Illinois State Toll Highway Authority
Update to Credit Analysis following the Downgrade to A1

Summary
The Illinois State Toll Highway Authority (ISTA, A1 Stable) maintains a 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 impacts of competition. Debt service coverage remains strong, and leverage and liquidity will stay in the same range despite plans to issue an additional $2.6 billion through 2025. The authority does not rely on state funding and its rating (five notches above the state of Illinois’ Baa3 Stable) 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. This linkage in fiscal distress was highlighted by the March 26th ruling by the 1st Circuit Court of Appeals that upheld a lower court ruling that the Commonwealth of Puerto Rico (Ca Negative) is not required to pay special revenue debt service on bonds of the Puerto Rico Highway & Transportation Authority (C Negative) during the pendency of the bankruptcy proceedings. While there is currently no provision for states to pursue a bankruptcy filing, in times of financial stress a state could pursue actions not contemplated under current laws. This risk suggests a closer alignment of ISTHA’s rating with that of the state.
**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

» Strong actual and projected DSCR over 2.0x and satisfactory liquidity levels are expected to be maintained despite significant planned increase in debt through 2025

» 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 increased 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**

» Significant amount of planned additional debt to fund the $14.3 billion Move Illinois capital improvement program (CIP) coupled with construction and execution risk

» 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 increases for passenger car currently contemplated

» Exposure to variable rate debt and swaps, though this was significantly reduced by the refunding which closed in January of this year and is being proportionally reduced as additional fixed rate debt is added to fund the Move Illinois program and the authority is authorized to reduce exposure further depending on market conditions

» Potential exposure to increasing contributions for state pension funding costs and possible pressure due to state’s weak credit profile

**Rating outlook**

The stable outlook is based on the expectation that the authority will continue to exercise its rate-setting autonomy, that approved commercial toll increases will continue to be implemented as planned, and construction costs for the Move Illinois projects will be in line with estimates. The outlook is also based on the stable credit profile of the state of Illinois.

**Factors that could lead to an upgrade**

» Traffic and revenues that significantly exceed current projections

» DSCRs above the authority’s base case forecast and consistently over 2.0x

» Capital projects are delivered on schedule and within budget

» Reduced exposure to variable rate debt and swaps

» Upgrade of the state credit profile

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Factors that could lead to a downgrade

» Traffic and revenues fall short of current projections and DSCRs fall below forecasted levels consistently below 1.5x

» Issuance of additional debt to fund other projects without offsetting toll rate increases or revenue growth, or that results in lower DSCRs or liquidity

» Debt to operating revenues above 7.0x

» Liquidity below 180 days cash on hand

» Deterioration of the state credit profile

» Attempts by the state to divert ISTHA funds to non-authority purposes

Key indicators

Exhibit 1
Illinois State Toll Highway Authority
FY 2013 - 2017

<table>
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<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tr>
<td>Total Transactions (’000)</td>
<td>816,042</td>
<td>838,279</td>
<td>881,615</td>
<td>931,891</td>
<td>997,334</td>
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<tr>
<td>Total Transactions Annual Growth (%)</td>
<td>1.5</td>
<td>2.7</td>
<td>5.2</td>
<td>5.7</td>
<td>7.0</td>
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<tr>
<td>Operating Revenue ($’000)</td>
<td>1,016,917</td>
<td>1,042,821</td>
<td>1,228,564</td>
<td>1,303,283</td>
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<tr>
<td>Debt Outstanding ($’000)</td>
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<td>5,118,770</td>
<td>5,784,165</td>
<td>5,896,700</td>
<td>6,107,840</td>
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<tr>
<td>Adjusted Debt to Operating Revenues (x)</td>
<td>4.32</td>
<td>6.08</td>
<td>5.66</td>
<td>5.73</td>
<td>5.45</td>
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<tr>
<td>Days Cash on Hand</td>
<td>999</td>
<td>1,042</td>
<td>976</td>
<td>1,151</td>
<td>1,336</td>
</tr>
<tr>
<td>Total Debt Service Coverage By Net Revenues (x)</td>
<td>2.42</td>
<td>2.41</td>
<td>2.48</td>
<td>2.57</td>
<td>2.73</td>
</tr>
</tbody>
</table>

