North Carolina Turnpike Authority

Operations Committee Meeting

October 21, 2021



Opening Comments

JJ Eden Executive Director

August Statistics

Triangle Expressway



Transactions: 5.14 million



Revenue: \$4.17 million

Monroe Expressway



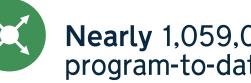
Transactions: 3.77 million



Transponders



Over 21,800 distributed



Nearly 1,059,000 distributed program-to-date

2022 Triangle Expressway Toll Rates

David Roy Chief Financal Officer

Triangle Expressway Toll Rate Schedule

| Scheduled Average Toll Rate Increases | | | | | | | | | | |
|---------------------------------------|--------------|--|--|--|--|--|--|--|--|--|
| Before 2017 | 5.0% | | | | | | | | | |
| 2017 – 2021 | 3.5% | | | | | | | | | |
| 2022 - 2036 | 3.0% | | | | | | | | | |
| After 2036 | 2.0% or less | | | | | | | | | |

Triangle Expressway 2022 Toll Rates

| | | EXIT POINT | | | | | | | | | | | | | | | | | | | | | |
|--------|---|------------|----------------|-----|-------|----|-------|-----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| | | | egin Il 147 | Exi | t 3/2 | Ex | it 69 | Exi | it 66 | Ex | it 64 | Ex | it 62 | Ex | it 59 | Ex | it 57 | Ex | it 56 | Ex | it 55 | Ex | it 54 |
| | Begin Toll 147 - Toll N.C. 147 at I-40 | | | \$ | 0.42 | \$ | 0.93 | \$ | 1.16 | \$ | 1.67 | \$ | 2.09 | \$ | 2.60 | \$ | 3.23 | \$ | 3.23 | \$ | 3.55 | \$ | 3.71 |
| | Exit 3/2 - Hopson Road / Davis Drive | \$ | 0.42 | | | \$ | 0.93 | \$ | 1.16 | \$ | 1.67 | \$ | 2.09 | \$ | 2.60 | \$ | 3.23 | \$ | 3.23 | \$ | 3.55 | \$ | 3.71 |
| | Exit 69 - Chapel Hill Road / N.C. 54 | \$ | 0.93 | \$ | 0.93 | | | \$ | 0.74 | \$ | 1.25 | \$ | 1.67 | \$ | 2.18 | \$ | 2.81 | \$ | 2.81 | \$ | 3.13 | \$ | 3.29 |
| F | Exit 66 - N.C. 55 | \$ | 1.16 | \$ | 1.16 | \$ | 0.74 | | | \$ | 0.51 | \$ | 0.93 | \$ | 1.44 | \$ | 2.07 | \$ | 2.07 | \$ | 2.39 | \$ | 2.55 |
| NIO | Exit 64 - Morrisville Parkway | \$ | 1.67 | \$ | 1.67 | \$ | 1.25 | \$ | 0.51 | | | \$ | 0.42 | \$ | 0.93 | \$ | 1.56 | \$ | 1.56 | \$ | 1.88 | \$ | 2.04 |
| Ч Р | Exit 62 - Green Level West Road | \$ | 2.09 | \$ | 2.09 | \$ | 1.67 | \$ | 0.93 | \$ | 0.42 | | | \$ | 0.51 | \$ | 1.14 | \$ | 1.14 | \$ | 1.46 | \$ | 1.62 |
| ENTR | Exit 59 - U.S. 64 | \$ | 2.60 | \$ | 2.60 | \$ | 2.18 | \$ | 1.44 | \$ | 0.93 | \$ | 0.51 | | | \$ | 1.14 | \$ | 1.14 | \$ | 1.46 | \$ | 1.62 |
| Ш | Exit 57 - Old U.S. Hwy 1 / S. Salem St. | \$ | 3.23 | \$ | 3.23 | \$ | 2.81 | \$ | 2.07 | \$ | 1.56 | \$ | 1.14 | \$ | 1.14 | | | \$ | 0.30 | \$ | 0.62 | \$ | 0.78 |
| | Exit 56 - U.S. 1 | \$ | 3.23 | \$ | 3.23 | \$ | 2.81 | \$ | 2.07 | \$ | 1.56 | \$ | 1.14 | \$ | 1.14 | \$ | 0.30 | | | \$ | 0.32 | \$ | 0.48 |
| | Exit 55 - Veridea Parkway | \$ | 3.55 | \$ | 3.55 | \$ | 3.13 | \$ | 2.39 | \$ | 1.88 | \$ | 1.46 | \$ | 1.46 | \$ | 0.62 | \$ | 0.32 | | | \$ | 0.48 |
| | Exit 54 - N.C. 55 | \$ | 3.71 | \$ | 3.71 | \$ | 3.29 | \$ | 2.55 | \$ | 2.04 | \$ | 1.62 | \$ | 1.62 | \$ | 0.78 | \$ | 0.48 | \$ | 0.48 | | |

CLASS 1

Tolls shown for 2-AXLE vehicles

with an NC Quick Pass account

2022 Monroe Expressway Toll Rates

David Roy Chief Financial Officer

Monroe Expressway Toll Rate Schedule

| 136-89.183 Powers of the | Toll Rate Policy Adopted |
|--------------------------|--------------------------|
| Authority | September 17, 2008 |
| | |

| Scheduled Average Toll Rate Increases | | | | | | | | | | |
|---------------------------------------|------|--|--|--|--|--|--|--|--|--|
| 2019 – 2025 2.3% | | | | | | | | | | |
| 2025 - 2040 | 2.1% | | | | | | | | | |

