

## OUTLOOK

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### ANALYST CONTACTS

Maria Matesanz 212-553-7241  
Senior Vice President  
maria.matesanz@moodys.com

Chee Mee Hu 212-553-3665  
MD-Project Finance  
cheemee.hu@moodys.com

Natalie J Bowlus 212-553-0817  
Associate Analyst  
natalie.bowlus@moodys.com

Earl Heffintrayer 212-553-1770  
AVP-Analyst  
earl.heffintrayer@moodys.com

Kurt Kruppenacker 212-553-7207  
VP-Sr Credit Officer/Manager  
kurt.kruppenacker@moodys.com

Sarah Lee 212-553-6955  
Analyst  
sarah.lee@moodys.com

John Medina 212-553-3604  
VP-Senior Analyst  
john.medina@moodys.com

Toll Roads – US

# 2016 Outlook — Jump in Traffic Growth Drives Change to Positive

Our outlook for the US toll road industry is positive. This outlook reflects our expectations for the fundamental business conditions in the industry over the next 12 to 18 months.

- » **We are changing our outlook for the US toll road industry to positive from stable.** We expect that this year's stronger-than-expected recovery in traffic growth will continue in 2016, supported by low gas prices and continued economic gains. Our outlook had been stable since 2013, following five consecutive years at negative.
- » **For 2016, we expect 3% traffic growth and a 5% jump in revenue.** Our 2016 estimate for traffic growth and related revenue for the 45 issuers in our portfolio is based on median traffic growth of 5.7% this year through June, compared with the year-earlier period, according to information from 13 toll roads. This rate of growth significantly exceeds our forecast of 1% to 2% traffic growth for 2015, and the expectation that similar conditions will continue is the main reason we are changing our outlook to positive from stable.
- » **Low gas prices could stimulate use of toll roads.** According to the US Energy Information Administration, gas prices will remain low through 2016. Low gas prices can result in increased traffic on the roads, which combined with an increase in tolls, should support higher revenue. About 30% of the 45 toll roads we rate have put into effect annual toll increases or inflation-indexed toll increases.
- » **Rising leverage amid insufficient funding for infrastructure remains an important credit risk.** State and local governments continue to exert demands on the excess cash flows of toll roads to subsidize their own capital and operating needs, or have shifted some of their transportation financing responsibilities to existing toll roads.
- » **What could change our outlook.** We could move to a stable outlook if US economic growth slows appreciably below 2.5%, or if gasoline prices rise significantly and are sustained at a higher level. We could move to a negative outlook if traffic growth declines and revenue growth stalls at 2% or lower. Toll rate increases could face some push back from drivers and thereby hurt revenue growth, particularly if economic growth disappoints. Reduced revenue would hurt toll road financial margins and liquidity.

## Stronger-Than-Expected Traffic Growth in 2015 Will Likely Continue in 2016

We expect that this year's stronger-than-expected traffic growth will continue in 2016. For the 45 toll roads we rate, we expect traffic growth of about 3% on a median basis for 2015 and 2016.

Low gasoline prices and continued improvement in the US economy, which Moody's Macroeconomic Board expects will expand 2% to 3% in 2015 and 2016, are supporting the gains. This year through June, traffic grew 5.7%, on a median basis, compared with the same six months last year, based on information from 13 toll roads, including data posted to issuer websites. This rate of growth significantly exceeds our previous forecast of 1% to 2% for 2015, though it is based on data from 30% of the operational toll roads we rate. It is our expectation that this growth will continue and is the main reason we are changing our outlook to positive from stable.

We also expect that median toll revenue will rise 5% to 6% in both 2015 and 2016, compared with our forecast of 3% to 5% growth for 2015. Increased traffic volume should support financial metrics, provided that operating expenses remain stable and debt leverage remains moderate and manageable.

We would consider moving back to a stable outlook if US economic growth disappoints, or if gasoline prices rise significantly and remain high. We could shift to a negative outlook if the rate of traffic growth declines and revenue growth stalls at 2% or lower. Toll rate increases could face some push back from drivers and thereby hurt revenue growth, particularly if economic growth disappoints.

