

U.S. Transportation Infrastructure Toll Sector Report Card: Resilient Demand And Higher Tolls Underpin Credit Strength

August 17, 2023

Key Takeaways

- We expect the ratings on U.S. not-for-profit toll road operators will remain stable, given the almost-complete rebound in demand, supported by steady commercial vehicle traffic and toll-rate increases. Toll roads have been among the most resilient transportation infrastructure asset classes in recent years, with no downgrades during the pandemic.
- Revenue growth will be accompanied by increased operations and maintenance expenses, as well as capital spending for capacity expansions and continued conversions to all-electronic toll collection against a backdrop of higher financing costs.
- Our economic outlook no longer includes a recession but projects a shallower and more attenuated slowdown, which could translate into more muted transaction growth with remote work trends and a normalizing post-pandemic e-commerce trucking industry adding to uncertainty.
- Our analysis of fiscal 2022 financial metrics--including debt service coverage, debt to EBIDA, and liquidity--for U.S. not-for-profit toll road and toll bridge issuers that we rate, shows relatively stable performance that we expect will remain so.

Lights Are Green For The Sector, With Resilient Demand And Toll Increases Supporting Credit Quality

We believe U.S. toll operators will maintain strong coverage, healthy financial margins, increasing liquidity, and overall credit quality despite potential headwinds. Toll operators rated by S&P Global Ratings tend to have strong market positions in their respective service areas, supporting meaningful rate-setting flexibility with inelastic demand that is important in maintaining their creditworthiness. Although inflationary and political pressures could cause some toll operators to reconsider implementing their near-term toll-rate increases, we expect proactive management to support our view of the sector's generally strong demand and stable credit quality.

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We have seen continued resilience and stability across the U.S. not-for-profit toll road operators that we rate, with no downgrades since the start of the pandemic in March 2020. We maintain a stable view for the toll sector overall and anticipate the rebound in overall baseline traffic, as measured by vehicle miles traveled (VMTs), and a return of metro region congestion will continue to bolster transactions and revenue growth on tolled facilities and managed-lanes projects. Many issuers will likely see a step-up in capital spending and program costs due to lingering inflationary pressures associated with projects aimed at maintaining or expanding networks, along with a growing network of managed-lanes projects with variable-demand pricing. These increased capital project costs might force issuers to use debt as a funding source.

In addition, we believe several ongoing trends will likely shape the financial profiles of toll operators over the next year. These factors include:

- Issuers with tolling policies linked to the Consumer Price Index or other inflation-linked measures might produce higher revenue growth in 2023 and 2024, although some operators could defer allowable rate increases for fear of public opposition, to maintain toll affordability, or because of previously implemented toll increases in recent years.
- Improved tolling technology and the continued shift toward all-electronic or open-road tolling will likely allow for easier implementation of toll increases and congestion pricing revenue models, in our opinion. New technology systems, however, might lead to higher lost revenues, writeoffs, or other logistical problems that toll operators will need to effectively manage.
- As toll-related revenues increase from enforcement, fines, late fees, and penalties, there is often corresponding pressure from policy makers in some states to place limits or caps on these enforcement amounts, which could lead to higher toll rates.
- The trend toward remote work has introduced more variability in traffic patterns, based on day of the week (Tuesday versus Friday) and congestion at different times of the day, with lower peaks during typical commuting times and more off-peak trips. However, higher truck traffic from online ordering and home delivery might offset the changes in passenger traffic.

What we're watching



Capital programs

Capital spending continues, with moderating-but-still-high construction cost inflation. Toll operators are expanding managed lanes with variable toll structures based on time of day or current demand.



Economic landscape

How will a shallow and more attenuated slowdown with tight financial conditions and potential higher unemployment affect toll road traffic and revenues?



Toll rate increases

Will toll road operators implement toll increases as planned, particularly those linked to inflationary indexes, to meet higher operational and capital costs, or will they defer or limit increases as public opposition arises?



Remote work trends

How will a shift to more remote or hybrid work structures and associated effects affect passenger traffic volumes and toll road utilization patterns?



All-electronic or open-road tolling

Expedited by the pandemic, the ongoing conversion to all-electronic and open-road tolling facilitates the ability to adjust toll rates and improve operations but can lead to lost revenues if not managed well.

Source: S&P Global Ratings.

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Toll Traffic Remains Robust

Traffic volumes and financial results have been resilient over the years through different industry and economic conditions. Most toll roads are typically supported by comparatively good rate-setting flexibility including regular toll-rate increases, sometimes indexed to inflation. For some toll roads, the combined effects of higher traffic volumes and toll-rate increases have resulted in revenues rising by double digits over the past year. Proactive management actions combined with the robust recovery in traffic volumes during the pandemic resulted in stable and, in some cases, improved credit quality for rated not-for-profit toll road operators.

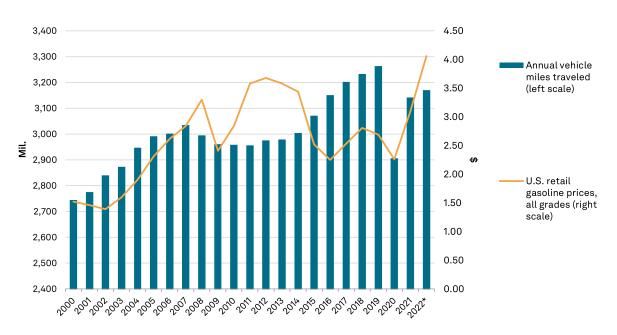
Toll operators we rate are either near or above 2019 activity levels based on transaction volumes, with many supporting strong financial profiles with prudent increases of tolls and fees. Although pent-up consumer travel demand following the pandemic might be subsiding, we continue to see stable-to-growing commercial vehicle traffic across the sector. We will also monitor whether softening economic trends or elevated fuel prices will have an adverse effect on demand in the near term. However, demand as measured by VMT has proven to be relatively inelastic.

Financial results for not-for-profit toll road operators--which have a broad geographic footprint in the U.S.--have mirrored the nation's overall economic trends. Toll operators have benefited from Americans' propensity for driving, with total VMT increasing 15.5% from 2000 to 2022, according to the Federal Highway Administration (FHWA). However, we note that VMTs are still down modestly, approximately 2.8% in calendar 2022 compared with 2019. This has resulted in metro region congestion and spurred transactions and revenues on tolled routes.

The prices of gasoline and diesel fuel affect the transportation and toll road sector in many ways.

Intuitively, we would expect that VMTs would decline as fuel prices rise and, conversely, increase as fuel prices fall. Nevertheless, U.S. consumer and commercial vehicle traffic has not historically been directly correlated with fluctuations in fuel prices (chart 1). For example, although fuel prices increased annually from 2002-2007 and 2016-2018, VMT also rose during these periods. However, other factors, such as personal incomes, more fuel-efficient or electric vehicles, and population density, could also affect travel behavior. Overall, although U.S. average fuel prices increased materially to \$4.06 per gallon in 2022, up 50.9% from \$2.69 in 2019, we do not expect rising fuel prices will materially alter driving patterns, similar to what we have seen historically, and note that despite increasing fuel prices in 2022, VMT travel has recovered, as noted above.

U.S. annual vehicle miles traveled versus U.S retail gasoline prices (2000-2022)



*Estimated.

Chart 1

Source--U.S. Department of Transportation, Federal Highway Administration, and U.S. Energy Information Administration. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

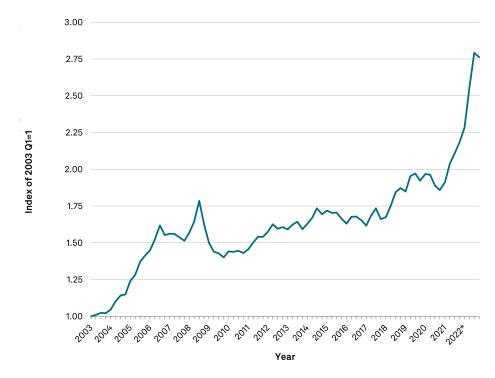
Inflation Has Taken A Toll

Construction costs and rising operations and maintenance (0&M) expenses have also pressured toll road operators. Overall debt levels have increased materially for many issuers we rate. Although management teams have generally raised toll rates and increased liquidity positions as a proactive approach to mitigate future potential stresses and rising construction costs and operating expenses, credit risks related to inflation are pressuring management teams.

