



North Carolina Turnpike Authority Board of Directors

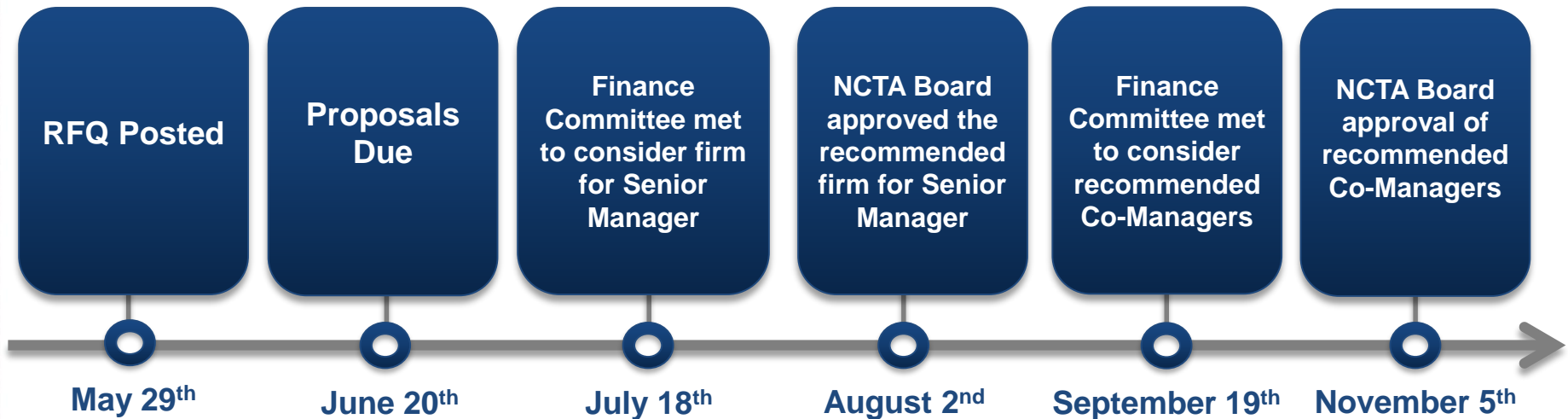
November 5, 2018

Complete 540 Underwriter Selection

David Roy

Director of Finance

Selection Process



Selection Committee:

- Evan Rodewald, NCDOT Chief Financial Officer
- David Roy, NCTA Director of Finance
- David Miller, PFM Financial Advisors

Recommendation

- 20 firms submitted Statements of Qualification
- Recommended Firms for Co-Managers:
 - Bank of America Merrill Lynch
 - Citi
 - Loop Capital Markets
 - Siebert Cisneros Shank & Co.
 - Wells Fargo

