



**NORTH CAROLINA**  
Department of Transportation



**Board of Directors**  
**Finance Committee Meeting**  
**North Carolina Turnpike Authority**  
**April 13, 2017**

# Triangle Expressway Refunding Overview

**David Miller**

Public Financial Management



# North Carolina Turnpike Authority

**Overview of the \$200,515,000 Triangle Expressway System Senior Lien  
Turnpike Revenue Refunding Bonds, Series 2017**

April 12, 2017

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## Overview

- On February 16 the refunding opportunity was presented to NCTA's Finance Committee.
- A special Finance Committee Meeting was held on March 1<sup>st</sup> and the Committee recommended the Board approve the refunding transaction.
- On March 3, 2017 the NCTA Board of Directors unanimously approved the Resolution and Bond Order authorizing and approving the issuance of Triangle Expressway System Senior Lien Turnpike Revenue Refunding Bonds, Series 2017.
- LGC approval was received on March 13, 2017.
- The Series 2017 Bonds successfully priced on March 22, 2016 to advance refund all outstanding, callable Series 2009A Bonds generating net present value savings in excess of \$32.1 million.



## Overview of Refunded Bonds (Series 2009A)

- The Triangle Expressway System Senior Lien Revenue Bonds, Series 2009A were issued on July 29, 2009 in a par amount of \$234,910,000
- The All-in TIC for the 2009A&B Bonds was 6.40%
- Purpose of Issue: Finance certain costs of the Triangle Expressway Project; (ii) fund the debt service reserve account; (iii) pay capitalized interest on the bonds; (iv) purchase an Assured Guaranty bond insurance policy; and (v) pay costs of issuance.
- The 2009A Bonds are subject to optional redemption on January 1, 2019 at par
- \$234,310,000 was eligible for an advance refunding



## Plan of Finance

- Method of Sale
  - The 2016B Bonds were sold via negotiated sale on March 22, 2017
- Approach to Ratings
  - Due to the familiar credit and recent strong performance of the expressway, NCTA opted to pursue only two underlying rates choosing Fitch and S&P after an analysis of potential fees and feedback from the underwriter
- Structure
  - NCTA opted to structure the refunding to achieve savings on the long end to give the NCTA Board maximum flexibility in the future
  - A Surety Bond was used for the DSRF allowing NCTA to liquidate the existing cash DSRF to be used as a contribution into the escrow, reducing the bond size
  - Bond insurance was used for bonds maturing 2024, 2026-2029, 2031 and 2039



## Series 2017 Bonds Sales Results

- **Amortization**
  - The Series 2017 Bonds are current interest bonds and pay interest semiannually on January 1 and July 1, commencing on July 1, 2017
  - Serial Bonds mature on July 1 in the years 2018 through 2032 and 2039
- **Underwriting Syndicate**
  - Bank of America Merrill Lynch was the senior underwriter
  - Citigroup, J.P. Morgan and Wells Fargo Securities were co-managers
- **Pricing/Execution**
  - At the time of the sale, municipal market yields remained low and investor demand was significant leading to a successful pricing and significant oversubscription on all maturities



## Series 2017 Bonds Sales Results

- Purpose of Issue:
  - Advance refunding the Authority's 2009A bonds maturing on and after January 1, 2020
  - Paying the premium for the Bond Insurance Policy issued by AGM with respect to certain maturities of the Series 2017 Bonds
  - Paying the premium for the Series 2017 debt Service Reserve Policy
  - Paying certain costs of issuance
- Optional Redemption
  - Bonds are subject to optional redemption on or after January 1, 2027





## Summary of Ratings Reports – S&P

- S&P rating: BBB (“Stable”)
  - NCTA’s Triangle Expressway bonds have been upgraded to ‘BBB’ from ‘BBB-’
- Strengths
  - Strong support from the State including NCDOT
  - Actual results have consistently exceeded forecast
  - Adequate total coverage that we expect will continue despite rising debt service requirements
- Weaknesses
  - Risks associated with single-asset facilities
  - Requirement for strong annual growth in revenue, transactions, and tolls to meet base-case projections of debt service coverage
  - High overall toll structure and expectation of increase in tolls in near future



