



North Carolina Turnpike Authority

Board of Directors Meeting

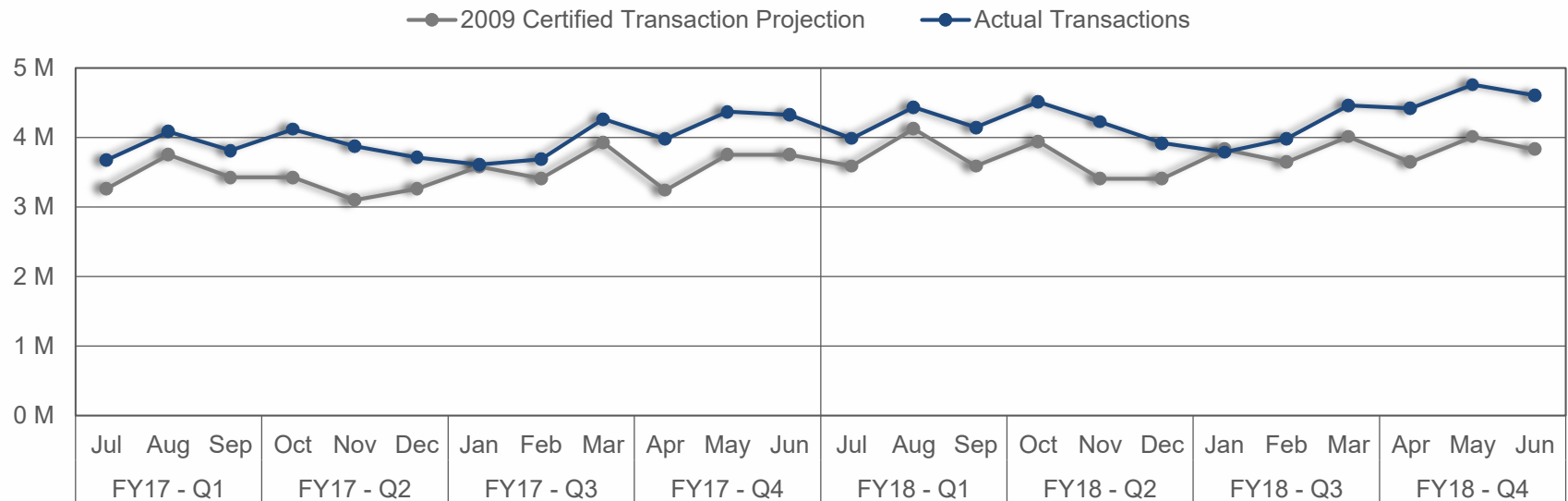
August 2, 2018

4th Quarter Triangle Expressway Update - Operations & Customer Service

Kristen Pearce

Back Office System Manager

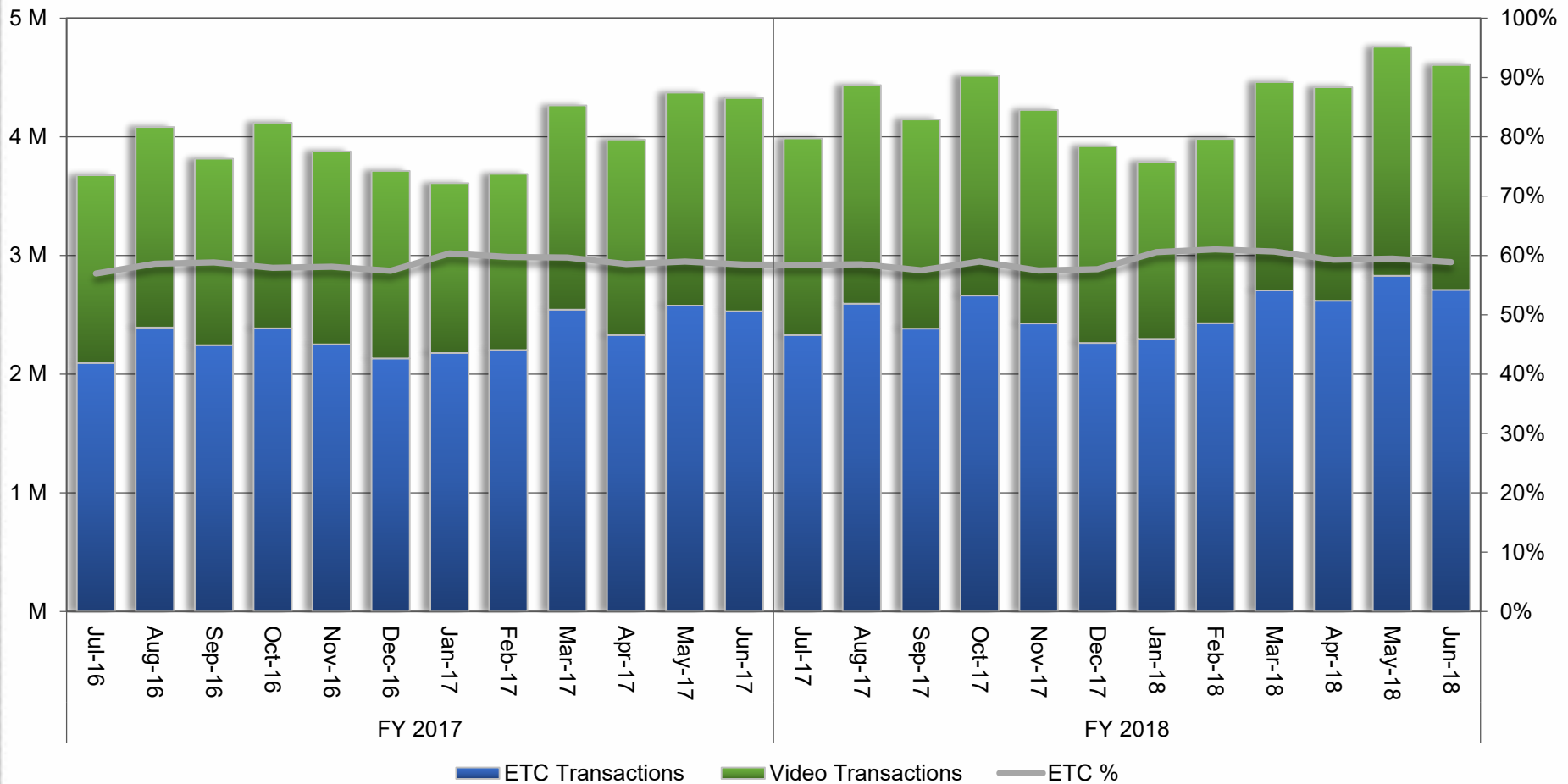
Transaction Statistics



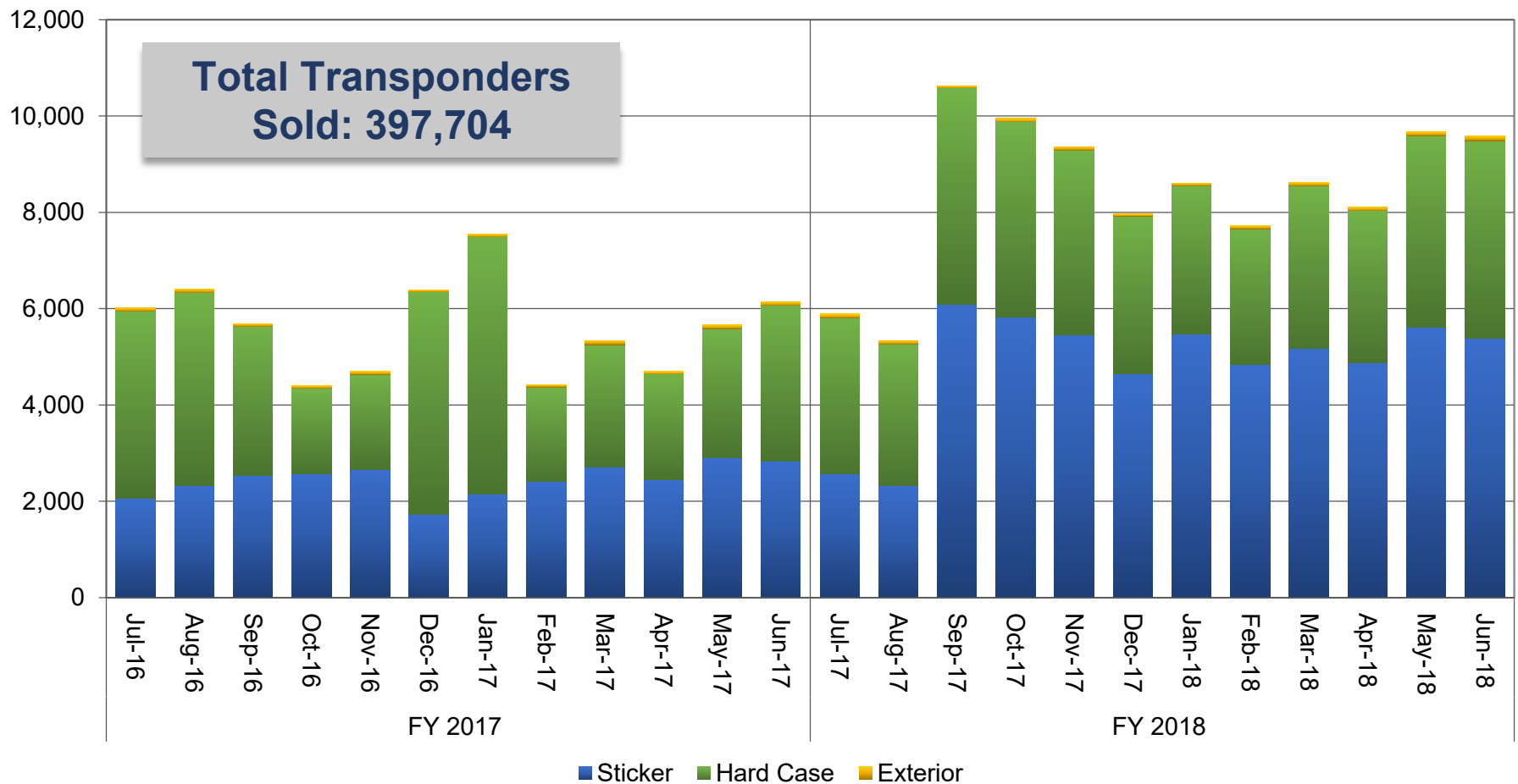
	FY17 - Q1	FY17 - Q2	FY17 - Q3	FY17 - Q4	FY18 - Q1	FY18 - Q2	FY18 - Q3	FY18 - Q4
Actual Transactions	11,570,102	11,706,855	11,561,253	12,675,376	12,566,202	12,657,190	12,232,513	13,780,931
2009 Certified Traffic and Revenue¹	10,440,591	9,788,054	10,918,982	10,748,373	11,300,881	10,762,744	11,486,687	11,486,688
Delta	1,129,511	1,918,801	642,271	1,927,003	1,265,321	1,894,446	745,826	2,294,243
Percent of Actual vs. 2009 Base Case	111%	120%	106%	118%	111%	118%	106%	120%

¹Target monthly transaction data based on annualized numbers contained in the 2009 Certified Traffic and Revenue Report developed by CDM Smith