Source: Moody’s Investors Service

Profile

ISTHA operates a tollway system that consists of approximately 294 miles of limited access highway in twelve 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 11.9% of traffic in FY 2018 is commercial but this class of vehicles accounted for over 46.4% of revenues. The percentage of commercial revenues is forecasted to surpass passenger vehicles revenues by 2028 due to regular 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. At 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

The credit profile of ISTHA cannot be fully decoupled from that of the state; the authority is an enterprise of the state, with its governing board appointed by the Governor, funds held by the state Treasurer 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 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 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 states 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 ISHTA 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 98% of operating revenues are from tolling. There are no intergovernmental transfers from the state save periodic reimbursements between ISHTA and IDOT for construction project 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.

On March 26th, the US Court of Appeals for the First Circuit ruled that the Commonwealth of Puerto Rico is not required to pay “special revenue” debt service on PRHTA bonds during the pendency of bankruptcy-like proceedings. This decision may not be directly applicable to the authority, given Illinois’ location outside the First Circuit’s jurisdiction and the lack of precedence around the ability of a state to file for bankruptcy under the US Constitution. That said, this decision highlights the potential credit contagion risk between a state and its enterprises. Outside of bankruptcy, a state can still default on its obligations. Rather than having a bankruptcy court or a PROMESA-like structure manage the process, a state may be in a position to prioritize its own payments in a politically palatable way, given its broad powers.

**Revenue Generating Base**

Though parts of the tollway system were first designed and constructed 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.

Cook County (A2 STA), Du Page (Aaa STA) and Lake County (Aaa STA) make up the core tollway counties, from which the majority of toll revenue and transactions are generated. Cook County includes the City of Chicago (Ba1 STA). 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 (Aa1 STA), Kane County (Aa1 NOO), McHenry County (Aaa NOO) and DeKalb County (Aa1 STA). 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.

Illinois’ second-largest city, Rockford (A1 NEG), is connected to the tollway via the Jane Addams Memorial Tollway though Winnebago County (Aa2 NOO) and Boone County (Aa3 NOO). The Rockford MSA’s economy is exposed to the auto industry, and its top employer Fiat Chrysler announced plans to lay off about 1,400 workers in 2019 as it cuts one production line from its Belvidere plant amid softening global demand, especially in China. Layoffs will also extend to the region’s large contingent of auto part suppliers. The population has declined for eight straight years, with the biggest declines occurring among the prime working-age population. Rockford’s depleted labor force will make it tough for it to attract new investment and expand high-value-added industries.

Lee County (Aa2 NOO) and Ogle County (NR) are on the western end of the Reagan Memorial Tollway and are largely rural.
Operational and Financial Performance

After a decade of transactions hovering around 780,000 as the service area matured, growth has been consistent starting in 2010 and the authority has had only one down year as new capacity was added to the tollway system in that period. 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. FY 2018 saw both record transactions (1.0 billion) and toll revenue ($1.3 billion). 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 competition.
The authority began electronic toll collection (ETC) in 1993 with a small pilot program, but eventually expanded to high-speed open road tolling and cashless plazas. The tollway system uses I-PASS for ETC, and had 87.8% usage in 2017, second only in the nation to the Metropolitan Transportation Authority in New York.

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.

Toll revenues drive operating revenues, comprising approximately 98% of total, with the remaining operating revenues coming from concessions. Toll revenues grew by an average of 7% since 2010, driven by the toll rate increases. As a result, debt service coverage continues to improve. Audited 2017 coverage was solid at 2.73x. The increase in toll revenues has also driven the adjusted debt to operating revenue metric down to 5.45x in FY 2017, despite increasing the amount of debt outstanding. Based on estimates, coverage and leverage metrics should stay in the same range for FY 2018. Looking further ahead, the authority’s coverage should generally stay above 2.0x and leverage below 5.0x save the period of maximum debt outstanding following the planned 2025 issuance.
LIQUIDITY
The authority’s unrestricted cash and investments for 2017 was strong at 1,336 days cash on hand, up from 1,151 days cash on hand in 2016. 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. Moody’s considers the authority’s strong liquidity as a mitigant to the relatively large (albeit declining) exposure to variable rate debt and derivatives. A significant drop in liquidity below forecasted levels could exert downward pressure on the rating.

