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Forecasting the Bond Market's Response to Federal Infrastructure Investments

The Broadcast Will Begin at 2:00 PM Eastern

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Hello! Welcome to the webcast.

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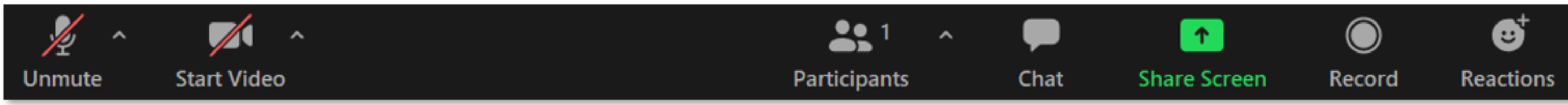

Submit your questions in the chat feature pictured above.

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Panelists

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Beth Mullen
Partner, National Director – Affordable Housing Industry
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FORECASTING THE BOND MARKET'S RESPONSE TO FEDERAL INFRASTRUCTURE

CDFA//BNY Mellon Development Finance Webcast Series

January 18, 2022

CohnReznick LLP

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2022 MOODY'S OUTLOOKS

U.S. Public Infrastructure

2022 Outlook

11 January 2022

US airports outlook is positive

Strength of domestic travel will hold, and international and business travel will resume growth once recently renewed travel restrictions related to the latest virus variants are eased

Negative	Stable	Positive
What could change outlook to negative » If progress on containing the pandemic reverses and leads to renewed restrictions on travel or activities, or » Major airlines enter bankruptcy at the same time	**What could change outlook to stable** » If demand shows signs of weakening, or » Certain restrictions return following the identification of new virus variants, such as Omicron, or » The pace of airlines adding capacity slows, plateaus or reverses	**Drivers of a positive outlook** » We forecast US enplanements – the number of people departing from an airport – will increase to 95% of 2019 levels by the end of 2022, up from around 85% today, despite expected bumps along the way

The positive sector outlook reflects our view of credit fundamentals in the US airports sector over the next 12 to 18 months. Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuers' specific characteristics and actions. A sector outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks.

US airports – positive outlook

2022 outlook remains positive as domestic travel recovery continues

- **International and business travel will increase despite constraints.** Domestic leisure travel will remain the top performing segment. But normalization of travel will reduce the disparities between the best and worst recovering airports.
- **Improving airline profitability will help airlines make airport payments.** Airports will need to increase charges to airlines as support from the government for operations runs out. But improving airline profitability supports the ability make increased payments.
- **US airports retain financial flexibility.** Lower debt service costs, and in many cases ample remaining federal relief grants, limit the risk that airports will draw on their high cash balances. In addition, the recently passed $1.2 trillion infrastructure act will provide grants that replace some debt-issuance plans.
- **High energy costs are a risk to full recovery.** High energy costs have the potential to limit recovery if airlines limit capacity as they have historically. In addition to the potential for a constrained supply of airline seats, high home heating and transportation costs could also erode the consumer’s discretionary purchasing power for air travel.

US public ports outlook is positive

High absolute level of cargo activity and increased cruise activity will support favorable credit conditions for ports; supply chain stresses and rising fuel costs are balanced by strong port revenue and record profitability among ocean carriers

Negative

What could change outlook to negative

- If we expect cargo volume growth will be below 0% while port costs rise meaningfully, and
- The financial strength of port counterparties (ship lines and terminal operators) deteriorates meaningfully

Stable

What could change outlook to stable

- If we expect cargo volume growth below 2.5%, and
- We see cost increases related to congestion, fuel or other inflationary factors become more pronounced over the next 12-18 months

Positive

Drivers of a positive outlook

- We expect container cargo volume will increase 3%-5% in 2022 despite historically high current activity and supply chain disruptions
- Cargo demand is strongly correlated with US GDP and retail sales, both of which we forecast will increase about 4% in 2022

The positive sector outlook reflects our view of credit fundamentals in the US public ports sector over the next 12 to 18 months. Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuers' specific characteristics and actions. A sector outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks.

US public ports – positive outlook

2022 outlook remains positive on elevated cargo volume and revenue

- **Container cargo will remain at a high absolute level in 2022.** Cargo demand is strongly correlated with domestic GDP and retail sales, both of which we forecast will rise about 4% in 2022. Strong consumer spending and inventory rebuilding in the US will support high absolute levels of cargo and revenue for ports – often 10%-20% above pre-COVID levels.

- **Congestion will constrain growth potential, but gradually ease.** Port congestion reduces the volume of cargo ports can handle, and ocean and inland transportation bottlenecks also reduce system capacity. Congestion will persist through H1 2022 with elevated demand, and labor and equipment shortages. But we expect it will ease as demand slows for a variety of reasons, and as ports and federal government partners take steps to reduce congestion.

- **Ocean carriers' strong financial health is positive for ports.** Carriers, which pay port charges and have negotiating power with ports, are generating record profits. Their financial strength reduces their sensitivity to prices and supports pricing for ports.