The National Highway Construction Cost Index (NHCCI), produced by the FHWA, measures the average change over time in the prices paid by state transportation departments for roadway

construction materials and services. The index reached a new all-time high in the third quarter of 2022 and increased at the second-fastest rate (9.0%) from the level in the previous quarter. (The fastest guarter-over-guarter growth occurred in the second guarter of 2022 at 11.9%.) Although the increases in the index have abated somewhat, the pressure remains as the sector adapts to higher prices associated with capital improvement plans. Furthermore, despite the high interest rates for borrowers, we expect toll operators will continue to debt-finance projects given the meaningful revenue growth from continued demand in toll transactions and increases in toll rates that can support the additional costs.

National highway construction cost index



*Data for Q4 2022 is preliminary. U.S. Department of Transportation, Bureau of Transportation Statistics. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

We Expect Continued Stability Despite Curves In The Road

Traffic volumes for most toll operators continue to increase despite a material step-up of toll rates against the backdrop of eroding disposable income. This has helped most toll operators to recover to pre-pandemic levels. However, the U.S. economy continues to experience tight labor market conditions and stubborn inflation, although headline inflation has begun to decline. These conditions have pressured management teams' operational expenses and capital costs and might somewhat erode the vibrant traffic demand seen recently. A more severe recession than we currently forecast could weaken disposable income, travel demand, commuter trends, and activity associated with transporting goods. Considering the resilience of the U.S. economy, S&P Global Ratings' baseline U.S. forecast no longer includes a recession but projects a shallower and more

attenuated slowdown than previously expected. The tightness of financial conditions and the negative impact on growth will peak in late 2023 and early 2024, followed by a gradual recovery. For more information, see "Economic Outlook U.S. Q3 2023: A Sticky Slowdown Means Higher For Longer," published June 26, 2023, on RatingsDirect.

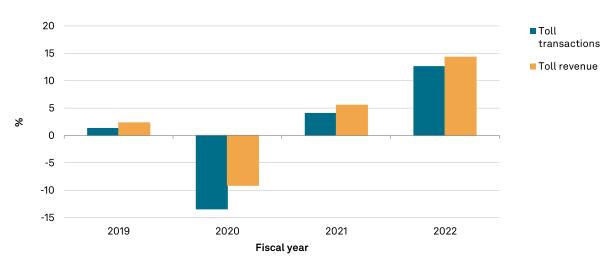
Although overall toll transactions have increased, peak travel time volumes, such as during rush hour, are lower than expected given changes in commute times and frequency. This is spurred by changing consumer preferences and workers remaining reluctant to return to the office. For express lanes or managed lanes that are next to free general-purpose lanes and collect tolls based on time periods with dynamic pricing, the shifting demand can materially affect toll revenue. In our opinion, toll rates and revenues for non-peak demand may increase faster than for peak travel times.

Furthermore, in recent months the trucking spot rates have sharply declined from recent peaks due to lower volumes and increased capacity. With trucking volumes expected to remain somewhat soft through the rest of the year compared with what we've seen emerging from the pandemic, some toll operators could experience weaker commercial toll revenues. In our opinion, the commercial trucking sector is still adjusting to a normalized post-pandemic e-commerce environment, and with toll road operators collecting outsized tolls from larger vehicles typically, financial margins could be pressured.

Toll road operators increased toll rates and adjusted O&M expenses to offset the steep declines in toll transactions and maintain strong credit quality through the pandemic (chart 3). Overall, toll transactions and revenues increased in 2019, followed by the pandemic-induced decline in 2020 and subsequent rebound in 2021 and 2022. Most toll road operators recovered to pre-pandemic activity in 2022 and continue to see more modest growth that we expect will continue in 2023 and 2024. At the beginning of the recovery, volume increases were largely spurred by robust commercial traffic tied to increased demand for goods. Higher revenues from toll-rate increases and generally favorable commercial vehicle traffic volumes helped mitigate losses from significantly lower passenger vehicle volumes, stabilizing financial metrics through the pandemic. Toll road operator's ability and willingness to increase toll rates, and adjust operating expenses and capital spending as needed contributed to overall resilience of the sector.

Chart 3

Median annual toll transaction and revenue percentage growth (2019-2022)



Does not include start-up toll roads in ramp-up or not yet open. For 52 rated toll road operators, not adjusted for varying audited fiscal year ends.

