deferring capital needs or delaying system expansions until demand stabilizes. Despite these efforts, weakening farebox revenues have generally exceeded expense reductions, resulting in near-term structural budget deficits, largely for operators more reliant on fares that have bridged the gap by applying federal stimulus aid. Although near-term risks remain, we generally expect mass transit providers will adapt operations to match demand as we emerge from the pandemic. Some are pursuing tax initiatives to achieve structural balance.

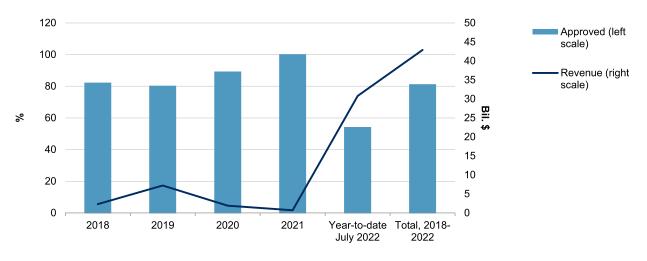
Bipartisan Infrastructure Bill Aids Capital Improvement Plans and ESG Initiatives

Some relief on the capital side came from the Bipartisan Infrastructure Law (BIL) passed in November 2021, which provided \$108 billion to support U.S. public transit, including \$91 billion in guaranteed funding. The four priorities of the BIL for transit are safety, modernization, climate, and service equity. Major funding components of the bill include grants for urban (\$33.5 billion) and rural (\$4.58 billion) systems, capital investment (\$23 billion), state of good repair (\$23.1 billion); climate initiatives for transitioning fleets to low or no vehicle emissions (\$5.6 billion); and investments for underserved communities (\$1.75 billion) and improving safety. We view the BIL as providing significant funding for mass transit operators that could somewhat mitigate borrowing needs to fund capital improvement plans, while also enhancing ESG initiatives including lowering greenhouse gas emissions and providing more service equity for underserved communities.

Will Voters Remain Supportive Of Tax Initiatives When Ridership Declines?

Despite the broad trend of Americans using transit less and less, voters in many communities continue to support it. Data from the APTA indicate voters considered 150 ballot initiatives between 2018 and year-to-date through August 2022, and approved 120, or 81%, for a total of \$42.9 billion in new revenue to support mass transit operations and infrastructure investment (chart 6).

Chart 6





Source: American Public Transportation Association.

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Public support is crucial for mass transit to continue its role of providing mobility to a significant portion of the population. Across the 31 issuers we rate under our Global Transportation Infrastructure Enterprises criteria (including obligor's creditworthiness ratings), mass transit operators derived an average of 59% of total revenue from net tax revenue in 2019 before the pandemic. Our calculations net out tax revenue that an entity collects only to remit to other entities, and we include this net tax revenue available to support an entity's operations and/or debt service in our analysis.

The relatively low correlation between ridership and total revenue for mass transit operators has been a stabilizing credit factor in times of economic stress, including the major shock of the pandemic. In fact, most of our ratings on transit operators with significant tax support were unchanged despite plummeting ridership, compared with those more reliant on farebox revenues, which have seen negative rating actions. One longer-term question is whether local or regional taxpayers who increasingly do not use mass transit will continue to view it as an important public service worthy of financial support. As shown in chart 6, only 54% of transit ballot initiatives have passed year-to-date in 2022, a material decline from previous years when more than 80% passed. This could indicate voter support is waning, although this might also be attributable to depressed

ridership levels, weakening economic conditions, and high inflation.

Environmental, Social, And Governance Considerations

We generally view the mass transit sector as exposed to social risks stemming from the effects of the pandemic that persist relative to weakened ridership levels that have, in some cases, adversely affected our view of an issuer's market position or financial performance. Below we highlight key ESG trends and considerations within the sector that could affect credit quality when considered material within our credit rating analysis.



Resiliency and cybersecurity

Social capital and health and safety risks. Particularly for transit systems that rely on farebox revenue to fund operations, we view social risks as a negative consideration in our credit rating analysis. At the onset of the pandemic, mass transit operators' exposure to significant health and safety social risks related to COVID-19 resulted in precipitous ridership and revenue declines, leading to operating and financial stress. Although ridership may continue to gradually recover over the next few years, we believe longer-term social capital demographic changes, and modifications in rider preferences and behavior (such as remote or hybrid working conditions) could result in a loss of ridership for several years, with ultimate recovery, both in terms of timing and actual ridership, highly uncertain.