Proposed 2009 Triangle Expressway TIFIA Loan Refunding

David Roy

NCTA Director of Finance

David Miller

PFM Financial Advisors

Wally McBride

Hunton Andrews Kurth

TIFIA Refunding Overview

David Miller

PFM Financial Advisors



North Carolina Turnpike Authority 2009 TIFIA Loan Refunding Overview

November 5, 2018

PFM Financial
Advisors LLC

300 South Orange
Avenue
Suite 1170
Orlando, FL 32801

407-406-5752
pfm.com



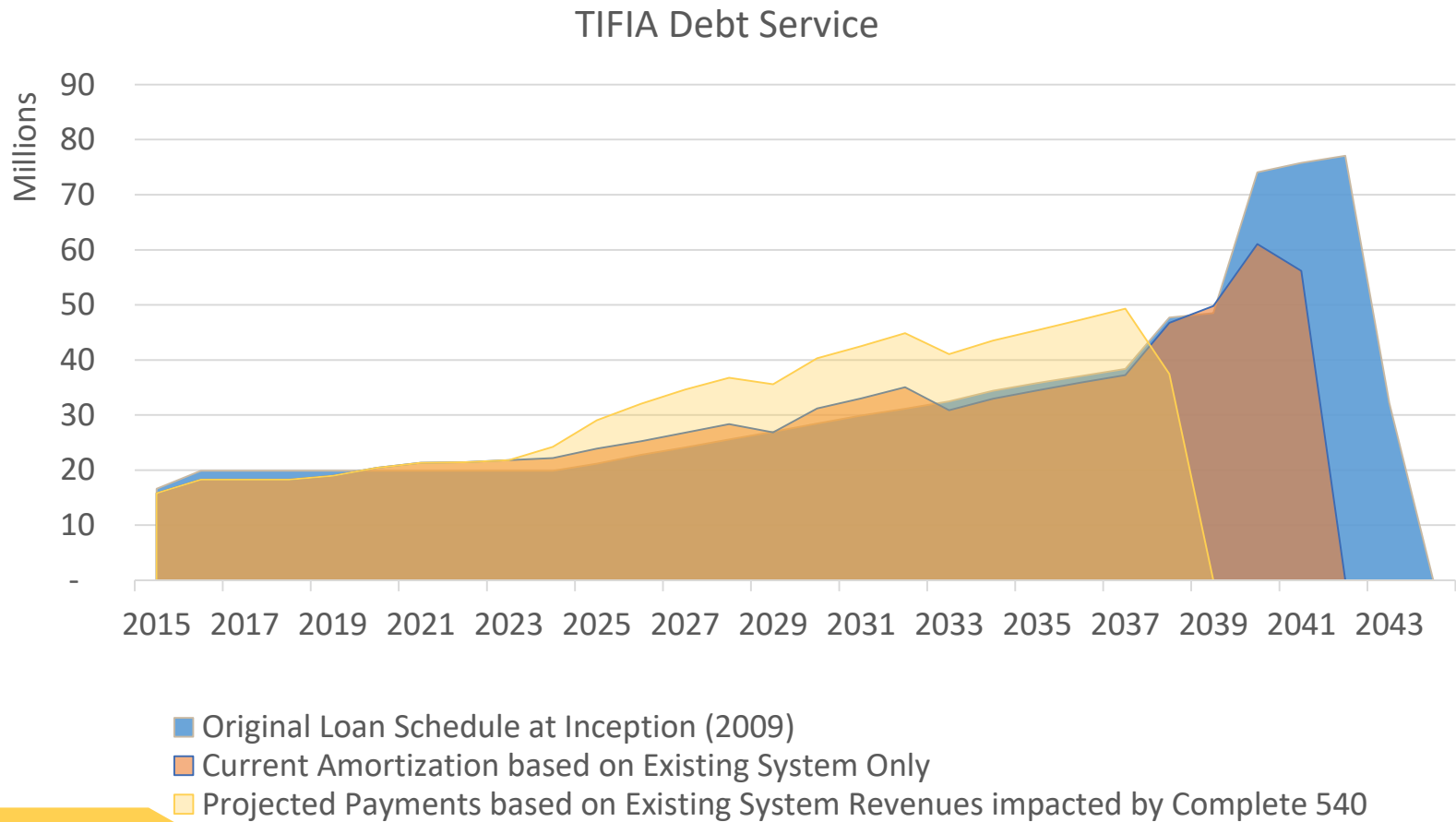
Existing 2009 TIFIA Loan Summary

- ◆ Subordinate TIFIA Loan for Triangle Expressway System
- ◆ Dated July 1, 2009
- ◆ Approved for up to \$386 million; only \$372 million drawn
- ◆ Interest accrued through 2014 bringing current loan balance to \$430.4 million
- ◆ Covenant to fully repay by 2047 – 35 years after substantial completion
- ◆ Principal repayment is flexible based on a 45% “cash sweep” of pledged revenue available after senior lien debt service



