

CREDIT OPINION

20 November 2020

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Illinois State Toll Highway Authority

Update to Credit Analysis

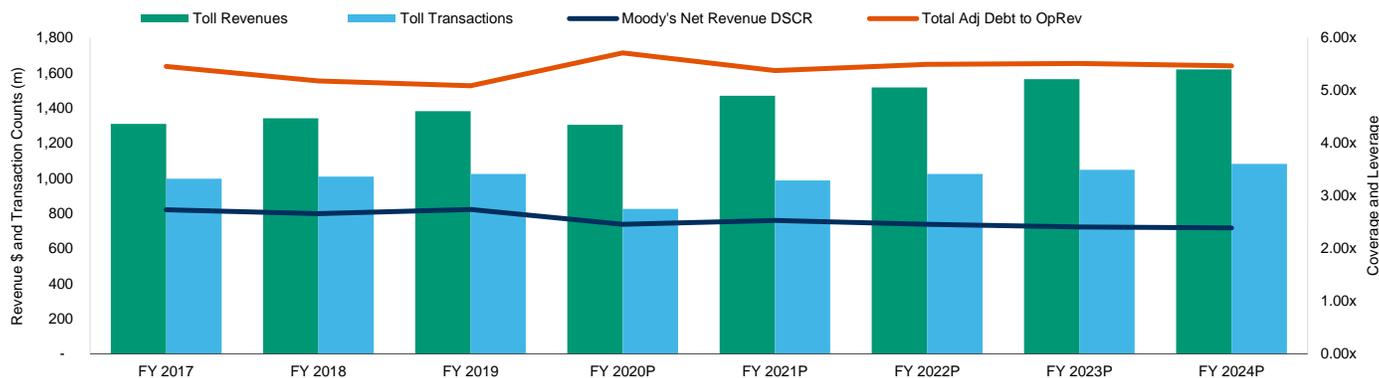
Summary

The credit profile of the [Illinois State Toll Highway Authority](#) (ISTHA) is based on the authority's very strong market position characterized by the essential nature of its tollway system serving one of the largest population bases and diverse economies in the nation. Strong traffic and revenue trends through toll increases and state-level fiscal stress demonstrate the inelastic demand for the tollway system roads and limited impact of competition. The authority does not rely on state funding and its rating, which is five notches above the [State of Illinois](#)' Baa3 Negative Outlook, acknowledges strong protections in the authorizing legislation, the master trust indenture, and the Illinois Constitution. However, in the event of serious fiscal distress and potential default by the state on its own bonds, risk remains that the authority could be negatively affected by emergency fiscal actions taken by the state in such an unprecedented scenario. Moody's notes the five notches of rating differential between ISTHA and the state is unlikely to widen.

ISTHA peak traffic and revenue declines related to coronavirus were in April, and as of September 30th, monthly traffic was only down 15.1% from the prior year and monthly toll revenues were down 11.4%. Based on CDM Smith traffic and revenue studies, traffic is expected to end FY 2020 19% down and toll revenues 11% down. Commercial traffic has shown much more resiliency than passenger traffic, expected to close the year down only 3.2% versus 21.6% down for passenger vehicles. Coupled with commercial vehicles' higher rate structure, its expected revenues are expected to be up slightly over FY 2019. This growth underscores the system's inelasticity of demand, even through market dislocations. FY 2020 Moody's net revenue debt service should still be strong at 2.46x and leverage at 5.71x. Management projections have toll revenues recovering to near pre-pandemic levels in 2022 and traffic in 2021 and despite the \$2.55 billion of additional debt expected through 2024 (inclusive of the current offering), coverage is expected to remain above 2.0x and leverage below 5.5x.

Exhibit 1

ISTHA coverage and leverage are expected to stay in the same range despite \$2.5 billion of additional debt through FY 2024



Source: ISTHA and Moody's Investors Service, as adjusted

Credit strengths

- » Large integrated system of toll roads serves as an essential component of the Chicago area's transportation network and an important congestion reliever for commuters
- » Mature service area and a diverse user base comprising both commuters and interstate traffic has long, well-established history of steady growth
- » Leverage is projected to stay at or below current levels despite significant planned increase in debt through 2024 due to fast amortization of debt
- » Inelastic demand through recent large toll increases; a large commercial rate increase was implemented in three phases between 2015 and 2017, and starting in 2018 commercial rates increase annually based on inflation, yet commercial traffic continues to grow
- » Experienced management team has successfully implemented toll increases and adopted robust controls and processes for electronic toll collection and enforcement
- » Annual reinvestment in and improvement of facilities per inspection and recommendation of consulting engineer
- » Maintenance of strong liquidity despite annual funding of reinvestment in facilities