Monroe Expressway 2022 Toll Rates

| | | EXIT POINT | | | | | | | | | | | | | | | |
|---------|--|------------|------|----|------|----|------|----|------|----|------|----|------|----|------|----|------|
| | | E | Exit | | Exit |
| | | 2 | 255 | | 257 | | 259 | | 260 | | 264 | | 266 | | 270 | | 273 |
| | Exit 255 - U.S. 74 (West) | | | \$ | 0.28 | \$ | 0.61 | \$ | 0.81 | \$ | 1.40 | \$ | 1.67 | \$ | 2.27 | \$ | 2.72 |
| | Exit 257 - Indian Trail-Fairview Rd. | \$ | 0.28 | | | \$ | 0.33 | \$ | 0.53 | \$ | 1.12 | \$ | 1.39 | \$ | 1.99 | \$ | 2.44 |
| POINT | Exit 259 - Unionville-Indian Trail Rd. | \$ | 0.61 | \$ | 0.33 | | | \$ | 0.20 | \$ | 0.79 | \$ | 1.06 | \$ | 1.66 | \$ | 2.11 |
| | Exit 260 - N. Rocky River Rd. | \$ | 0.81 | \$ | 0.53 | \$ | 0.20 | | | \$ | 0.59 | \$ | 0.86 | \$ | 1.46 | \$ | 1.91 |
| ENTRY | Exit 264 - U.S. 601 | \$ | 1.40 | \$ | 1.12 | \$ | 0.79 | \$ | 0.59 | | | \$ | 0.27 | \$ | 0.87 | \$ | 1.32 |
| | Exit 266 - Morgan Mill Rd. | \$ | 1.67 | \$ | 1.39 | \$ | 1.06 | \$ | 0.86 | \$ | 0.27 | | | \$ | 0.60 | \$ | 1.05 |
| | Exit 270 - Austin Chaney Rd. | \$ | 2.27 | \$ | 1.99 | \$ | 1.66 | \$ | 1.46 | \$ | 0.87 | \$ | 0.60 | | | \$ | 0.45 |
| | Exit 273 - U.S. 74 (East) | \$ | 2.72 | \$ | 2.44 | \$ | 2.11 | \$ | 1.91 | \$ | 1.32 | \$ | 1.05 | \$ | 0.45 | | |