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Table 1

U.S. not-for-profit toll roads

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Alligator Alley	Florida	AA-	Stable	12,095	38,056	Strong	Alligator Alley is a 78-mile toll road that runs across southern Florida, connecting the Naples area on the West Coast to the Fort-Lauderdale/Miami area on the East Coast. The toll road has seen Positive traffic trends with total transactions in fiscal 2022 up 12.5% from fiscal 2021 and 7.1% fromfiscal 2019. As the only highway that crosses the southern half of Florida, the toll road has no significant competition and, in our view, behaves more like a land bridge, favoring long-distance travelers over commuters and commercial users. We view the system's financial risk profile as extremely strong, reflecting debt service coverage (S&P Global Ratings-calculated) that we expect will be greater than 5x and debt to EBIDA (S&P Global Ratings-calculated) that we expect will be less than 1x, given our expectation of no near-term additional debt plans.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Bay Area Toll Authority	California	AA	Stable	9,726,797	756,197	Extremely strong	BATA administers toll revenue collections and finances improvements for seven state-owned toll bridges in the San Francisco Bay Area, which include all toll bridges in the Bay Area except for the Golden Gate Bridge. BATA exhibits an exceptional market position given its near-monopoly status in an extremely strong service area, but also because of high historical traffic, strong financial flexibility given competitive tolls, full toll-raising autonomy, and the high essentiality of and relatively resilient demand for the bridge system. However, we note weaker-than-historical financial capacity from continuing depressed traffic because of changing work and commuting habits resulting from the COVID-19 pandemic, although toll increases have partly offset this risk. The financial risk profile is bolstered by very strong liquidity and financial flexibility that we expect will remain so, with a formal policy to maintain a self-restricted reserve of \$1 billion under its long-term financial plan to provide liquidity for unforeseen events. BATA's 10-year capital improvement plan includes \$1.9 billion in projects, with the potential for additional debt to fund the projects.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Buffalo & Fort Erie Public Bridge Authority	New York	A+	Stable	80,230	33,056	Strong	The Peace Bridge spans the U.SCanada border, and is located 2 miles from downtown Buffalo, N.Y. and 20 kilometers upriver from Niagara Falls. The bridge faces competition from the Niagara Falls Bridge Commission, which operates the Rainbow Bridge, Whirpool Rapids Bridge, and the Lewiston-Queenston Bridge. Fiscal 2022 toll revenues are 104% of fiscal 2019, despite fiscal 2022 total toll transactions being 64% of fiscal 2019 levels. A combination of toll rate increases and relatively stable truck traffic (at 100% of 2019 traffic levels since 2022) attributed to the good revenue performance. We expect the authority will maintain strong coverage above 2x (S&P Global Ratings-calculated) as passenger traffic continues to recover, it has no near-term debt plans, and liquidity will remain extremely strong with unrestricted days' cash on hand averaging over 2,000 over the past three fiscal years.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Central Florida Expressway Authority (CFX)	Florida	A+	Stable	2,960,625	610,920	Very strong	The CFX consists of several contiguous segments totaling 125 miles, serving around 3 million residents within the large Orlando metropolitan statistical area. The system has experienced strong traffic and revenue growth resulting from its important role, critical links, and strategic location, despite some competition from toll-free roads. CFX has a large capital improvement plan of about \$4 billion, which will be partly funded with \$2.8 billion in additional debt. However, we expect the system will maintain strong coverage and very strong debt to net revenue, supported by strong revenue growth from toll rate increases and overall favorable traffic trends that we expect will continue.
Central Texas Regional Mobility Authority (CTRMA)	Texas	A	Stable	2,750,132	176,437	Strong	cTRMA owns and operates a toll road system in the economically vibrant Austin MSA, resulting in the toll road's strong demand characteristics given its significant role as a regional urban infrastructure provider, with important linkages in the Austin area, despite nontolled alternatives. Financial performance has trended favorably, with DSC (S&P Global Ratings-calculated) fluctuating in a range we consider strong (1.25x-3.0x), supported by strong toll-rate flexibility and a very strong management team with a conservative approach to financial and capital planning. However, CTRMA has ongoing expansion projects, which could incur higher-than forecast costs or delays, with ramp-up periods in traffic and toll rate increases needed to enhance revenues to meet escalating debt service requirements.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Central Texas Turnpike System (CTTS)	Texas	A	Stable	2,908,020	265,278	Strong	The CTTS is a 72.8-mile toll road system with a strong market position, resulting from its strong demand characteristics given its important role as a regional urban infrastructure provider, with important linkages in the economically vibrant Austin area, despite nontolled alternatives. Our financial risk profile assessment considers the CTTS' historically strong revenue growth due to rising toll revenues that we expect will continue based on a combination of organic traffic growth and increasing toll rates that rise in line with the Consumer Price Index, if necessary, to maintain strong coverage and strong debt burden capacity despite rising debt service requirements. Although recent financial results have been negatively affected by the transition of the system's back-office operations, with lost revenue transactions and higher expenses, we view the impact as transitory and not reflective of long-term credit stability. CTTS also benefits from strong support from the Texas Department of Transportation, which fully covers all operating, maintenance, and capital costs if a shortfall prevents CTTS from maintaining sufficiency on all its obligations.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Chesapeake Bay Bridge & Tunnel District	Virginia	BBB	Stable	750,989	74,577	Adequate	The Chesapeake Bay Bridge and Tunnel is a four-lane, 20-mile-long vehicular toll crossing of the lower Chesapeake Bay (U.S. 13) through a combination of low-level trestles connected by two approximately one-mile-long tunnels. Passenger cars make up approximately 90% of traffic, and trucks the remainder. Our enterprise profile incorporates the facility's strong demand characteristics, including a favorable service area providing a good base level of demand that has historically produced stable traffic despite the facility's single-asset nature and high toll rates. The district has adopted a toll rate schedule that calls for approximate 10% increases every five years to help finance the costs associated with the Parallel Thimble Shoal Tunnel Project and escalating debt service requirements, with the latest increase effective Jan. 1, 2019. We expect stable operating history and toll rate increases will continue to support financial metrics, offsetting construction risks associated with the project. More specifically, the financial risk profile reflects our view of adequate financial performance, based on strong pro forma debt service coverage (DSC; 1.25x to 3.00x) offset by the revenue stream's single-asset nature; adequate debt capacity with debt to net revenue of 15.9x; and a very strong overall liquidity position, with unrestricted cash equal to approximately 3,840 days' cash on hand and 50.4% of debt.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Chesapeake Transportation System (CTS)	Virginia	BBB+	Stable	292,492	33,840	Adequate	The Chesapeake Transportation System services the Virginia Beach-Norfolk-Newport News area of Virginia. It is made up of two assets that primarily serve passenger traffic: the Chesapeake Expressway that opened in 2001 and the Dominion Boulevard that opened in 2017. Total toll transactions increased 6% and total toll revenue increased 15% in 2022, exceeding prepandemic levels. Our financial risk profile incorporates our belief that the system will maintain strong coverage of at least 1.25x (S&P Global Ratings-calculated) and very strong liquidity, with the average weighted metric for the past three fiscal years more than 1,000 days' cash on hand. CTS has escalating debt service due to its 2012 series and Virginia Transportation Infrastructure Board debt. We expect annual toll rate increases for the Dominion Boulevard will help offset rising debt service costs.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Delaware River & Bay Authority (DRBA)	Delaware	A	Stable	569,838	179,211	Strong	The Delaware River & Bay Authority owns and operates the Delaware Memorial Bridge (DMB), five airports, Cape May-Lewes Ferry, and the Forts Ferry. The strong enterprise risk profile assessment reflects the important role, in our opinion, the twin spans of the DMB play as a key vehicular route south of the Philadelphia metropolitan area, connecting to Interstates 295 (I-295) and 95 (I-95) and the New Jersey Turnpike, offset by DRBA's reliance on a single asset. Traffic has recovered to pre-pandemic levels through June 2023, and is primarily composed of passenger cars, which make up approximately 80%-85% of traffic historically. The strong financial risk profile assessment is based on DRBA's consolidated financial results, which are dominated by the DMB. We expect the authority will maintain DSC (S&P Global Ratings-calculated) above 2x over the near term, and liquidity will remain what we consider very strong following recent toll rate increases and relatively stable traffic trends. The authority's five-year capital improvement plan totals \$604 million, with a portion of funding coming from \$50 million-\$75 million of bonds issued in fiscal years 2023 or 2024.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Delaware River Joint Toll Bridge Commission	Pennsylvania	A+	Stable	697,632	193,452	Very strong	The commission operates a mature, multi-asset toll bridge system, including 20 bridges with eight tolled, serving an economically healthy service area with very strong management oversight. The system has shown relatively stable traffic volumes, good competitive position, and authority to adjust toll rates given the eight tolled bridges provide convenient access and time-saving routes connecting various interstates over the Delaware River between New Jersey and Pennsylvania. Our strong financial risk profile assessment incorporates material revenue growth from recent toll rate increases and favorable traffic trends resulting in strong financial performance. However, in our opinion, the ongoing capital needs for a large 20-bridge system are a key credit weakness despite the commission's forecast to fund the sizable capital plan with pay-as-you-go revenues and prior bond proceeds.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Delaware River Port Authority	Pennsylvania	A+	Stable	1,096,224	334,560	Very strong	The Delaware River Port Authority is a mature, multi-asset system that provides critical links within the large Philadelphia and Camden MSAs and serves as steward of four bridges that cross the Delaware River between Pennsylvania and New Jersey: the Ben Franklin, Walt Whitman, Commodore Barry, and Betsy Ross bridges. In fiscal 2022, these constituted 37%, 41%, 15%, and 8% of total bridge traffic, respectively. The E-ZPass Electronic Toll Collection System is enabled on all four bridges. The enterprise risk profile assessment reflects the mature, multi-asset system that connects crucial parts of the two metropolitan statistical areas of Philadelphia and Camden, but is constrained by some competition and some weaknesses in transactions over varying economic cycles. The financial risk profile assessment reflects the authority's long history of favorable net revenue growth and strategic capital funding, resulting in good sustainable debt service coverage and very strong available liquidity.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
E-470 Public Highway Authority	Colorado	A+	Stable	1,265,968	265,681	Strong	E-470 is a 47-mile semi-circular beltway around the eastern perimeter of the Denver metropolitan area utilizing all-electric-tolling. The road has experienced generally favorable traffic trends, in part from the expanding service area economy, and has relatively good pricing power despite some modest weakness through the pandemic as a result of changing travel preferences from commuters. Our financial risk profile incorporates our expectation of DSC being maintained near or above 2x (S&P Global Ratings-calculated); debt-to-net revenues between 5x-10x with no near-term additional debt needs; and very strong liquidity that we expect will continue.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Florida Turnpike Enterprise	Florida	AA	Stable	3,122,259	1,110,938	Very strong	The system serves 20 of Florida's 67 counties, accounting for more than two-thirds of the state's population, and supports strong demand characteristics given its important role in facilitating intrastate and interstate commerce. Our enterprise risk profile assessment incorporates the system's historically favorable traffic trends, driven by commuting travelers, and projects stronger transaction growth due to its strategic location and absence of significant competition. Our financial risk profile incorporates the turnpike system's historically good revenue growth from periodic toll-rate increases, which has helped the system to maintain strong debt service coverage, extremely strong debt capacity, and relatively high unrestricted cash reserves. The system's conservative and comprehensive financial and capital planning with detailed financial forecast will help mitigate the risks associated with its signficant capital improvement plan that requires additional debt and potential use of cash reserves.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Foothill-Eastern Transportation Corridor Agency	California	A	Stable	2,727,109	216,953	Strong	Foothill-Eastern is a 36-mile, limited-access toll road system comprising three different highways in Orange County: State Route 241, State Route 261, and a portion of State Route 133. The system functions as a congestion reliever in the heavily crowded Los Angeles-Long Beach-Anaheim service area, resulting in favorable traffic demand. Fiscal 2022 toll transactions and toll revenues were 60.9 million and \$172.8 million, respectively. Toll transactions were 88% of 2019 levels but toll revenues were 105%, supported by 2% annual toll rate increases. Fiscal 2023 transactions were 63.4 million, which represents a recovery to approximately 92% of fiscal 2019 levels, and toll revenues were 112% of fiscal 2019 levels. We expect the system's annual toll rate increases will support the moderately escalating debt service requirements, thereby maintaining debt service coverage above 1.25x, which we consider strong. Our financial risk profile assessment also takes into consideration the system's maintenance of strong debt and liabilities (5x-10x) supported by no near-term additional debt needs, and very strong overall liquidity position.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Golden Gate Bridge Highway & Transportation District	California	AA-	Stable	61,000	185,418	Very strong	The district has operated the Golden Gate Bridge since 1928 and was authorized in 1969 to implement a mass transportation program using surplus toll revenues to reduce bridge traffic congestion, resulting in modestly sized transit divisions providing bus service in and between Marin, San Francisco, and Sonoma counties; and ferry service between Marin and San Francisco. First the pandemic and now the rise of remote working have negatively affected historical commuting patterns (about 80% of 2019 traffic totals) and the district's operations. Rate increases for the past five years have closed the toll revenue gap, now back to 2019 levels. However, fare revenue, like ridership, remains depressed and the district estimates that there are 150,000 fewer people in downtown San Francisco each weekday compared with pre-pandemic levels. Absent a ridership recovery, other revenue enhancements, or cost reductions, district resources will increasingly be required to subsidize the transit divisions, thus slowing capital reinvestment in its \$2.27 billion program. The district has no long-term debt and only \$61 million in commercial paper secured by net revenues and a line of credit.

