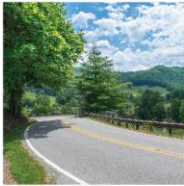




## NORTH CAROLINA

Department of Transportation



# Board of Directors Operations Committee Meeting North Carolina Turnpike Authority February 16, 2017

# Executive Director Comments

Beau Memory

Executive Director

# Purpose & Goals

To support the Board in responsibly executing its powers with regard to Turnpike Projects:

- The power to fix, revise, charge, and collect tolls and fees for the use of the Turnpike Projects pursuant to NCGS § 136-89.183 (a) (5);
- To issue bonds or notes of the NCTA pursuant to NCGS § 136-89.183(a)(6);
- To invest the proceeds of bonds or notes of the NCTA that are pending disbursement or other idle funds of the Authority in any investment authorized by NCGS § 159-30 pursuant to NCGS § 136-89.183 (6a); and
- To exercise such additional powers as shall be necessary for the financing of Turnpike Projects through compliance with the associated bond documentation, including complying with any arbitrage, rebate or other federal tax filings and providing for secondary market disclosure; provided any such additional power may be subjected to conditions, including the involvement and participation of other portions of the North Carolina Department of Transportation, which are stated within the bond documentation and executed by the Secretary acting as the Secretary.

# Refunding Analysis

David Miller

Public Financial Management



# NCTA Refunding Structure Options

Triangle Expressway Revenue Bonds, Series 2009A

February 16, 2017

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# Refunding Considerations

- Triangle Expressway System Senior Lien Revenue Bonds, Series 2009A
  - Currently outstanding in a par amount of \$234,910,000 (Refundable - \$234,310,000)
  - Callable January 1, 2019
- Refunding the Series 2009A Bonds would improve the TriEx Pro Forma
  - Structure to reduce annual debt service in every year which would improve coverage ratios and accumulated cash balances
  - May help to achieve improved credit ratings
- Insurance and DSRF Surety
  - Bond insurance from Assured Guaranty, the 2009 insurer, will likely reduce borrowing costs
  - Assured Guaranty will probably offer a DSRF Surety which could be used to liquidate the cash funded reserve



# Refunding Criteria

- Net Present Value (“NPV”) Savings
  - It’s recommend to achieve at least 3.0% of NPV savings for a current refunding & higher for an advance refunding
- Negative Arbitrage – In the current market environment, the refunding escrow would earn less interest earnings than would be legally permitted resulting in significant negative arbitrage
  - Many of PFM’s clients have established thresholds for negative arbitrage in addition to minimum NPV savings (i.e. maximum negative arbitrage of 50% to 100% of NPV savings).
  - Negative Arbitrage will decrease as we move closer to the call date
- Option Value – Option value can be characterized as the theoretical maximum savings to be achieved from the bonds’ call option given assumed future interest rates
  - Theoretically and absent other considerations, PFM recommends refunding bonds with NPV savings as a % of option value at least in excess of 50%



# Refunding Assumptions & Results

- Date Assumptions
  - Dated and Delivery Date: March 29, 2017
  - First Coupon: July 1, 2017
  - Call Date: January 1, 2027
- Interest Rate and Insurance Assumptions
  - Baseline MMD AAA index as of Feb 13 plus credit spreads
  - Uninsured: Maturities 2019 through 2027
  - Insured: Maturities 2028 through 2039
  - Insurance premium of 80 bps total debt service
  - Surety premium of 4.50% of the DSRF requirement





# Debt Service Reserve Fund

- The existing DSRF was funded with cash to the initial Senior Lien Parity Reserve Requirement of \$27,008,311, which equaled 10% of par of the 2009 Bonds
- Immediately after issuance the DSRF requirement changed to 5-Year MADS on the bonds
- In tandem with the refunding, a surety may be used to satisfy the reserve requirement, so the DSRF cash funds would be released
  - Funds used as a contribution into the escrow for the refunded bonds to reduce the bond size



# Structuring Scenarios

- There are options for structuring the refunding bonds to dictate when you realize cash flow savings
  - Uniform Savings: The refunding bonds amortize in a structure that mirrors the prior debt service in order to achieve approximately level debt service savings in every year
  - Deferred Savings: The refunding bonds are front loaded to fill the structure of the prior debt service and savings are realized on the back end
  - Mixed/Alternate Option – A combination of uniform and deferred savings can be achieved by realizing less savings than a pure uniform structure in the beginning years and pushing those savings into the later years.
- While there is no TIFIA loan prepayment due to the refunding, TIFIA repayment is based on 45% of cash flow after senior lien debt service, so effectively TIFIA gets paid faster due to savings