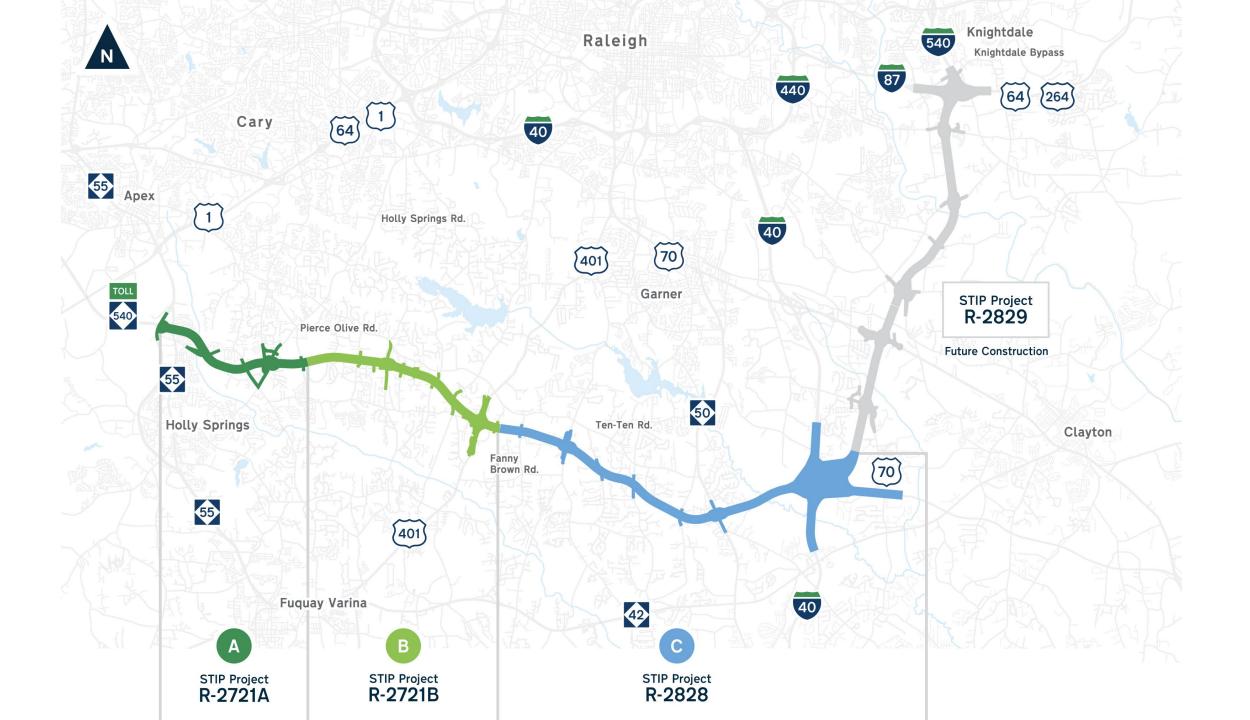
CLASS 1

Tolls shown for 2-AXLE vehicles

with an NC Quick Pass account

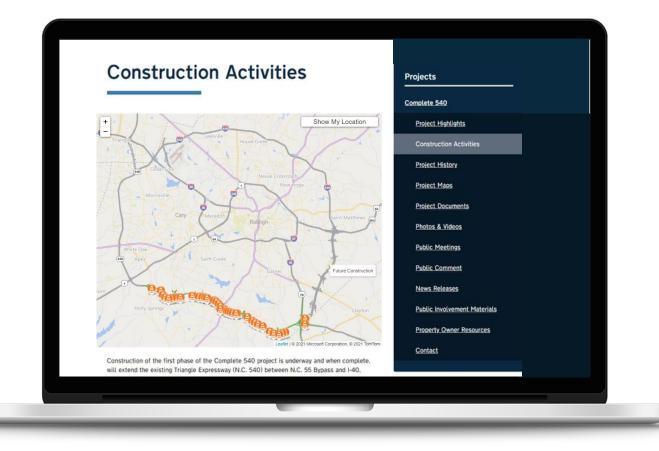
Complete 540 Construction Update

Dennis Jernigan, P.E. Deputy Chief Engineer for Highway Operations





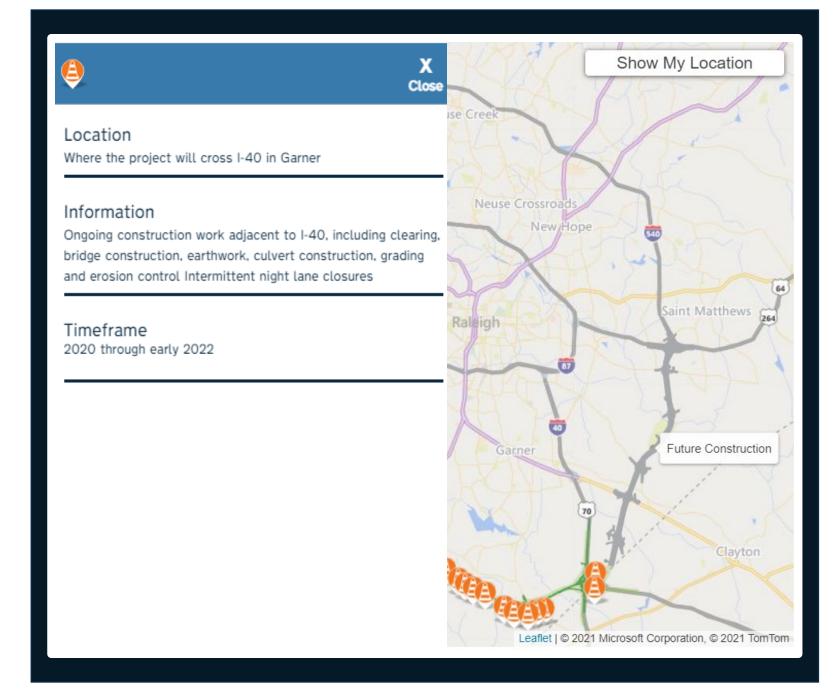
Complete 540 Interactive Map



Creative

Connected

Convenient











Community Outreach

Complete 540 Outreach



Virtual/In-Person Meetings

Resident Communications

Town of Apex, Town of Garner, Civic Organizations, Wake County WakeUP, RTA, I-40 Regional Partnership, National Society of Engineers, Realtor firms, NCSITE, Benson Area Chamber

NCDOT Project Development Support

Andy Lelewski, P.E. Director of Program Development

NCDOT Project Development Support

Continued Analysis of SPOT Projects

- Work completed in August 2021
 - Analysis of SPOT projects provided by NCDOT
 - Determined potential toll costs
 - Estimated potential toll revenue
- NCTA is underway with further evaluation of four projects.
 - Six to eight month effort
 - Research and compile available information and existing studies
 - Outreach within the Department
 - Division Engineers and their staff
 - STIP Office
 - SPOT Office
 - Feasibility Studies Unit

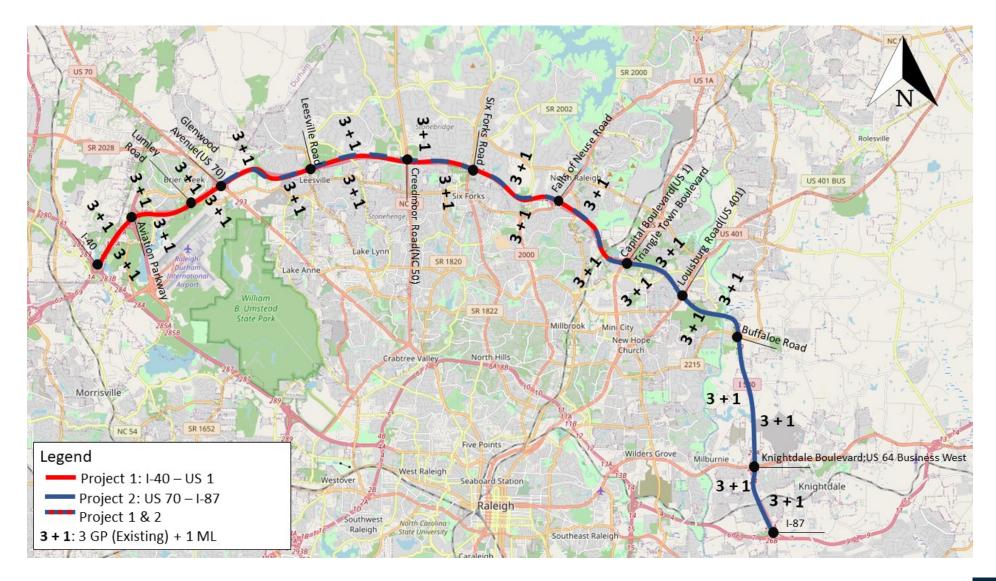
NCDOT Project Development Support

Continued Analysis of SPOT Projects

- Further evaluation of four projects, continued
 - Limits and access
 - Traffic & revenue
- Goal is to develop project proposals
 - Project scope
 - Preliminary plan of finance
 - Project delivery options
 - Review project proposals with stakeholders

I-540 Peak Period Managed Shoulders

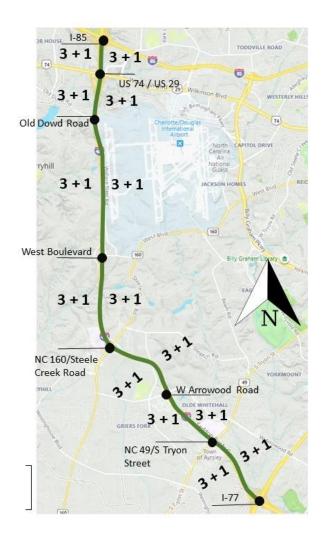
Potential Future Toll Projects



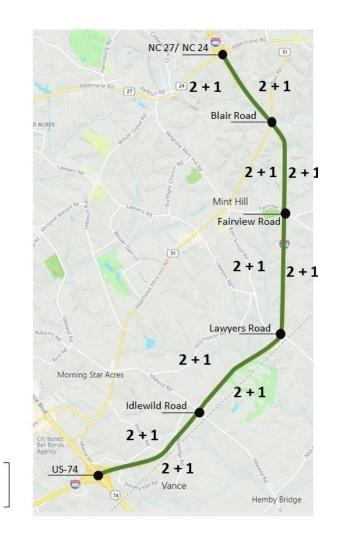
I-485 Express Lanes

Potential Future Toll Projects

From I-77 (Exit 67) to I-85 (Exit 10)