Toll Transactions by Type



Monthly Transponders Sold

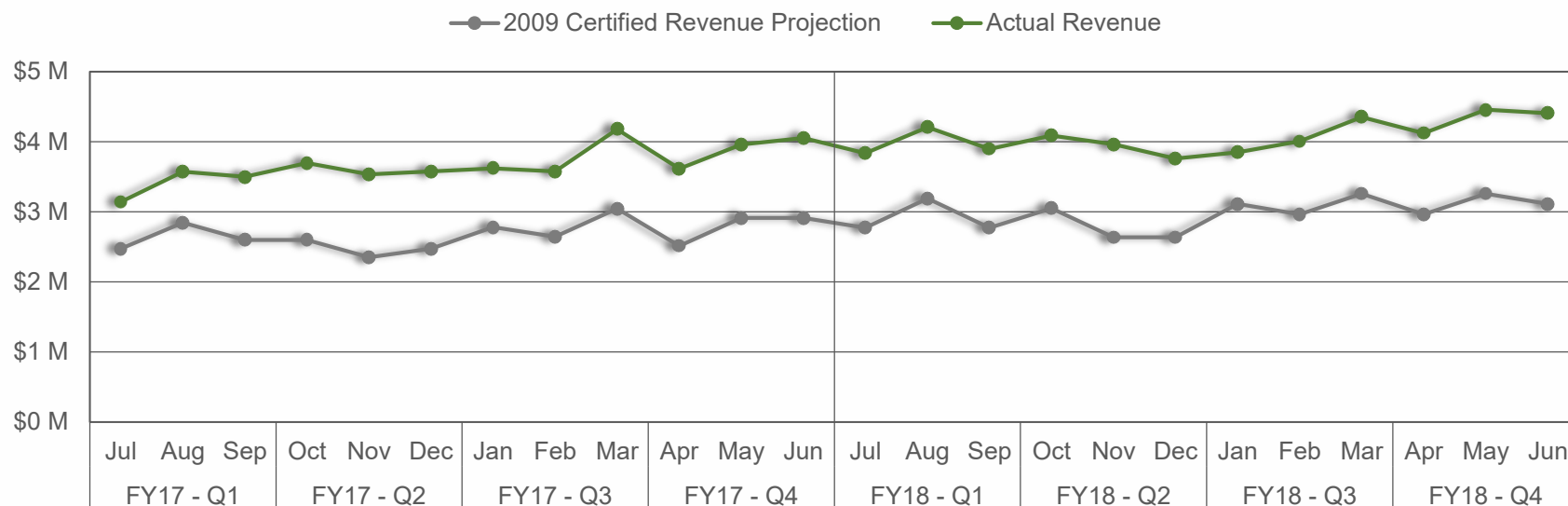


4th Quarter Triangle Expressway Update – Finance

David Roy

Director of Finance

Revenue Statistics

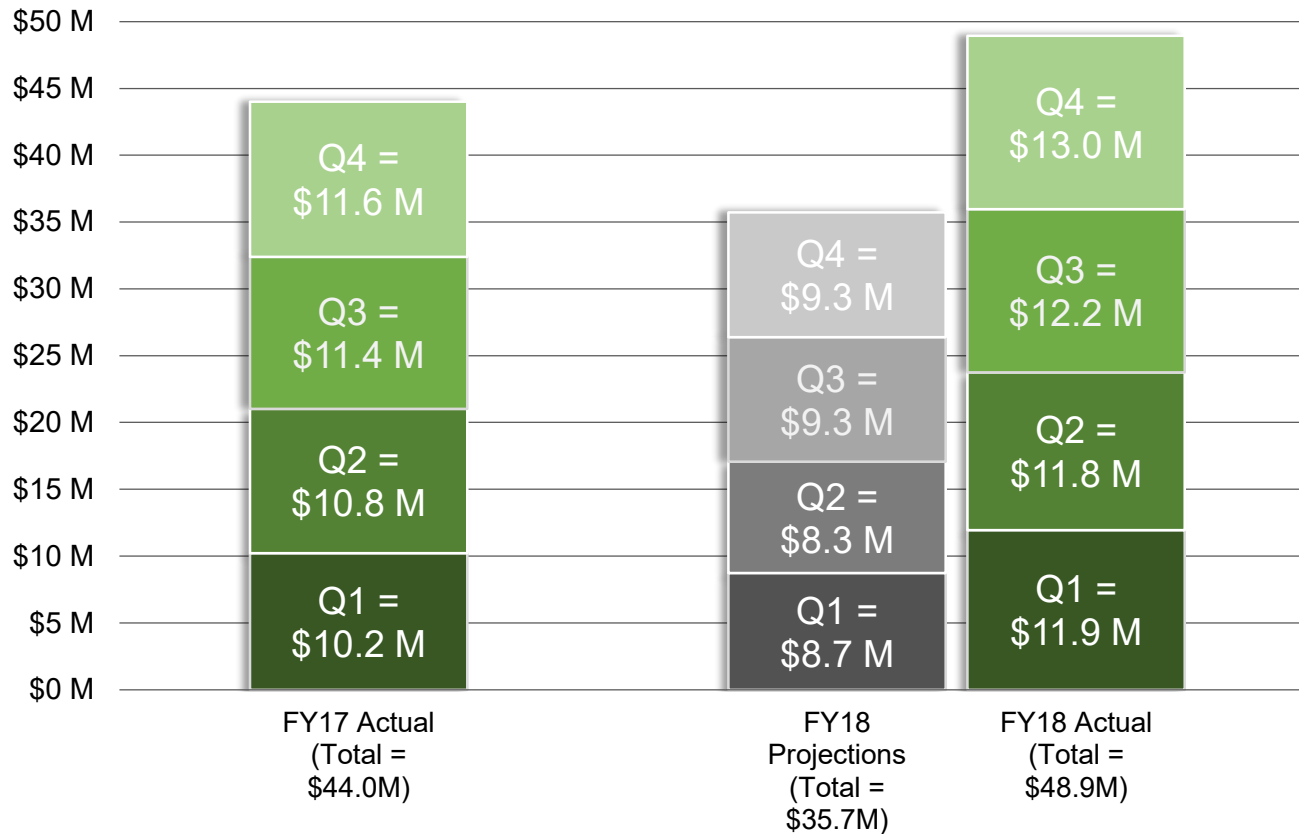


	FY17 - Q1	FY17 - Q2	FY17 - Q3	FY17 - Q4	FY18 - Q1	FY18 - Q2	FY18 - Q3	FY18 - Q4
Actual Revenue¹	\$ 10,210,606	\$ 10,802,362	\$ 11,371,706	\$ 11,625,254	\$ 11,938,800	\$ 11,810,005	\$ 12,206,584	\$ 12,982,210
2009 Certified Traffic and Revenue²	\$ 7,913,993	\$ 7,419,368	\$ 8,468,479	\$ 8,336,160	\$ 8,735,177	\$ 8,319,217	\$ 9,332,303	\$ 9,332,303
Delta (\$)	\$ 2,296,613	\$ 3,382,994	\$ 2,903,227	\$ 3,289,094	\$ 3,203,623	\$ 3,490,788	\$ 2,874,281	\$ 3,649,907
Percent of Actual vs. 2009 Base Case	129%	146%	134%	139%	137%	142%	131%	139%

¹Actual revenue is reported on a cash basis

²Target monthly revenue data based on annualized numbers contained in the 2009 Certified Traffic and Revenue Report developed by CDM Smith

Revenue Statistics



