



Board of Directors Finance Committee Meeting

North Carolina Turnpike Authority

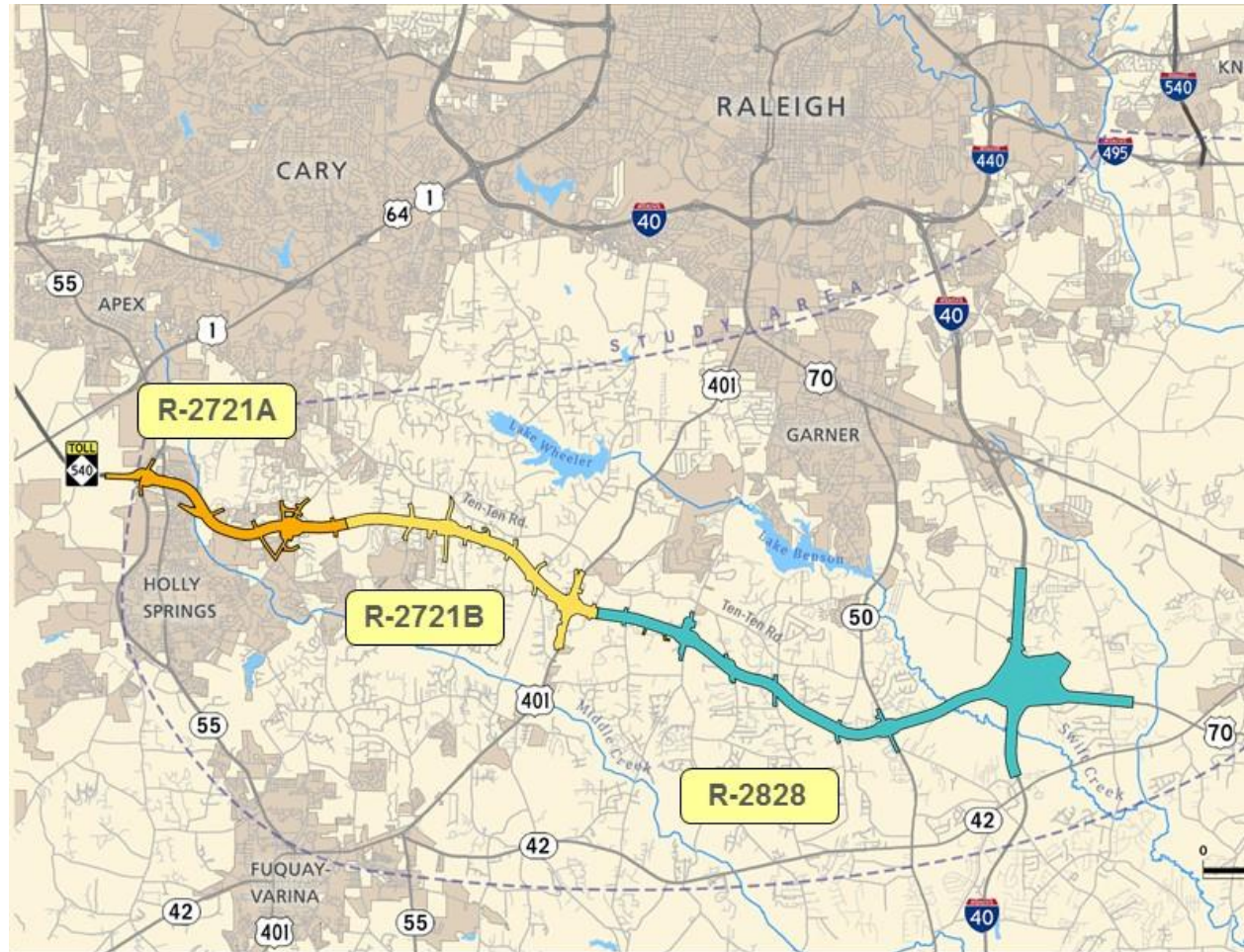
September 19, 2018

Complete 540 Design-Build Procurement Update

Rodger Rochelle, P.E.
Chief Engineer

Complete 540

- **R-2721A**
 - 4.3 mile new location
 - ~ 190 parcels
- **R-2721B**
 - 4.9 mile new location
 - ~ 210 parcels
- **R-2828**
 - 8.6 mile new location
 - ~ 250 parcels



Current Project Schedule

- Record of Decision: June 6, 2018
- Corridor Permit Application: Summer 2018
- Advertisement for ROW Acquisition Firm(s) September 4, 2018
(R-2721A & R-2721B)
- Right of Way Plans for R-2721A & R-2721B: Fall 2018
- Anticipate Permits: Late 2018/Early 2019
(phased for R-2828 & construction for R-2721A and R-2721B)
- Design-Build Contract Letting
 - R-2828: November 2018
 - R-2721B: February 2019
 - R-2721A: April 2019
 - R-2829: Future (2027)
- Complete Project Finance Early 2019

Status and Next Steps

	R-2828	R-2721B	R-2721A
Advertisement	✓ April 16	✓ July 2	✓ September 4
SOQ Due Date	✓ May 11	✓ July 31	October 2
Shortlist Date	✓ May 24	✓ August 14	October 18
Issue 1 st Draft RFP	✓ May 24	✓ August 14	October 18
Debrief Teams	✓ Week of June 4	✓ Week of Aug. 27	Week of Oct. 29
1 st Meeting with Teams	✓ June 7	✓ August 28	November 1
Issue 2 nd Draft RFP	✓ June 19	✓ August 31	November 20
2 nd Meeting with Teams	✓ July 10	September 25	December 6
Issue 3 rd Draft RFP	✓ July 19	October 9	December 20
3 rd Meeting with Teams	✓ August 7	October 23	January 8, 2019