Credit challenges

- » Potential exposure to increasing contributions for state pension funding costs and possible pressure due to state's weak credit profile
- » Construction and execution risk around the \$14.3 billion Move Illinois capital improvement program (CIP)
- » Service area economy recovered relatively slowly from the last recession and population growth is low
- » Approved toll increases will result in more commercial traffic revenue concentration, which can be a more economically volatile portion of the user base; no toll increases for passenger cars currently contemplated
- » The authority's adjusted net pension liability is relatively high in relation to its outstanding debt and expected to grow in tandem with the state's growing pension liabilities, to become a larger percentage of the operating budget

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Rating outlook

The negative outlook reflects increased credit pressure on the state, the authority's potential exposure to further deterioration in the state's credit and the powers a state could invoke in times of fiscal stress.

Factors that could lead to an upgrade

- » Upgrade of the state's rating
- » Traffic and revenue that significantly exceed current projections

Factors that could lead to a downgrade

- » Deterioration of the state's credit profile
- » Attempts by the state to divert ISTHA funds to non-authority purposes
- » Traffic and revenues fall significantly short of current projections for a sustained period
- » DSCRs consistently falling below 1.5x on a Moody's net revenue basis
- » Issuance of additional debt beyond that which is currently projected to fund other projects without offsetting toll rate increases or revenue growth, or that results in lower DSCRs or liquidity- Adjusted debt to operating revenues above 7.0x
- » Liquidity below 180 days cash on hand

Key indicators

Exhibit 2

Illinois State Toll Highway Authority FY 2015 - FY 2019

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Total Transactions ('000)	881,615	931,891	997,334	1,008,952	1,023,222
Total Transactions Annual Growth (%)	5.2	5.7	7.0	1.2	1.4
Operating Revenue (\$'000)	1,228,564	1,303,283	1,398,498	1,436,403	1,484,506
Debt Outstanding (\$'000)	5,784,165	5,896,700	6,107,840	5,994,680	6,085,620
Adjusted Net Pension Liability (\$000)	1,168,041	1,566,696	1,516,678	1,446,038	1,466,437
Adjusted Debt to Operating Revenues (x)	5.66	5.73	5.45	5.18	5.09
Days Cash on Hand	976	1,151	1,336	1,096	1,149
Senior Lien Debt Service Coverage By Net Revenues (x)	2.48	2.57	2.73	2.66	2.74

Source: Moody's Investors Service, as adjusted

Profile

ISTHA operates a tollway system that consists of approximately 294 miles of limited access highway in 12 counties in the northern part of Illinois and is an integral part of the expressway system in northern Illinois. The entire tollway system has been designated a part of the US Interstate Highway System, except for the 10 miles of Illinois Route 390. Approximately 12% of traffic is commercial in 2019, but this class of vehicles accounted for over 47% of revenues. The percentage of commercial vehicle revenues is forecasted to surpass passenger vehicle revenues by 2028 due to previously approved CPI-based annual toll rate increases for this class. The system consists of five components: the new Illinois Route 390 (formerly the Elgin O'Hare Expressway) whose first 6.5-mile segment opened in July 2016, and second 3.5-mile segment opened in November 2017, and upon completion, the Elgin O'Hare Western Access Project will total 17 miles and provide Western access to O'Hare airport; the 76-mile Jane Addams Memorial Tollway, which constitutes a portion of US Interstate Highway 90; the 82-mile Tri-State Tollway constituting portions of US Interstate Highways 80, 94 and 294; the 30-mile Veterans Memorial Tollway (Interstate 355) which opened in December 1989 and was extended in 2007; and the 96-mile Ronald Reagan Memorial Tollway that constitutes a portion of US Interstate Highway 88.