Debt and Other Liabilities
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. Including the current offering, ISTHA will have issued $3.1 billion to fund the CIP, with an additional $2.6 billion planned through 2025. The remaining funding will be from pay-go revenues.

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.

Exhibit 5
Move Illinois Capital Improvement Program Spending Plan
FY 2012 - 2026

Source: Illinois State Toll Highway Authority

DEBT STRUCTURE
The authority will have $6.25 billion in outstanding debt after the Series 2019A issuance. Overall debt structure escalates gradually through 2027, then becomes more level. The bonds have a relatively short maturity profile, given the maximum 25 year maturity permitted by state statute. The authority has $721 million in outstanding variable debt and $5.2 billion in outstanding fixed rate debt. Except for Series 2008 A-1b, which is a direct purchase for a term ending February 2020, all of the authority’s variable rate debt is supported by external liquidity with earliest expiration in January 2020.
ISTHA began to issue debt to fund the Move Illinois capital plan in 2013, and has issued $2.8 billion to this point. In addition to the current offering, the authority also currently expects to issue approximately $2.6 billion of senior lien bonds to finance costs of the Move Illinois Program, consisting of approximately $400 million in 2019, approximately $1.4 billion of bonds during the years 2020-2022 and approximately $800 million of bonds during the years 2023-2025.

DEBT-RELATED DERIVATIVES
The authority has interest rate swap agreements outstanding under which it pays a fixed rate and receives a floating rate on a notional amount of approximately $722 million. The swaps hedge all of the authority’s outstanding variable rate debt. The authority is not required to post collateral, and termination risk is remote as it would require a downgrade of the authority or the counterparties below Baa1. As of April 30, 2019 the authority’s swaps had a negative mark-to-market of $117.2 million. The authority is also authorized to refund its outstanding 2007A Bonds and 2008A Bonds, and to terminate any associated swap agreements. Such authorization is scheduled to expire December 31, 2020.

PENSIONS AND OPEB
Authority employees participate in the State Employees’ Retirement System (SERS), a public employee defined-benefit pension plan. Under the Illinois Pension Code required contributions to fund SERS are calculated or determined by actuaries on an annual basis. The authority’s required contributions are computed in accordance with the state’s Pension Code.

Pursuant to GASB 68, as of December 31, 2017, the authority reported a liability of $888.46 million for its proportionate share of the state’s net pension liability for SERS. Moody’s calculates an adjusted net pension liability (ANPL) at $1.517 billion based on our lower
discount rate assumption. This amount is relatively high (24.9%) in relation to ISTHA’s $6.088 billion in outstanding debt. Pension expenses in 2017 of $118.1 million represent 10.8% of GAAP-based operating expenses.

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.

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 by the Governor as Chairman of the Authority.

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.moodys.com for a copy of this methodology. ISTHA’s scorecard-indicated outcome is based on FY 2017, the most recently available audited data. 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.
### Illinois State Toll Highway Authority Scorecard

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<th>Factor</th>
<th>Subfactor</th>
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<tr>
<td></td>
<td>b) Competitive Position and Environment</td>
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<td>c) Economic Strength and Diversity of Service Area</td>
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<td>2. Performance Trends</td>
<td>a) Annual Revenue (USD Million)</td>
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<td></td>
<td>b) Operating Track Record and Revenue Stability</td>
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<td></td>
<td>c) Ability and Willingness to Increase Toll Rates</td>
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<td>3. Leverage and Coverage</td>
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<tr>
<td></td>
<td>b) (Debt + ANPL) to Operating Revenue</td>
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<td>5 - Leverage Outlook</td>
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**Scorecard Indicated Rating:** Aa1

*Source: Moody’s Investors Service*
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