Additional Revenues Accelerate Repayment

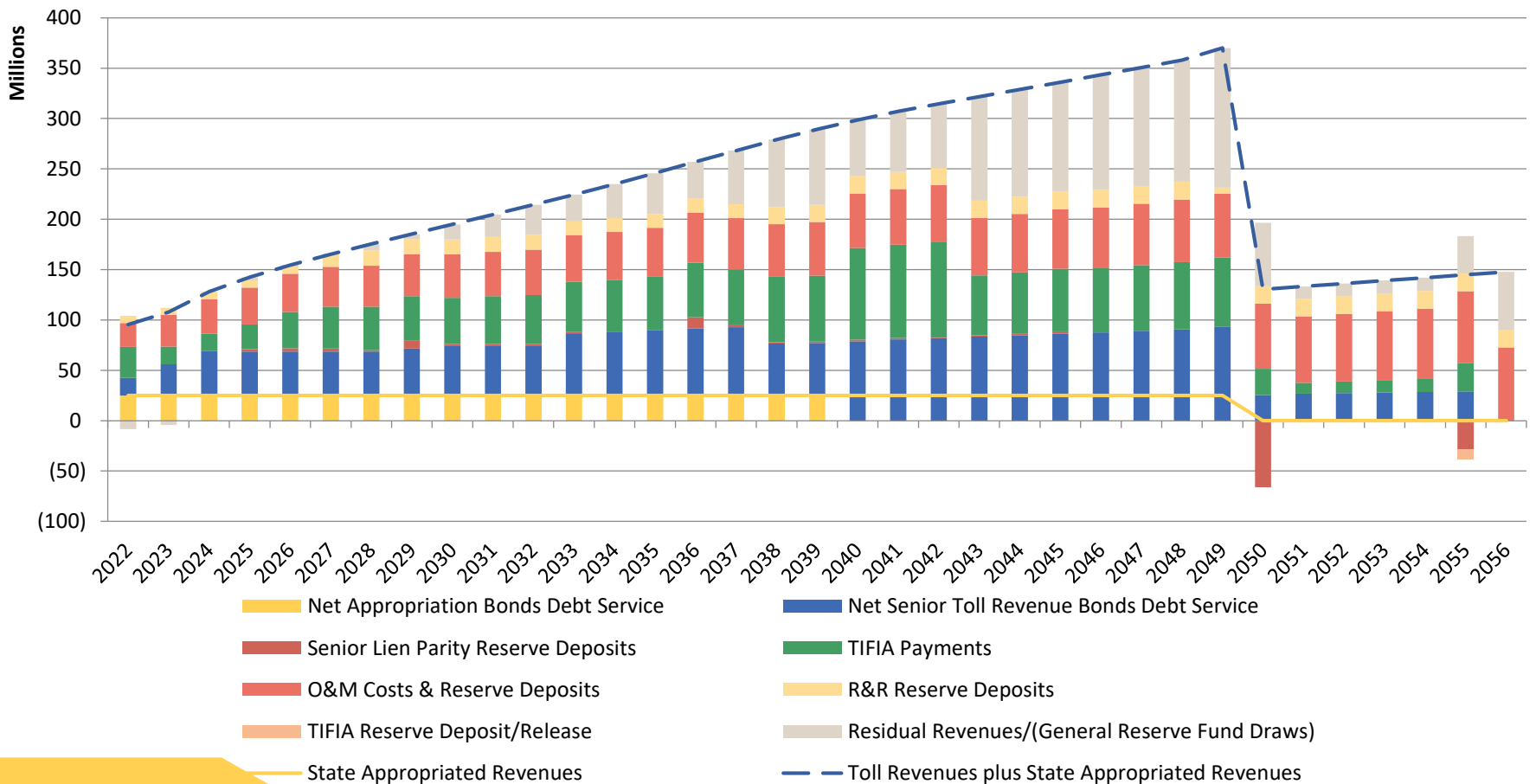
- ◆ TriEx toll revenues higher than the original projections plus debt service savings from 2017 refunding each accelerate TIFIA repayment
- ◆ Adding Complete 540 Revenues would accelerate repayment even more to 2038





Triangle Expressway System Cash Flows with Complete 540

- Using total projected cash flows, the financial plan has little room to accelerate TIFIA through 2038, especially in years 2022 - 2033