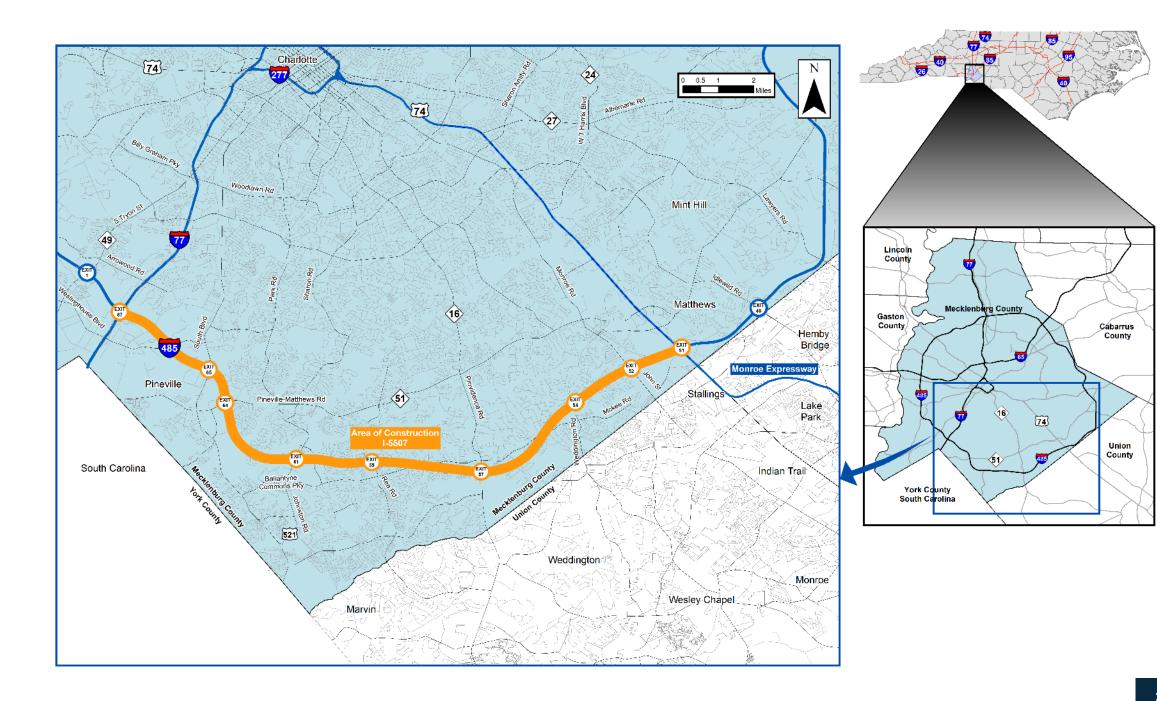


From US 74 (Exit 51) to NC 24/27 (Exit 41)



I-485 Express Lanes Update

Andy Lelewski, P.E. Director of Program Development



Division 10 Construction Update

- Thirteen structures and two box culverts are under construction
- Six box culverts have been completed
- Over 32 miles of portable concrete barrier have been installed
- Approximately 48,000 LF of pipe has been constructed



Division 10 Construction Update

- Over 16 miles of widening is under construction
- > 36,000 LF of median barrier wall is complete
- Soil stabilization, ABC placement, and asphalt paving is ongoing
- Over 69,000 LF of conduit has been installed for ITS/AET facilities



Division 10 Construction Update – Major Milestones

- ✓ Elm Road Bridge
 Opening Aug 31
- > 3rd GP Lane between Rea and Providence – Nov 15



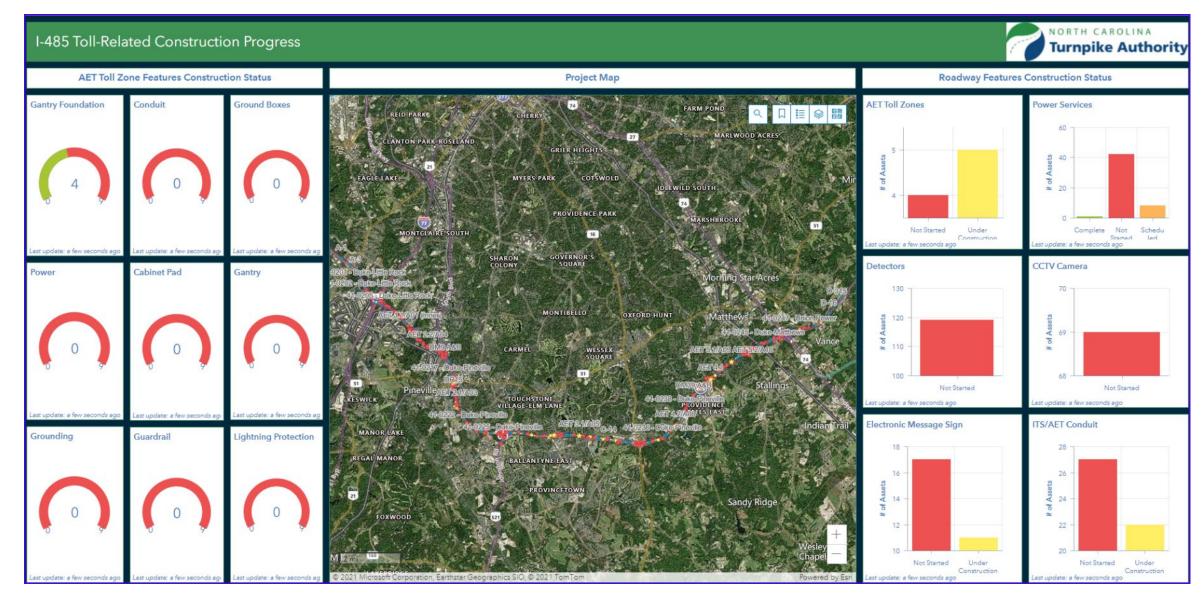
- Bi-weekly coordination with Design-Build Team and Resident Office
- Monitoring of toll-related work along the corridor and regular construction field reviews
- Power meter coordination
- Continue review of construction submittals
- Coordinate with roadside toll technology project







The GIS Dashboard



ITS America Conference Update

Andy Lelewski, P.E. Director of Program Development



📩 December 7 - 10, 2021

Charlotte Convention Ctr.