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Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Grand Parkway Transportation Corp.	Texas	BBB+	Positive	4,740,570	253,365	Strong	The corporation has access to and supports the broader Houston-The Woodlands-Sugar Land, TX MSA containing a large population of nearly 7.1 million . The service area's economic fundamentals reflect favorable income levels and economic activity as measured by GDP per capita and above-average expected population growth. Toll transactions fell in fiscal 2020 due to the onset of the pandemic but improved by 13.7% in fiscal 2021 and nearly 18% in fiscal 2022. Our financial risk profile incorporates our expectation of DSC being maintained near or above 1.1x (S&P Global Ratings-calculated); exceptional liquidity, with unrestricted reserves totaling more than 1,000 days' cash on hand; significant debt burden; and our expectation that debt to EBIDA will remain at least in the adequate range, given the system has now completed its debt-financed road segments of H&I.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Greater New Orleans Expressway Commission	Louisiana	A	Stable	116,773	32,059	Strong	Greater New Orleans Expressway Commission consists of two Lake Pontchartrain Expressway bridges that are approximately 24 miles and connect the New Orleans Metropolitan area and Jefferson Parish with St. Tammany Parish and all points north. Fiscal 2022 toll revenue increased by 11.5% from the prior year, but was still down by 2.9% compared with pre-pandemic fiscal 2019 figures; fiscal 2022 traffic levels have recovered to about 94% of pre-pandemic (2019) levels. Stable traffic and increases in toll rates have enabled the system to hold strong coverage, with fiscal 2022 DSC (S&P Global Ratings-calculated) at 2.32x. We view the debt burden as manageable, reflecting the relatively minimal amount of senior-lien debt to subordinate debt and the closure of the senior lien coupled with the absence of additional debt plans, providing very strong debt to EBIDA between 5x-10x. The commission has strong liquidity of 400-800 days' cash on hand with no plans to materially draw down reserves.

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Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Harris County Toll Road Authority (HCTRA)	Texas	AA-	Stable	2,233,576	812,222	Very strong	The approximately 125-mile toll-road system primarily consists of the Sam Houston Tollway forming a ring around Houston (70 miles) and the Hardy Toll Road (21 miles), along with other, smaller connecting roadways, including the Westpark Tollway, Spur 90A, and the Katy Managed Lanes providing highly essential regional links, with minimal competition serving a large and growing population. HCTRA has, in our view, strong annual debt service coverage on senior- and subordinate-lien bonds after paying operating expenses and including transfers to the county as a debt-like obligation and has held very strong unrestricted liquidity consistently above 1,000 days' cash on hand.

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Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Hidalgo County Regional Mobility Authority	Texas	BBB-	Stable	304,928	8,552	Highly vulnerable	The authority's new 365 Toll Project will relieve traffic congestion, coordinate and promote international trade across the U.SMexico border, and benefit local travelers by providing a high-speed connection between the Pharr-Reynosa International Bridge, the Anzalduas International Bridge, the Anzalduas International Bridge, the McAllen Foreign Trade Zone, and industrial areas and warehouses in the region. Construction of the project is expected to continue through the end of calendar 2025. We believe the project has sufficient mechanisms and characteristics that adequately mitigate construction risk as it benefits from an existing stable vehicle registration fee revenue stream. However, a moderately aggressive toll revenue growth forecast to meet escalating debt service requirements limits the rating.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Illinois State Toll Highway Authority (ISTHA)	Illinois	AA-	Stable	6,874,440	1,593,815	Very strong	Illinois State Toll Highway Authority (ISTHA) toll roads are only located in Northern Illinois and the Chicagoland region, where the majority of the state's overall population is located and thus the traffic demand is highly dependent on the overall health and vitality of the broader Chicago MSA. Service area population growth is below the national average but is offset by a favorable GDP per capita and populous MSA. Fiscal 2022 systemwide toll revenues totaled about 97% of fiscal 2019, up 3.4% from fiscal 2021, while fiscal 2022 systemwide toll transactions totaled about 94% of fiscal 2019, up 2.2% from fiscal 2021. Generally favorable traffic volumes and toll rate increases, tempered somewhat by significant ongoing capital needs that require additional debt and possible draws on unrestricted cash reserves to finance, in our opinion, will allow the authority to maintain S&P Global Ratings-calculated coverage, debt to net revenue, and unrestricted days' cash on hand at levels we consider strong (near 2x), very strong (below 10x), and extremely strong (above 800), respectively. The ISTHA is planning to issue about \$1.5 billion of additional debt during 2023-2025 to complete the debt financing of the Move Illinois Program, potentially increasing its debt service requirements 30% from 2022 to 2026.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Kansas Turnpike Authority (KTA)	Kansas	AA-	Stable	103,155	142,377	Very strong	The authority operates the 236-mile Kansas Turnpike, the only tolled road in the state, which faces little competition from toll-free alternative routes and is an important economic link across the Midwest. The 41-mile eastern portion connecting Kansas City to Topeka is a section of U.S. Interstate 70. The remaining portion extends from Topeka to the state's southern border, through Wichita, and includes an 82-mile portion of U.S. Interstate 35. Total toll transactions and toll revenues in fiscal years 2021 and 2022 recaptured 95% and 110% of fiscal 2019 levels, respectively. Our financial risk profile includes KTA's very strong debt service coverage, due to robust operating performance in conjunction with decreasing debt service requirements. It also considers the authority's extremely strong debt and liabilities assessment and very strong liquidity, with unrestricted liquidity balances above 700 days' cash on hand on a weighted-average basis over the last three fiscal years.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Laredo	Texas	A+	Stable	22,071	75,840	Very	The Laredo Bridge system consists of four bridges that serve as important border crossings between Texas and Mexico. The system has little competition and has experienced favorable traffic trends, particularly for southbound traffic. Our financial risk profile expects coverage to be near sufficiency because the system operates as a break-even enterprise (S&P Global Ratings-calculated); extremely strong debt to EBIDA supported by it having no near-term additional debt needs; and historically adequate liquidity.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Lee County	Florida	A+	Stable	72,835	55,225	Strong	The facilities consist of the Sanibel Causeway, the Cape Coral Bridge, and the Midpoint Memorial Bridge. Commercial vehicle activity is limited, and the vast majority (approximately 98%) of toll-paying traffic consists of passenger vehicles. We consider the toll system to have a strong market position because of its location in a favorable service area and absence of significant competition from toll-free roads, combined with the county's covenant not to build competing facilities unless they will become part of the three-bridge system. We expect the toll system's strong traffic and revenue recovery trends (following the toll suspensions and damage caused by Hurricane Ian) will support financial metrics consistent with a very strong financial risk profile despite the Sanibel Causeway's being partly closed for repairs until October 2023. More specifically, the financial risk profile reflects our expectation that the system will maintain strong debt service coverage (above 1.25x per S&P Global Ratings' calculations), extremely strong debt to net revenue (less than 5x), and very strong liquidity metrics, including more than 400 days' cash on hand and 20% liquidity to debt.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Maine Turnpike Authority	Maine	AA-	Stable	535,680	169,703	Very strong	The 109-mile toll highway, which includes 184 bridges, 19 interchanges, and 19 toll plazas from the New Hampshire border north to Augusta, connects Maine with southern New England, providing a highly essential route for discretionary and commercial travel using all-electronic-tolling. Historically, it has had a mature and stable traffic base, demonstrating low elasticity to toll increases given that it benefits from unlimited legal authority to change toll rates and there are no alternative routes. Our financial risk profile incorporates our expectation that DSC (S&P Global Ratings-calculated) will be near or above 2x; debt-to-net revenues will be between 5x-10x with anticipated additional medium-term debt needs in 2026, which we view as manageable relative to projected activity levels and revenue growth; and very strong liquidity, which includes a \$35 million line of credit for operating purposes if necessary.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Maryland Transportation Authority (MDTA)	Maryland	AA-	Stable	2,103,100	856,064	Very strong	The MDTA consists of seven pledged facilities that we believe provide essential service for central Maryland's highway, bridge, and tunnel network, including Interstate 95 (I-95). Its favorable service area economy, which primarily consists of the Baltimore-Towson-Columbia MSA, provides the authority with a strong and resilient demand base. MDTA follows prudent financial planning, which includes conservative forecasting and budgeting practices, adjusting operating expenditures, deferring capital spending for non-essential projects not yet started, and increasing toll rates as needed. We believe this will help MDTA maintain a very strong financial risk profile although it has additional debt needs associated with its \$2.7 billion capital improvement plan through 2028. The majority of these costs will be covered by surplus net revenues, state grants, and availability liquidity, however.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Massachusetts Department of Transportation (Metropolitan Highway System)	Massachusetts	A+	Positive	1,590,203	356,270	Very strong	The Metropolitan Highway System is composed of a 12-mile urban commuter toll road (a portion of Interstate 90 west of Boston) as well as the three-tunnel system connecting Boston to the regional road network and Boston Logan International Airport. The toll road experienced a steady improvement to 88%-90% of pre-pandemic transaction and revenue on the combined road and tunnel network. There are no toll rate-setting restrictions and new money debt is not permitted under the current indenture. Senior-(A+/Positive) and subordinate-lien (AA+/Stable) bond holders benefit from extraordinary contract assistance funding of \$125 million from the commonwealth to first pay debt service on the subordinate lien, then the senior lien and then other fixed costs. The subordinate lien is rated using our state criteria. Senior-lien bondholders benefit from a debt service reserve currently funded to \$83.7 million. Our financial profile incorporates our expectation of operation and financial performance trends improving steadily, which may result in an upgrade in the following year, given the system's large ongoing capital maintenance requirement of \$1.1 billion for fiscal years 2023-2027 and meaningful progress on a tunnel restoration project likely to depress toll revenues during fiscal 2024. Because of the contract assistance provided by Massachusetts, we also apply our government-related entity criteria, leading to MassDOT's Metropolitan Highway System senior-lien 'a' SACP elevated by one notch to 'A+'.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
McAllen International Toll Bridge	Texas	A	Stable	85,272	18,143	Strong	The McAllen International Toll Bridge system consists of the Hidalgo and Anzualdas Bridge, which serve as important border crossings between Texas and Mexico. Revenues are generated from tolls charged to southbound vehicles (Hidalgo and Anzalduas) and cross-border pedestrians (Hidalgo only). The system has competition from nearby Pharr International Toll Bridge. It experienced a strong rebound in toll revenue and traffic volume in fiscal 2022, fully recovering to prepandemic levels. Although the system has escalating debt service resulting from a privately placed \$63 million revenue bond issuance in fiscal 2022, we expect coverage (S&P Global Ratings-calculated), which includes transfers out to the city, will be held at strong levels above 1.25x and debt to EBIDA at very strong levels (between 5x and 10x).