## Low Gas Prices, Higher Tolls Will Support Toll Revenue

We expect that median toll transactions will rise 3% in both 2015 and 2016, driven by continued traffic growth and sustained low gasoline prices in 2016, based on the US Energy Information Administration's (EIA) forecast of an average of \$2.38 per gallon for regular grade gasoline at the pump. The median transaction growth is based on FY 2014 transaction growth for 42 US toll roads rated by Moody's and included in our US Toll Road Medians for 2014 report. The median is the middle value in an ordered sequence of data, such that 50% of data observations fall below and 50% are above the median.

As shown in Exhibit 1, the 13 toll roads that reported data through June 2015 had median traffic and revenue growth of 5.7% and 9.7%, respectively, compared to the prior year. The very strong 78.4% traffic growth for the Miami-Dade Expressway Authority (A2 stable) was because of the addition of 16 new tolling points in 2015, where there were previously three. The Central Texas Regional Mobility Authority (Baa2 stable) also had very strong growth in traffic and revenue, supported by the opening of two new toll roads that were added to its network.

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Exhibit 1

## Revenue and Traffic Growth for Selected Toll Roads: Calendar Year 2015 through June

Toll Road	YTD Calendar Revenue			YTD Calendar Transactions		
	June, 2014	June, 2015	Percent Growth	June, 2014	June, 2015	Percent Growth
Central Texas Regional Mobility Authority, TX	21,420,418	28,813,531	34.5%	23,976	31,978	33.4%
E-470 Public Highway Authority, CO	69,719,934	80,228,597	15.1%	30,790	35,025	13.8%
Florida Department of Transportation, FL	404,864,000	447,649,000	10.6%	353,622	398,567	12.7%
Foothill-Eastern Transportation Corridor Agency, CA	59,357,160	64,642,131	8.9%	28,258	29,874	5.7%
Illinois State Toll Highway	461,105,860	552,454,347	19.8%	401,446	424,285	5.7%
Maine Turnpike Authority, ME			N/A	29,043	30,163	3.9%
Miami-Dade County Expressway Authority, FL	62,505,463	109,623,601	75.4%	124,510	222,128	78.4%
New Jersey Turnpike Authority, NJ	491,274,000	523,686,000	6.6%	110,883	117,473	5.9%
Ohio Turnpike Commission, OH	123,495,901	131,450,913	6.4%	24,022	25,105	4.5%
Pennsylvania State Turnpike Commission, PA	427,236,000	464,197,000	8.7%	90,980	93,259	2.5%
Port Authority of New York New Jersey	675,484,000	741,255,000	9.7%	54,887	55,509	1.1%
San Joaquin Hills Trans. Corridor Agency, CA	58,107,986	66,992,444	15.3%	13,142	14,250	8.4%
South Jersey Transportation Authority, NJ			N/A	24,307	23,990	-1.3%
<b>MEDIAN</b>	<b>123,495,901</b>	<b>131,450,913</b>	<b>10.6%</b>	<b>30,790</b>	<b>35,025</b>	<b>5.7%</b>

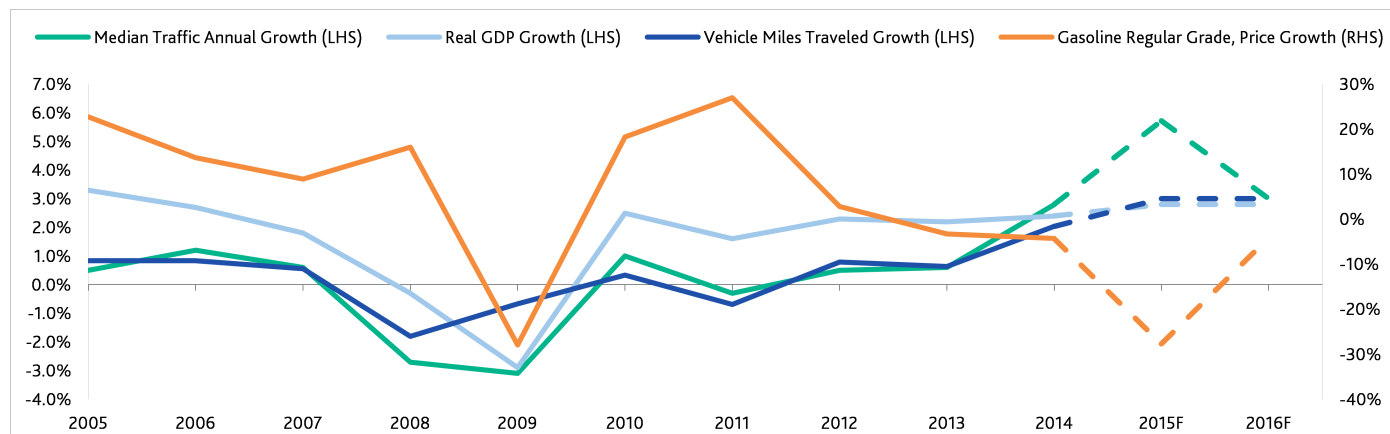
Note: Year-to-date (YTD) financials through June 30 for selected issuers.