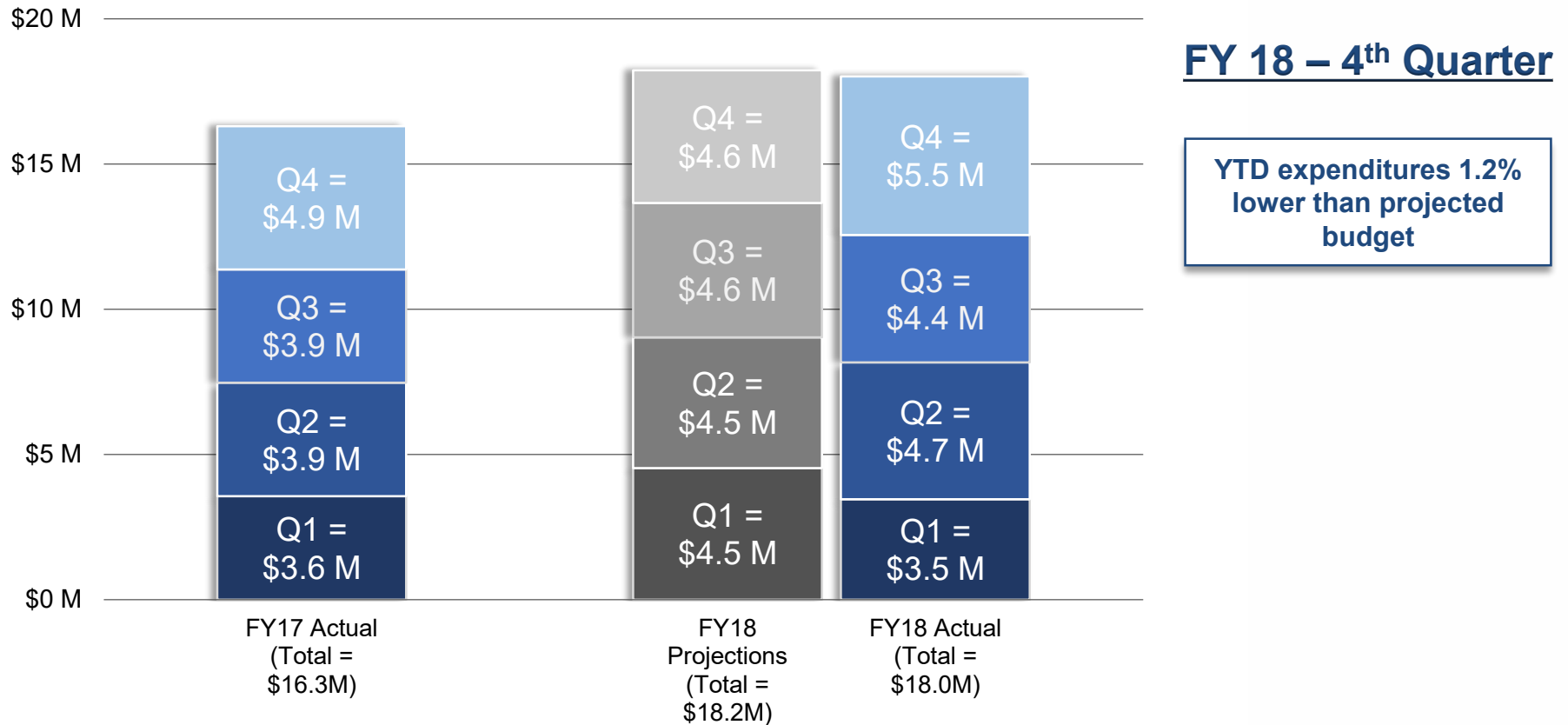
FY 18 – 4th Quarter

**YTD revenues 37.0%
higher than financing
base case projections**

**YTD revenues up 11.2%
year-over-year**

- Revenue figures are inclusive of all toll revenue and fees, but exclude transponder revenues (YTD = \$418,102.98)
- Actual revenues reported on a cash basis

Operating Expenditures



- Actual operating expenditures reported on a cash basis

4th Quarter Triangle Expressway Update – Maintenance Report

Dennis Jernigan, P.E.

Director of Highway Operations

Mainline Traffic Statistics



Roadway Maintenance Statistics

	Q1 FY 2018	Q2 FY 2018	Q3 FY 2018	Q4 FY 2018	Rolling Rating
Road Surface	98.1	98.9	98.5	99.2	98.7
Unpaved Shoulders and Ditches	100.0	97.9	97.8	96.8	98.1
Drainage Structures	83.2	87.6	87.7	97.3	89.0
Roadside	90.4	92.5	92.2	91.3	91.6
Traffic Control Devices	85.2	82.4	83.8	88.3*	84.4
Overall	90.9	91.1	91.3	94.0*	91.7

* Excludes Pavement Striping/Marking, Characters and Symbols, and Pavement Markers characteristics.