C) Grant Thomas

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Show Info Exhibit & Sponsor Conference Media Health & Safety Hotel & Travel



REIMAGINING TRANSPORTATION

December 7 – 10, 2021 **Q** Charlotte Convention Center

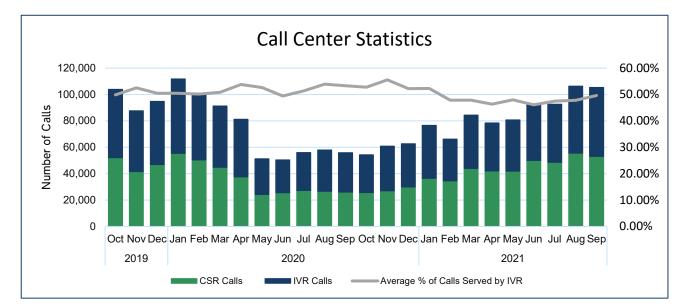
REGISTRATION IS NOW OPEN

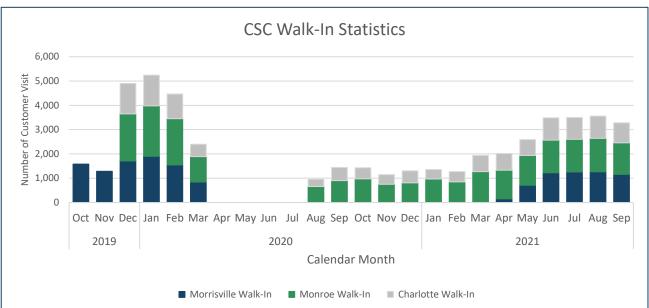
Customer Service & Toll Technology Update

Manish Chourey Chief Technology Officer

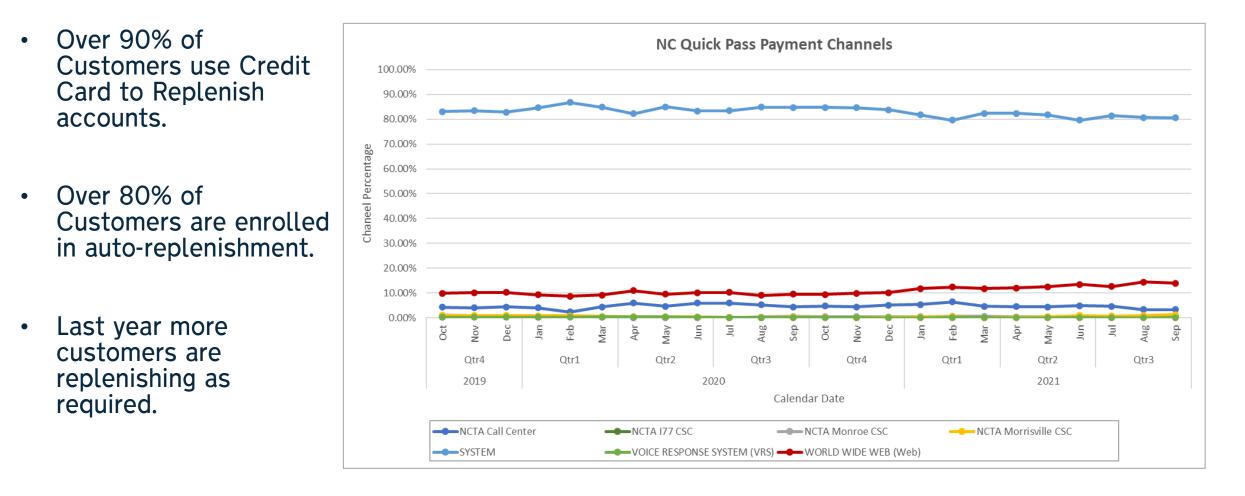
Customer Service Update

- CSC Operations adjusts to new norm
 - Call Volumes are averaging pre-COVID-19 numbers.
 - Three of walk-In locations are serving customers.
 - Employees and Embedded Consultants have returned to work.
 - CSRs continue to maintain social distancing.
 - Few CSRs continue to Work From Home (WFH).
- IVR system informs customers of wait times.
- Customer outreach to update account profile via self-service channels.



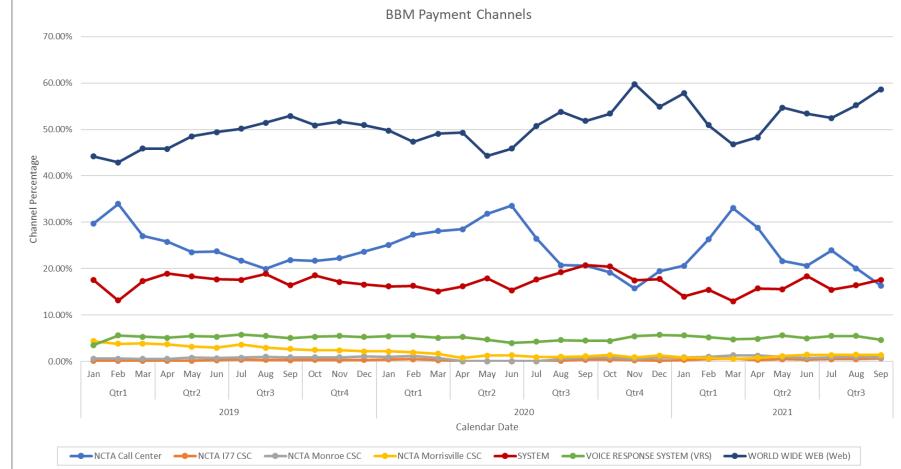


NC Quick Pass Payment Trends by Channels



Bill By Mail (BBM) Payment Trends by Channels

- Over 50% of BBM Customers make payment on Web.
- Over 35% of BBM Customers make payment via Lockbox and Call-Center.



Roadside System Updates

Triangle Expressway Retrofit Updates

- All Toll Zones Retrofit are complete.
- Prepare for Operational Acceptance Test (OAT).
- Review As-Built Design Document and KPI's
- Increased focus on automation of KPI compliance.