## Summary of Ratings Reports – Fitch

- Fitch’s rating: BBB- (“Stable”)
  - Rating reflects commuter toll road that is still in ramp-up and is supported by a stable and expanding service area and by a commitment from NCDOT
- Strengths
  - Strong service area with continued growth and support from NCDOT
  - Rate-making flexibility available without additional legal or regulatory approvals
  - Gross pledge supports newer asset
- Weaknesses
  - Back-loaded, growth dependent structure
  - Escalating debt structure that relies on growth to meet debt service obligations and periods of low debt service coverage ratios
  - Limited number of toll roads in the area, and uncertainty as to overall demand and perceived value of time savings



## Savings

- Including the DSRF Release, NCTA generated over \$93.6 million in gross debt service savings.
- Adjusting for the DSRF release, savings on a net present value basis equates to \$32.1 million (13.7% of the refunded bonds par amount)

Date	Prior Net Cash Flow	Refunding Debt Service	Savings	NPV Savings
07/01/2017	2,932,212	2,500,754	431,458	399,471
07/01/2018	13,011,206	12,974,094	37,113	11,067
07/01/2019	13,011,206	12,972,094	39,113	11,378
07/01/2020	15,154,075	15,116,844	37,231	7,999
07/01/2021	16,748,444	16,709,219	39,225	8,236
07/01/2022	17,931,069	17,893,344	37,725	5,381
07/01/2023	19,682,025	19,645,594	36,431	2,928
07/01/2024	21,659,194	21,615,844	43,350	7,153
07/01/2025	23,854,731	20,847,469	3,007,263	2,324,362
07/01/2026	25,718,222	20,847,719	4,870,503	3,663,757
07/01/2027	27,121,163	20,846,094	6,275,069	4,581,241
07/01/2028	28,563,400	20,850,594	7,712,806	5,461,976
07/01/2029	30,132,088	20,847,297	9,284,791	6,377,036
07/01/2030	27,448,381	16,428,000	11,020,381	7,338,936
07/01/2031	31,754,038	19,153,500	12,600,538	8,134,848
07/01/2032	33,119,569	19,174,875	13,944,694	8,726,737
07/01/2033	4,184,138	1,017,000	3,167,138	1,916,168
07/01/2034	4,069,138	1,017,000	3,052,138	1,789,275
07/01/2035	3,954,138	1,017,000	2,937,138	1,668,438
07/01/2036	3,839,138	1,017,000	2,822,138	1,553,404
07/01/2037	3,724,138	1,017,000	2,707,138	1,443,926
07/01/2038	3,609,138	1,017,000	2,592,138	1,339,771
07/01/2039	27,760,819	20,848,500	6,912,319	3,466,763
<b>Total</b>	<b>398,981,665</b>	<b>305,373,832</b>	<b>93,607,833</b>	<b>60,240,251</b>

PV of savings from cash flow	60,240,251
Less: Prior funds on hand	(28,092,053)
Plus: Refunding funds on hand	4,871
Net PV Savings	32,153,069

# Public Private Partnership Review Update

Jim Taylor

Mercator Advisors

Review of the Comprehensive Agreement between  
the North Carolina Department of Transportation  
and I-77 Mobility Partners LLC

# Scope of Work and Anticipated Schedule

April 2017

# Overview

*NCDOT has initiated a review of the Comprehensive Agreement with I-77 Mobility Partners LLC. The objective is to identify and evaluate potential policy options that might address concerns expressed by members of the public regarding the implementation of the managed toll lanes concept and various provisions in the agreement.*

*To expedite the review, a financial consulting firm has been retained that specializes in providing strategic advice to public agencies undertaking large and complex capital investments. The firm offers particular expertise in transactions involving the loans provided under the federal Transportation Infrastructure Finance and Innovation Act (TIFIA).*

*North Carolina Turnpike Authority staff is providing technical and logistical support for this effort.*

# Presentation Outline

- Mercator Qualifications
- Scope of Work for Review
- Focus of Risk Allocation Assessment
- Potential Policy Options and Examples
- Anticipated Schedule for the Review
- Stakeholder and Public Input

# Mercator Qualifications

- Mercator Advisors LLC provides financial advisory, policy analysis and strategic consulting services. The firm specializes in large and complex capital investments involving a blend of public and private sector resources.
- The lead consultant for this assignment, **Jim Taylor**, has significant expertise in toll finance. Prior to joining Mercator in 2006, he was an investment banker for 19 years.
- Recent work experience includes conducting the initial assessment of the potential risks associated with using a public-private partnership to deliver toll lanes and other improvements to a segment of Interstate 66 in Virginia.
- Jim graduated from the Massachusetts Institute of Technology and received a Master of Public Policy degree from the Kennedy School of Government at Harvard University.