Status and Next Steps

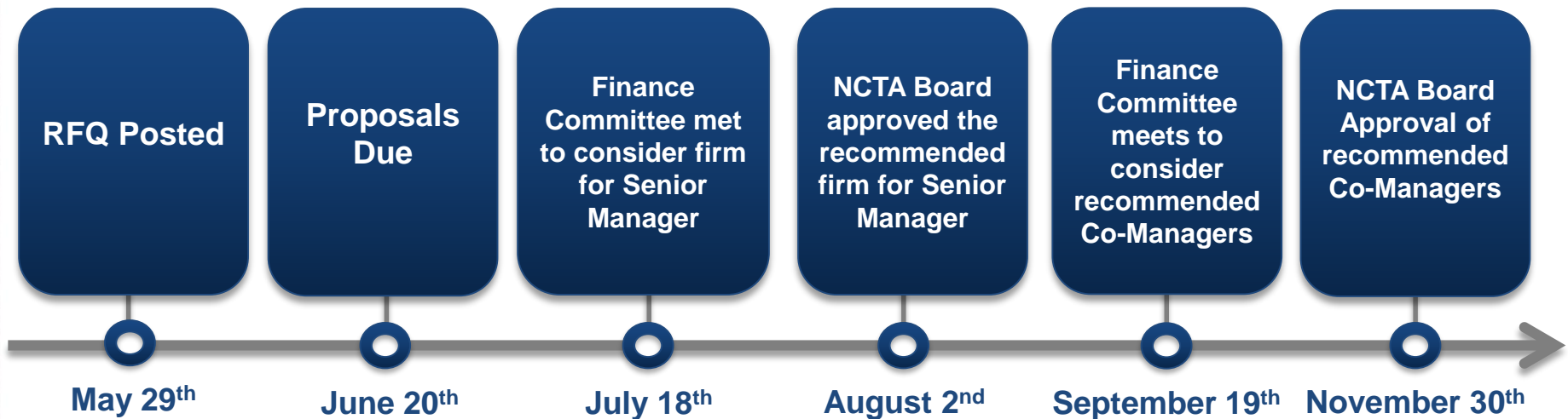
	R-2828	R-2721B	R-2721A
Issue Final RFP	✓ August 14	November 6	January 22, 2019
Technical Proposals Due	October 30	January 29, 2019	March 27, 2019
Price Proposals Due	November 14	February 12, 2019	April 10, 2019
Open Price Proposals	November 20	February 19, 2019	April 16, 2019