Monroe Expressway

- Security enhancements on 6C transponder reads.
- Addition of Plate Type during Image review to improve Out of state name and address lookup.

I-485 Express Lanes Toll Collection System Procurement Schedule

| Category | Date | | |
|--|---|--|--|
| ✓ RFP Issued | April 14, 2021 | | |
| ✓ Mandatory Pre-Proposal Scope of Services Meeting | April 30, 2021 (1:00 p.m. to 3:00 p.m. ET) | | |
| ✓ Proposer Questions Due | May 14, 2021 (4:00 p.m. ET) | | |
| ✓ Proposals (Technical and Price) Due | July 12, 2021 (4:00 p.m. ET) | | |
| Notification of Proposers Shortlisted for Oral Presentations | August 31, 2021 | | |
| ✓ Oral Presentations and Interviews | Week of September 20, 2021 | | |
| Ranking of Proposers for Negotiations | October 29, 2021 | | |
| Notice to Proceed / Award of Contract | November 30, 2021 | | |

NCTA reserves the right to modify the schedule at any time and for any reason.

On Call Consultant Updates

- Selected multiple firms with focus in specialized work areas:
 - 1. Business and technical operations audit and compliance
 - 2. Application support
 - 3. Technical program/project management
 - 4. Development, Implementation, and Management of As-A Service Offerings
- > Met with 4 of 6 On Call firms to establish Tasks.
- Remaining meetings and all contracts to be established by end of 2021.

| | Selected On Call Firms |
|---|------------------------|
| A | tkins Global |
| C | DM Smith |
| D | eloitte |
| G | annett Fleming |
| R | K&K |
| R | S&H |

Transponder Fulfillment

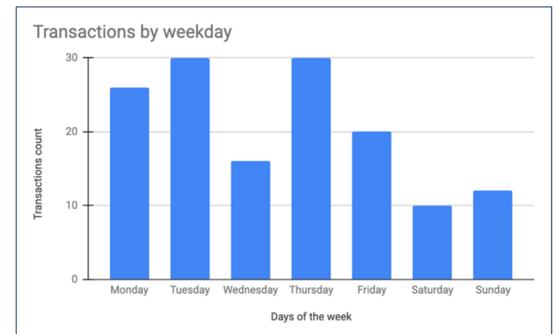
amazon webservices™

- Transponder As a Service (TaaS) deployed on July 25th2021.
- 2. Project leveraged AWS marketplace to transform business to "as a service" offerings.
- 3. For initial Phase 1 Transponders are fulfilled by Hardcase or Sticker for full-service packaging and shipping.
- 4. Fulfilled 36,089 since July 25-through end of September 2021 on 7 days basis.
- 5. Future phases evaluating Amazon and other faster shipping methods.

Update on Pay By Car Pilot

- Technical Pilot using Transponders has completed.
 - Overall technology use case was proven.
 - Program expansion paused.
 - Limited local marketing campaign and operating into Raleigh stations.
- Next Pilot includes License plate readers
- Expansion continues in other states.