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Metropolitan Washington Airport Authority (MWAA) (Dulles Toll Road)	Virginia	A	Stable	3,598,001	172,577	Strong	The MWAA's Dulles Toll Road is a 13.4-mile all-electronic tolled mature roadway with four lanes in each direction, running from Interstate 495 to State Road 28 with a direct connection to the Dulles Greenway. The strong enterprise risk profile incorporates periodic toll rate increases and the road's commuter user base, which serves a large and growing population and above-national-average GDP per capita in the region, which supports the ability to increase toll rates in the future. The strong financial risk profile reflects a projected return to historically strong DSC (S&P Global Ratings-calculated) due to a recovery in toll revenues and the near-term reduction of debt service requirements with this refunding and adequate debt capacity, with no additional debt needs and very strong cash reserves.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Miami Dade County (Rickenbacker Causeway)	Florida	A-	Stable	35,257	12,712	Adequate	The Rickenbacker Causeway is approximately 3.6 miles long and serves almost entirely passenger vehicle traffic with only 1%-2% of traffic being commercial vehicles. The strong enterprise risk profile reflects the causeway's important role as the only route connecting mainland Miami with the islands of Virginia Key and Key Biscayne, offset by its single-asset nature that exposes it to fluctuations in demand due to changes in economic cycles or temporary disruptions from occasional severe weather events. The strong financial risk profile reflects our expectation that the causeway's total DSC (S&P Global Ratings-calculated) will fluctuate around 2x and considers the causeway's continued amortization of debt, no additional debt needs, and use of cash reserves to fund its capital improvement plan. The causeway has a risk associated with its geographic concentration, relatively small revenue base, and exposure to extreme weather events, which we view negatively.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Miami-Dade County Expressway Authority (MDX)	Florida	A	Stable	1,287,476	239,433	Strong	Miami-Dade County Expressway Authority (MDX) is a 33-mile system, which includes five expressways running primarily east-west through the Miami metropolitan statistical area (MSA). It is overwhelmingly an urban-commuter system, with approximately 98% of revenue derived from two-axle vehicles. Fiscal 2022 net toll revenue and traffic volumes totaled \$227.5 million and 538.5 million, respectively, up from \$203.7 million and 503.6 million in fiscal 2019. The expressway's strong demand characteristics stem from providing critical transportation links in the expanding Miami-Fort Lauderdale-West Palm Beach MSA that has favorable levels of economic activity as measured by GDP per capita, a large population base, above-average expected population growth, and below-average unemployment. No additional debt plans and traffic volume, revenue performance, and no expected permanent reductions to toll rates will, in our view, allow the authority to maintain S&P Global Ratings-calculated coverage, debt to EBIDA, unrestricted days' cash on hand, and liquidity to unrestricted reserves at levels we consider strong (1.6x-1.8x), very strong (below 10x), and very strong (below 10x), and very strong (400 to 800 days and 3%-7.5% cash to debt), respectively, despite the ongoing legal dispute between MDX and the state, that, in our view constrains MDX's rate-setting flexibility.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Mid Bay Bridge Authority	Florida	BBB+	Stable	254,395	29,892	Adequate	The Mid Bay Bridge Authority consists of the Spence Parkway and Mid-Bay Bridge, which, together, act as a single, continuous road connecting Niceville, Fla. to Destin, Fla. Total toll transactions and revenues for fiscal 2022 were both 8% above fiscal 2019 and were relatively stable compared with fiscal 2021 levels. The stabilizing influence on traffic generated from activities at the Eglin Air Force Base somewhat offsets the fluctuating traffic volumes generated from tourism activities in the Destin and surrounding area, which are seasonal in nature. Although the authority has a moderately escalating debt service, we expect coverage to be maintained between 1.1x and 1.25x (S&P Global Ratings-calculated).