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

TIFIA Refunding Analysis

David Roy

Director of Finance

David Miller

PFM Financial Advisors



North Carolina Turnpike Authority

2009 TIFIA Loan Refunding Overview

September 19, 2018

PFM Financial
Advisors LLC

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Orlando, FL 32801

407-406-5752
pfm.com



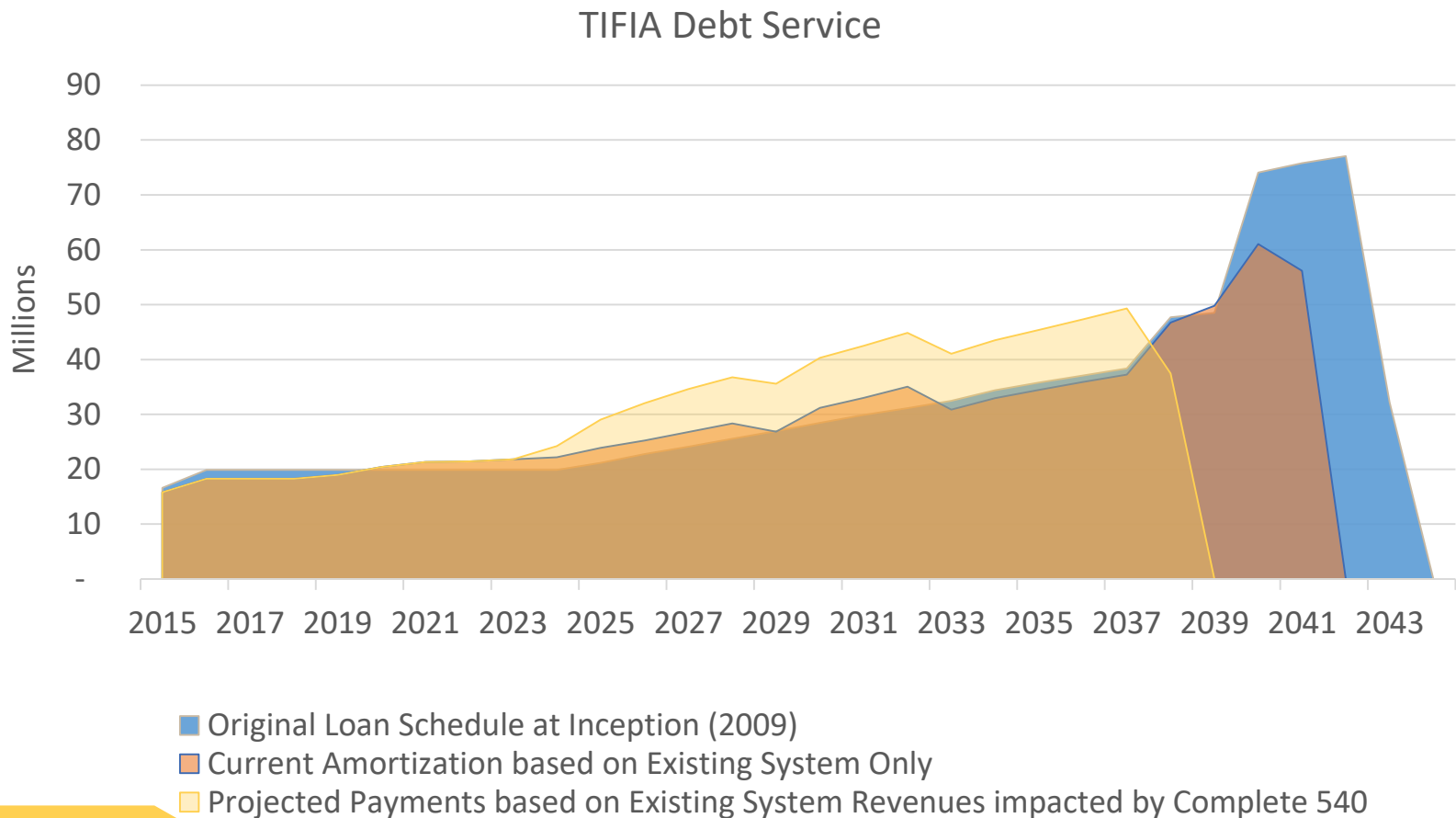
Existing 2009 TIFIA Loan Summary

- ◆ 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 45% of pledged revenue available after senior lien debt service



Additional Revenues Accelerate Repayment

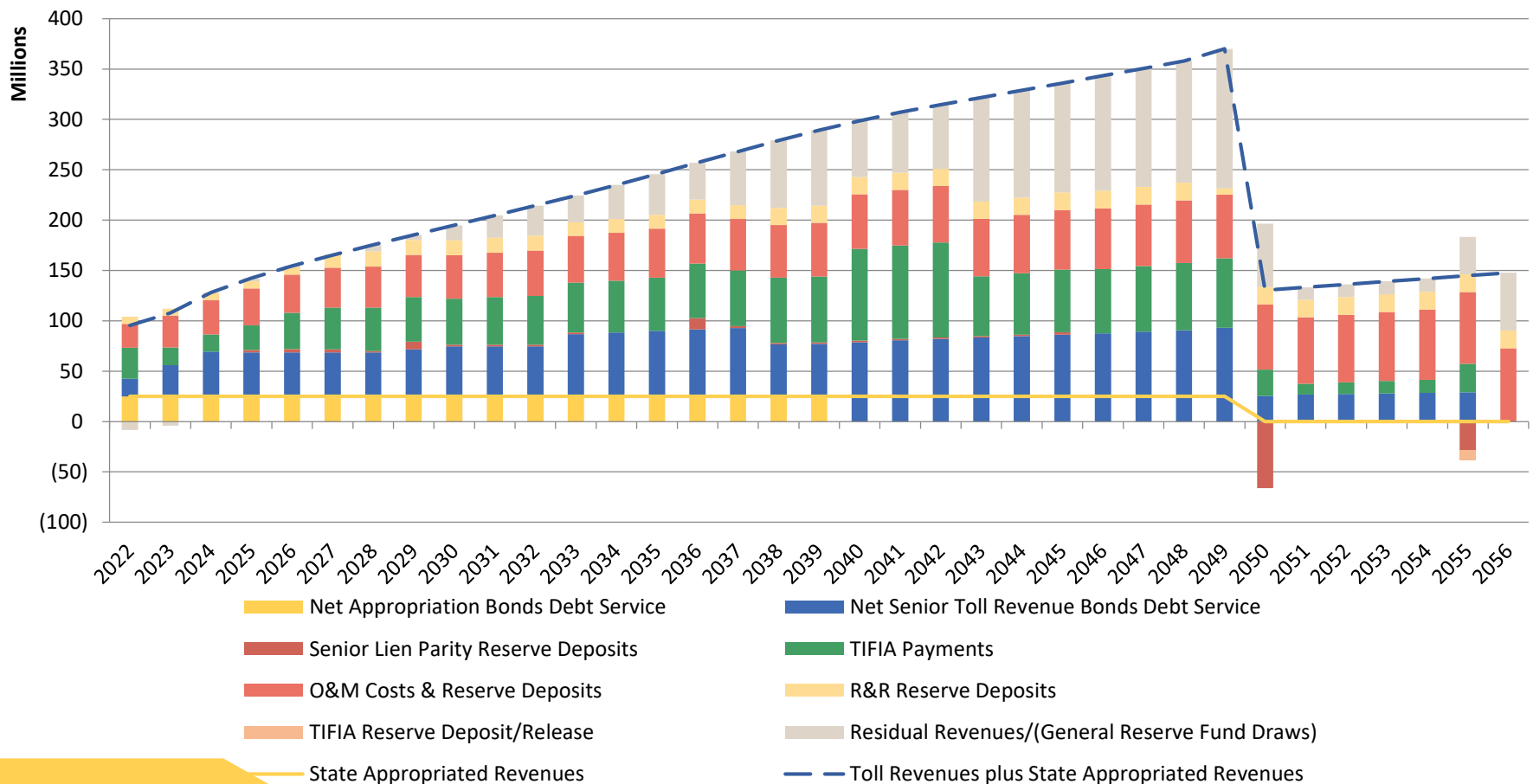
- TriEx toll revenues higher than the original projections plus debt service savings from 2017 refunding each accelerate TIFIA repayment
- Adding Complete 540 Revenues would accelerate repayment even more to 2038