Social equity. With the emphasis within the BIL on expanding economic opportunities to historically disadvantaged populations, we think operators will face pressures to expand service while minimizing fare increases to cover potentially higher costs. We anticipate mass transit providers will expand service offerings based on local demand but could also achieve other objectives by providing access to vulnerable or disadvantaged communities. This could translate into more capital market offerings like the Commonwealth of Massachusetts' 2021 series A sustainability bonds, which funded a portion of the Green Line Extension project for the Massachusetts Bay Transportation Authority to expand service to areas that historically did not have access to fast and reliable public transit.

Energy transition to facilitate emissions reductions. We expect a continued focus within the sector on the transition to green or renewable modes of transportation. This focus is supported by the BIL, which dedicates \$5.6 billion in funding for transitioning fleets to low or no vehicle emissions. In California, 17 mass transit operators will receive more than \$236 million for transitioning to zero-emission buses as part of the BIL.

Resiliency and cybersecurity. Given the large and infrastructure-intensive aspects of transit systems, physical climate risks can disrupt operations and potentially lead to demographic changes in the service area that dampen demand, depending on the severity of an acute event or as chronic risks intensify. For coastal mass transit operators such as the MTA, Boston Massachusetts Bay Transportation Authority, and those within the San Francisco Bay region, resiliency and hardening of system assets is an ongoing focus, either due to sea-level rise (seawall resiliency projects), storm-surge mitigation, or severe weather events that result in flooding. Mass

transit operators have increasingly included these initiatives within the scope of their capital plans. In addition, entities could issue more green and sustainability bonds to fund carbon emission reduction initiatives and harden assets from extreme weather events for legacy systems (see "U.S. Municipal Sustainable Debt Issuance Could Surpass \$60 Billion In 2022," Feb. 10, 2022).

Furthermore, cybersecurity and the sophistication of bad actors present ongoing challenges for the sector, which in some cases intensified with remote work during the pandemic. For example, the MTA reported that in April 2021 hackers gained access to certain computer systems, but did not make any changes to operations, compromise any accounts, or collect any employee or customer information; nor did they gain access to systems that control train cars. And a 2020 survey by the Mineta Transportation Institute at San Jose State University of 90 transit agency technology employees found that only 60% have a cybersecurity preparedness program, and 43% reported they do not believe they have the resources necessary for cybersecurity preparedness. Only 47%, said they audit their cybersecurity programs at least once a year.

We believe management teams that have implemented robust cyber hygiene policies and procedures, regularly test and practice their response to an event, and are able to acquire cyber insurance are likely more prepared to mitigate cyber risks, as we reflect in our management and governance assessment of operators. In our view, cybersecurity management is an aspect of governance under ESG. (For more on how S&P Global Ratings incorporates ESG factors in its criteria frameworks, see "ESG Brief: Cyber Risk Management In U.S. Public Finance," June 28, 2021; "Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors," March 2, 2022; and "Cyber Risk In A New Era: Are Third-Party Vendors Unwitting Cyber Trojan Horses For U.S. Public Finance?", Oct. 25, 2021.)

S&P Global Ratings' U.S. Mass Transit Sector Means And Medians

Mass transit debt issuers are evaluated under our Global Transportation Infrastructure Enterprise criteria that assess operators' enterprise risk and financial risk profiles. Our financial profile risk assessment focuses on three primary credit factors: financial performance (weighted at 55%), debt and liabilities (35%), and liquidity and financial flexibility (10%). Debt service coverage (DSC) is considered in our financial performance assessment; debt-to-net revenue is considered in our debt and liabilities assessment; and unrestricted days' cash on hand and unrestricted cash reserves-to-debt are considered in our liquidity and financial flexibility assessment. Key observations from our analysis of median values of these key financial metrics are detailed below. DSC and debt-to-net revenue (tables 4 and 5) exclude the application of federal stimulus aid, given its nonrecurring nature.

