

CREDIT FOCUS

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Ratings

North Texas Tollway Authority

First-Tier Revenue Bonds	A2
Second-Tier Revenue Bonds	A3
Subordinate Lien Revenue Bonds	Baa3

Key Facts^[1]

Transaction Volume 2013	610,129,000
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5-Year CAGR, 2013	8.2%
Annual Toll Revenue 2013	525,459,000

DSCR, 2013	
First-Tier DSCR	1.64X
Second-Tier DSCR	1.37X
All Debt DSCR	1.26X

Debt / Operating Revenue, 2013 Avg 10-Year Projected	13.76x
First-Tier DSCR	1.63x

[1] FY 2013 unaudited.

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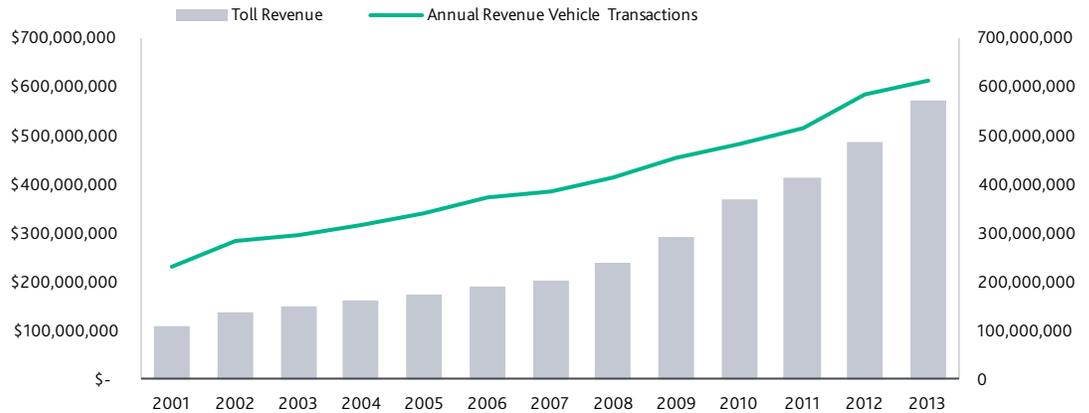
North Texas Tollway Authority

Economic Growth Spurs Traffic Growth and Supports High Leverage

Summary

- » Strong service area economy continues to generate traffic growth. Economic growth has been among the top three metro areas in the state after Houston and Austin.
- » Traffic for the fiscal year ending in December 2013 grew 4.3% and toll revenue increased 8.2% (net), helped by the biennial toll increase of 5.6%. Through March 2014, transactions were up 5.7% and revenues, 5.6%.
- » Strong tolling policy imposes automatic increases based on set annual rates and thus reduces dependence on willingness and ability to implement increases.
- » Historically, debt service coverage ratios (DSCRs) have been above required levels. Additionally, liquidity has increased, with 859 days cash on hand in FY 2013.
- » Construction risk is minimal as all of the system's main roads are fully operational. Current capital needs for existing roads consist mainly of lane additions or extensions, with no plans for additional debt.
- » Meeting targeted 1.50x DSCRs for steeply rising debt service through 2037 depends on achieving projected increases in traffic and annual toll rate increases.
- » Expanding service area could pressure the North Texas Tollway Authority (NTTA) to assume additional capital improvements, though the authority has opted out of several Texas Department of Transportation projects and would likely fund additional projects through the Special Projects System (SPS), which is outside of the NTTA System revenue pledge.