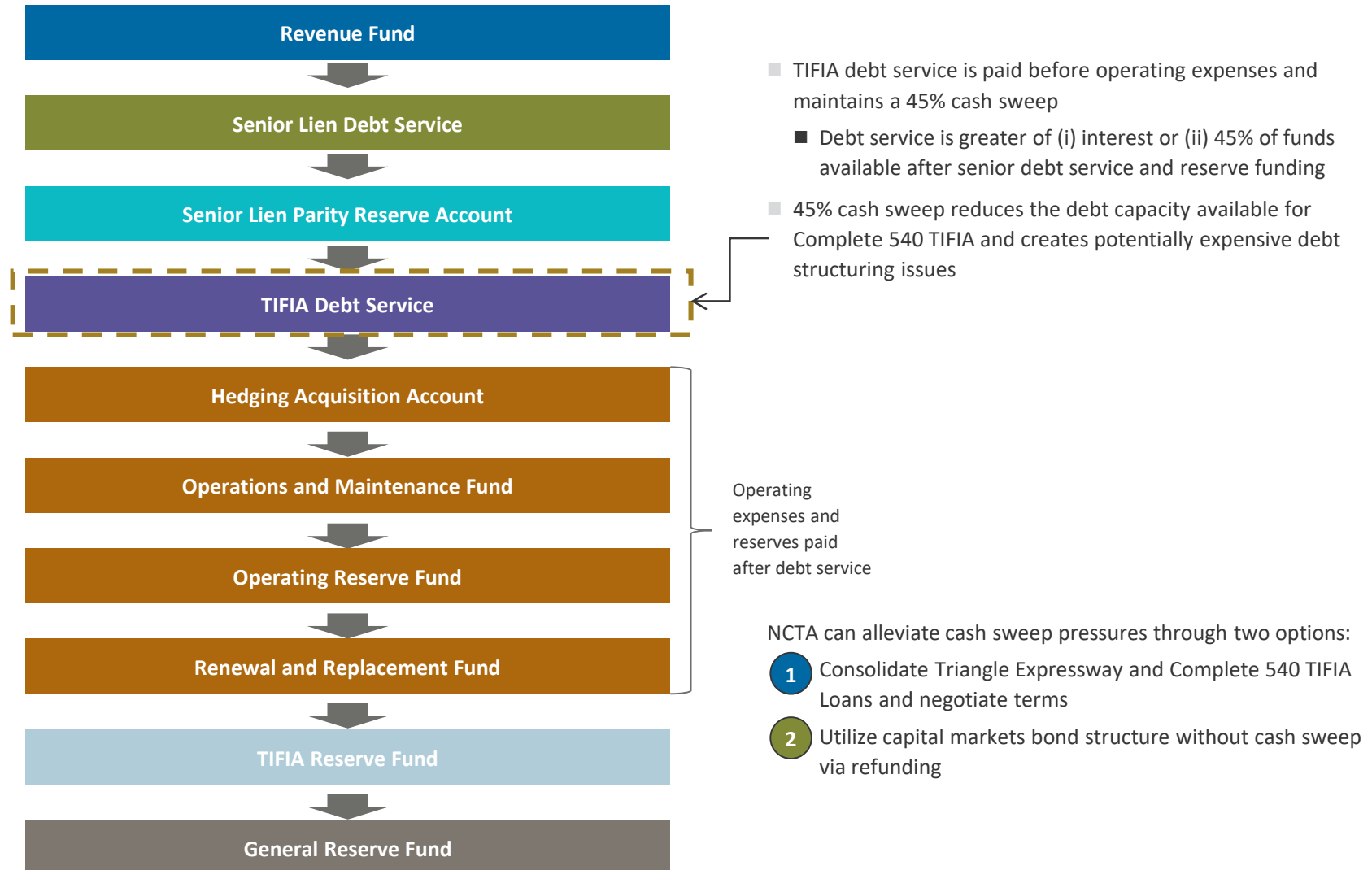
Triangle Expressway System Cash Flows with Complete 540

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





North Carolina Turnpike Authority: Current Flow of Funds





TriEx TIFIA Loan Refinance vs. Renegotiate

TriEx TIFIA Loan Refinancing

Potential Benefits:

- Completely eliminate the cash sweep concept and avoid amortization acceleration
 - Less use of general fund and unpaid interest on Complete 540 TIFIA loan
- Potential NPV savings of 3.37% of refunded par
- More flexibility with regard to debt service reserve requirement. Lower test and use of surety policy to reduce reserve requirement
- Allows for a better posture with TIFIA to negotiate new loan agreement without having to make concessions
- Ability to move quickly, eliminate interest rate risk

Other Considerations:

- Debt will become senior lien. This consideration is offset by out-performance of Triangle Expressway with regard to projections, therefore senior lien coverage is still robust on existing facility
- Lose flexible repayment terms that often come with TIFIA loans

TriEx TIFIA Loan Renegotiate

Potential Benefits:

- Potential NPV savings greater than Refinancing scenario if TIFIA agrees to favorable terms
- Debt would likely remain on subordinate lien

Other Considerations:

- Will almost certainly lose lower debt service reserve requirement
- Not certain TIFIA will modify cash sweep language
- Not certain TIFIA will reduce interest rate to lower current rate; carry interest rate risk until new TIFIA loan is closed
- Only have the ability to renegotiate existing TIFIA terms under a system expansion
- Must make concessions on existing agreement that are needed for the Complete 540 Project which will hamper negotiations on the new TIFIA Loan for Complete 540
- Timing is highly contingent on TIFIA; not likely to know terms for approx. 6 months