Refunding Assumptions & Results

- Date Assumptions
 - Dated and Delivery Date: December 12, 2018
 - First Coupon: July 1, 2019
 - Call Date: January 1, 2029
- Interest Rate and Insurance Assumptions
 - Baseline MMD AAA index as of October 12 plus credit spreads
 - Uninsured: Maturities 2020 through 2029
 - Insured: Maturities 2030 through 2041
 - Insurance premium of 60 bps total debt service
 - Surety premium of 5.00% of the DSRF requirement assumed to be 50% of the lesser of three test
- Debt Service Reserve Fund
 - The existing TIFIA DSRF will be used as a contribution to reduce the refunding bond size



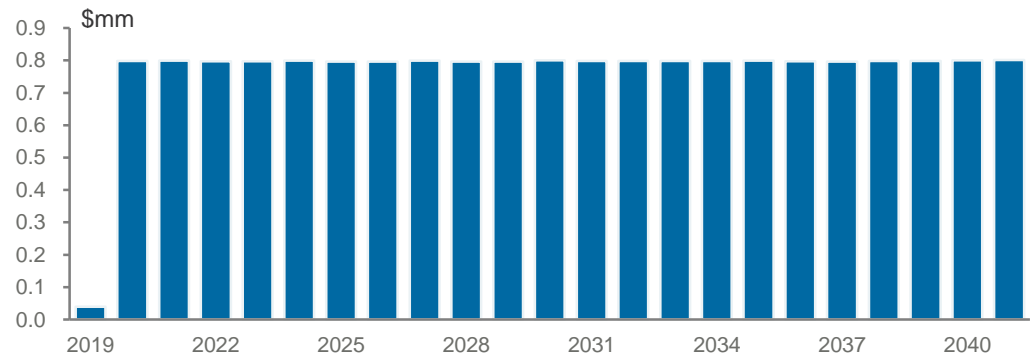
Indicative Results: Market Refinancing of Existing TIFIA Loan

- NCTA can achieve approximately \$4.4 savings (\$17.5 million cash flow savings) by refinancing the existing TIFIA loan on its senior lien
 - Refinancing assumes final principal repayment in 2041
 - Assumes surety funded senior lien DSRF sized at 50% of the three-prong test and \$5.31 million deposit from TIFIA DSRF to repay TIFIA loan
 - If benchmark rates increase by 13 basis points across the curve, the refunding will break even on a PV Savings basis

Refunding Overview at Current MMD

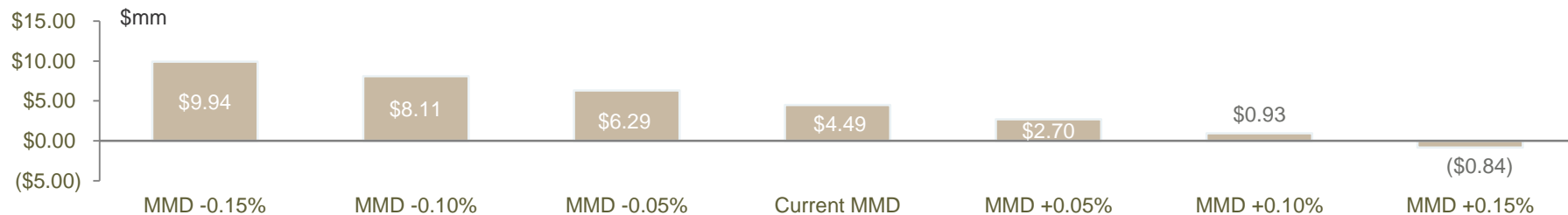
Statistics	
Delivery date	12/12/2018
Refunded Par	\$430,405,953
Refunding Par	\$387,085,000
Arb Yield	3.74%
True Interest Cost	4.07%
All-in TIC	4.17%
Average Life (yrs)	16.99
Net Cash Flow Savings	\$17,602,801
Net PV Savings @ arb yield	\$4,491,427
NPV Savings as a % of Refunded Par	1.04%
Surety DSRF Cost	\$367,345

Summary of Cash Flow Savings (6/30 Fiscal Year)



Note: Assumes rates as of October 10, 2018, COI of \$665,000 and Underwriter's Discount of \$2.31/bond. Assumes bond insurance for refunding bonds maturing after 2029