EXHIBIT 1

Historical Revenue and Transactions

Source: NTTA

Strong Service Area Economy Spurs Continued Growth in Transactions and Revenue and Supports High Leverage

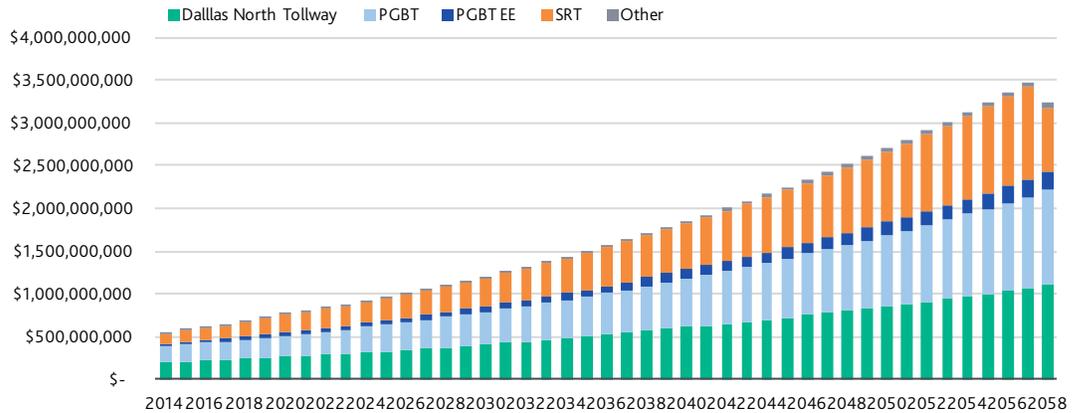
As illustrated in Exhibit 1 a combination of economic growth, system additions, including the President George Bush Tollway Eastern Extension (PGBTEE) and the Sam Rayburn Tollway (SRT), and rate increases produced double-digit transaction and revenue growth in FY 2012. Toll transactions grew by 4.3% in FY 2013 and revenues by 8.2% (net), 8.6% above the traffic consultant's forecast. Through March 2014, transactions continued trending up by 5.7% and revenues by 5.6%. This growth was consistent with expectations.

Reasonable assumptions in the latest traffic engineer's report of March 2014 underpin forecast toll transaction and revenue growth, and reflect expected population, housing and employment growth in the Dallas MSA service area. Although the March 2014 forecast lowers traffic and revenue growth rates, the authority has exceeded the more optimistic previous forecasts over the last few years, and so the base for this lower growth is actually higher. The latest report forecasts that the system's traffic and revenue will become more diversified over time with the growth of new PGBTEE and SRT segments.

According to the March 2014 forecast, transaction growth will average 2% through 2020 and revenue growth, 5.9% (Exhibit 2). Combined with 2.75% annual rate increases, this growth yields DSCRs above 1.50x for first-tier bonds and above 1.30x for first- and second-tier bonds. The FY 2014 budgeted DSCR is 1.50x for first-tier bonds and 1.20x for first- and second-tier bonds, but given recent traffic trends the authority expects that these DSCRs will be higher.

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EXHIBIT 2

NTTA Projected Revenue by Road Segment

A strength of the system is automatic toll rate increases implemented every two years, on 1 July, at an effective annual rate of 2.75%. However, challenges in collections of video tolling transactions continue to somewhat temper forecasted revenue growth, though collection rates have improved.

Leverage Remains Among the Highest of Peer Group

The ratings reflect high leverage. At over 13.76x in FY 2013, the NTTA is among the top 10 most leveraged of 44 Moody's-rated government-owned toll roads (see Exhibit 3).

However this leverage has moderated since a high of 24.6x in 2008, owing to strong revenue growth from system expansions, traffic growth and toll increases. Given the NTTA's escalating debt service schedule, we expect that robust increases in revenue will be key to the maintenance of strong credit metrics. Nevertheless, the NTTA still remains among the highest of the rated toll road peer group (Exhibit 3) and well above median levels for the sector. The median debt-to-operating revenue ratio in 2012 for all rated tolled facilities was 4.79x and for A-rated credits, 4.67x.