Summary of TriEx TIFIA Loan Options

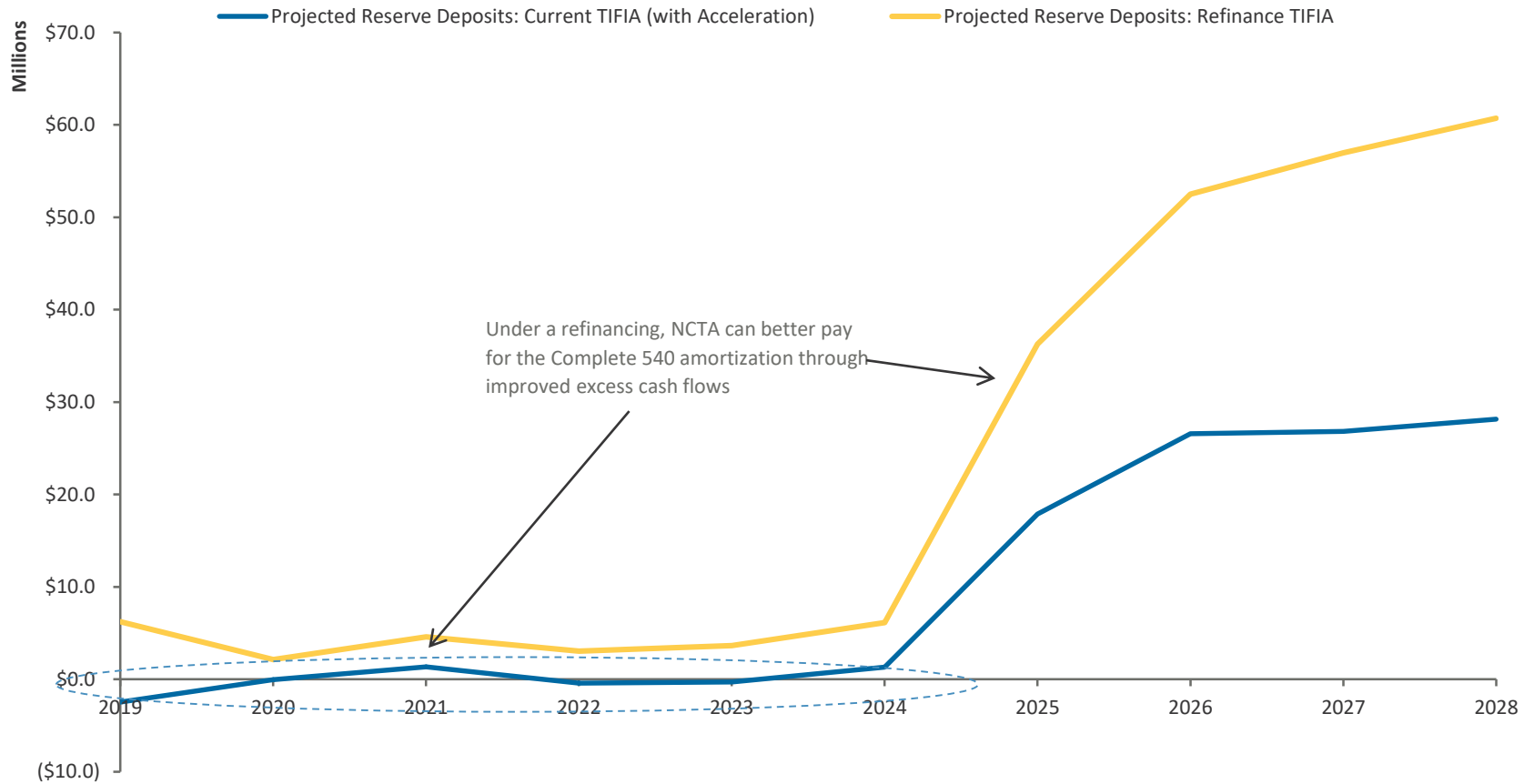
	Current TIFIA Requirement	New Requirement (Senior Lien)
Debt Service Reserve Fund Requirement	Deposit 10% of excess cash flows until DSRF balance equals 10% of outstanding loan balance	50% of Three-prong test
DSRF Requirement (Current)	\$4.15 million	\$7.09 million (\$425,281 if surety funded)
DSRF Requirement in 2028	\$11.85 million	\$11.53 million (\$691,535 if surety funded)
Increased DSRF Requirement through 2028	\$7.70 million	\$4.44 million (\$266,253 if surety funded)
Interest Rate	4.25%	3.41%
Cash Sweep	45% of excess cash flow	None
General Reserve Fund Deposits through 2028	\$98.83 million	\$232.20 million

Note: Assumes Rates as of September 10, 2018; arbitrage yield used as a proxy for capital markets interest rate. Future revenues used to calculate DSRF requirement based on August 21 T&R Study; base case for DSRF deposits assumes current 2009 TIFIA loan agreement base case.