- **Cruise activity will ramp up.** We do not expect a return to pre-COVID passenger levels until at least 2023. But demand for cruising is strong and operators will increase capacity significantly by mid-2022, which will support ports' revenue growth.

- **Risks to the outlook exist.** Risks include the pandemic's progression and its effect on GDP, consumer spending patterns and potential disruptions from expiration of a key labor contract.

US toll roads outlook is positive

Positive outlook incorporates the continued delinking of general mobility from the local COVID-19 case count as we learn to live with the virus

Negative

What could change outlook to negative

- If we expect median traffic levels to decline and median annual revenue growth to fall below 2%

Stable

What could change outlook to stable

- If we expect median annual traffic growth will slow to 2% or lower, with a corresponding slowdown in median annual revenue growth below 4%

Positive

Drivers of a positive outlook

- We expect median tolled traffic and revenue growth will continue to exceed 2% and 4%, respectively, through 2022
- GDP and employment growth, resurgent demand for in-person services, increased work-related travel, and rebuilding retail inventories drive traffic growth
- Willingness to increase toll rates pegged to above-average CPI levels supports higher toll rates and toll revenue growth

The positive sector outlook reflects our view of credit fundamentals in the US toll roads sector over the next 12 to 18 months. Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuers' specific characteristics and actions. A sector outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks.

US toll roads – positive outlook

2022 outlook positive as strong GDP and CPI growth drive traffic and revenue growth

- **Traffic will continue to increase in 2022 as demand for services rises and return to work continues.** Passenger-traffic growth has room to rise because demand for certain in-person services remains below pre-pandemic levels in some parts of the country.
- **Commercial traffic remains strong as retailers rebuild inventories and consumer demand stays high.** Commercial traffic was high in 2021 and is likely to remain so in 2022 because of continued strong consumer demand and prolonged retail restocking amid supply chain backlogs. But commercial-traffic growth is likely to be limited, partly because of an inability to add trucking capacity quickly.
- **Willingness to increase toll rates supports accelerated revenue growth.** Most US toll roads annually adjust their toll rates according to changes in the Consumer Price Index (CPI). With the CPI at historically high levels and most toll roads continuing to adjust their toll rates accordingly, near-term toll revenue growth should accelerate at above-average levels.
- **Better-than-expected financial performance supports sustained financial strength.** Toll roads have maintained strong balance-sheet liquidity and refinanced debt to ensure debt service coverage ratios comply with financial covenants. We expect financial metrics will improve in 2022 as toll revenues continue to increase and cost-cutting measures taken during the pandemic continue to support margins.

Mass transit stable driven by federal aid and continued tax growth

Substantial pandemic-related federal assistance and continued tax revenue growth will offset transit systems' operating losses driven by continued low ridership. Depressed ridership and social risks will likely lead to structural changes in the long term in service levels, fares, operating budgets and capital plans to maintain stable credit profiles.

Negative

What could change outlook to negative

- If the economic rebound in transit service areas — typically more urbanized areas — is significantly weaker than our current national forecast, leading to weaker tax collections
- Return in ridership is weaker than expected

Stable

Drivers of a stable outlook

- Ridership will improve as more workers return to offices. However, most systems will reach only 60% to 65% of their pre-pandemic levels by year-end 2022
- Economic growth will increase collections in sales, payroll and other taxes dedicated to mass transit
- Federal aid will offset operating losses
- Transit systems face increased social demands to realign services and reduce fares
- Some efforts to reduce carbon emissions through increased transit usage will improve ridership and investment opportunities in systems

Positive

What could change outlook to positive

- This is unlikely during the outlook period

The stable sector outlook reflects our view of credit fundamentals in the US mass transit sector over the next 12 to 18 months. Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuers' specific characteristics and actions. A sector outlook does not represent a sum of upgrades, downgrades or ratings under review or an average of rating outlooks.

Mass Transit

Key credit themes

- **Ridership will grow as offices gradually reopen, but recovery will be slow and partial.** Currently at 30% to 50% of pre-pandemic levels, ridership will improve steadily through 2022 as more workers return to offices. However, most systems will reach only 60% to 65% of their pre-pandemic levels by year-end, and 85% over several years. While low ridership will have a relatively small impact on most systems' revenues, it could lead to reduced political support for transit funding that would weaken the sector's operating environment.

- **Continued growth in increasingly important tax collections will benefit transit system finances.** US economic growth in 2022 will increase collections in sales, payroll and other taxes dedicated to mass transit, and transit systems with above-average reliance on these taxes will have more stable finances than heavily fare-dependent systems.

- **Historic federal assistance will stabilize transit budgets through 2023.** The federal government has authorized nearly $70 billion of transit aid since the onset of the pandemic, which will offset operating losses for 18 to 24 months and limit the need for service reductions. In addition, increased federal funding for capital projects will reduce systems' relative borrowing needs and make existing debt loads more sustainable.