EXHIBIT 3

North Texas Tollway Authority

Issuer	2013 Debt to Operating Revenue	Senior Rating
Metropolitan Washington Airports Authority, DC Dulles Toll Road Enterprise, DC	26.53	A2
Central Texas Regional Mobility Authority, TX	24.10	Baa2
Texas Transportation Commission - Central Texas Turnpike System, TX	22.79	Baa1
San Joaquin Hills Trans. Corridor Agency, CA	17.85	B1
Foothill-Eastern Transportation Corridor Agency, CA	17.04	Ba1
Tampa-Hillsborough County Expressway Authority, FL	15.52	A3
North Texas Tollway Authority	13.76 ^[1]	A2
E-470 Public Highway Authority, CO	11.97	Baa2
Bay Area Toll Authority, CA	11.51	Aa3
Miami-Dade County Expressway Authority, FL	9.14	A3

[1] Unaudited.

The authority's \$7.588 billion of debt outstanding is 80% first tier. Outstanding variable-rate debt, including 'soft put' bonds, is \$417 million, or 5.4% of total debt. The 'soft put' bonds consist of \$215 million with a put date of 1 January 2016 and \$102 million with a put date of 1 January 2019.

A failed conversion and remarketing of these bonds does not constitute an event of default, and instead results in a stepped up coupon rate of 12% per year on the 2016 bonds and 10% on the 2019 bonds. There is no external liquidity facility to cover such an event. We consider the remarketing risk to be minimal, given the NTTA's demonstrated ability to access the market and to afford the higher interest rates on these series if necessary.

The NTTA has two interest-rate swaps outstanding with Citibank and JP Morgan Chase. Under the swap agreement with JP Morgan Chase, the NTTA could be obligated to post collateral if either of the two agencies rating the bonds assigns an A3 or below rating to either FGIC or the first-tier bond. Based on the mark-to-market as of 20 March 2014, the negative fair value on the swaps was \$27.3 million.

Zip Cash Toll Collections Improving

The system switched to all electronic tolling (AETC) in December 2010. Toll Tag penetration decreased immediately but as of 2013, has improved to more than 79%. Non-regular users are billed through the use of the video tracking and automated billing service known as ZipCash. ZipCash transactions entail collection risk because the NTTA invoices users after the transaction. Payment compliance was low in FY 2011 and 2012, and while revenue leakage was initially higher than expected, it is now improving as a result of enhanced tracking and enforcement mechanisms. In FY 2013, net revenue leakage was approximately 8% compared with over 16% in FY 2011. For 2014, the authority's target is 7.5%. The A2 rating should be able to absorb the continued challenges presented by the collection of ZipCash transactions, owing in part to recently improved collections.

Some revenue leakage risk is also present in the tolling services agreements (TSAs) with LBJ Infrastructure Group's I-635 managed lanes project (LBJ Baa3 stable) and with the North Tarrant Expressway Mobility Partners (NTE Mobility Partners LLC Baa2 stable; NTE Mobility Partners Segments 3 LLC Baa3 stable) given that these agreements require the NTTA to absorb uncollected tolls. From a credit perspective, increased leakage that leads to liquidity constraints or senior-lien DSCR that is lower than 1.50x will place negative pressure on the rating.

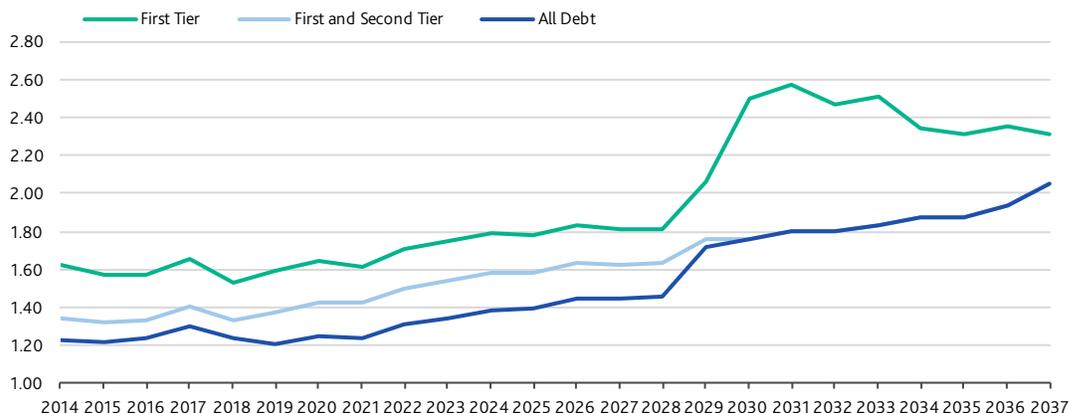
Debt Service Coverage Ratio Remains at Levels Consistent with the Current Rating