Monroe Construction Update

Christopher Sweat, P.E.
Summit Engineers

Monroe Expressway Overview

- 20-mile long expressway
- 4 to 6 lanes wide (expandable to median)
- 37 bridges
- 21 box culverts
- 8 interchanges
- Open Road Tolling

Important Dates

- Phased ITS Integration
May 2018 thru September 2018
- Substantial Completion
November 27, 2018
- Final Completion
May 28, 2019

Monroe Bypass Constructors, LLC



Anderson Columbia Company, Inc.

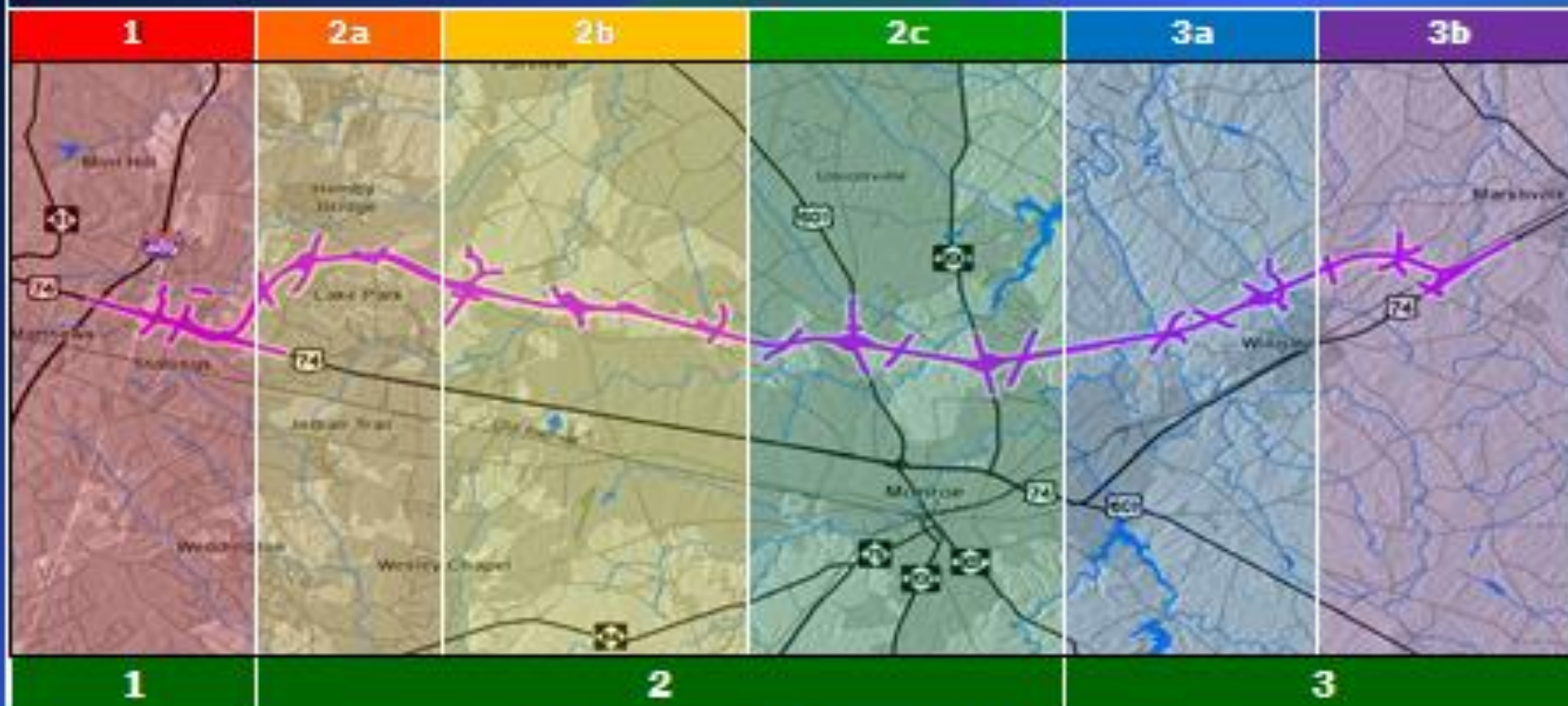


Boggs Paving, Inc.



Project Segments & Sections

DESIGN SECTIONS



CONSTRUCTION SEGMENTS

Toll Zone Progress

- AET-8 has been accepted.
- AET-7 has been accepted. Factory Acceptance Testing (FAT) will be Aug. 6-10.
- AET-6 has been accepted.
- AET-5 has been accepted.
- AET-4 has been accepted.
- AET-3 should be accepted next week.
- AET-2 accepted by Sept. 1.