# Scope of Work

- Analyze the allocation of key project risks and the potential financial liabilities assumed or shared by each partner.
- Review comments and suggestions submitted by project stakeholders and members of the public.
- Evaluate the merits and potential costs associated with various policy options, including, but not necessarily limited to:
  - Terminate the Comprehensive Agreement (CA)
  - Renegotiate or modify the CA to achieve certain policy objectives
  - Purchase the toll facility.

# Risk Allocation Assessment

Analysis will focus on the value of the major risks transferred to, or shared with, the private partner, including risks associated with:

- construction financing;
- cost of design and construction;
- schedule for project completion;
- right-of-way acquisition, site conditions, and permits;
- traffic management during construction;
- toll system installation and integration;
- toll collection expenses;
- revenue projections; and
- maintenance and rehabilitation of the highway.

# Potential Policy Options

- The risk assessment and public input will be used to develop potential policy options.
- States have taken different approaches to addressing concerns and/or opportunities that arise after a public-private partnership (P3) agreement has been executed. Some of the precedents involving toll facilities may be helpful in developing potential policy options for the I-77 Express Lanes Project.
- The following examples are for discussion purposes only. Any policy options developed for NCDOT will need to reflect the unique attributes of the project and the resources available to the public and private partners.

# P3 Contract Termination Example

## U.S. Route 460 Corridor Improvements Project (Virginia)

2012	Comprehensive Agreement executed for \$1.4 billion project (\$1.15 billion of public funds, 40-year term)	
2014	Work suspended on the project to address issues with environmental permits	
2015	April	Contract with private partner terminated.
	July	Settlement agreement announced . Private partner agrees to return \$46 million of \$256 million paid by the state and cancels claims to an additional \$103 million under the contract.
	September	Virginia Department of Transportation (VDOT) provides approximately \$50 million to redeem the toll revenue bonds
2017	Revised plan for Route 460 does not qualify for state funding based on low score under Virginia's project prioritization process	

# P3 Contract Modification Example

Elizabeth River Tunnels Project (Virginia)	
2011	Comprehensive Agreement executed for \$2.1 billion project (\$309 million of public funds, 58-year term)
2012	VDOT provides additional \$113 million to delay tolling of existing tunnels from September 2012 to February 2014
2014	VDOT provides additional \$82.5 million to lower toll rates through end of 2016
2015	VDOT provides additional \$78 million to eliminate tolls on one segment of the project; Private partner agrees to fund toll relief program for low-income residents
2016	New Midtown Tunnel and Martin Luther King Expressway completed

# P3 Project Acquisition Example

91 Express Lanes (California)	
1990	Franchise agreement executed for \$130 million project (No public construction funding; 35-year operating period after construction)
1993	Private developer secures construction financing
1995	91 Express Lanes open
2001	Orange County Transportation Authority (OCTA) initiates negotiations to purchase the franchise
2003	OCTA purchases the 91 Express Lanes for \$207.5 million (assumes \$135 million of debt and pays \$72.5 million cash). Ten months later, OCTA issues tax-exempt toll revenue bonds to retire developer debt and to reimburse a portion of funds used for acquisition
2011	Caltrans extends franchise agreement with OCTA to 2065

# Anticipated Meetings

Tentative Date		Focus of presentation
April 19, 2017	Charlotte Regional Transportation Planning Organization	<i>Scope of work and schedule</i>
May 04, 2017	North Carolina Turnpike Authority Board	<i>Preliminary report on public input</i>
May 04, 2017	North Carolina Board of Transportation	<i>Preliminary report on public input</i>
May 17, 2017	Charlotte Regional Transportation Planning Organization	<i>Preliminary report on public input</i>
July 19, 2017	Charlotte Regional Transportation Planning Organization	<i>Findings and Recommendations</i>
August 3, 2017	North Carolina Board of Transportation	<i>Findings and Recommendations</i>
August 3, 2017	North Carolina Turnpike Authority Board	<i>Findings and Recommendations</i>

# Stakeholder and Public Input

<https://www.ncdot.gov/projects/I-77ExpressLanes/>

## **NCDOT Wants to Hear From You**

Have comments or concerns about the contract with I-77 Mobility Partners?

**Let Us Know**