While forecasts exceed these levels (Exhibit 4) the NTTA targets a minimum bond ordinance DSCR of 1.50x for senior bonds. The bond ordinance DSCR as of FY 2013 was 1.64x for first-tier debt and 1.37x for combined first- and second-tier debt. The FY 2014 projections indicate a DSCR of 1.55x for first-tier debt and 1.28x for total debt, in line with the authority's goal, the current rating level and above the coverage required by the trust agreement.

Liquidity is strong, with approximately 859 days cash on hand as of the end of FY 2013. The 2012 Moody's median for all rated roads was 773 days.

In addition to its first- and second-tier debt, the NTTA pays debt service on a federal Intermodal Surface Transportation Efficiency Act (ISTEA) loan, its Capital Improvement Fund (CIF) subordinated debt, and deposits to the Reserve Maintenance Fund (RMF), essentially ending with sum sufficient coverage.

EXHIBIT 4

Projected DSCRs

Source: NTTA

Construction Risk Minimal; No Additional Debt Currently Expected

Construction risk is minimal now that all segments of all of the system's roads are fully operational, with the opening of the PGBTEE in December 2011. The 2014-18 CIP totals \$667 million: \$341 million for routine maintenance projects and \$326 million for capacity enhancements, including lane additions and widening. The capacity improvements and widenings of various roadways includes: (i) the DNT 4th lane improvements from PGBT north to SRT and the bottleneck improvements at the DNT/PGBT interchange that are anticipated to be open to traffic at the beginning of 2018; and (ii) the PGBT widening between IH 35E and SH 78 that is anticipated to be completed in stages between 2016 and 2019.

The CIF and RMF are expected to provide much of the CIP funding, supplemented by cash flow. However, if cash flow is not sufficient, the authority has available the \$200 million commercial paper (CP) as interim financing with CP redeemed from the future CIF deposits or proceeds from additional first or second tier bonds. As of 31 December 2013, the authority had on deposit approximately \$47 million in the RMF and \$131 million in the CIF for those projects, with additional financing through cash flow.

Special Projects System Creates Limited Exposure to Cost Overruns

The NTTA has developed the Special Project Systems (SPS) to fund certain roadway developments as unique project finance structures outside of the NTTA system. These developments include the President George Bush Turnpike Western Extension and the Chisholm Trail Parkway located south of Fort Worth in Tarrant County.

Each of the projects qualified for a Toll Equity Loan Agreement (TELA) from the Texas Department of Transportation, which covers a predetermined level of debt service, operating and maintenance, and

capital expenditures. Any construction or future operating and maintenance cost overruns not covered with toll rate increases or the TELA will be the responsibility of the NTTA system. Though the NTTA's contingent exposure to these cost overruns is a potential credit risk, we do not currently expect that these projects will need liquidity. Thus, exposure has no effect on the issuer's credit quality. Furthermore, bonds issued by the SPS are not secured by revenues of the NTTA System.

Organizational Changes Focus on Strategic Planning

The authority is governed by a nine-member appointed board. The County Commissioners Court of each of the four member counties; Collin, Dallas, Denton and Tarrant, appoints two directors. The Governor of Texas appoints the ninth member, who must be from a county outside the authority but adjacent to one of the member counties.