Marshville Area (3B)



Expressway Bridge over CSX RR and US 74WB (3B)



Expressway Bridge over CSX RR and US 74WB (3B)



Toll Site #8 (3B)



Toll Site #8 (3B)



Forest Hill School Road (3B)



Austin Chaney Rd. Interchange (3A)



Toll Site #7 (2C)



Toll Site #7 (2C)



Olive Branch Rd. and NC 200 (2C)



Toll Site #6 (2C)



Toll Site #6 (2C)



US 601 Interchange (2C)



US 601 Interchange (2C)



Sound Wall 7B2 near Fowler Rd. (2C)



www.AerialPhotosElite.com

Sound Wall 7B2 near Fowler Rd. (2C)



Toll Zone 5 and Sound Wall 7A (2B)



Toll Zone 5 and Sound Wall 7A (2B)



Rocky River Road Interchange (2B)



Unionville-Indian Trail Interchange (2B)



Toll Site #5 (2B)



Secrest Shortcut Rd. and Sound Wall (2A)



Indian Trail-Fairview Road Interchange (2A)



Stinson Hartis Rd. (2A)



US 74 Interchange (1)



Stallings Rd. (1)



Elevated Section (1)



Elevated Section (1)



Complete 540 Senior Underwriter Selection

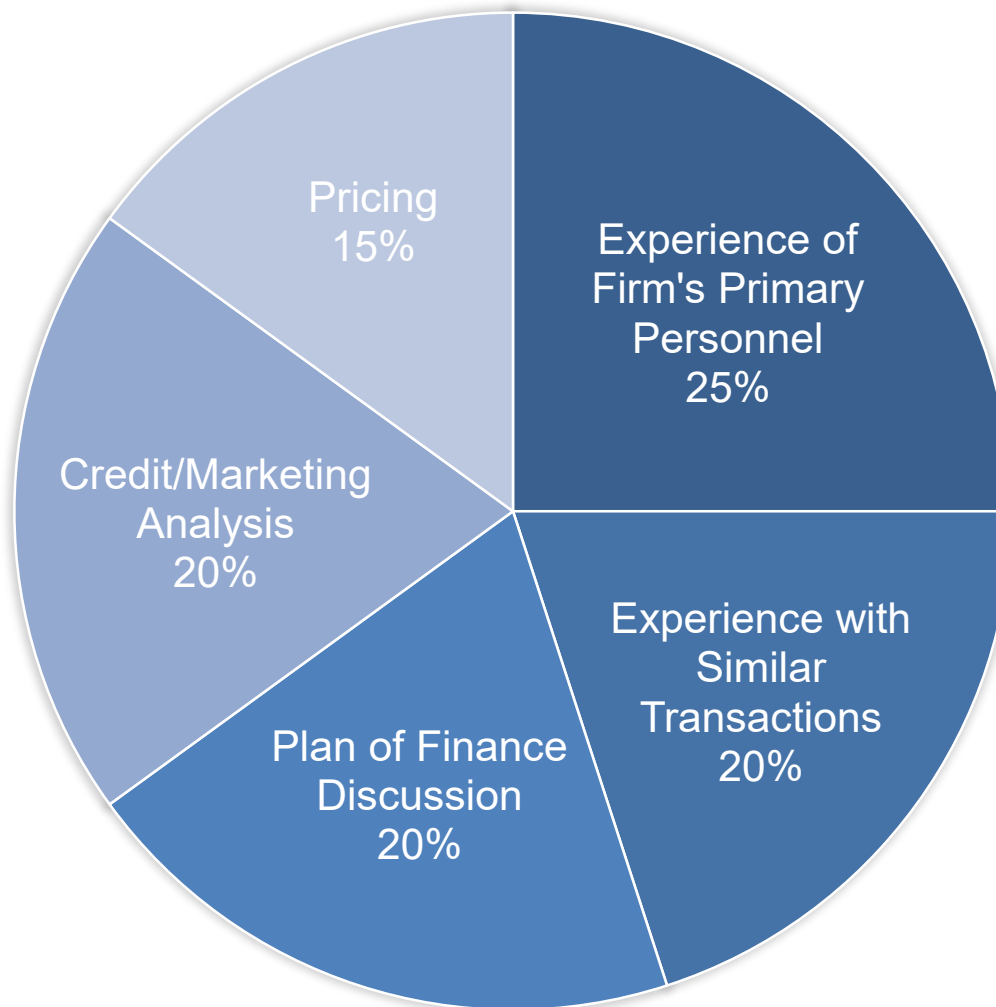
David Roy

Director of Finance

Request for Qualifications

- Select an underwriting team to support the financing of Phase I of the Complete 540 project
- Similar to the process used for the Monroe Expressway financing in 2016
- The RFQ was posted on May 29th

Evaluation Criteria



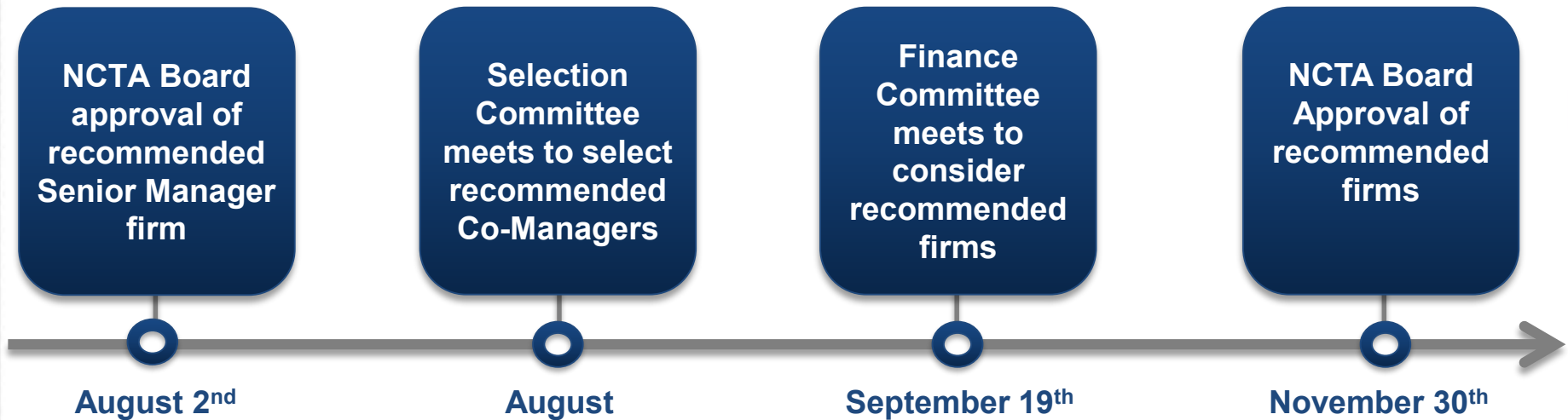
Selection Process



Selection Committee:

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

Next Steps



Recommendation

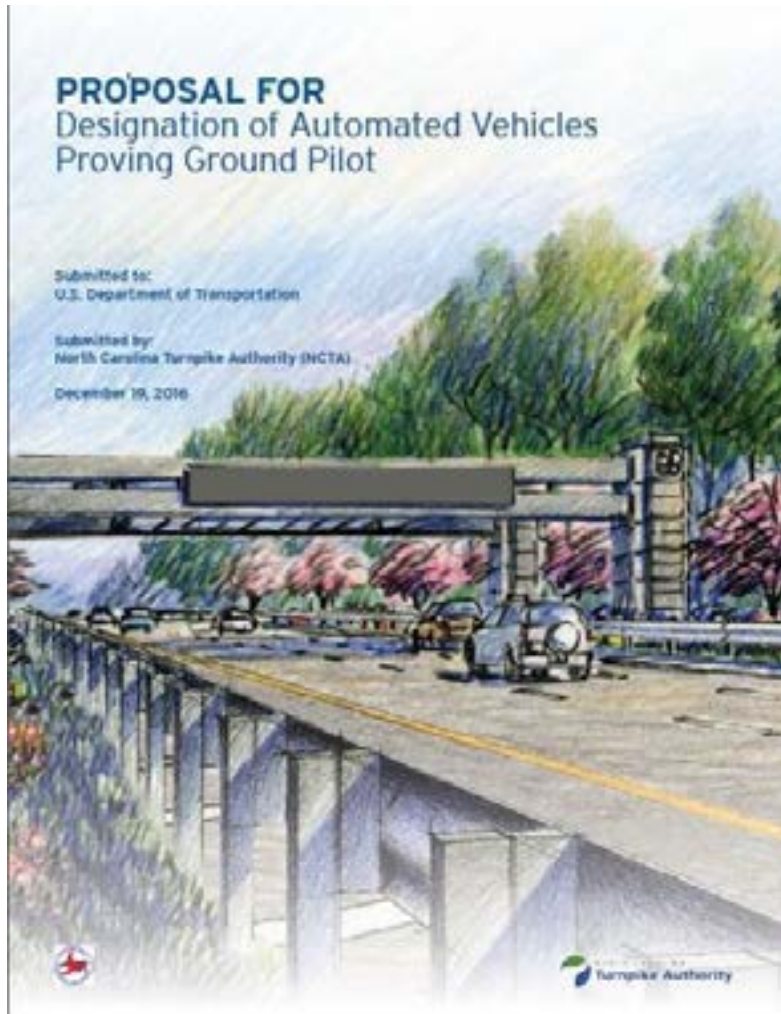
- 20 firms submitted Statements of Qualification
 - 8 firms proposed to serve in the role of Senior Manager
- Shortlisted Firms for Senior Manager:
 - Bank of America Merrill Lynch
 - Citi
 - J.P. Morgan
 - Wells Fargo

Volvo Trucks/FedEx Platooning

Dennis Jernigan, P.E.

Director of Highway Operations

AVPG Designation



- Triangle Expressway designated as a USDOT Autonomous Vehicle Proving Ground in January 2017
- First meeting with Volvo Trucks team in March 2017
- Collaborated with Volvo team, NCDOT and NCDMV on platooning legislation that was passed in July 2017
- Volvo submitted a plan for demonstration in March 2018
- Ordinances issued by NCDOT March 29, 2018
- Demonstration began in early April 2018

Details of Demonstration

- Veridea Parkway served as the proving ground and southern terminus of route
- Davis/Hopson interchange was used as northern terminus of route
- Salt barn location at Green Level was used to store tractors/trailers overnight
- Demonstration occurred outside a.m. and p.m. peak periods
- Trucks were spaced 75 to 100 feet apart as they traveled at 62 miles per hour
- All tractors had licensed drivers, each with 15+ years driving experience

Safety Was Paramount In All Demonstrations



Drivers: Ulysses, Justin, Cindy



Technical Team: Franklin, Bob, George



Media Outlets

Ever heard of truck platooning? It's happening on the Triangle Expressway.

BY RICHARD STRADLING
rstradling@newsobserver.com

June 27, 2018 05:00 PM
Updated June 27, 2018 09:39 PM



Volvo Trucks and FedEx Successfully Demonstrate Truck Platooning on N.C. 540 (Triangle Expressway)



Volvo, FedEx Team on Live Platooning in North Carolina



Volvo deploys truck platooning demo on designated autonomy testing highway in N.C.

Volvo, FedEx test truck 'platooning' on public U.S. road By Reuters

Search Bloomberg Sign in

Hyperdrive FedEx, Volvo Test U.S. Truck 'Platoons' to Catch Up to Europe

By Thomas Black
June 27, 2018 1:00 PM Updated on June 27, 2018 5:4

- Courier joins with Volvo to do highway test in North Carolina
- Technique is designed to provide fuel efficiency, safety gains