Source: The toll roads.

As shown in Exhibit 2, since 2010, median transaction growth for the US toll roads we rate has tended to rise when gas prices have fallen. The growth trajectory in vehicle miles traveled (VMT) throughout the US has been roughly in sync with real growth in GDP and the average growth in the retail price of gasoline.

Exhibit 2

## Annual Percentage Change in Toll Road Traffic Compared with Vehicle Miles Traveled, Gas Prices, and Gross Domestic Product



Note: 2015 and 2016 Median traffic growth forecasts are our estimates.

Source: Moody's Public Finance Monitoring System/Municipal Financial Ratio Analysis database of publicly rated government-owned toll roads for Median Traffic Annual Growth; US Federal Highway Administration for Vehicle Miles Traveled; U.S. Energy Information Administration for Gasoline Regular Grade Prices; and Moody's Investors Service for GDP.

We expect that median toll revenue will rise 5% to 6% in both 2015 and 2016, supported by a combination of traffic growth and annual toll rate increases. About 30% of the 45 toll roads we rate have put into effect annual toll increases or inflation-indexed toll increases. Among them are toll roads in Colorado, Florida and Texas (see Exhibit 3). We expect that the use of inflation-indexed toll increases will accelerate as more toll roads move toward 100% electronic toll collection.

Exhibit 3

**Toll Roads That Index Rate Increases to Inflation**

Entity Name	Senior Rating	Annual Indexed Rate Increases
Central Florida Expressway Authority, FL [1]	A2	Yes
Central Texas Regional Mobility Authority, TX	Baa2	Yes
E-470 Public Highway Authority, CO	Baa1	Yes
Florida Department of Transportation Alligator Alley, FL	A1	Yes
Florida Department of Transportation, FL	Aa3	Yes
Harris County Toll Road Authority, TX	Aa2	Yes
Miami-Dade County Expressway Authority, FL	A2	Yes, from FY 2020
North Texas Tollway Authority, TX	A1	Yes
Ohio Turnpike and Infrastructure Commission, OH	Aa3	Yes, from 2023
Orange County Transportation Authority, CA	A1	Yes [2]
Pennsylvania State Turnpike Commission, PA	A1	Annual but not Indexed
Tampa-Hillsborough County Expressway Authority, FL	A3	Yes
Texas Transportation Commission - Central Texas Turnpike System, TX	A3	Yes

[1] Formerly Orlando-Orange County Expressway Authority.

[2] Also congestion/volume based increases.

Sources: The issuers' published toll policies and websites.

Toll revenue is steadily rising. Median toll revenue growth was 1.2% in 2011, 3.3% in 2012, 3.5% in 2013 and 5.6% in 2014, with a significant bump in 2015. We attribute the accelerating growth to both the economic recovery from the recession and sustained low gas prices. In some urban areas that are experiencing strong economic recovery and population growth, such as Denver, Colorado, which is served by the E-470 Public Highway Authority (Baa1 stable), traffic and revenue growth is outpacing the sector medians (see Exhibit 4). However, in other areas where the toll road is well-established and population levels are flat or declining, traffic and revenue are lagging behind the median (see Exhibit 5). This includes a 1.54% revenue drop for the South Jersey Transportation Authority (Baa2 negative) that serves economically challenged Atlantic City, New Jersey (Caa1 negative) and a 0.53% revenue drop for the Nassau County Bridge Authority (A3 stable), a small single asset facility in Long Island, New York.