Appendix A

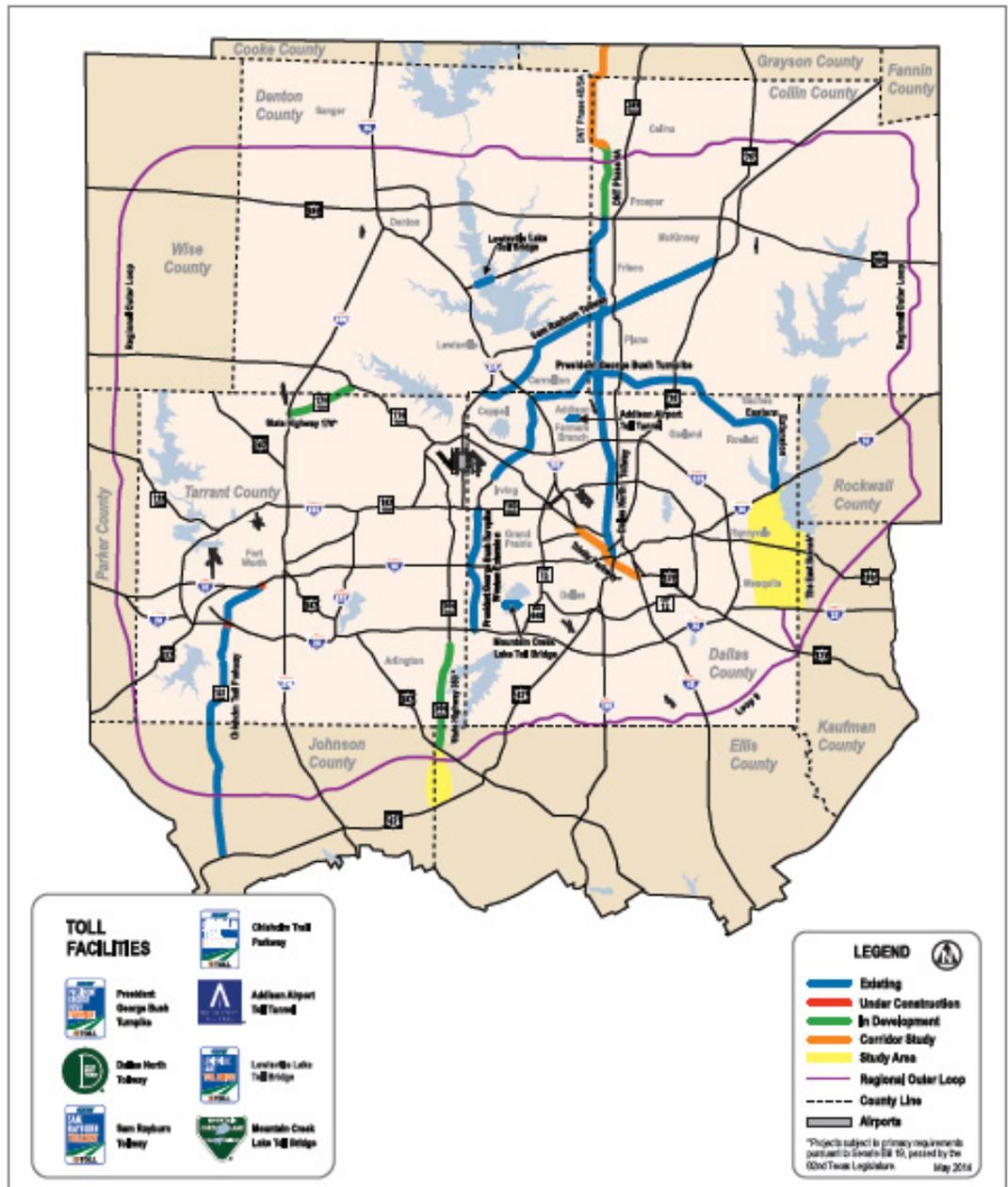
Historical Financial Information

	2009	2010	2011	2012	2013 ^[1]
Core Ratios					
Operating Revenue (\$'000)	307,600	383,866	443,406	506,193	551,598
Debt Outstanding (\$'000)	7,122,390	7,543,022	7,555,402	7,556,400	7,588,629
Assets (\$'000)	7,931,820	8,402,464	7,701,093	7,556,045	7,405,621
Operating Cash Flow Margin (%)	70.4	75.1	74.8	79.0	80.4
Debt Service to Operating Revenues (%)	38.0	47.2	51.1	60.4	64.2
Debt to Operating Revenues (x)	23.15	19.65	17.04	14.93	13.76
Sector Ratios					
Available Cash and Investments ('000)	765,773	921,011	403,212	437,199	381,990
Unrestricted & Discretionary Reserves ('000)	128,823	280,344	251,906	315,242	253,996
Gross Revenues and Income ('000)	235,441	338,971	409,123	469,618	592,033
Total Operating Expenses (excluding Depreciation and Interest Expense) ('000)	90,935	95,710	111,788	106,236	107,930
Net Revenues ('000)	144,506	243,261	297,334	363,382	484,103
Aggregate Annual Debt Service ('000)	116,870	181,205	226,688	305,959	354,280
Margin after Debt Service (%)	11.7	18.3	17.3	12.2	21.9
Debt Ratio (%)	93.7	95.0	102.0	104.0	107.1
Days Cash on Hand ('000)	517	1,069	822	1,083	859
Operational Ratios					
Passenger Transactions ('000)	449,300	474,437	505,408	574,201	597,203
Passenger Transactions Annual Growth (%)	10.4	5.6	6.5	13.6	4.0
Commercial Transactions ('000)	6,246	7,476	8,347	10,851	12,926
Commercial Transactions Annual Growth (%)	15.5	19.7	11.6	30.0	19.1
Total Transactions ('000)	455,546	481,913	513,754	585,052	610,129