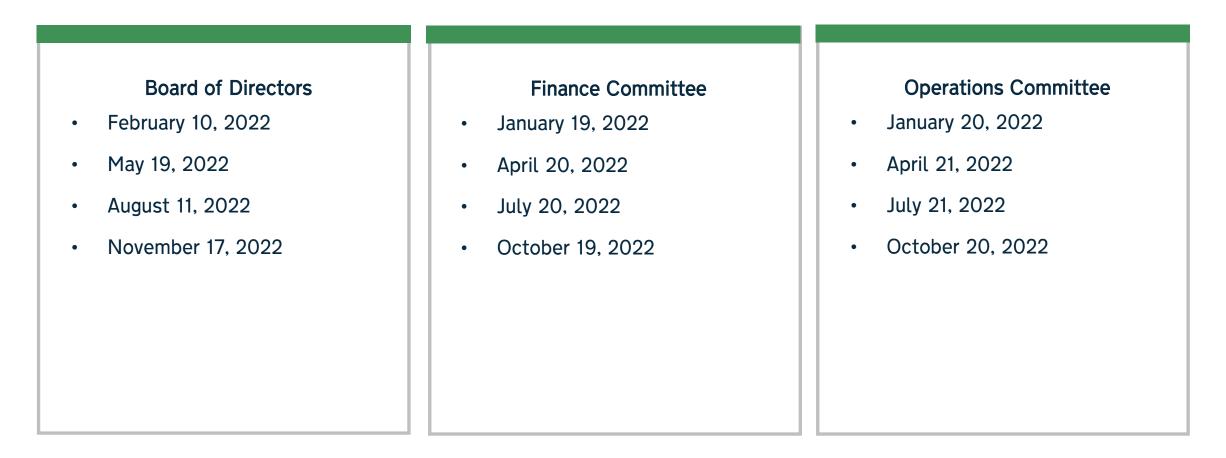




2022 Operations Committee Meeting Dates

Montell Irvin, PE Chair

2022 Board & Committee Dates



• All meetings will be held at 9:30 AM, unless otherwise noted

Contact Us

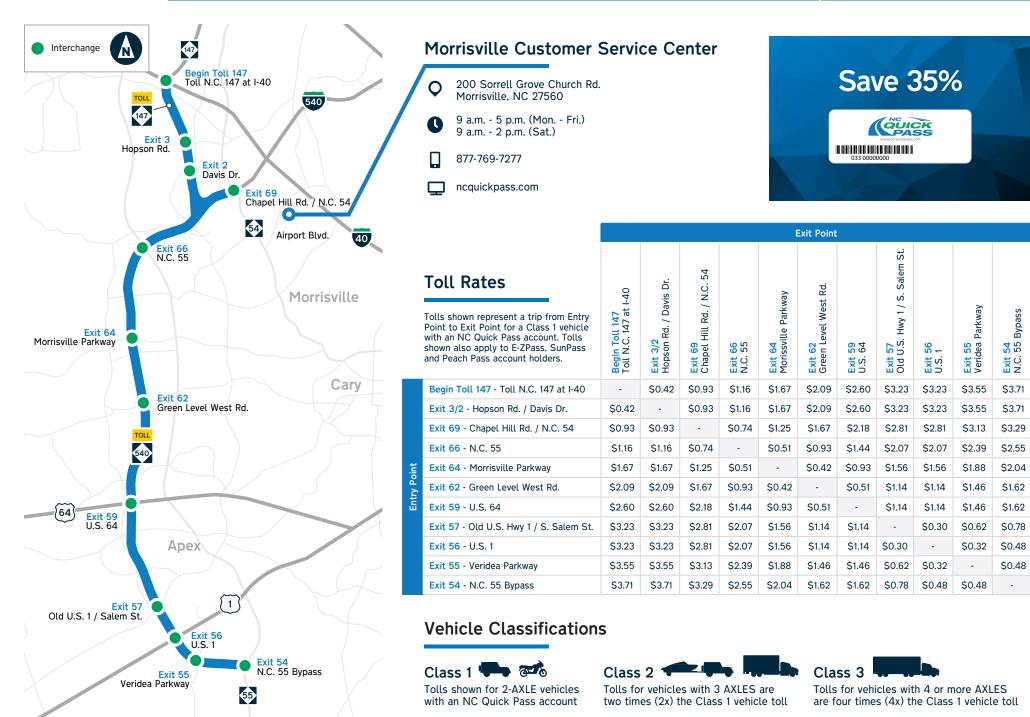
- ncdot.gov/turnpike
- 9 @NCTurnpike

ncquickpass.com @NC_QuickPass

Thank you!

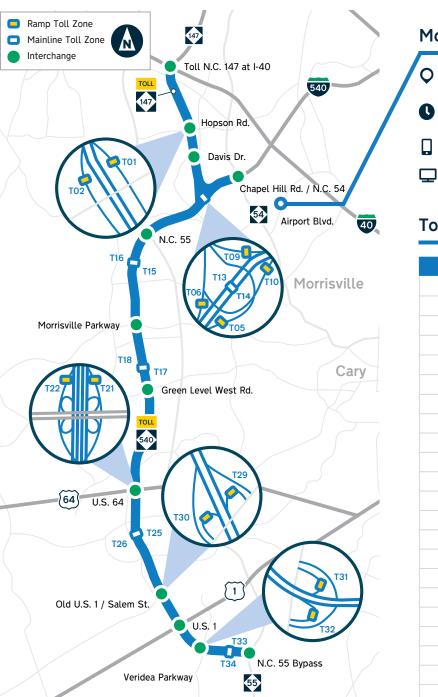


Triangle Expressway Toll Schedule





Triangle Expressway Toll Locations



Morrisville Customer Service Center

- 200 Sorrell Grove Church Rd. Morrisville, NC 27560
- 9 a.m. 5 p.m. (Mon. Fri.) 9 a.m. - 2 p.m. (Sat.)
- 877-769-7277
- ncquickpass.com

Toll Zone Descriptions

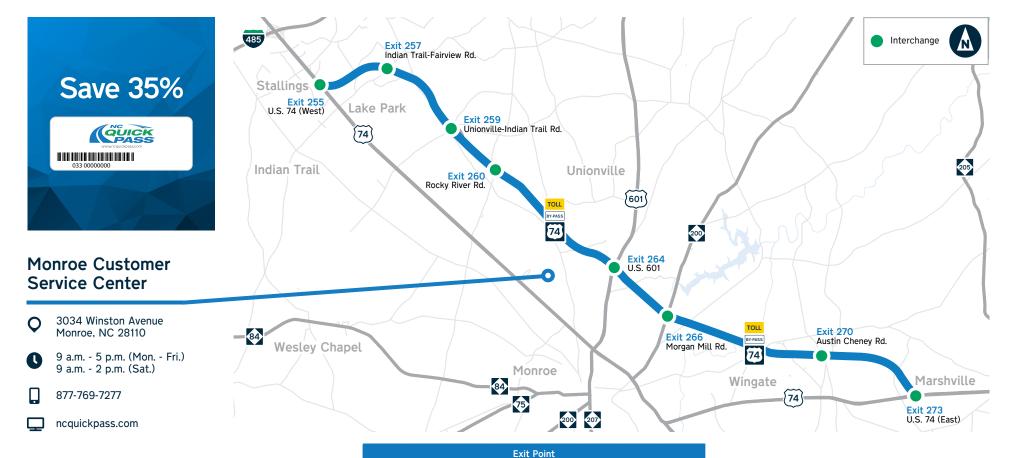


| Toll Zone | Location / Description |
|-----------|--|
| T01 | Ramp - N.C. 147 Northbound On from Hopson Rd. / Davis Dr. |
| Т02 | Ramp - N.C. 147 Southbound Off to Hopson Rd. / Davis Dr. |
| T05 | Ramp - N.C. 540 Northbound to N.C. 147 Northbound |
| T06 | Ramp - N.C. 147 Southbound to N.C. 540 Southbound |
| т09 | Ramp - N.C. 540 Westbound to N.C. 147 Northbound |
| T10 | Ramp - N.C. 147 Southbound to N.C. 540 Eastbound |
| T13 | Mainline - N.C. 540 Southbound at N.C. 147 |
| T14 | Mainline - N.C. 540 Northbound at N.C. 147 |
| T15 | Mainline - N.C. 540 Northbound, North of Morrisville Parkway |
| T16 | Mainline - N.C. 540 Southbound, North of Morrisville Parkway |
| T17 | Mainline - N.C. 540 Northbound, North of Green Level West Rd. |
| T18 | Mainline - N.C. 540 Southbound, North of Green Level West Rd. |
| T21 | Ramp - N.C. 540 Northbound On from U.S. 64 |
| T22 | Ramp - N.C. 540 Southbound Off to U.S. 64 |
| T25 | Mainline - N.C. 540 Northbound, North of Old U.S. 1 (S. Salem St.) |
| T26 | Mainline - N.C. 540 Southbound, North of Old U.S. 1 (S. Salem St.) |
| T29 | Ramp - N.C. 540 Northbound Off to Old U.S. 1 (S. Salem St.) |
| Т30 | Ramp - N.C. 540 Southbound On from Old U.S. 1 (S. Salem St.) |
| T31 | Ramp - N.C. 540 Northbound On from Veridea Parkway |
| T32 | Ramp - N.C. 540 Southbound Off to Veridea Parkway |
| Т33 | Mainline - N.C. 540 Northbound, North of N.C. 55 Bypass |
| T34 | Mainline - N.C. 540 Southbound, North of N.C. 55 Bypass |