Exhibit 4

**Traffic and Revenue Growth in Some Urban Areas Outpaces Sector Medians**

Name	Rating	FY 13-14 Change in Transactions	FY 13-14 Change in Toll Revenues
Laredo International Toll Bridge System, TX	A2	24.89%	18.65%
Tampa-Hillsborough County Expressway Authority, FL	A3	17.22%	7.48%
Maryland Transportation Authority, MD	Aa3	16.97%	39.48%
E-470 Public Highway Authority, CO	Baa1	13.64%	16.43%
Oklahoma Turnpike Authority, OK	Aa3	7.06%	5.72%

Source: Moody's Investors Service Municipal Financial Ratio Analysis database.

Exhibit 5

**Traffic and Revenue Growth Lag Behind the Sector Medians in Mature Areas**

Name	Rating	FY 13-14 Change in Transactions	FY 13-14 Change in Toll Revenues
South Jersey Transportation Authority, NJ	Baa2	-3.19%	-1.54%
Nassau County Bridge Authority, NY	A3	-2.49%	-0.53%
Metropolitan Washington Airports Authority Dulles Toll Road Enterprise, DC	A2	-2.20%	16.99%
Massachusetts Dept. of Transportation - Western Turnpike, MA	Aa3	-0.44%	11.09%
Delaware River Joint Toll Bridge Commission, PA	A1	-0.30%	1.61%

Source: Moody's Investors Service Municipal Financial Ratio Analysis database.

## Rising Leverage Remains a Sector Risk

Increasing leverage remains an important credit risk amid a widening funding gap for transportation infrastructure. State and local governments continue to exert demands on the excess cash flows of toll roads to subsidize their own capital and operating needs, or have shifted some of their transportation financing responsibilities to existing toll roads. Public-private partnership (P3) financings might alleviate some of this pressure on toll roads, although not by much. A delayed funding of the Highway Transportation Trust Fund could exert more funding pressure for toll roads and add to leverage.

Toll roads with the highest leverage, measured by the ratio of debt to operating revenue, are mostly start-ups (roads in operation for less than 10 years), such as the North Carolina Turnpike Authority (Baa3 stable), which opened in December 2012 and is still in ramp-up, and the Central Texas Regional Mobility Authority. Others include toll roads that technically are no longer start-ups but have had lower-than-expected traffic and revenue growth, such as the Foothill Eastern (Ba1 stable) and San Joaquin Hills (Ba2) Transportation Corridor Agencies in Southern California.

Exhibit 6

### Toll Roads with Highest Leverage, FY 2014

Name	Rating	Debt to Operating Revenues (x)	Debt Outstanding (\$'000)
North Carolina Turnpike Authority, NC	Baa3	63.98	1,581,872
Texas Transportation Commission - Central Texas Turnpike System, TX	A3	19.49	2,810,157
Central Texas Regional Mobility Authority, TX	Baa2	18.26	782,852
San Joaquin Hills Trans. Corridor Agency, CA	Ba2	16.17	2,148,605
Foothill-Eastern Transportation Corridor Agency, CA	Ba1	15.99	2,464,333

Source: Moody's Investors Service Municipal Financial Ratio Analysis database.