Detailed credit considerations

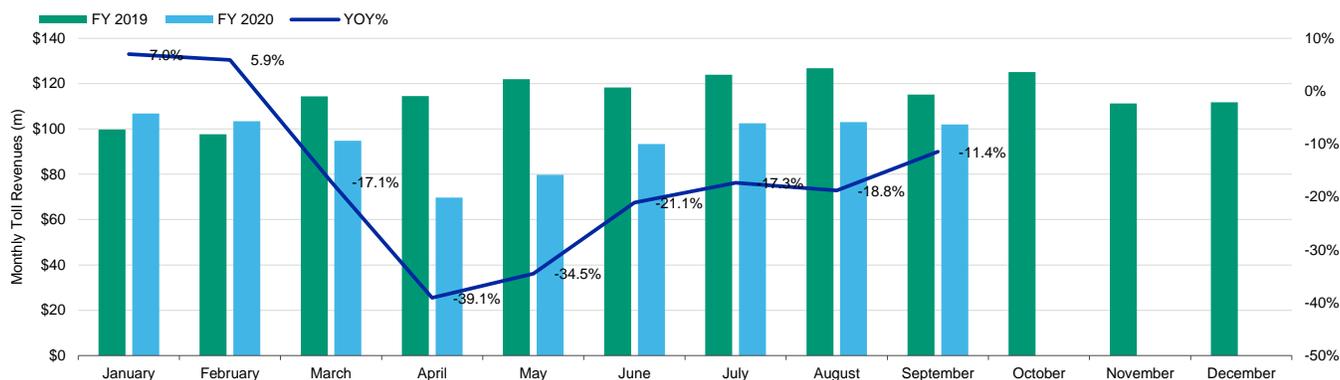
CORONAVIRUS OUTBREAK

The rapid and widening spread of the [coronavirus outbreak](#), deteriorating global economic outlook, falling oil prices, and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

As with the [broader toll road sector](#), the ISHTA revenues saw sharp declines in early March related to coronavirus. The declines reached their peak in April, with monthly traffic 51.3% down and monthly toll revenues 39.1% down compared to April 2019. The recovery began in May, and as of September 30th, monthly traffic was only down 15.1% from the prior year and monthly toll revenues were down 11.4%. Based on CDM Smith traffic and revenue studies, traffic is expected to end FY 2020 19% down and toll revenues 11% down. Commercial traffic has shown much more resiliency than passenger traffic, expected to close the year down only 3.2% versus 21.6% down for passenger vehicles. Coupled with commercial vehicles' higher rate structure, its expected revenues are expected to be up slightly over FY 2019. This growth underscores the system's inelasticity of demand, even through market dislocations.

Exhibit 3

Coronavirus Impacts on ISTHA Monthly Traffic Revenues FY 2019 vs FY 2020



Source: ISTHA

Moody's expects that the pandemic and its economic consequences will exacerbate the State of Illinois' financial challenges and test its resiliency relative to other states. Large unfunded pension liabilities and a chronic unpaid bill backlog are likely to worsen significantly and reduce the state's financial flexibility. The actual toll on Illinois in social, economic and budgetary terms will be determined by factors such as federal aid, virus containment efforts and near-term financial market performance.

Revenue Generating Base

Though parts of the tollway system were first designed and constructed over 60 years ago, the authority was established in 1968 under the Toll Highway Act. The tollway system is now a multi-asset system of 294 centerline miles of interstate tollways throughout 12 counties in the greater Metropolitan Chicago Area. There are no limited access freeways or other limited access highways under construction, and no Federal, state or other agency is now planning the construction, improvement or acquisition of any highway or other facility that may be materially competitive with the tollway system.

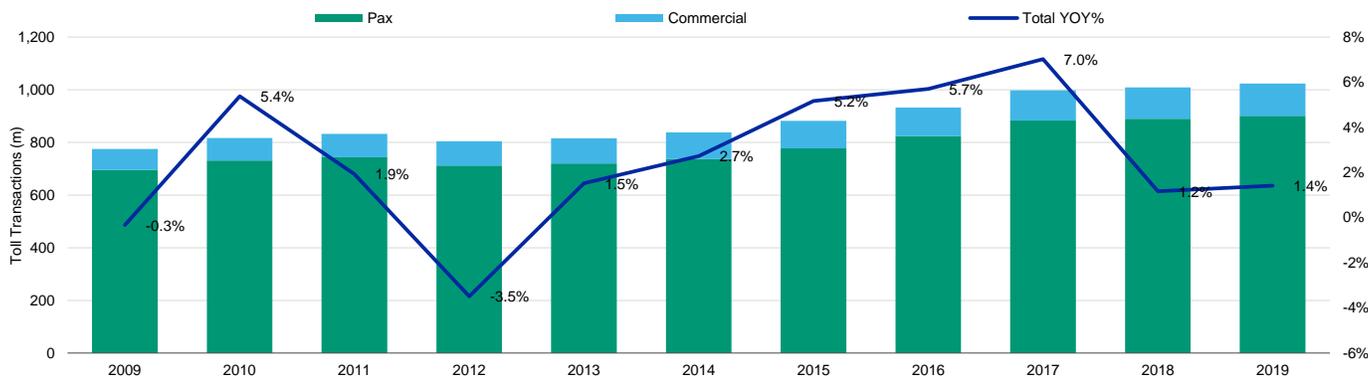
[Cook County](#), [Du Page County](#) and [Lake County](#) make up the core tollway counties, from which the majority of toll revenue and transactions are generated. Cook County includes the [City of Chicago](#). These counties are the most mature of the service area, with one of the largest population bases and diverse economies in the nation. The next "collar" of counties served by the tollway system includes [Will County](#), [Kane County](#), [McHenry County](#) and [DeKalb County](#). These are the suburban counties which grew as the core counties became more constrained. Chicagoland overall remains a major center for business, distribution, transportation and finance with a huge talent pool and a strong roster of well-regarded educational institutions. That said, the area stays a step behind its peers and the nation because of its poor population trends and persistent fiscal pressures at the state and local level. Moody's Economy.com (MEDC) reports the economy is gingerly getting back on its feet after the coronavirus recession. Nonfarm employment in July was down