Senior Lien TIFIA Refunding Sensitivity Analysis





Refunding Criteria & NPV Savings

- Net Present Value (“NPV”) Savings Typically it’s recommend to achieve at least 3.0% of Net Present Value (“NPV”) Savings for a current refunding
- Based on interest rates as of October 11th, estimated savings are 1.04%
- Economic savings are not the main driver for this transaction. The key drivers are:
 - Removal of the cash sweep to gain capacity for future debt to fund the Complete 540 Project
 - Flexibility to amend the debt service reserve fund requirements on future debt (and TIFIA Loans)

Date	Prior Net Cash Flow	Refunding Debt Service ¹	Savings	Present Value Savings ²
7/1/2019	10,736,676	10,696,913	39,763	47,410
7/1/2020	20,448,819	19,650,100	798,719	759,641
7/1/2021	21,313,230	20,513,875	799,355	724,790
7/1/2022	21,431,040	20,634,000	797,040	695,017
7/1/2023	21,786,477	20,988,625	797,852	666,915
7/1/2024	22,218,495	21,419,000	799,495	639,661
7/1/2025	23,877,124	23,080,375	796,749	600,610
7/1/2026	25,241,965	24,445,750	796,215	566,908
7/1/2027	26,768,286	25,969,250	799,036	535,469
7/1/2028	28,362,106	27,565,500	796,606	500,562
7/1/2029	26,829,066	26,032,875	796,191	488,937
7/1/2030	31,189,340	30,389,375	799,965	443,358
7/1/2031	33,036,908	32,238,375	798,533	410,840
7/1/2032	35,063,660	34,265,000	798,660	379,131
7/1/2033	30,836,348	30,038,000	798,348	383,703
7/1/2034	32,953,664	32,155,625	798,039	353,754
7/1/2035	34,450,727	33,651,625	799,102	328,621
7/1/2036	35,898,920	35,101,125	797,795	303,132
7/1/2037	37,252,621	36,456,250	796,371	278,902
7/1/2038	46,713,546	45,915,000	798,546	219,014
7/1/2039	49,813,759	49,015,125	798,634	188,439
7/1/2040	61,065,654	60,265,000	800,654	123,848
7/1/2041	56,171,632	55,370,500	801,132	157,764
Total	733,460,065	715,857,263	17,602,801	9,796,425

PV of savings from cash flow	9,796,425
Less: Prior funds on hand	(5,308,074)
Plus: Refunding funds on hand	3,076
Net PV Savings	4,491,427
Net PV Savings as a % of refunded par	1.04%

1. Based on interest rates as of October 11, 2018.
 2. Discounted at the arbitrage yield of the refunding bonds (3.75%).



Impact on Complete 540 Plan of Finance

Scenario Analysis:

- Scenario A - Refunding of 2009 TIFIA Loan and Amendments to Debt Service Reserve Requirements
- Scenario B – 2009 TIFIA Loan remains outstanding without any amendments

Results:

- Scenario A – Fully funded, marketable plan of Finance
- Scenario B – The PV Cost to not refund the TIFIA Loan, is estimated to be \$28.8 million
 - The resulting plan of finance requires the use of a large amount of deferred interest debt products which may be difficult to market, and the General Reserve balance is reduced to less than \$1 million (below the targeted minimum of \$50 million) which may be unacceptable to NCTA