- **Demands for more equitable fares pose a social risk while environmental investments open opportunities.** Transit systems face increased social demands to realign services and reduce fares, which will increase costs and reduce flexibility to balance budgets. However, over the long run, regional efforts to reduce carbon emissions through increased transit usage will improve ridership and investment opportunities for some systems.

US public power utilities outlook is stable

Financial metrics and load demand stabilize

Negative	Stable	Positive
What could change outlook to negative » Median FOCC ratio of the 50 largest generators declines to around 1.50x » Cities and states lean on utility systems to plug budgetary shortfalls created by coronavirus-related financial pressures	**Drivers of a stable outlook** » For the 30 largest utilities that own generation by debt outstanding, median FOCC to remain at around 1.7x, an adjusted debt ratio of 70% and 200 days cash on hand » Load demand and prices for natural gas and wholesale power to continue rising into 2022, before stabilizing within the next 12 to 18 months	**What could change outlook to positive** » Rate increases and stabilizing fuel and power purchase costs contribute to an improvement in liquidity and a rise in the median FOCC ratio for the 50 largest generators to above 2.0x

*The stable sector outlook reflects **our view of credit fundamentals** in the US public power sector **over the next 12 to 18 months.** Sector outlooks are distinct from rating outlooks, which, in addition to sector dynamics, also reflect issuer's specific characteristics and actions. A sector outlook does not represent a sum of upgrades, downgrades or ratings under review, or an average of rating outlooks.*

US public power utilities

2022 outlook stable on our expectations that load demand will stabilize at pre-pandemic levels

» **Liquidity and FOCC to remain flat, but adjusted debt ratios will continue to rise.** We expect demand and prices to continue rising into 2022, before stabilizing within the next 12 to 18 months. As a result, we expect the median FOCC ratio, our key indicator for the US public power sector, to decline slightly to around 1.70x in 2022 for the 30 largest generators by debt outstanding, from 1.79x in fiscal 2020 and an estimated 1.80x in fiscal 2021.

» **Extreme weather events to remain a threat to reliability.** Public power utilities will continue to contend with the threat of extreme weather events and harsh environmental conditions, which directly or indirectly affected credit quality in 2021. Droughts, extreme heat and wildfires in California and record-cold winter temperatures in the south-central part of the country have contributed to commodity price increases and the need for additional borrowing.

» **Higher leverage associated with carbon transition likely over the long term.** Public power utilities may have to adjust to higher leverage over the long term to implement carbon transition plans. Investments in new renewable generation, battery storage and new technologies such as carbon capture and storage (CCS) and hydrogen could increase leverage. New transmission infrastructure, some of which will be undertaken by larger public power utilities, will also be needed to connect regions with significant renewable resources to load centers.

US public-private partnerships (PPP)

- **Infrastructure Investment and Jobs Act (IIJA) new and increased funding positive for PPP pipeline**, especially in asset classes like transit, rail, EV charging infrastructure, broadband as well as traditional roads, bridges and tunnels.
- **Multiple provisions in IIJA reference PPPs and are positive for US PPPs long-term.** Funding for PPP capacity building; value for money analysis for certain projects accessing TIFIA/RRIF; increased PABs cap to $30 billion from $15 billion; PABs for broadband and Carbon Capture and Sequestration projects; DOT/DOE partnership for EV infrastructure; reporting on how to remove barriers to PPPs.
- **Pipeline remains broad across multiple asset classes, locations, and with new public sector procuring agencies each year.** These include street lighting, flood mitigation, wastewater, university utility projects, light rail and demand risk managed lanes.
- **Favorable pricing continues as strong investor demand outweighs limited supply of projects that reach financial close each year**, resulting in projects typically having one or two weaker credit features, balanced against other credit strengths.
- **Pandemic related credit risks underlie the multiple risks negatively affecting projects in construction like supply chain delays, material and labor cost increases and shortages, as well as productivity slowdowns due to quarantine requirements.** Most outstanding claims remain unresolved as the pandemic continues, but construction continues, and new projects continue to close.
- **Insurance procurement risk, higher escalation costs, longer construction schedules and potential work disruptions must be accounted for when analyzing new projects.** High demand from new federal funding will continue to pressure construction pricing.
- **Progressive Development Agreements try to reduce risk by improving risk allocation, advancing key design elements and attempting to optimize the price and schedule to reduce excess contingencies, but effectiveness of approach yet to be widely proven as process can vary from project to project.** In the current construction environment, a better risk allocation that results in a more certain price and schedule is a positive starting point for a new PPP.

Audience Questions

Submit your questions to the panel now by using the Zoom control panel.

Upcoming Events at CDFA

Register Online at www.cdfa.net

Fundamentals of Economic Development Finance WebCourse
January 26-27, 2022
12:00 – 5:00 PM Eastern

Intro Bond Finance WebCourse
February 14-15, 2022
12:00 – 5:00 PM Eastern

Advanced Bond Finance WebCourse
February 16-17, 2022
12:00 – 5:00 PM Eastern

Intro Revolving Loan Fund WebCourse
March 28-29, 2022
12:00 – 5:00 PM Eastern

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