Operations and Financial Position

The authority began electronic toll collection (ETC) in 1993 with a small pilot program, but eventually expanded to high-speed open road tolling (ORT) and cashless plazas. Under its authorizing legislation the authority has the exclusive right to fix, adjust, revise and collect tolls for the use of the tollway system. The authority may increase tolls by vote of a majority of its board, after conducting a public hearing in each county in which the proposed increase is to take place. No other body has the authority to limit or restrict such rates and charges. The most recent toll adjustments on passenger cars were approved by the authority board as part of the authorization of its capital plan, Move Illinois.

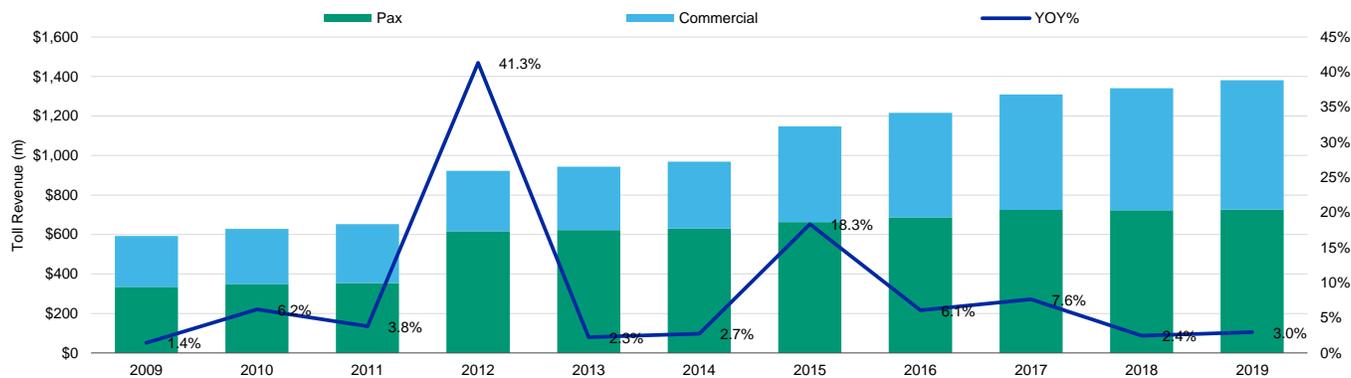
After a decade of transactions hovering around 700,000 as service area matured, starting in 2010 the authority has had only one down year as new capacity was added to the tollway system. The one down year was 2012, and was linked to a passenger car toll increase. At the same time, revenue have shown steady growth with periodic jumps due to toll rate increases: the aforementioned passenger toll rate increase in 2012, a three-phase commercial vehicle toll rate increase between 2015 and 2017, and the start of inflation-based commercial vehicle toll rate increases in 2018. The growth in transactions and revenue is despite the fiscal instability causing out-migration in the service area, demonstrating the inelastic demand for the tollway system roads and limited impacts of competing tollways and economic contraction.

Exhibit 5
Illinois State Toll Highway Authority Toll Transactions
 FY 2009 - FY 2019



Source: ISTHA

Exhibit 6
Illinois State Toll Highway Authority Toll Revenues
 FY 2009 - FY 2019



Source: ISTHA

FY 2019 saw both record transactions (1.02 billion) and toll revenue (\$1.38 billion). Toll revenues drive operating revenues, comprising approximately 98% of total, with the remaining operating revenues coming from concessions. FY 2019 transactions grew 1.4% over

the prior year, overwhelming driven by commercial traffic. Lower passenger traffic was linked to major construction projects, where commercial vehicles on long-distance trips diverted to other system routes while passenger cars went to local, non-system alternatives. FY 2019 revenues were up 3.3%, reflecting both the commercial traffic growth and the second year of indexed toll adjustments (1.84%). As a result, debt service coverage remains strong at 2.74x on a Moody's net revenue basis in FY 2019. The increase in toll revenues combined with a quickly amortizing debt profile has kept leverage manageable at 5.09x adjusted debt to operating revenue.