Higher-rated mass transit operators with significant tax revenue support were able to maintain coverage and debt to net revenue generally near pre-pandemic levels

For 'AAA' and 'AA' category mass transit operators, tax revenues generally make up more than 60% of total revenues, which provided credit stability in 2020 and 2021. As a result, these transit systems were able to maintain coverage and debt-to-net revenues generally near pre-pandemic levels, while 'A' and 'BBB' category systems, which are more reliant on fare revenues, experienced a material decline in financial metrics in 2020 and 2021. Median debt-to-net revenue for 'AAA' and 'AA' category issuers was extremely strong (below 5x) and weakened to just near the cutoff between extremely strong and very strong (5x-10x) in 2020 before returning to below 5x in 2021, while median DSC remained extremely strong for the 'AAA' category (above 4.75x) and strong for

the 'AA' category (1.25x-3.0x).

Mass transit operators in the 'A' and 'BBB' (the MTA) category are more reliant on fare revenues, as net tax revenues generally made up less than 50% of total pre-pandemic revenues. Before the pandemic, the median DSC for 'A' and 'BBB' category mass transit systems was strong (1.25x-3.0x) and vulnerable (1.0x-1.1x), respectively, before falling to levels we consider highly vulnerable (below 1.0x) as a result of the significant decline in ridership. Median debt-to-net revenue for 'A' category systems fell to adequate (15x-20x) from strong (10x-15x), and the MTA ('BBB' category) fell to highly vulnerable (above 30x) from adequate.

Significant federal aid allowed transit systems to preserve unrestricted cash reserves while ridership recovers. More specifically, unrestricted days' cash on hand generally improved in 2020 and 2021 for most of the mass transit issuers rated by S&P Global Ratings, primarily due to the infusion of federal relief aid as well as strong sales tax revenue performance and deferred capital projects increasing cash reserves, as demonstrated by the overall sector median as well as the median values by rating category (tables 4 and 5).

Favorable tax revenue performance provided revenue stability for transit operators.

Median sales tax revenue growth remained positive but fell to 3.1% in 2020 from 6.9% in 2019, as sales tax collections were more negatively affected in the early months of the pandemic. However, 2021 median tax revenue growth was 11.5% as a result of increased property values and higher consumer spending due to federal stimulus checks and easing COVID-19 restrictions in 2021. In some cases, bolstered tax revenues more than offset farebox revenue declines.

Table 4

Select Mass Transit Medians And Means

		(n=31)			
	2021	2021 2020			
Total operati	ng revenues (\$00	0)			
Median	35,209	54,487	75,386		
Mean	259,615	256,737	442,582		
Total operati	ng revenues annu	ial % change			
Median	(35.1)	(26.5)	1.2		
Mean	(30.1)	(30.6)	2.3		
Operating ex	penses (\$000)				
Median	391,043	320,384	311,786		
Mean	948,632	925,135	935,386		
Total operati	ng expense annua	al % change			
Median	(1.5)	2.2	6.1		
Mean	(3.3)	2.6	7.4		
Coverage (x)					
Median	1.4	1.1	2.1		
Mean	1.1	2.9	4.8		

Select Mass Transit Medians And Means (cont.)

		(n=31)	
	2021	2020	2019
Debt to net re	venue (x)		
Median	5.5	7.5	4.1
Mean	10.9	8.9	5.4
Debt (\$000)			
Median	848,749	614,451	639,311
Mean	3,359,183	2,924,130	2,691,729
Unrestricted o	lays' cash on ha	nd	
Median	310	252	195
Mean	431	347	301
Unrestricted r	eserves to debt	(%)	
Median	56.4	52.0	48.8
Mean	133.4	248.5	199.0
Unrestricted o	ash and investr	nents (\$000)	
Median	271,540	185,543	159,687
Mean	743,952	531,560	468,385
Net tax revenu	ues (\$000)		
Median	285,051	241,154	233,910
Mean	849,989	662,795	683,513
Net tax revenu	ue % change		
Median	11.5	3.1	6.9
Mean	10.1	5.2	13.6
Net tax revenu	ues as share of t	otal revenues	(%)
Median	80.6	68.9	67.3
Mean	69.8	65.0	59.0
Farebox reven	ue (\$000)		
Median	22,271	40,230	58,820
Mean	138,352	158,275	329,664
Farebox reven	ue % change		
Median	(39.8)	(31.3)	(0.8)
Mean	(37.2)	(34.8)	(0.9)
Ridership			
Median	20,632	27,969	44,578
Mean	1,263,471	1,251,200	2,686,935
Ridership % c	hange		
Median	(34.3)	(27.7)	(1.1)

Select Mass Transit Medians And Means (cont.)