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Montgomery County Toll Road Authority	Texas	BBB-	Stable	87,680	15,019	Vulnerable	Montgomery County Toll Road Authority is located in the northwest portion of the greater Houston region and, when completed, along with HCTRA Tomball Tollway and TxDOT SH249 is expected to provide access to major employment centers in Harris County and Houston. Strong service area economic fundamentals, which include favorable income levels and economic activity as measured by GDP per capita, a large population base, above-average expected population growth support the toll road's demand profile. Fiscal 2022 toll revenue and toll transaction has increased 30% and 14%, respectively, compare to fiscal 2021. Our financial risk profile incorporates our expectation of DSC being held near or above 1.25x (S&P Global Ratings-calculated). We expect authority will keep debt to EBIDA between 5x-10x, and liquidity of more than 1,000 days' cash on hand. We view its capital improvement plan and debt needs as limited, given the project has just become operational. Due to the startup nature of the project and related uncertainties, actual performance could be worse than what is forecast.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
New Hampshire Turnpike System	New Hampshire	AA-	Stable	236,525	141,937	Very strong	New Hampshire Turnpike comprises approximately 89 miles of limited access highway, of which 36 miles are part of the US Interstate Highway System. The enterprise risk profile is based on our view of a mature turnpike system that plays an important role linking the major cities in New Hampshire and connecting Massachusetts and Maine. The turnpike has favorable demand characteristics with no significant regional competition and adequate rate-setting flexibility, albeit with no planned rate increases over the near term. The financial risk profile is based on the system's absence of additional debt needs during the upcoming five-year period as it funds its capital improvement plan on a pay-as-you-go basis and reserves, and our expectation that falling annual debt service requirements and leverage position will support very strong financial metrics beyond the outlook period.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
New Jersey Turnpike Authority	New Jersey	AA-	Stable	12,413,292	2,412,576	Very strong	The New Jersey Turnpike Authority consists of the Garden State Parkway and New Jersey Turnpike, both of which traverse the state from north to south. Total toll transactions in fiscal 2022 were 94% of 2019 transactions and rose by 3% over 2021. In our view, the toll roads provide essential linkages to the state's 9.5 million residents as well as the New York City metro area, creating very strong demand for the facilities. In fiscal 2022, debt service coverage dipped below 1.25x, as a result of transfers to the state, which we view as debt-like and were higher because the annual amount included those deferred during the pandemic. These transfers to the state will normalize at lower levels after fiscal 2023, helping to maintain debt service coverage around 1.25x. Despite the authority's large capital improvement plan, with \$1 billion in annual additional debt issuance expected through 2027, we believe debt service coverage and financial performance will remain stable based on the authority's implementation of 3% annual toll rate increases. In addition, these toll rate hikes will help mitigate the effects of any potential drop in demand from weaker macroeconomic conditions during the rest of calendar 2023.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
New York State Bridge Authority	New York	A+	Stable	114,235	74,543	Strong	The New York State Bridge Authority consists of the Rip Van Winkle Bridge, the Kingston-Rhinecliff Bridge, the Mid-Hudson Bridge, the Newburgh-Beacon Bridge, and the Bear Mountain Bridge. The system provides service across eight counties in the state and faces no competition from alternative routes. Toll transactions in fiscal 2022 increased 3% and are about 94% of 2019 levels. Toll revenues increased 12% in fiscal 2022 and exceed prepandemic levels. The authority has yearly 10-cent toll increases that it implemented in May 2023. Considering the recovering traffic and planned toll increases, we believe the authority will be abe to maintain a very strong enterprise risk profile and a strong financial risk profile. Our financial risk profile incorporates our expectation of DSC being held at strong levels as rate increases are reflected by fiscal 2023. Although coverage was less than 1x in fiscal 2022, we believe this is transitory as toll revenues continue to recover and toll rate increases are implemented.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
New York State Thruway Authority	New York	A	Stable	6,093,150	920,474	Very strong	The New York State Thruway Authority is a mature statewide system with limited competition from toll-free alternatives and tolls that are relatively low compared with those of other regional authorities. Total toll revenues in 2022 were 8% higher than 2021 levels and 12% higher than 2019 levels. Total toll transactions were 4% higher than 2021 levels and 40% higher than 2019 levels. With the rising revenues attributed to toll rate increases and recovered traffic, we believe the authority will be able to hold a very strong enterprise risk profile and strong financial risk profile incorporates our belief of DSC being held near 1.25x, adequate debt and liabilities as the authority has future debt plans, and adequate liquidity as the authority has a three-year weighted-average of 400 days' cash on hand. The authority does have escalating debt service requirements but we believe these will be offset by further planned toll rate increases.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Niagara Falls Bridge Commission	New York	A+	Stable	97,133	34,397	Strong	The Niagara Falls Bridge Commission consists of three bridges that connect the Province of Ontario, Canada and Niagara County, N.Y. The bridge system serves mainly commuter traffic. It faces competition from the Peace Bridge, 22 miles south in Buffalo, N.Y. Toll revenues in fiscal 2022 were 86% of 2019 levels. Our financial risk profile incorporates our belief that coverage will be maintainted near historical levels above 1.25x (S&P Global Ratings-calculated) as the system contines to recover traffic and revenues, very strong debt and liabilities as the system has no near-term additional debt needs, and extremely strong liquidity with the system having more than 1,000 days' cash on hand.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
North Carolina Turnpike Authority (Monroe Expressway)	North Carolina	BBB	Positive	308,602	30,744	Adequate	Monroe Expressway is 19.8 miles long, of which approximately 18 miles are tolled extending from U.S. Highway 74 (US 74) at Interstate 485 in eastern Mecklenburg County, N.C., to US 74 near Marshville. It provides a limited-access, four-lane road and an alternate and timesaving route for travelers who currently take U.S. 74 through the town of Monroe and several other communities. The road has experienced generally favorable traffic trends since it opened to traffic in November 2019, in part benefitting from a large and growing service area economy. We believe the road benefits from very strong management and governance that has established a record of operating and maintaining its assets, supported further by strong state support that guarantees replenishment of O&M reserve funds and R&R fund in the event of a shortfall. Our financial risk profile reflects our expectation that debt service coverage (S&P Global Rating-calculated) could fluctuate near 1.25x should toll revenues trend lower than forecast, debt to net revenue will eventually settle below 20x as existing debt amortizes with no plans to issue additional new money debt, and unrestricted cash reserves will be maintained at levels that we consider strong, above 400 days.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
North Carolina Turnpike Authority (Triangle Expressway)	North Carolina	BBB	Stable	1,564,357	56,046	Adequate	The Triangle Expressway system extends from the interchange of I-40 and NC 147, or NC 885 on the north end, to the NC 55 bypass near Holly Springs, N.C., on the south end, a length of 18.8 miles. The road also extends the planned and partially complete outer loop around the greater Raleigh area. The road has experienced generally favorable traffic trends, in part benefitting from a large and expanding service area economy. We believe the road benefits from very strong management and governance that has established a record of operating and maintaining its assets, supported further by strong state support that guarantees replenishment of operations and maintenance reserve funds and renewal and replacement fund in the event of a shortfall. The authority's toll rate policy is to increase toll rates in-line with an independent consultant's traffic and revenue study to align toll revenues with forecasts. Our financial risk profile incorporates our expectation of DSC being maintained around 1.1x (S&P Global Ratings-calculated); debt-to-net revenues between 20-30x as the authority has additional debt needs to finance the final portion of its expansion to close the outer loop around Raleigh, referred to as the Complete 540 project; and strong liquidity.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
North East Texas Regional Mobility Authority	Texas	Α-	Stable	179,181	19,937	Adequate	The authority manages and operates a 26-mile long toll road that forms a partial loop around the city of Tyler, Texas. Traffic activity remains steady to growing, supported by completed extensions and further ramp-up in recent years, which we now view as completed. However, the system still serves a small MSA with less-important road linkages and some variability in historical demand. For fiscal 2022, we calculate debt service coverage (S&P Global Ratings-calculated) of 1.29x. Although the authority has moderately increasing debt service, we anticipate biannual toll rate increases will provide strong coverage near or above 1.25x. Considering it has no additional near-term debt needs, we believe debt to EBIDA (S&P Calculated) will remain strong, generally between 10x and 15x.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
North Texas Tollway Authority (NTTA)	Texas	AA-	Stable	9,466,479	1,100,172	Very strong	The NTTA provides critical transportation links in the expanding Dallas-Fort Worth-Arlington metropolitan statistical area, despite the existence of non-tolled alternatives. Fiscal 2022 toll transactions rose 8.3% from the previous fiscal year and were about 104% of pre-pandemic 2019 levels with continued improvement into 2023. The NTTA is a very large regional urban system and is mainly used by passenger vehicles. Because of regularly scheduled toll rate increases, generally favorable traffic trends, and no new-money borrowing needs, we expect the NTTA will maintain S&P Global Ratings-calculated coverage, debt to EBIDA, unrestricted days' cash on hand, and liquidity to debt at levels we consider consistent with a strong financial risk profile, with coverage above 1.25x, debt to EBIDA between 10x-15x, days' cash on hand above 800 days, and liquidit to debt below 7.5%.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Ohio Turnpike Commission	Ohio	AA-	Stable	2,102,553	382,315	Very strong	The Ohio Turnpike is a mature toll system spanning the northern part of the state, and serving as an important travel corridor between the Northeast and Midwest. It connects to the Pennsylvania Turnpike in the east and the Indiana Turnpike to the west, and has a very strong market position with little competition. While fiscal 2022 toll transactions were 95% of prepandemic levels, toll revenues exceeded prepandemic levels due to yearly toll increases that occur on Jan. 1. The financial risk profile incorporates our belief that the system will maintain strong coverage (S&P Global Ratings-calculated), very strong debt and liabilities assessments due to the system not having any additional debt plans, and extremely strong liquidity following the strong recovery in toll revenues and planned toll rate increases.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Oklahoma Turnpike Authority (OTA)	Oklahoma	AA-	Stable	1,824,006	382,293	Very strong	The OTA consists of 11 toll roads with 624 center lane miles, providing connectivity between the state's two primary economic and population centers (Oklahoma City and Tulsa). Its very strong market position is supported by growth in traffic demand, limited competition, and demonstrated toll rate-setting flexibility. In June 2023, OTA increased toll rates for four segments of the turnpike system for non-electronic toll users as the state converts to cashless tolling. For fiscal 2022, revenues recovered to 109.7% of fiscal 2019 levels and conservative growth in projected revenues to \$363.1 million, or 109.8% of 2019 levels. Our financial risk profile incorporates our historical view of very strong DSC that has been above 2x and extremely strong debt-to-net revenues below 5x. However, these metrics could be tempered, in our view, by the recent validation by the Oklahoma Supreme Court for OTA to proceed with its bonding plans that aims to expand the system through the 15-year, \$5 billion ACCESS Oklahoma program. Depending on the magnitude and timing of future bond issues, our view of OTA's financial metrics and its overall financial risk profile could be affected. We anticipate the OTA will maintain very strong liquidity, with its policy of targeting unrestricted cash balance of \$60 million.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Orange County Transportation Authority	California	AA-	Stable	81,909	61,135	Strong	The 91 Express Lanes is a four-lane, 10-mile toll road built in the median of California's Riverside Freeway (SR 91) between the Orange/Riverside County line and the Costa Mesa Freeway (SR 55). The toll road has historically seen favorable traffic growth supported by the 91 EL's location in the heavily congested and vibrant Los Angeles-Long Beach-Anaheim service area. The financial risk profile reflects our view of the road's historically very strong debt service coverage (3x-4.75x) and extremely strong debt capacity and liquidity position, which we expect will be maintained given the absence of additional debt plans and strong traffic and revenue performance.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Osceola County (Osceola Parkway)	Florida	BBB+	Stable	306,978	15,295	Adequate	Osceola Parkway is a 17.5-mile partially tolled arterial road extending east-west across the northern boundary of Osceola County, Fla. that connects Walt Disney World with Interstate 4 and Florida's Turnpike before terminating at Simpson Road. It has experienced generally favorable traffic and revenue trends, which pointed to a complete recovery to peak fiscal 2018 traffic levels in fiscal 2022. A robust and growing service area economy, along with indexed toll rate increases, will support the parkway's adequate financial risk profile. Our financial risk profile incorporates our expectation of DSC being held above 1.25x (S&P Global Ratings-calculated), tempered by our view of the parkway as a single-asset toll road; debt-to-EBIDA between 20x-30x given the parkway's high debt burden for a toll road this size, although improving as existing debt amortizes and supported by no additional debt needs; and strong liquidity balances that we expect the parkway will sustain.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Pennsylvania Turnpike Commission (PTC)	Pennsylvania	AA-	Stable	15,612,835		-	The PTC's strategic location and favorable traffic trends, with direct links to the New Jersey Turnpike to the east and the Ohio Turnpike to the west, and absence of significant competition from toll-free roads, have supported the commission's resilient financial results and demand characteristics. The PTC has demonstrated a willingness and ability to adjust toll rates frequently through different economic conditions to maintain steady financial metrics, despite increases in debt service and leverage. Commercial vehicle traffic accounts for about 50% of total toll revenues. Fiscal 2022 net fare revenues totaled about \$1.46 billion or 110% of fiscal 2019, while toll transactions totaled about 200 million or 94% of fiscal 2019. PTC has a relatively high debt burden with reliance on revenue growth to address rising debt service requirements from funding Act 44 payments to PennDOT and ongoing significant capital needs that require additional senior-lien turnpike revenue bonds to partially fund. We expect the PTC's total DSC (S&P Global Ratings-calculated), debt capacity, and overall liquidity will be held at what we consider generally strong, with total DSC near or above 1.25x; debt-to-net revenues below 15x; and available liquidity at levels equating to near or above 400 days' cash on hand. Fiscal 2022 marked the last fiscal year the PTC was required to make a \$450 million annual payment to PennDOT pursuant to Act 44/Act 89. Starting in fiscal 2023 through 2057, the term of the amended funding agreement between the
							commission and PennDOT,