Debt per Roadway Mile (\$)	75,979.61	83,626.02	85,040.29	86,962.33	88,289.29
Debt per Transaction (\$)	13.34	13.88	13.24	11.89	11.58
O&M Expense/Roadway Mile (\$)	1,136.68	1,196.37	1,397.35	1,327.95	1,349.13
Debt Service Coverage Ratios					
Senior Lien Debt Service Coverage By Net Revenues (x)	1.40	1.66	1.71	1.54	1.79
Senior Lien Coverage (Bond Ordinance) (x)	1.61	1.97	1.78	1.90	1.64
Senior And Sub Coverage By Net Revenues (x)	1.32	1.54	1.52	1.32	1.50
Senior And Sub Coverage (Bond Ordinance) (x)	1.56	1.83	1.60	1.47	1.25

[1] Unaudited.

Sources: NTTA financial statements, Moody's PFMS

Appendix B



Facility Map of the North Texas Region



Moody's related research

Sector Outlook:

- » [2014 Outlook –US Toll Roads: Slow Recovery in Traffic Growth Shows Staying Power, December 2013 \(160843\)](#)

Rating Methodology:

- » [Government Owned Toll Roads, October 2012 \(143776\)](#)

Special Comments:

- » [US Toll Roads: Federal TIFIA Loans Provide Low-Cost Capital, but Not Without Risks, March, 2014 \(166047\)](#)
- » [Managed Lanes are HOT! Unique Risks and benefits versus traditional tolling, May 2013 \(153659\)](#)
- » [Milking the Cash Cow, February 2012 \(138832\)](#)
- » [Credit Rewards and Risks of Electronic Toll Collection, February 2011 \(131073\)](#)
- » [US Toll Road Sector Medians for Fiscal Year 2012, \(144734\)](#)

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. All research may not be available to all clients.

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