	(n=31)						
	2021	2020	2019				
Mean	(33.7)	(33.4)	(0.7)				

Data include obligor's creditworthiness ratings.

Table 5

Select Mass Transit Medians Calculated By Rating Category

	(n=31)											
		AAA			AAA						ew York MTA	; BBB+)
					Fiscal year							
	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019
Total operating revenues (\$000)	163,003	167,463	227,087	26,695	34,431	47,001	35,209	55,142	77,473	5,775,000	4,728,000	9,043,000
Total operating revenues annual % change	(4.3)	(39.4)	1.4	(37.6)	(26.5)	1.2	(35.5)	(25.1)	(0.3)	22.1	(47.7)	3.5
Operating expenses (\$000)	440,389	521,919	515,860	321,725	260,480	260,563	338,884	320,384	311,786	13,173,000	13,298,000	13,952,000
Total operating expense annual % change	(9.9)	0.9	24.5	(4.3)	3.4	7.6	2.3	2.8	3.7	(0.9)	(4.7)	3.1
Coverage (x)	6.1	6.3	6.7	2.7	1.2	2.5	0.6	0.3	1.5	0.6	(0.5)	1.0
Debt to net revenue (x)	3.4	5.3	3.8	3.4	6.8	3.8	17.5	17.7	13.0	31.6	(30.5)	15.7
Debt (\$000)	2,079,915	2,074,933	2,030,397	158,253	137,433	139,940	1,495,775	1,472,351	1,477,640	54,615,000	49,386,000	44,348,000
Unrestricted days' cash on hand	1,253	1,002	1,091	322	298	202	206	211	142	212	127	96
Unrestricted reserves to debt (%)	66.1	53.7	57.7	67.1	80.8	53.6	19.5	19.0	17.6	14.0	9.4	8.3
Unrestricted cash and investments (\$000)	1,420,928	1,158,573	1,235,613	255,231	184,797	127,177	190,968	166,465	159,687	7,638,000	4,633,000	3,675,000
Net tax revenues (\$000)	1,054,204	949,522	984,055	289,023	230,368	174,588	171,636	199,671	197,337	7,267,000	5,593,000	6,249,000

Select Mass Transit Medians Calculated By Rating Category (cont.)

		(n=31)										
		AAA			ААА					BBB (New York MTA; BBB+)		
		Fiscal year										
	2021	2020	2019	2021	2020	2019	2021	2020	2019	2021	2020	2019
Net tax revenues % change	6.0	(0.7)	3.2	14.7	5.5	7.0	(7.5)	8.4	7.8	29.9	(10.5)	15.0
Net tax revenues as share of total revenues (%)	52.5	52.0	49.2	85.2	72.0	69.5	52.7	56.0	45.3	38.2	35.6	37.2
Farebox revenue	28,619	35,994	97,961	14,395	26,195	41,416	28,510	42,119	62,845	3,048,000	2,625,000	6,351,000
Farebox revenue % change	(19.0)	(63.3)	(0.2)	(49.6)	(29.8)	(0.4)	(47.1)	(25.9)	(1.7)	16.1	(58.7)	3.2
Ridership	16,439,465	17,960,418	38,987,519	18,956	27,806	35,466	23,973	29,892	44,578	1,523,573	1,210,003	2,897,570
Ridership % change	1.7	(60.3)	(2.1)	(35.9)	(27.0)	(1.1)	(50.6)	(24.1)	(2.4)	25.9	(58.2)	0.5

Data include obligor's creditworthiness ratings. AAA category includes Minneapolis St. Paul, which receives about 10% of revenues from taxes and about 37% of revenues from waste water operations.

This report does not constitute a rating action.

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