

# North Carolina Turnpike Authority

Board of Directors - Operations Committee Meeting

June 18, 2020



# Opening Comments

**JJ Eden**

Executive Director



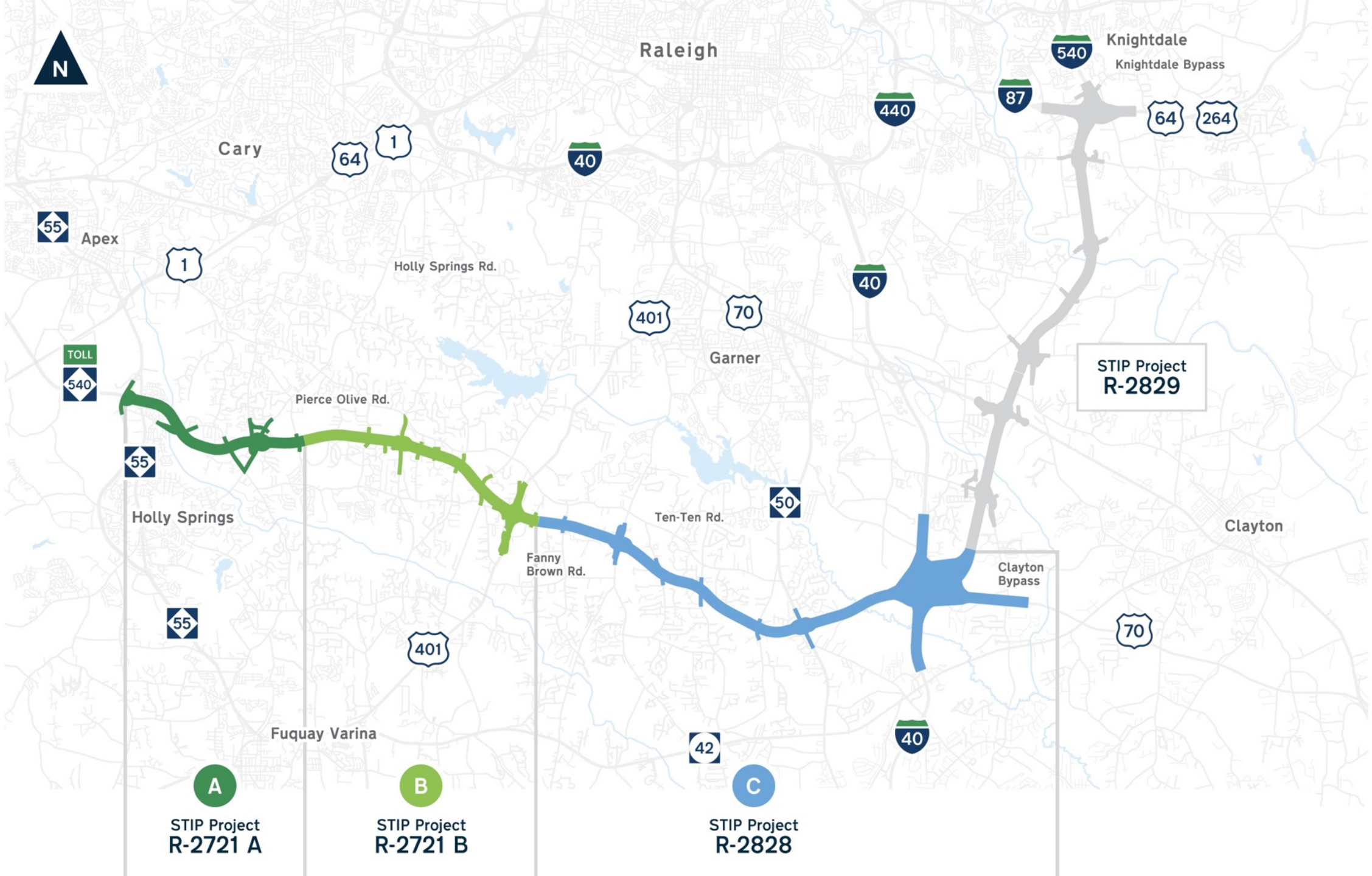
## April Statistics

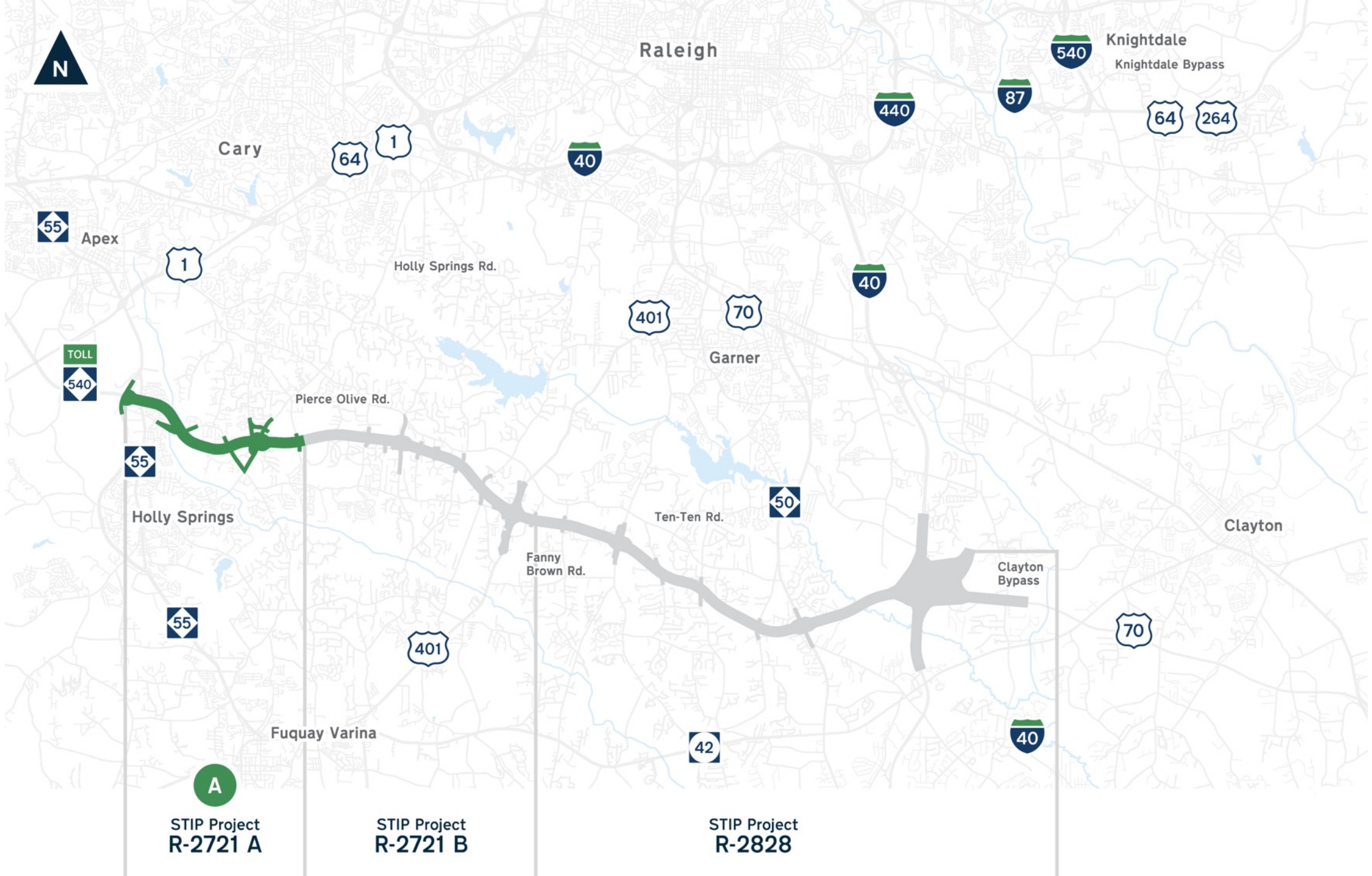
- **Triangle Expressway**
  - Transactions - 1.9 million
  - Revenue - \$3.4 million
- **Monroe Expressway**
  - Transactions - 1.6 million
  - Revenue - \$1.5 million
- **Transponders**
  - Nearly 9,700 distributed
  - Over 832,000 distributed program-to-date as of April 30, 2020