	Scenario A	Scenario B
TIFIA Refunding		
Refunding Savings		
Cash Flow \$	17,602,801	n/a
NPV \$	4,491,427	n/a
NPV %	1.04%	n/a
2019 Complete 540 Toll Revenue Bonds & Future TIFIA Loan		
Current Interest Bonds	557,085,000	-
Convertible Capital Appreciation Bonds	-	465,746,022
Capital Appreciation Bonds	66,484,250	66,484,250
Premium	9,470,391	-
TIFIA Loan	492,970,168	443,565,681
Total Proceeds	1,126,009,809	975,795,954
Less Capitalized Interest (thru 7/1/2024)	(134,769,399)	-
Less Issuance Costs	(19,704,310)	(4,259,854)
Proceeds for Project Costs	971,536,100	971,536,100
Total Debt Service		
2009 TIFIA Loan DS	-	678,478,209
2018 Refunding Bond DS	715,857,263	-
2019 Complete 540 Bond Net DS	1,457,053,125	1,737,927,710
Complete 540 TIFIA DS	1,135,352,971	982,288,259
Total Bond and TIFIA Debt Service	3,308,263,360	3,398,694,177
<i>Change from Scenario A</i>	-	90,430,818
PV of Total Bond and TIFIA DS		
PV of Total Bond and TIFIA DS	1,377,071,449	1,405,354,341
<i>Change from Scenario A</i>	-	28,282,892
Coverage		
Senior Lien & TIFIA		
Minimum	1.51x	1.37x
Average thru 2049	1.83x	1.84x
All-in		
Minimum	0.90x	0.86x
Average thru 2049	1.14x	1.12x
General Reserve		
Minimum Balance	52,014,695	962,575
Minimum Year	2029	2037
# of years below \$50 million	-	9



Refunding Status Update

- ◆ Assured Guaranty – Moving forward with the refunding would require consent or a waiver from Assured Guaranty. NCTA and PFM are in communications with AG who is aware the request may be forthcoming.
- ◆ Preliminary Ratings – Fitch Ratings, Moody’s Investor Services and S&P Global Ratings visited NCTA and toured the Triangle Expressway during September 26-27. Analysts were updated on the existing Triangle Expressway and the upcoming Complete 540 project.
- ◆ LGC - NCTA staff has been in communication with LGC staff to ensure the timeline is acceptable should the committee decide to recommend further action

TIFIA Refunding Bond Documents

Wally McBride

Hunton Andrews Kurth

Refunding Bond Documents

Third Supplemental Trust Agreement

- Between the Authority and Wells Fargo as Trustee
- Amends the original 2009 Trust Agreement and states terms for 2018 Bonds (rate, maturity, etc.) and bond insurance if obtained

Bond Order

- Short formula document to be adopted by the Authority as required by Revenue Bond Act

Refunding Bond Documents

Preliminary Official Statement

- Main marketing document for the 2018 Bonds
- Describes the Project and revenues as security for the 2018 Bonds
- Includes 2018 Traffic and Revenue Study and discusses new interchanges and future expansions

Official Statement

- After sale the POS is updated with actual 2018 Bond terms and sent to purchasers

TIFIA Refunding Schedule

David Roy

NCTA Director of Finance

Preliminary Schedule

Date	Action
October 17	Finance Committee Meeting
November 5	NCTA Special Board Meeting to Approve Refunding
November 6	LGC Meeting – Approval of Refunding
November 7	Preliminary Official Statement released
November 27	NCTA Board Meeting, Pre-Closing
November 28	Negotiated Bond Sale
December 13	Closing

TIFIA Refunding Resolutions

David Roy

NCTA Director of Finance

Authority Board Resolution

The Authority Board Resolution will include provisions comparable to the following:

- It is necessary and expedient to issue the Series 2018 Bonds to refund the TIFIA Series 2009 Bond to implement amendments considered to be favorable to the Authority unless such refunding is expected to result in [net present value debt service savings less than ____%] [negative present value debt service savings in excess of ____%] (calculated in the traditional manner).
- The refunding of the TIFIA Series 2009 Bond is feasible.
- The amount of debt to be incurred in connection with the refunding of the TIFIA Series 2009 Bond and the fees to be paid in connection therewith are sufficient but not excessive for the intended purpose.
- The Authority has not defaulted on any debt obligation.
- The Authority follows the debt management guidelines of the LGC.
- The anticipated toll revenues, based on both traffic and revenue studies and the actual history of the Triangle Expressway System, will be sufficient to service the proposed Series 2018 Bonds.
- The Series 2018 Bonds may be issued at reasonable rates of interest.