LIQUIDITY

The authority's unrestricted cash and investments for 2019 was strong at 1,274 days cash on hand, having stayed in the same range as the previous five years. While balances are forecasted to be drawn down over time to fund the CIP, they are expected to remain above one year of days cash on hand.

Debt and Other Liabilities

Capital Improvement Plan

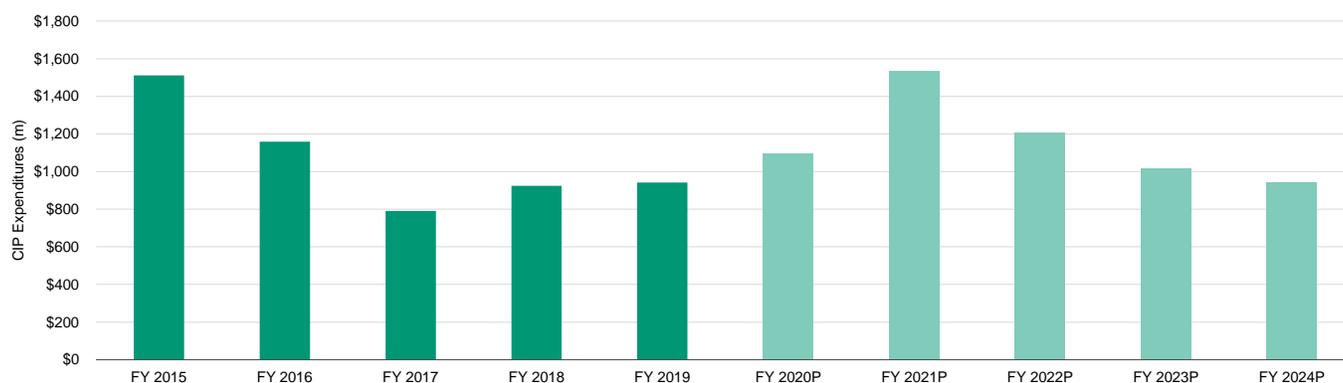
In August 2011, the authority approved a fifteen-year \$12 billion capital improvement plan (CIP) known as "Move Illinois" which established a guide for infrastructure and other capital investments to be made through 2026. The approval of the CIP led to the toll rate increases beginning in 2012. The authority upsized the plan from \$12.1 billion to \$14.3 billion in 2017, with the increased spending planned for the central portion of the Tri-State Tollway. Of the \$14 billion total capital spend, approximately \$10 billion is focused on improvements on the existing tollway system. The remaining \$4 billion is directed to tollway system expansion.

The authority has issued \$3.1 billion in bonds to fund the Move Illinois capital plan, with an additional \$2.55 billion planned through 2024, inclusive of the current offering. The remaining funding will be from pay-go revenues.

Exhibit 7

Capital Improvement Plan Expenditures

FY 2015 - FY 2019, with projections through FY 2024



Source: ISTHA

Legal security

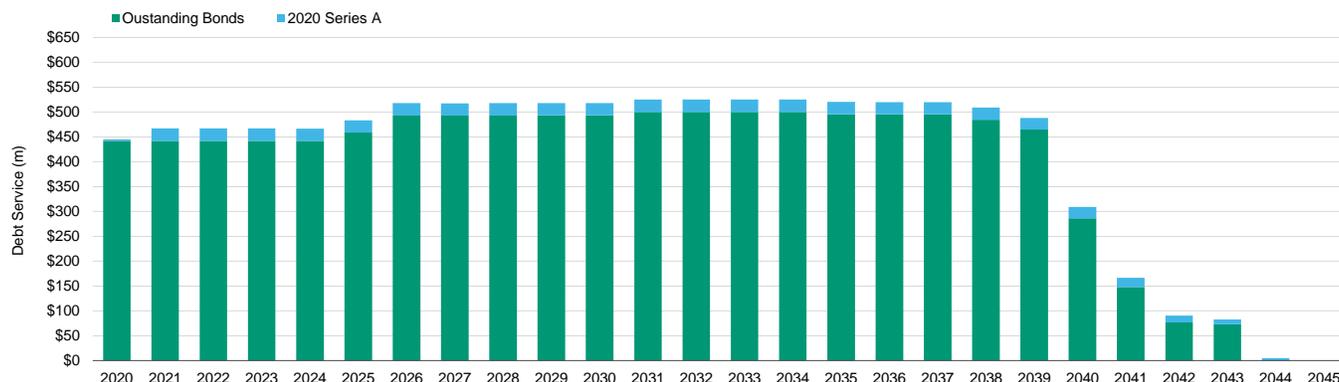
The bonds are secured by the net revenues of the authority. The authority has by statute the exclusive and autonomous right to set and collect tolls. Net revenues must be at least equal to 1.30x aggregate annual debt service on a trust indenture basis. The additional bonds test is also 1.30x. The debt service reserve requirement is equal to maximum aggregate annual debt service and is cash-funded save a \$100 million surety provided by [Berkshire Hathaway Assurance Corporation](#).