# Complete 540 Construction Update

**Dennis Jernigan, P.E.**  
Director of Highway Operations







R-2721A

A

74%

Plans for  
Construction

4.3 miles

Length of Project

\$183.5M

Cost of Contract

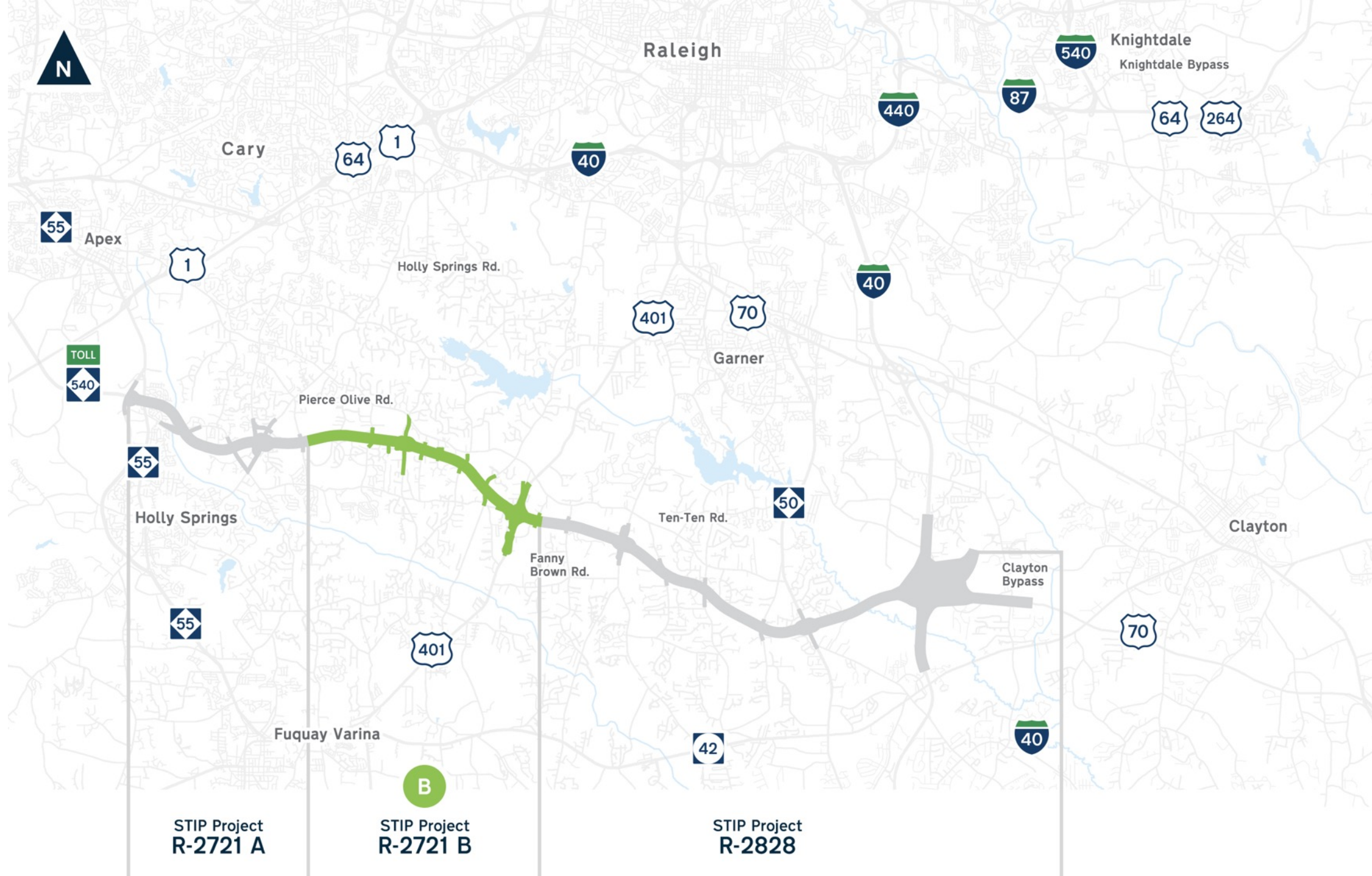
193

Design Submittals

97%

Parcels Settled







R-2721B