- NCTA maintains three options with regard to its outstanding TIFIA loan: (a) maintain the current TIFIA loan, (b) seek to amend the existing loan, or (c) refinance the existing loan onto the senior lien
- Amending the TIFIA loan agreement, most notably amending the cash flow provision or consolidating the outstanding Triangle Expressway TIFIA loan with the contemplated Complete 540 TIFIA loan, would require consent from the TIFIA office and may involve concessions regarding seniority and reserve fund requirement



TriEx TIFIA Refunding Analysis: Excess Cash Flow before Complete 540 Financing



Source: Current Projected TIFIA Debt Service from PFM; revenue for cash sweep using CDM Smith T&R Study as of August 21, 2018;



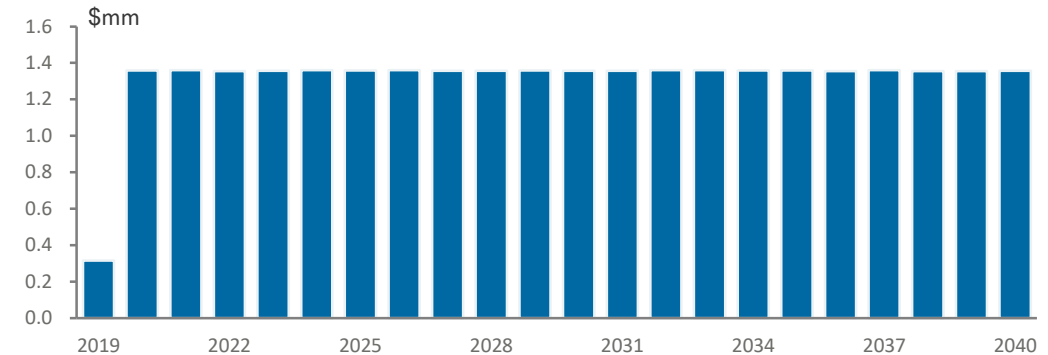
Indicative Results: Market Refinancing of Existing TIFIA Loan

- NCTA can achieve approximately \$14.5 million in PV savings (\$28.8 million cash flow savings) by refinancing the existing TIFIA loan on its senior lien
- Refinancing assumes final principal repayment in 2040
- Assumes surety funded senior lien DSRF sized at 50% of the three-prong test and \$4.15 million deposit from TIFIA DSRF to repay TIFIA loan
- PV Savings breakeven if rates rise approximately 42 basis points

Refunding Overview at Current MMD

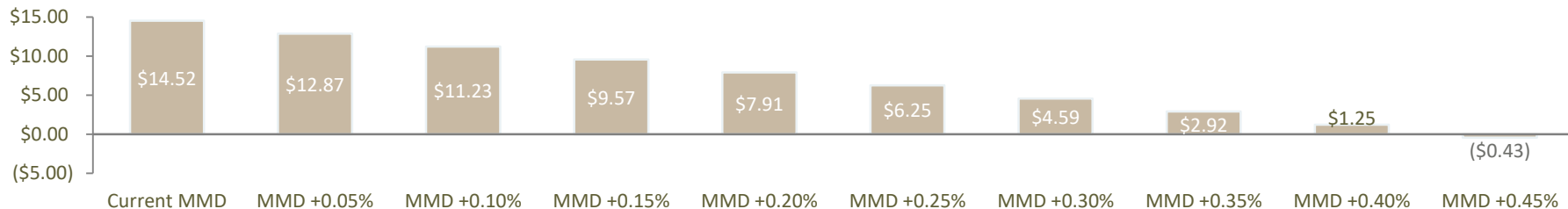
Statistics	
Delivery date	12/5/2018
Refunded Par	\$430,405,000
Refunding Par	\$381,385,000
Arb Yield	3.22%
True Interest Cost	3.87%
All-in TIC	3.95%
Average Life (yrs)	15.71
Net Cash Flow Savings	\$28,829,684
Net PV Savings @ 3.25% PV Rate	\$14,518,574
NPV Savings as a % of Refunded Par	3.37%
Surety DSRF Cost	\$640,336

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



Note: Assumes rates as of September 4, 2018, COI of \$200,000 and Underwriter's Discount of \$5.00/bond. Assumes bond insurance for refunding bonds maturing after 2028.