DEBT STRUCTURE

ISTHA had \$6.1 billion outstanding at FY 2019. All debt is fixed-rate and fully amortizing. A key credit strength of the authority is the limitation around issuance of debt to maturities within 25 years, leading to lower leverage than its peers.

Exhibit 8

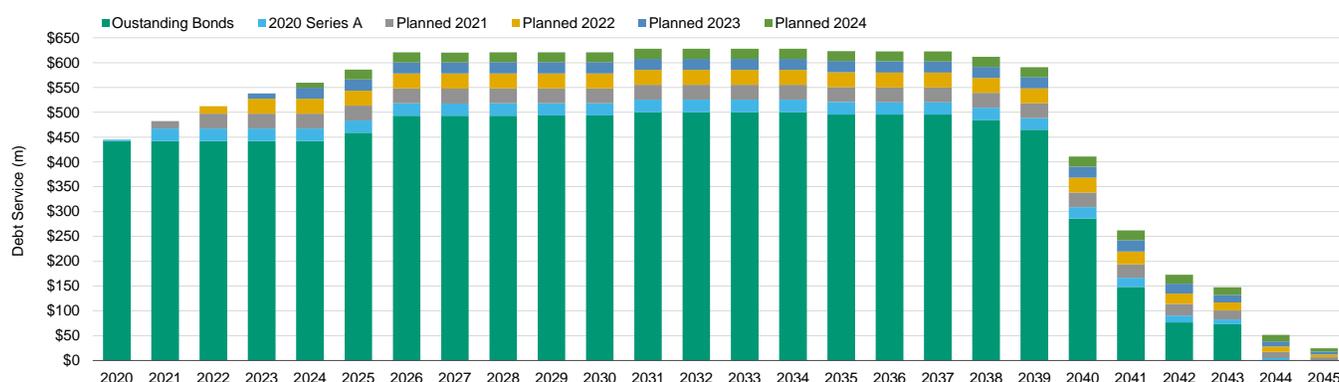
Illinois State Toll Highway Authority Debt Profile After issuance of 2020 Series A



Source: ISTHA

Exhibit 9

Illinois State Toll Highway Authority Debt Profile After issuance related to Move Illinois CIP



Source: ISTHA

DEBT-RELATED DERIVATIVES

None. The authority's remaining variable rate debt with associated swaps were refunded in late 2019.

PENSIONS AND OPEB

Moody's adjusts the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. Under governmental pension accounting, liabilities are discounted using an assumed rate of investment return on the plan assets. Under our adjustment, we value liabilities using the [FTSE Pension Liability Index \(FTSE PLI\)](#), a high investment-grade long-term taxable bond index, as a discount rate to compute the present value of accrued benefits and a proxy for the risk of pension benefits.

Authority employees participate in the State Employees' Retirement System (SERS), a public employee defined-benefit pension plan. Pursuant to GASB 68, as of FY 2019, the authority reported a liability of \$1.3 billion for its proportionate share of the state's net pension liability for SERS. Moody's calculates an adjusted net pension liability (ANPL) at \$1.5 billion based on our lower discount rate assumption. This amount is relatively high (24%) in relation to ISTHA's in outstanding debt. While currently manageable, we expect the authority's annual pension obligations to continue to grow in tandem with the state's growing liabilities and become a larger percentage of the operating budget. This could exert negative pressure on future net revenues available for both capital projects and debt service.