Monroe Expressway Toll Schedule

2022



Tolls Rates

| | Tolls Rates | est) | | Rd. | | | _ | ney | st) |
|-------|---|----------------------------|---|---|--------------------------------|----------------------|---|----------------------------------|----------------------------|
| | Tolls shown represent a trip from Entry Point to Exit Point for a Class 1 vehicle with an NC Quick Pass account. Tolls shown also apply to E-ZPass, SunPass and Peach Pass account holders. | Exit 255 U.S. 74 (West) | Exit 257 Indian Trail- Fairview Rd. | Exit 259 Unionville- Indian Trail | Exit 260 Rocky River Rd. | Exit 264 U.S. 601 | <mark>Exit 266</mark> Morgan Mill Rd. | Exit 270 Austin Chaney Rd. | Exit 273 U.S. 74 (East) |
| | Exit 255 - U.S. 74 (West) | - | \$0.28 | \$0.61 | \$0.81 | \$1.40 | \$1.67 | \$2.27 | \$2.72 |
| | Exit 257 - Indian Trail-Fairview Rd. | \$0.28 | - | \$0.33 | \$0.53 | \$1.12 | \$1.39 | \$1.99 | \$2.44 |
| Ļ | Exit 259 - Unionville-Indian Trail Rd. | \$0.61 | \$0.33 | - | \$0.20 | \$0.79 | \$1.06 | \$1.66 | \$2.11 |
| Point | Exit 260 - Rocky River Rd. | \$0.81 | \$0.53 | \$0.20 | - | \$0.59 | \$0.86 | \$1.46 | \$1.91 |
| Entry | Exit 264 - U.S. 601 | \$1.40 | \$1.12 | \$0.79 | \$0.59 | - | \$0.27 | \$0.87 | \$1.32 |
| ш | Exit 266 - Morgan Mill Rd. | \$1.67 | \$1.39 | \$1.06 | \$0.86 | \$0.27 | - | \$0.60 | \$1.05 |
| | Exit 270 - Austin Chaney Rd. | \$2.27 | \$1.99 | \$1.66 | \$1.46 | \$0.87 | \$0.60 | - | \$0.45 |
| | Exit 273 - U.S. 74 (East) | \$2.72 | \$2.44 | \$2.11 | \$1.91 | \$1.32 | \$1.05 | \$0.45 | - |

Vehicle Classifications

Class 1 🖤 🐨 o Tolls shown for 2-AXLE vehicles with an NC Quick Pass account



Tolls for vehicles with 3 AXLES are two times (2x) the Class 1 vehicle toll

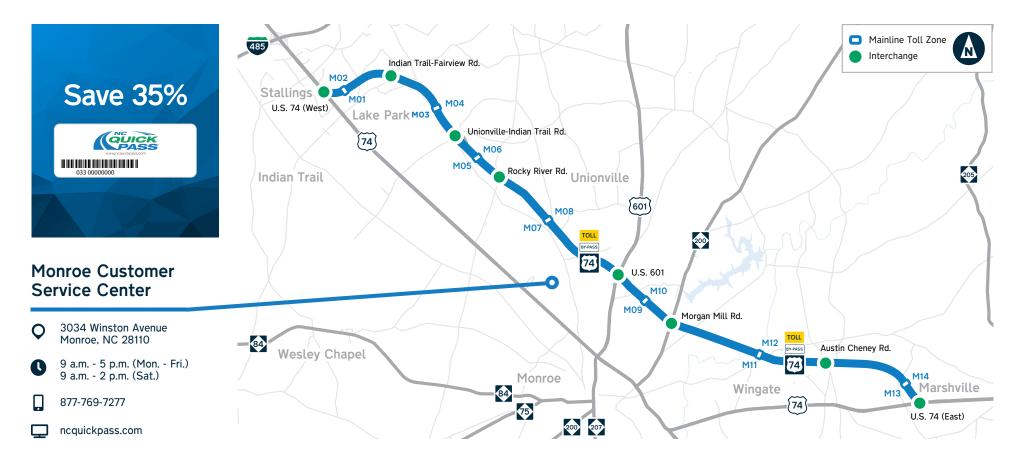


Tolls for vehicles with 4 or more AXLES are four times (4x) the Class 1 vehicle toll



Monroe Expressway Toll Locations

2022



Toll Zone Descriptions

| Toll Zone | Location / Description |
|-----------|---|
| M01 | 74 BYP EB, U.S. 74 to Indian Trail-Fairview Rd. |
| M02 | 74 BYP WB, Indian Trail-Fairview Rd. to U.S. 74 |
| M03 | 74 BYP EB, Indian Trail-Fairview Rd. to Unionville-Indian Trail Rd. |
| M04 | 74 BYP WB, Unionville-Indian Trail Rd. to Indian Trail-Fairview Rd. |
| M05 | 74 BYP EB, Unionville-Indian Trail Rd. to Rocky River Rd. |
| M06 | 74 BYP WB, Rocky River Rd. to Unionville-Indian Trail Rd. |
| M07 | 74 BYP EB, Rocky River Rd. to U.S. 601 |

| Toll Zone | Location / Description |
|-----------|---|
| M08 | 74 BYP WB, U.S. 601 to Rocky River Rd. |
| M09 | 74 BYP EB, U.S. 601 to Morgan Mill Rd. |
| M10 | 74 BYP WB, Morgan Mill Rd. to U.S. 601 |
| M11 | 74 BYP EB, Morgan Mill Rd. to Austin Chaney Rd. |
| M12 | 74 BYP WB, Austin Chaney Rd. to Morgan Mill Rd. |
| M13 | 74 BYP EB, Austin Chaney Rd. to U.S. 74 |
| M14 | 74 BYP WB, U.S. 74 to Austin Chaney Rd. |