## Sources & Uses

Sources	
Par Amount	201,955,000
Premium	27,536,346
DSRF Release	27,611,329
Interest Account Funds on Hand	3,180,517
	260,283,192

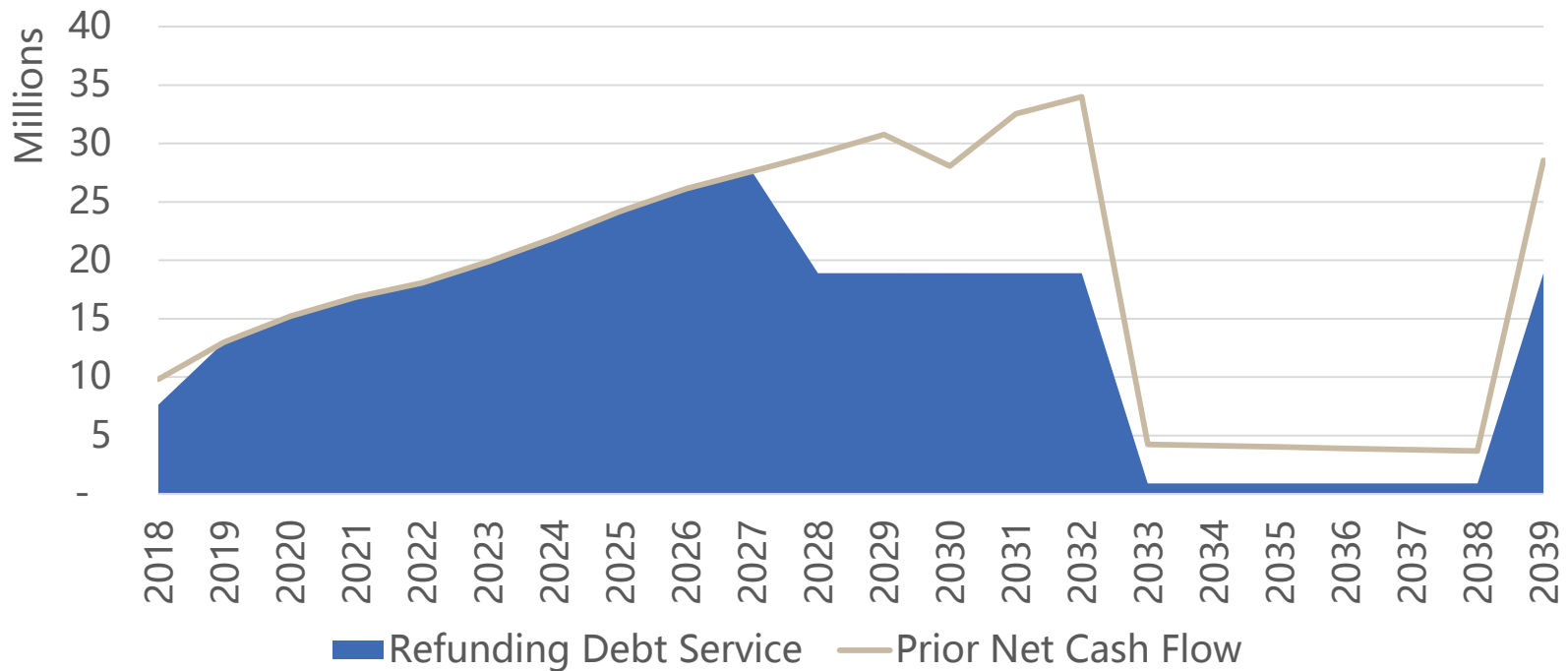
  

Uses	
Refunding Escrow Deposits	255,723,068
Insurance Premium (80 bps)	1,324,319
Surety Expense	1,215,374
Cost of Issuance	1,010,655
Underwriter's Discount	1,009,775
	260,283,192



## Debt Structure & Savings

- Cash Flow Savings: \$90.2 million / 38.5%
- Adjusted NPV Savings: \$27.7 million / 11.8%
- Net DSRF Release: \$25.7 million



# Thank You



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