Management and Governance

The authority was created under the Toll Highway Act of 1968 as an instrumentality and administrative agency of the State of Illinois to provide for the construction, operation, regulation and maintenance of a system of toll highways within the State. Under the act, ISHTA assumed all the obligations, powers, duties, functions and assets of its predecessor agency, the Illinois State Toll Highway Commission. ISHTA is authorized to issue revenue bonds for the purposes, among others, of financing expansions of the Tollway System and reconstruction of and improvements to the Tollway System. The authority is empowered to enter into contracts; to acquire, own, use, hire, lease, operate and dispose of personal and real property, including rights-of-way, franchises and easements; to establish and amend resolutions, by-laws, rules, regulations and to fix and revise tolls; to acquire, construct, relocate, operate, regulate and maintain the Tollway System; to exercise the power of eminent domain; and to contract for services and supplies, including services and supplies for the various patron service areas on the Tollway System.

Under its authorizing legislation the authority has the exclusive right to fix, adjust, revise and collect tolls for the use of the tollway system. The authority may increase tolls by vote of a majority of its board, after conducting a public hearing in each county in which the proposed increase is to take place. No other body has the authority to limit or restrict such rates and charges. The most recent toll adjustments on passenger cars was approved by the authority board as part of the authorization of its capital plan in 2012, and rates were increased by approximately 87%. Commercial vehicles were last adjusted starting in 2015 over the course of three years, totaling approximately 60%, then linking to the Consumer Price Index for an annual adjustment starting in 2018. The authority also discounts commercial vehicles during certain hours and for using I-PASS.

The authority is governed by an 11-member Board of Directors that includes the Governor of Illinois and the Secretary of the Illinois Department of Transportation, ex officio. Nine directors are appointed by the governor, with the advice and consent of the Illinois Senate, from the state at large with a goal of maximizing representation from the areas served by the Tollway System. These nine directors are appointed for a term of four years, or in the case of an appointment to fill a vacancy, the unexpired term. No more than five directors may be from the same political party. Of the directors appointed by the governor, one is appointed as Chairman.

ESG considerations

Environmental

We view environmental risk as falling broadly into two categories:

- » The consequences of regulatory or policy initiatives that seek to reduce or prevent environmental trends or hazards or perceived trends or hazards; and
- » The adverse effects of direct environmental trends and hazards, such as pollution, drought, severe natural and human-caused disasters, and climate change.

Overall, toll road issuers face limited impact from environmental risks, though the effect of car use on air pollution is gaining increasing attention and could result in restrictions on traffic and car purchases in selected areas through air quality and traffic control measures. Nonetheless, traffic volumes are fundamentally linked to macroeconomic trends, business sentiment, population growth and personal mobility requirements. The increasing use of electric or hybrid cars is a further mitigant, but may require investment by toll road operators in additional facilities, such as charging stations. Some jurisdictions also have mechanisms that allow the recovery of a detrimental financial impact as a result of differences between projected and lower actual traffic volumes. Environmental policies, particularly related to carbon reduction, are more advanced in Europe, and accelerating in Asia and Latin America, but are likely to be phased. Toll road traffic can also be affected by extreme weather or natural disasters. Mitigating factors include insurance policies, regulations in some jurisdictions that allow the recovery of unforeseen costs or losses, and state intervention.

We do not believe there are major unique environmental considerations for this issuer.

Social

We view social considerations as falling broadly into two categories:

- » Issuer-specific considerations, such as product safety problems that harm an issuer's reputation; and
- » The adverse effects of external factors, such as regulation that leads to higher compliance costs or creates rigid work rules.

Overall, the Toll Roads sector faces moderate exposure to social risks. Traffic volumes are a key revenue driver for issuers in this sector and are fundamentally linked to macroeconomic trends and business sentiment but also more broadly influenced by demographic and societal trends and consumers mobility preferences. As a mitigant, concession contracts in some jurisdictions set out rebalancing provisions, whereby issuers are entitled to be compensated if actual traffic is below expectations. Community relations and sensitivity to the socially driven policy agenda also represent potential conveyers of social risk for issuers in this sector, although exposure can be different depending on the geography. In particular, issuers are exposed to the risk of political interferences in the toll setting process, although this risk is partially mitigated by the fact that tariff adjustment formulas and procedures are usually contractually agreed with grantors in the concession agreements. We also note that in some jurisdictions multiyear toll increases have been passed by legislation and believe the overall risk of political interference is heightened during election cycles. Finally, the sector is exposed to customer activism risk, in the form of potential reduced traffic as a reaction to toll increases. We believe this risk is partially mitigated by the fact that roads managed by issuers in this sector are often strategic assets in terms of meeting users' mobility needs and that alternatives can be limited and/or more expensive.

We do not believe there are major unique social considerations for this issuer.