Senior Lien TIFIA Refunding Sensitivity Analysis





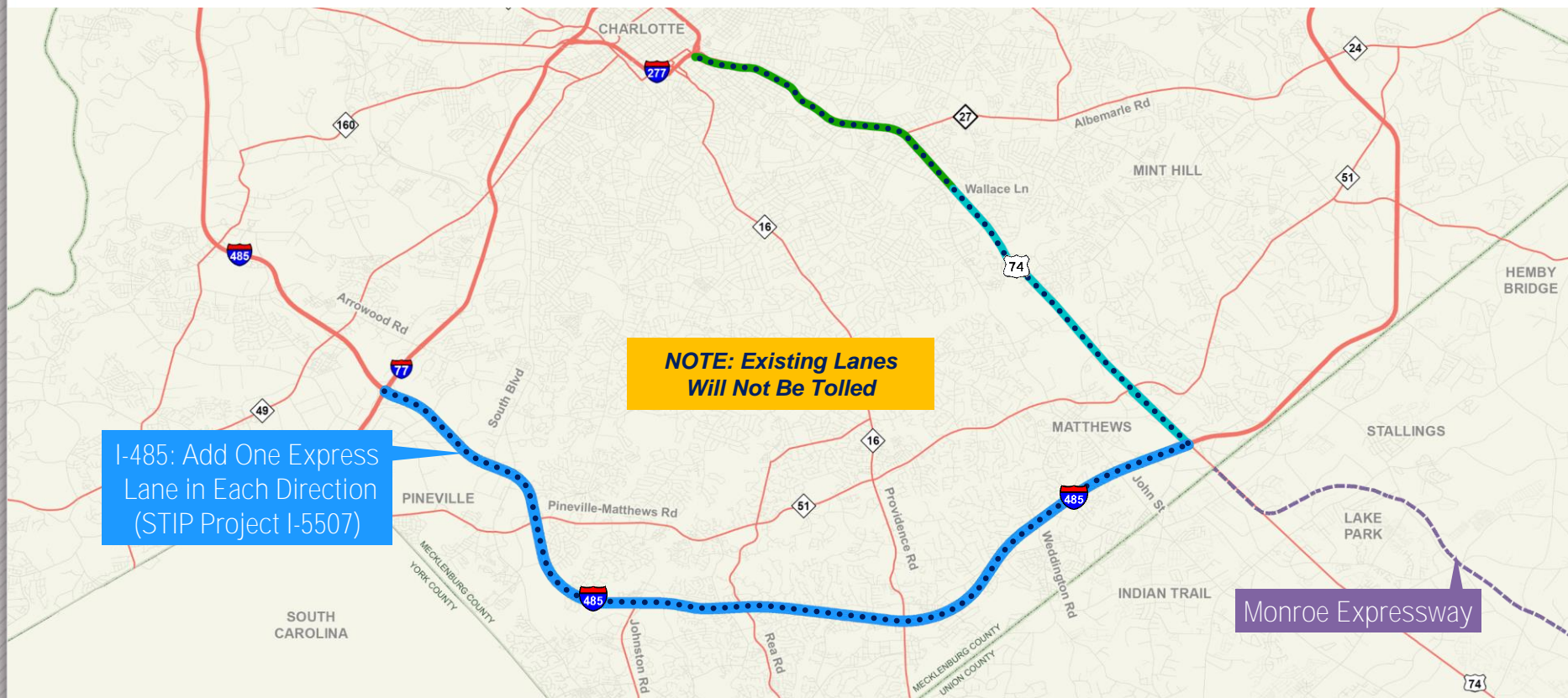
Summary of Refinancing Option

- IFs and BUTs – Negotiating a revised interest rate and amortization with TIFIA makes sense. It's a great strategy IF TIFIA does what we want, BUT there is the concern that TIFIA will be difficult.
- NCTA has capacity from the existing TriEx facility to issue senior lien refunding revenue bonds to repay the 2009 TIFIA loan early
- Estimated Net Present Value Savings of \$14.5 million or 3.4% of refunded par with matched maturity at 2040 final maturity
- Potentially less savings than IF TIFIA reduces the 2009 Loan interest rate, although also less uncertainty than negotiating with TIFIA
- Ability to amend the 2009 Trust Agreement to remove the 45% cash sweep, modify to a more favorable DSRF requirement, and make other technical modifications
- Start the Complete 540 TIFIA Loan negotiations with a “clean slate”

I-485 Express Lanes Project Update

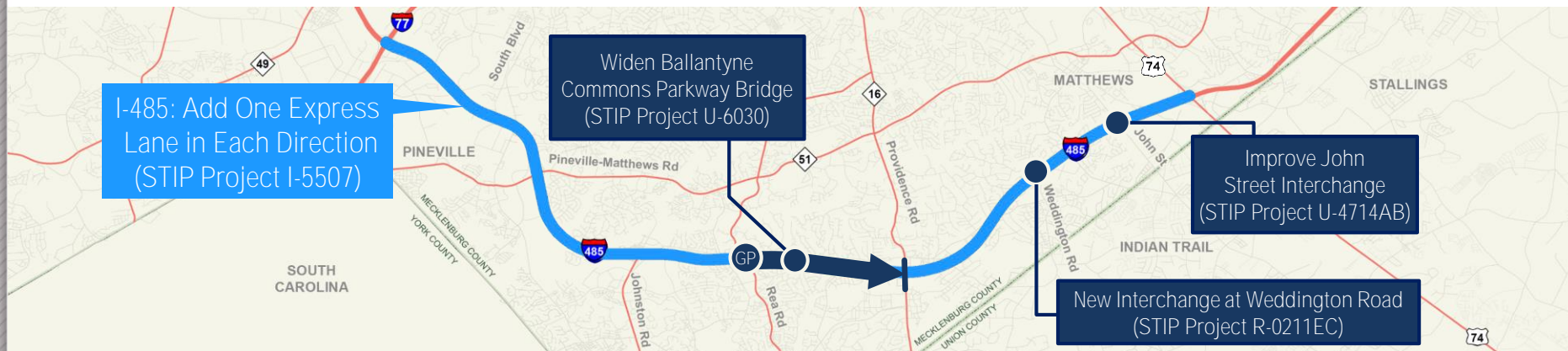
Rodger Rochelle, P.E.
Chief Engineer

I-485 Express Lanes



I-485 Express Lanes (I-5507)

- Add one express lane in each direction between I-77 and U.S. 74
- Extend third general purpose lane from Rea Road to Providence Road (both directions)
 - No tolls will be added to the existing and new general purpose lanes
- Combine three other area projects with I-485 project



Status and Next Steps

I-5507 / R-0211EC / U-4714AB

Issue 1st Draft RFP	✓ February 2018
Issue 2nd Draft RFP	✓ March 2018
Issue Final RFP	✓ April 2018
Completion of Environmental Document	✓ August 2018
Technical Proposals and Price Proposals Due	✓ August 23, 2018
Open Price Proposals	✓ September 18, 2018
Begin Final Designs	Summer 2018
Start Construction	Summer 2019
Open to Traffic (anticipated)	2022

Design-Build Contract

- Engineers' Estimate \$349.988M
- Price Proposal from Apparent Low Bidder \$346M
- Date of Availability October 29, 2018
- Project Completion Date December 1, 2022
- Proposed Project Completion Date September 19, 2022