Table 1

Entity	State	Rating (senior lien) (Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
							the PTC's required annual payment to PennDOT is \$50 million, unless the legislature amends the funding agreement, which we do not expect will happen. The PTC is required to make the \$50 million annual payment with current revenues, not debt.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Pharr International Toll Bridge*	Texas	A	Stable	39,746	16,996	Strong	The Pharr-Reynosa International Toll Bridge is a four-lane bridge that stretches over three miles of the Rio Grande flood plain from the Pharr port of entry to Reynosa in Mexico, playing an integral role in the region and nationally, facilitating essential trade and commerce between the U.S. and Mexico. The bridge rises more than four feet above the maximum high-water level of the Rio Grande River, ensuring floods would not affect operations. On the U.S. side, the City of Pharr in Texas owns and operates the bridge. The bulk of revenues are from southbound traffic on one bridge, which could fluctuate due to competition from other international toll bridge crossings (like McAllen International Bridge, five miles from Pharr) along the Texas border and changes in federal trade and border control policies. Fiscal 2022 truck traffic volume totaled about 121% of fiscal 2019 levels, while fiscal 2022 passenger car volume was slower to recover, totaling about 69% of fiscal 2019 levels. Due to strong commercial traffic trends, which have historically accounted for about 80%-85% of total toll revenues and about 50% of total southbound traffic, the bridge has experienced generally favorable historical toll revenue performance during different economic cycles. Total toll revenues increased every year from fiscal 2015-2022, averaging 4.2% per year. The bridge operates on a break-even basis, with most excess revenues after payment of bridge funding requirements and obligations transferred to the city monthly. We expect