Volvo Trucks, FedEx Demonstrate Truck Platooning in North Carolina



Volvo, FedEx test truck platoons in North Carolina



Volvo, FedEx test autonomous truck 'platooning' on public U.S. road

We've got a little convoy in N.C., and expect testing in other states



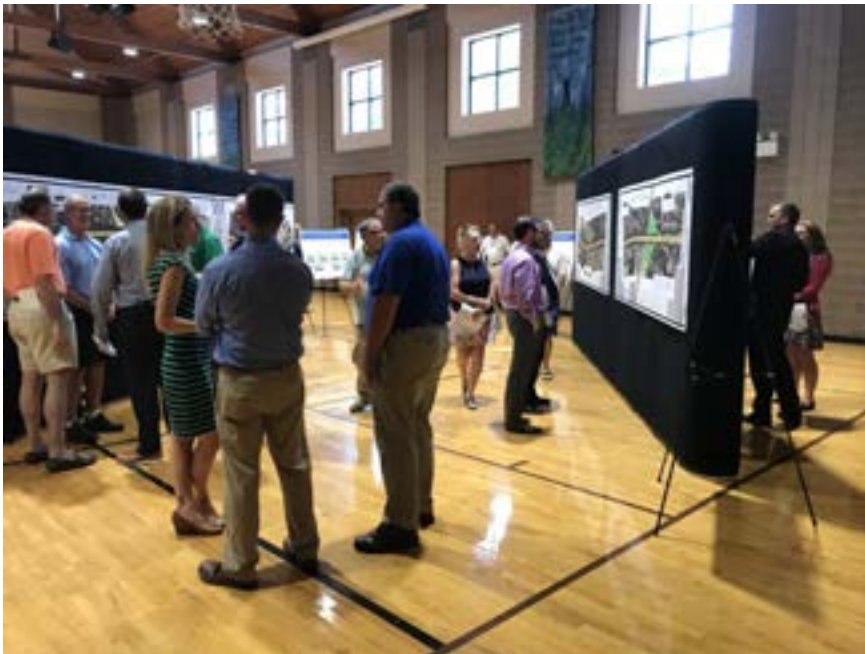
I-485 Project Update

Rodger Rochelle
Chief Engineer

Carly Olexik
NCTA Communications Officer

Public Open House Locations





- 320+ people attended
- Around 50 staff answered questions



Can't make it to tonight's I-485 express lanes open house? You can find all the information and submit feedback, here: bit.ly/2zovDyn



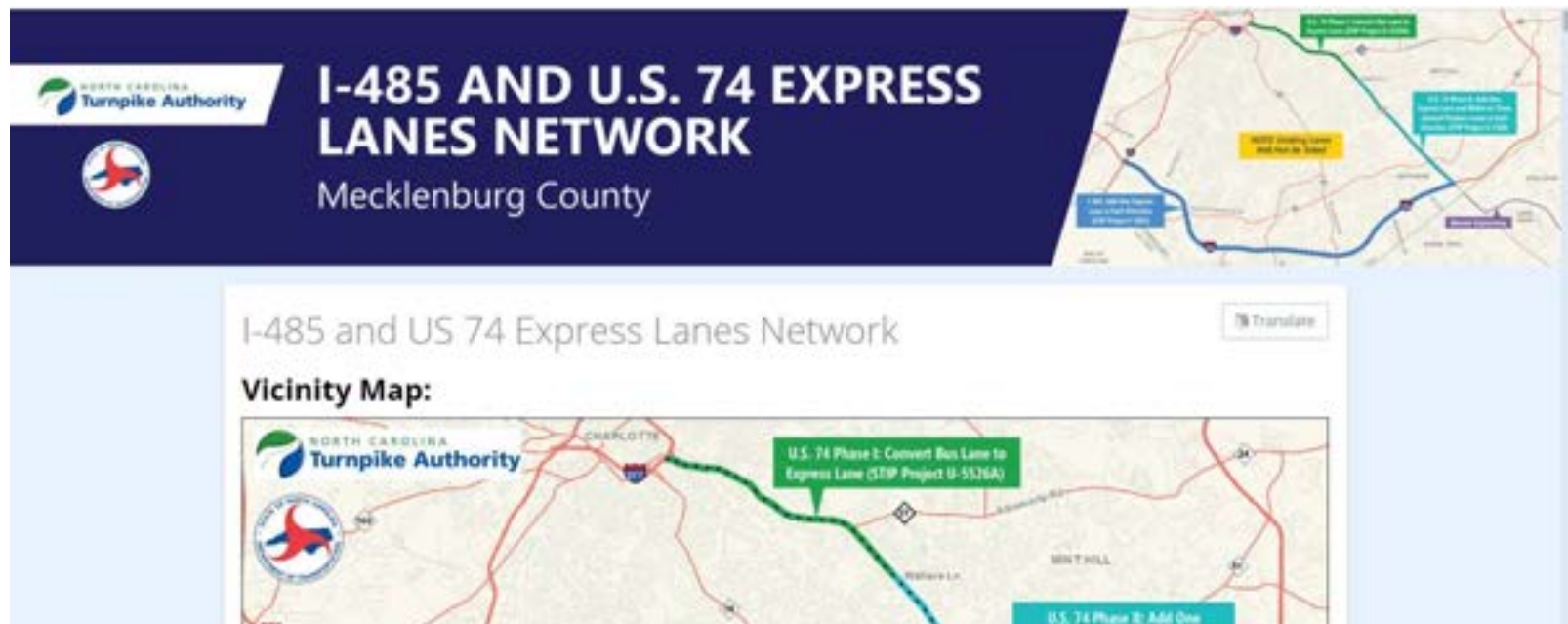
Thank you to all who stopped by our table tonight at the I-485 express lanes open house! We will be back tomorrow from 4-7 p.m. at Pineville United Methodist Church.



Publicinput.com Website

July 2-31

- 44,675 Direct views
- 401 Comments
- 283 Participants
- 184,982 Views from social media
- 1,404 Responses



Geofencing

- 119,157 People Reached
- 4,655 Link Clicks
- 185,478 Impressions
- 286 Comments



North Carolina Department of Transportation

July 20 at 9:40 AM · 🌐

Drive on I-485? Find out how we are working to improve your commute. Join us at public open houses on July 25-26 from 4-7 p.m.



PUBLICINPUT.COM

I-485 and US 74 Express Lanes Network

Join us at public open houses on July 25-26 from 4-7 p.m.

[Learn More](#)

Next Steps

- New geofence ad encouraging residents to provide feedback through the August 10 comment period
- The project team is providing responses to all comments received

Thank You!