Authority Board Resolution

The Authority will designate, and request the LGC approve, to the extent necessary, the following parties working in the following capacities in connection with the Series 2018 Bonds:

Underwriters:

Senior Manager

Co-Managers

J.P. Morgan Securities

Bank of America Merrill Lynch,

Citi, Loop Capital Markets,

Siebert Cisneros Shank & Co., Wells Fargo

Financial Advisor:

PFM Financial Advisors, LLC

Professional Engineers:

HNTB

Traffic and Revenue Consultant:

CDM Smith

Trustee and Escrow Agent:

Wells Fargo Bank, N.A.

Underwriters' Counsel:

McGuireWoods LLP

Bond Counsel:

Hunton Andrews Kurth LLP

Authority Counsel:

Ebony Pittman, Esq, of Attorney General's Office

Authority Board Resolution

The Board hereby adopts the Bond Order and

- approve the issuance of the Series 2018 Bonds to provide funds, together with other available funds, to (a) refund the TIFIA Series 2009 Bond, (b) pay the costs incurred in connection with the issuance of the Series 2018 Bonds, (c) pay the premium on a bond insurance policy for certain Series 2018 Bonds, if cost effective, and (d) pay the premium for a debt service reserve insurance policy with respect to the Series 2018 Bonds, if cost effective;
- approve the form of and the execution and delivery by the Chairman or other officers or employees of the Authority of the Third Supplemental Trust Agreement and the Bond Purchase Agreement in substantially the form presented at the meeting;
- approve the sale of the Series 2018 Bonds to the Underwriters;

Authority Board Resolution

- approve use of the Preliminary Official Statement and the Final Official Statement by the Underwriters for the marketing of the Series 2018 Bonds;
- approve the refunding of the TIFIA Series 2009 Bond; and
- approve all other actions necessary for the issuance of the Series 2018 Bonds and the continued financing of the Triangle Expressway System; provided the specific terms and conditions for such actions and the documentation thereof must be within the limits stated in the resolution and as otherwise approved by the Chairman or other officers or employees of the Authority as provided in the resolution.

Authority Board Resolution

Imposes the following limits: [to be determined]

- Final maturity date of Series 2018 Bonds: 1/1/2041
- Maximum aggregate principal amount: \$450,000,000
- Maximum interest rate for Series 2018 Bonds: 5.5%
- Maximum % of aggregate discount to Underwriters: 0.5%
- Minimum net present value savings: []

Authority Board Resolution

- Authorize and direct the Chairman and the other officers and employees of the Authority to take such action deemed necessary and appropriate to accomplish the issuance to the Series 2018 Bonds under the Act and the Revenue Bond Act
- Reaffirm and ratify all prior resolutions and actions taken in connection with the issuance of the Series 2018 Bonds and the financing of the Triangle Expressway System
- Confirm that, pursuant its Toll Rate Policy adopted on September 17, 2008, and resolutions adopted with respect to the Triangle Expressway System on December 20, 2012, June 20, 2013, and August 4, 2016, the Schedules of Toll Rate Adjustments provided by CDM Smith are used for percentage rate increases for the Triangle Expressway System

Authority Board Resolution

- Designate and establish the Authority's tax covenants in the Trust Agreement and the certifications and covenants in the Non-Arbitrage and Tax Certificate delivered upon issuance of the Series 2018 Bonds as its written procedures. The Authority's Director of Finance and Budget is designated as the officer charged to undertake or supervise compliance checks under such written procedures, as they may be supplemented from time to time.
- Designate the Director of Finance and Budget as the officer charged to undertake or supervise regular review for compliance with the continuing disclosure requirements agreed to by the Authority under the Trust Agreement with respect to the Series 2018 Bonds, as they may be supplemented from time to time.
- Request the LGC to approve the issuance of the Series 2018 Bonds and any other action requiring its approval in connection therewith.

I-77 Project Update

Rodger Rochelle

Chief Engineer

2019 Board of Directors Meeting Dates Review

Secretary Trogdon
Chair

2019 Meeting Dates

NCTA Main Conference Room (6th Floor) @ 10:30 AM

February 7th

May 2nd

August 8th

November 13th – November 14th (Charlotte)

Thank you!