## Appendix

### List of Rated Toll Roads

Name	Current Rating	Outlook
Bay Area Toll Authority, CA	Aa3	STA
Central Florida Expressway Authority, FL <sup>[1]</sup>	A2	STA
Central Texas Regional Mobility Authority, TX	Baa2	STA
Delaware River & Bay Authority, DE	A1	STA
Delaware River Joint Toll Bridge Commission, PA	A1	STA
Delaware River Port Authority, PA	A3	STA
E-470 Public Highway Authority, CO	Baa1	STA
Eagle Pass Toll Bridge System, TX	Baa1	STA
Florida Department of Transportation Alligator Alley, FL	A1	STA
Florida Department of Transportation, FL	Aa3	POS
Foothill-Eastern Transportation Corridor Agency, CA	Ba1	STA
Fort Bend County Toll Road Authority	A2	STA
Georgia State Road and Tollway Authority-Northwest Corridor Project, GA	Baa3	STA
Greater New Orleans Expressway Commission, LA	A3	STA
Harris County Toll Road Authority, TX	Aa2	STA
Illinois State Toll Highway Authority, IL	Aa3	STA
Kansas Turnpike Authority, KS	Aa3	STA
Kentucky Public Transportation Infrastructure Authority	Baa3	STA
Laredo International Toll Bridge System, TX	A2	STA
Lee (County of) FL Toll Facility Enterprise, FL	A3	STA
Maine Turnpike Authority, ME	Aa3	STA
Maryland Transportation Authority, MD	Aa3	STA
Massachusetts Department of Transportation - Metropolitan Highway System, MA	A3	STA
Massachusetts Turnpike Authority - Western Turnpike, MA	Aa3	STA
Metropolitan Washington Airports Authority, DC Dulles Toll Road Enterprise	A2	STA
Miami-Dade County Expressway Authority, FL	A2	STA
Nassau County Bridge Authority, NY	A3	STA
New Hampshire (State of) Turnpike Enterprise, NH	A1	STA
New Jersey Turnpike Authority, NJ	A3	POS
New York State Bridge Authority, NY	Aa3	STA
New York State Thruway Authority, NY	A2	STA
North Carolina Turnpike Authority, NC	Baa3	STA
North Texas Tollway Authority, TX	A1	STA
Ohio Turnpike and Infrastructure Commission, OH	Aa3	STA
Oklahoma Turnpike Authority, OK	Aa3	STA
Orange County Transportation Authority, CA	A1	STA
Pennsylvania State Turnpike Commission, PA	A1	STA
Port Authority of New York and New Jersey, NY <sup>[2]</sup>	Aa3	STA
Richmond Metropolitan Transportation Authority, VA <sup>[3]</sup>	A1	STA
San Joaquin Hills Trans. Corridor Agency, CA	Ba2	STA
South Jersey Transportation Authority, NJ	Baa2	NEG
Tampa-Hillsborough County Expressway Authority, FL	A3	POS
Texas Transportation Commission - Central Texas Turnpike System, TX	A3	STA
Triborough Bridge & Tunnel Authority, NY	Aa3	STA
West Virginia Parkways Authority, WV	Aa3	STA

<sup>[1]</sup> Formerly Orlando-Orange County Expressway Authority

<sup>[2]</sup> Now included under Government Owned Toll Roads Methodology

<sup>[3]</sup> Formerly Richmond Metropolitan Authority

Source: Moody's Investors Service.

## Moody's Related Research

### Industry Outlooks:

- » [2015 Outlook – Slow and Steady Traffic Growth Supports Stable Outlook, December 2014 \(176495\)](#)

### Special Comments/Sector Comments:

- » [US Toll Road Medians Fiscal 2014: Traffic and Revenue Growth Support Strong Metrics, August 2015 \(1007449\)](#)
- » [Factors that Drive Strong Credit Quality: Size matters but so do resilience to downturns and rate-raising ability, September 2014 \(175275\)](#)
- » [US Toll Road Sector Medians for Fiscal Year 2013: Metrics Improve as Leverage Rises, August 2014 \(174635\)](#)
- » [Chile's earthquake: No impact on Chilean toll roads, April 2014 \(167208\)](#)
- » [European Toll Roads and Airports: Recent Data Suggests Signs of Slow Recovery in Traffic Volumes, March 2014 \(166141\)](#)
- » [Managed Lanes are HOT! Unique Risks and benefits versus traditional tolling, May 2013 \(153659\)](#)
- » [Milking the Cash Cow: US Toll Roads Are Reliable Source of Cash for Struggling State and Local Governments but Rate Affordability Exerts Credit Pressure, February 2012 \(138832\)](#)

### Global Financial Risk Perspectives:

- » [Global Macro Economic Outlook 2015-16: Stronger US Dollar and Shifts in Capital Flows Stoke Divisions in Global Growth, May 2015 \(1004721\)](#)

### Rating Methodologies:

- » [Government Owned Toll Roads, October 2012 \(143776\)](#)
- » [Moody's Rating Methodology Privately Managed Toll Roads, May 2014 \(165911\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available on the issuer's page. All research may not be available to all clients.



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**AUTHOR**

Maria Matesanz

**ASSOCIATE ANALYSTS**

Calyn Gelinas

Jenna Schlags