Governance

Corporate governance is highly relevant to all issuers and is important to bondholders because governance weaknesses can lead to a deterioration in an issuer's credit quality, while governance strengths can benefit a credit profile. The governance considerations most relevant to our credit analysis are

- » Ownership and control;
- » Compensation design and disclosure;
- » Board of director oversight and effectiveness
- » Financial oversight and capital allocation; and
- » Compliance, controls and reporting.

The toll road sector faces relatively low governance risks since these issues have not typically been a material factor affecting credit quality. However, these issues tend to be more prevalent in developing and emerging markets.

The authority was created under the Toll Highway Act of 1968 as an instrumentality and administrative agency of the State of Illinois to provide for the construction, operation, regulation and maintenance of a system of toll highways within the State. Under the act, ISHTA assumed all the obligations, powers, duties, functions and assets of its predecessor agency, the Illinois State Toll Highway Commission. ISHTA is authorized to issue revenue bonds for the purposes, among others, of financing expansions of the Tollway System and reconstruction of and improvements to the Tollway System. The authority is empowered to enter into contracts; to acquire, own, use, hire, lease, operate and dispose of personal and real property, including rights-of-way, franchises and easements; to establish and amend resolutions, by-laws, rules, regulations and to fix and revise tolls; to acquire, construct, relocate, operate, regulate and maintain the Tollway System; to exercise the power of eminent domain; and to contract for services and supplies, including services and supplies for the various patron service areas on the Tollway System.

The credit profile of ISTHA cannot be fully decoupled from that of the state; the authority is an instrumentality and administrative agency of the state, with its governing board appointed by the governor, funds held by the state treasurer as custodian and whose financial statements are reviewed by the state auditor general. States have broad powers and under extreme fiscal pressure could be expected to take unusual fiscal steps to avoid disruption of core services, such as maintaining public health and safety. Should the state rating continue to decline, the potential impact to ISTHA will increase and further weigh on the credit.

The authority has a three-pronged legal framework which provides separation from direct control by the state. First, the Toll Highway Act of 1968 is ISTHA's authorizing legislation, which states ISTHA monies can only be spent on toll highway O&M, renewal and replacement, system improvement and debt service for related obligations. Monies in excess of the above expenditures can only be spent on tollway purposes and dispersed only upon the order of the authority. Second, the authority's Master Indenture of 1999 provides that the flow of funds is closed, and monies can only be used for purposes allowed in the Toll Highway Act. Finally, the

2016 Transportation Lockbox Amendment to Illinois State Constitution precludes transportation funds from being used for non-transportation uses.

Beyond the legal framework ring-fencing the finances of the authority, the ISTHA board has full authority over operations. The authority does not rely on state funding and its A1 rating (five notches above the state's Baa3) acknowledges strong protections in authorizing legislation, the master trust indenture, and the Illinois Constitution. The authority does not rely on the state for funding, and approximately 99% of operating revenues are from tolling. There are no intergovernmental transfers from the state save periodic reimbursements between ISTHA and IDOT for construction projects one body completed for the other body's assets. Attempts by the state to divert revenues under this current framework might not stand up in court, and Moody's would expect high recoveries in this unlikely eventuality, should bondholder payments be delayed.

Rating methodology and scorecard factors

The principal methodology used in these ratings was Publicly Managed Toll Roads and Parking Facilities published in March 2019. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology. The Aa1 scorecard-indicated outcome is three notches above the A1 reference rating. The differential incorporates risks associated with fiscal pressures at the state level.

Exhibit 10

Publicly Managed Toll Roads and Parking Facilities Illinois State Toll Highway Authority - FY 2019

Factor	Subfactor	Score	Metric
1. Market Position	a) Asset Type	Aa	
	b) Competitive Position and Environment	Aa	
	c) Economic Strength and Diversity of Service Area	Aaa	
2. Performance Trends	a) Annual Revenue	Aaa	\$1.48b
	b) Operating Track Record and Revenue Stability	Aaa	
	c) Ability and Willingness to Increase Toll Rates	Aa	
3. Financial Metrics	a) Debt Service Coverage Ratio	Aa	2.74x
	b) (Debt + ANPL) to Operating Revenue	A	5.09x
Notching Considerations		Notch	
	1 - Debt Service Reserve Fund level	0.0	
	2 - Open/Closed Flow of Funds	0.0	
	3 - Days Cash on Hand	1.0	
	4 - Asset Ownership and Financing Structure	0.0	
	5 - Leverage Outlook	0.0	
Scorecard Indicated Outcome:		Aa1	

Source: Moody's Investors Service, as adjusted

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