I-77 Express Lanes Project Update

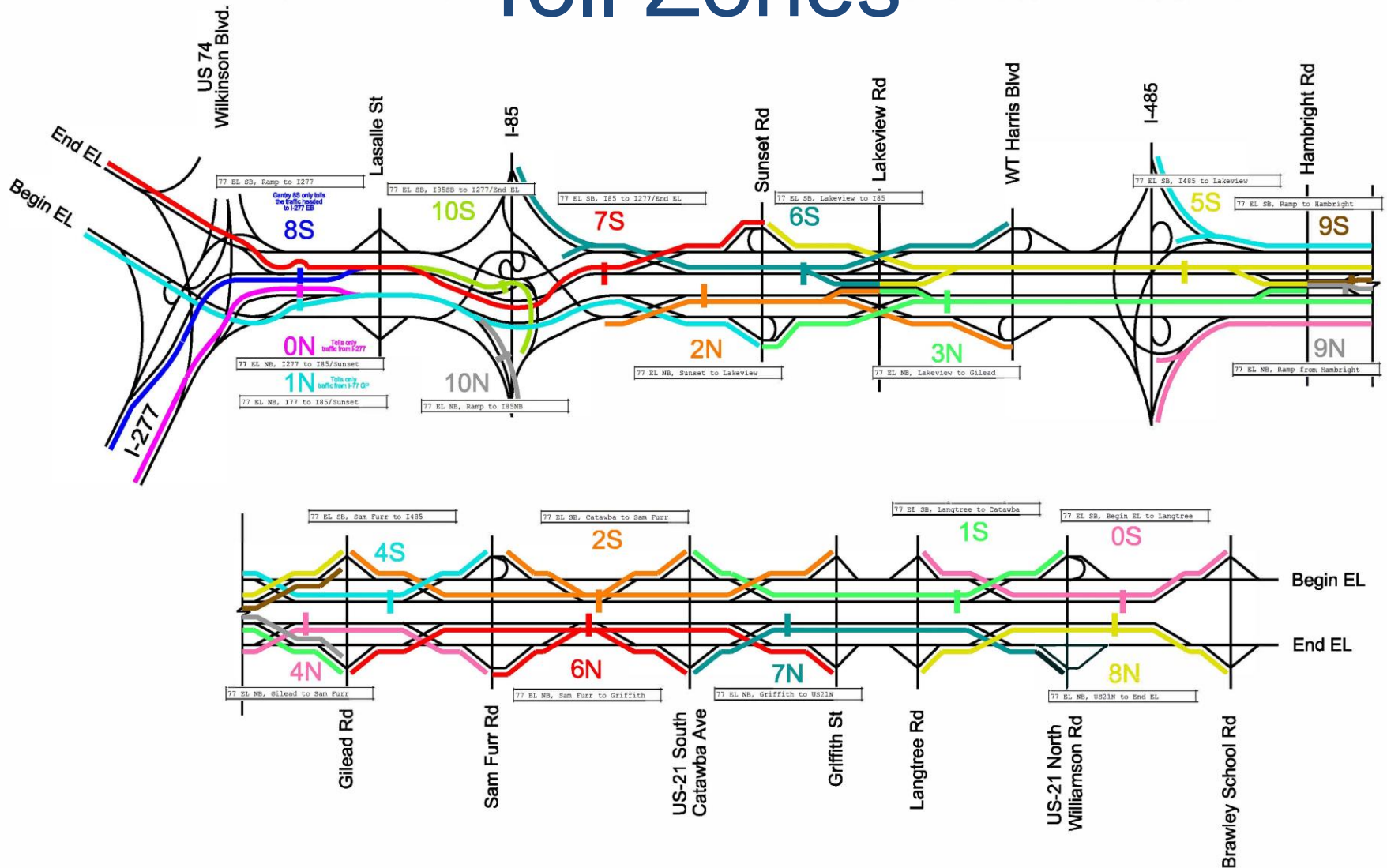
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Toll Rate Schedule

Excerpt from ETC Schedule for Toll Segment 2N

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
5:00 AM	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35	\$0.35
5:30 AM	\$0.35	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.35
6:00 AM	\$0.35	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.35
6:30 AM	\$0.35	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.35
7:00 AM	\$0.35	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.35
7:30 AM	\$0.35	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.35
8:00 AM	\$0.35	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.35
8:30 AM	\$0.35	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.35
9:00 AM	\$0.35	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55	\$0.35
9:30 AM	\$0.35	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55	\$0.35
10:00 AM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
10:30 AM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
11:00 AM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
11:30 AM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
12:00 PM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
12:30 PM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
1:00 PM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
1:30 PM	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50	\$0.50
2:00 PM	\$0.50	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55	\$0.50
2:30 PM	\$0.50	\$0.55	\$0.55	\$0.55	\$0.55	\$0.55	\$0.50
3:00 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
3:30 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
4:00 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
4:30 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
5:00 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
5:30 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
6:00 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
6:30 PM	\$0.50	\$0.60	\$0.60	\$0.60	\$0.60	\$0.60	\$0.50
7:00 PM	\$0.50	\$0.45	\$0.45	\$0.45	\$0.45	\$0.45	\$0.50

Toll Zones



Pending Amendment

Modifies Toll Transaction Process

Enhances customer service

NCTA Performs: All customer service account functions

All customer dispute resolutions

Implementation of technological enhancements regarding HOV3+ declaration

Pending Amendment

Revises Compensation Structure

NCTA Receives:	Modified fee for processing all transactions
NCTA Retains:	Difference between the ETC rate and the video rate for all Bill by Mail transactions
	All processing fees

Pending Amendment

Improves Efficiency

- Removes complex reconciliation process for video transactions
- Revises NCTA transaction fees – segments rather than trips
- Clarifies flexibility in setting the video toll rate differential

Additional Considerations

- Provides for consistency across all toll projects
- One-time public funds adjustment of \$6.98M in original budget funds
- Developed independently of local advisory group

Thank you!