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
							the bridge will keep financial metrics consistent with a strong financial risk profile, with the city implemeting toll rate increases, as needed, to maintain S&P Global Ratings-calculated coverage (which includes transfers out to the city) generally near or above 1.1x, debt to EBIDA below 10x, and days' cash above 250. Additional debt or a materially draw on cash reserves may be needed to finance construction of the new span project to pay for budget increases.
Rhode Island Turnpike & Bridge Authority	Rhode Island	A	Stable	48,426	23,167	Adequate	The Rhode Island Turnpike and Bridge Authority is a four bridge system where only one of the bridges, the Newport Pell, is tolled. The system faces little competition and has had steady activity levels. Fiscal 2022 toll transactions and toll revenues were 10.5 million and \$23.8 million, respectively. Toll transactions were 4% below 2019 levels but toll revenues increased about 25.1% in fiscal 2022 from fiscal 2021, following rate increases effective Dec. 1, 2021. Our financial risk profile assessment reflects debt service coverage (S&P Global Ratings-calculated) fluctuating at strong (1.25x-3.0x) to very strong (3.0x-4.75x), tempered by the bridge's single-asset nature, very strong debt and liabilities (5x-10x) supported by no near-term additional debt needs, and extremely strong overall liquidity position with \$42.9 million in reserves as of June 30, 2022.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Richmond Metropolitan Transportation Authority* (RMTA)	Virginia	A+	Stable	136,419	29,688	Strong	The RMTA consists of three tolled assets that provide important linkages to downtown Richmond: the Powhite Parkway, the Downtown Expressway, and the Boulevard Bridge. It faces limited competition from public transportation or free alternative routes into the city due to its very low toll rates, with rates not having been raised since 2008. Both toll transactions and revenues increased 16% in fiscal 2022 from 2021. The system's financial risk profile incorporates our view that RMTA's financial performance will recover such that the authority maintains its strong debt service coverage. We also believe RMTA's debt and liabilities capacity will remain very strong, supported by the authority's absence of additional debt issuance plans, and that liquidity balances will be held at what we consider very strong, providing more than 400 days' cash on hand.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Riverside County Transportation Commission (RCTC)	California	A	Stable	678,665	62,096	Strong	The RCTC 91 consists of two tolled express lanes of approximately eight miles in each direction in the median of SR-91 in Riverside County, CA and Interstate 15 (I-15) interchange. Since the road's opening in March 2017, traffic volumes have outperformed projections due to the system serving a healthy service area economy and functioning as an important link to a segment of SR-91 in nearby Orange County. For fiscal 2022, we calculate debt service coverage (S&P Global Ratings-calculated) of 1.66x. Although the system has escalating debt service requirements, we expect the variable pricing structure and the service area's strong fundamentals will continue generating favorable traffic demand trends that will result in DSC above 1.25x. In addition, we expect RCTC's debt-to-EBIDA ratio (S&P Global Ratings-calculated) will remain strong, between 10x-15x with no near-term additional debt needs; and that management will continue to hold unrestricted liquidity that we consider very strong.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
San Diego Association of Governments (SANDAG) (South Bay Expressway)	California	A	Stable	177,455	34,503	Adequate	South Bay Expressway State Route 125 (SR-125), located in suburban Chula Vista, Calif. and operated by SANDAG, is an 11-mile limited-access toll road approximately four miles east of and parallel to Interstate 805 providing convenient, but not essential, access between an expanding, affluent suburban portion of San Diego County in eastern Chula Vista and the broader highway network and employment hubs in the southern the metropolitan statistical area. It also offers improved access for shippers using the Otay Mesa U.SMexico border crossing. Most of the vehicles on the road enter or exit SR-125 at the SR-54 interchange, with travelers commuting 25-30 minutes to and from downtown San Diego or points northwest of the toll corridor and over three-quarters of all users paying via electronic toll collection. The system exhibits strong financial performance, given our assumption of steady increases in demand in the long term, with some toll rate-setting flexibility, level debt service, and no additional debt plans at present.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
San Joaquin Hills Transportation Corridor Agency (SJHTCA)	California	A	Stable	2,544,931	143,531	Strong	SJHTCA operates a 15-mile, limited-access road from Newport Beach to San Juan Capistrano in southwest Orange County, Calif. The toll road serves as a traffic reliever in the heavily congested Los Angeles-Long Beach-Anaheim service area, resulting in favorable traffic demand. Fiscal 2022 toll transactions and toll revenues were 24.8 million and \$137.9 million, respectively. Toll transactions were 78% of 2019 levels but toll revenues were 84%, supported by 2% annual toll rate increases. Fiscal 2023 transactions were 25.7 million, which represents a recovery to approximately 81% of fiscal 2019 levels, and toll revenues were 89% of fiscal 2019 levels. We believe the service area's strong fundamentals and favorable traffic trends, coupled with annual toll rate increases, will provide revenues sufficient such that DSC is held at or above 1.25x, despite escalating debt service requirements that rise at an average of 3.3% per year through 2040. We also expect debt-to-EBIDA (S&P Global Ratings-calculated) to be sustained at what we consider adequate, between 15x-20x given no additional debt needs. SJHTCA also has very strong liquidity balances, with approximately \$300 million at fiscal year-end 2022, which we expect it will maintain.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
South Jersey Transportation Authority	New Jersey	BBB+	Stable	924,875	163,474	Adequate	The South Jersey Transportation Authority operates the Atlantic City Expressway, which is a 44.2-mile-long toll road connecting the Philadelphia MSA to Atlantic City, N.J. and surrounding shore towns. Although the authority also operates the Atlantic City International Airport and provides other transportation services to the Atlantic City area, 73% of operating revenue is derived from tolls. Following a drop in traffic activity in fiscal 2022 of 1.7% from 2021, fiscal 2023 year to date (through June) total transactions increased 2.3% from fiscal 2022. However, toll transactions recovered to only 86.3% of fiscal 2019 transactions, due to the significant concentration of leisure travelers and declines in the gaming industry caused by increased competition from nearby states and online gaming in fiscal 2022. To reflect escalating debt service requirements, our rating reflects projected fiscal 2025 operating figures, with debt service coverage we expect will the authority will sustain at strong to adequate (near 1.25x).

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Sunshine Skyway Bridge	Florida	A	Stable	109,662	29,246	Strong	Sunshine Skyway is a 17.4-mile, four-lane, single-asset toll bridge with one tolling plaza for northbound traffic and one for southbound traffic. The bridge has experienced historically favorable traffic trends and toll revenue growth, given its role as a critical link between St. Petersburg and Palmetto that provides significant time savings, good rate-setting flexibility, and limited competition from toll-free alternative routes. Our financial risk profile considers our expectation that DSC (S&P Global Ratings-calculated) will be near 1x because the bridge operates as a break-even enterprise as all excess bridge revenue flows to Florida Department of Transportation (FDOT) to fund other off-system improvements. We expect debt capacity and liquidity will remain strong, given the bridge's access to FDOT's state transportation trust fund and no additional debt plans aside from the remaining draws on its \$114 million State Infrastructure Bank loan.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Tampa Hillsborough County Expressway Authority (THEA)	Florida	A+	Stable	842,183	116,057	Strong	THEA is a 16.9-mile, all-electronic, limited-access toll road that traverses Hillsborough County, providing access to downtown Tampa Bay. The expressway system has demonstrated generally favorable traffic and revenue trends through different economic cycles and annual toll rate increases (greater of 2.5% or CPI), which we expect will continue, given its role serving strategic routes to downtown Tampa with limited competition. Although THEA plans to issue additional debt to fund capital projects through 2027, we expect it will hold strong coverage and very strong debt to net revenues, given its history of good rate-setting flexibility and strong traffic and revenue trends.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
Triborough Bridge & Tunnel Authority (TBTA)	New York	AA-	Stable	9,316,035	3,384,477	Extremely strong	TBTA operates a large and diverse seven-bridge-and-two-tunnel system (with \$2.3 billion in toll revenues and 326 million in toll-paying traffic in 2022, and no one facility accounting for more than about 23% of toll revenue) within the very congested and highly populated New York City metropolitan area, providing it with good pricing power. For 2022, TBTA traffic totaled 99% of 2019 traffic, while toll revenue totaled 113% of 2019 toll revenue due to a recent rate increase. The system faces competition from the mass transit offerings in the city (bus, subway, commuter rail). We expect the TBTA will sustain financial metrics consistent with a strong financial risk profile as a break-even enterprise, given its long history of willingness and ability to raise toll rates that has produced generally favorable revenue and traffic trends through different economic cycles. Planned toll rate increases will allow the authority to hold coverage around 1.1x (S&P Global Ratings-calculated, including transfers out to the Metropolitan Transportation Authority [MTA]), debt to EBIDA of 5x-10x, days' cash on hand near 400, and unrestricted reserves to debt near 7.5%. Mandatory operating surplus transfers to the MTA, in our opinion, limit the TBTA's ability to fund more of its capital improvement plan on a pay-as-you-go basis. The authority has significant ongoing capital needs, requiring about \$2.6 billion of additional debt (from 2023-2027) to finance about \$2.3 billion of TBTA capital program costs and \$258 million of capital costs

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
							related to the Congestion Business District Tolling Program (CBDTP). We believe the CBDTP could result in TBTA traffic volume and toll revenues being lower than projected. On July 21, 2023, the State of New Jersey filed a lawsuit against the U.S. Department of Transportation and Federal Highway Administration (FHWA) alleging deficiencies in the environmental assessment process for the CBDTP. The MTA and TBTA are not named as defendants. New Jersey is asking that the FHWA conduct a full environment impact statement (EIS), which would adequately consider the CBDTP's environmental and financial impacts on New Jersey. The start of revenue collection for the CBDTP is currently assumed to occur in the middle of the second quarter of 2024. We expect this latest development, however, will likely push the start of CBDTP revenue collection further out into the future if the courts decide that a full EIS is required.

Table 1

Entity	State	Rating (senior lien)	Outlook	Debt outstanding (\$000s)	Total revenues (\$000s)	Market position	Summary
West Virginia Parkways Authority (WVPA)	West Virginia	AA-	Stable	482,790	184,201	Very strong	WVPA is a mature four-lane toll highway stretching 88 miles between Princeton and Charleston, West Va. Its facilities provide geographically important linkages to surrounding states for passenger and commercial vehicles, while exhibiting resilient demand across different economic cycles. Our market position assessment accounts for the important connection the toll road across the Appalachian Mountain region, facilitating effecient traffic flow to neighboring states: Kentucky, North Carolina, and Pennsylvania. In addition, WVPA has made timely increases to toll rates that have supported revenue growth and resilience of financial metrics. Although the traffic recovery rate is 98.5% of pre-pandemic levels, the authority approved a 5% automatic toll rate increase effective Jan. 1, 2022, resulting in an 11% increase in toll revenues in 2022 from the previous year. Our financial risk profile incorporates our expectation that DSC (S&P Global Ratings-calculated) will be at or above what we view as very strong. Debt-to-EBIDA remains between 5x-10x, which we view as very strong, with no anticipated debt needs and a \$224 million capital improvement plan likely to be funded on a pay-as-you-go basis. WVPA also has very strong liquidity, and we expect it will hold unrestricted days' cash on hand above its 365 day policy target in the near term.

^{*}All credits reflect fiscal year-end 2022 results, except for Pharr International Toll Bridge and RMTA, which reflect fiscal year-end 2021 results. DSC--Debt service coverage.

Justin Pogrebinsky contributed research to this report.

Related Research

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This report does not constitute a rating action.

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