B

77%

Plans for  
Construction

4.9 miles

Length of Project

\$160.0M

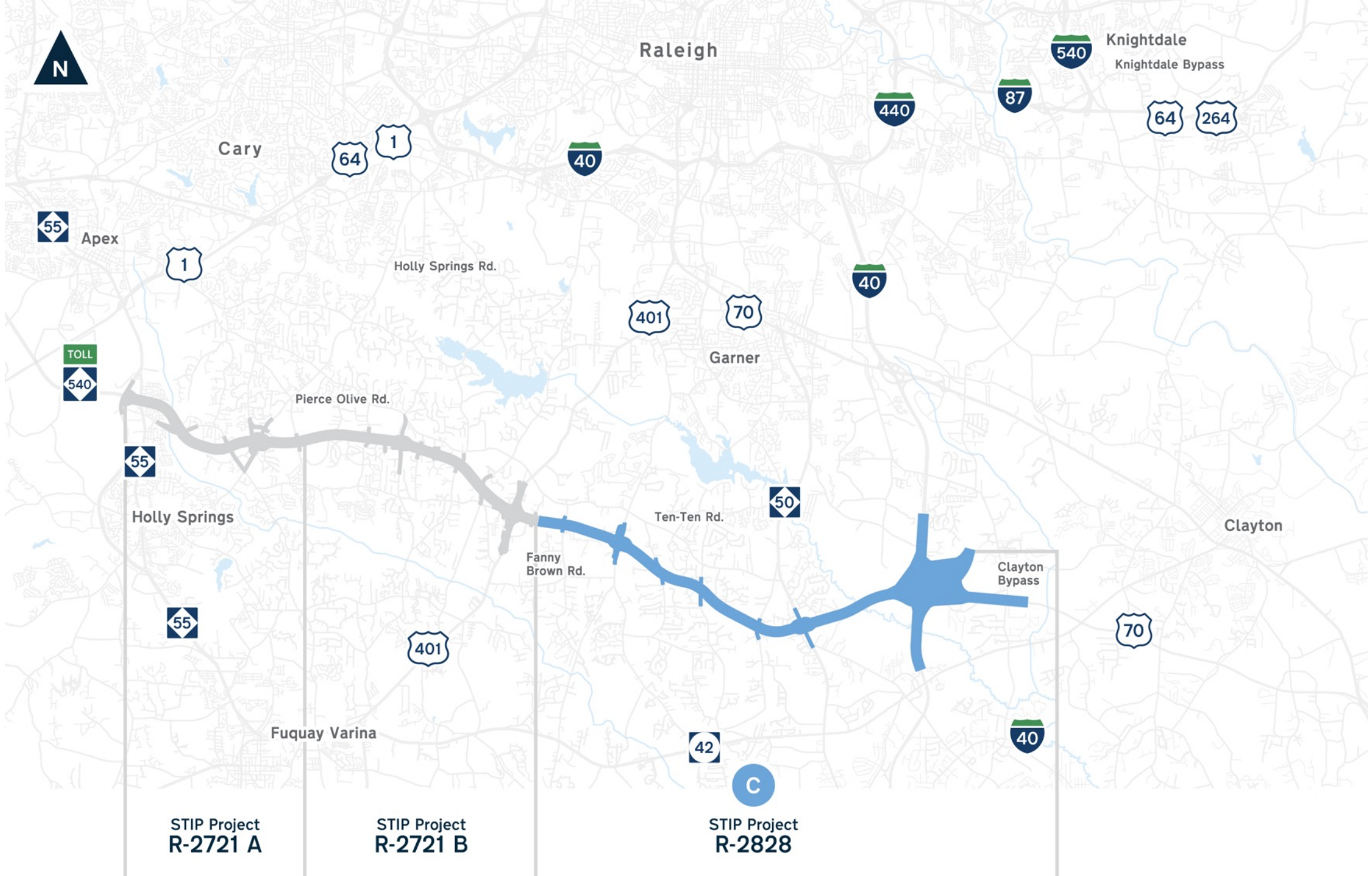
Cost of Contract

152

Design Submittals

95%

Parcels Settled



STIP Project  
R-2721 A

STIP Project  
R-2721 B

STIP Project  
R-2828

R-2828



90%

Plans for  
Construction

8.6 miles

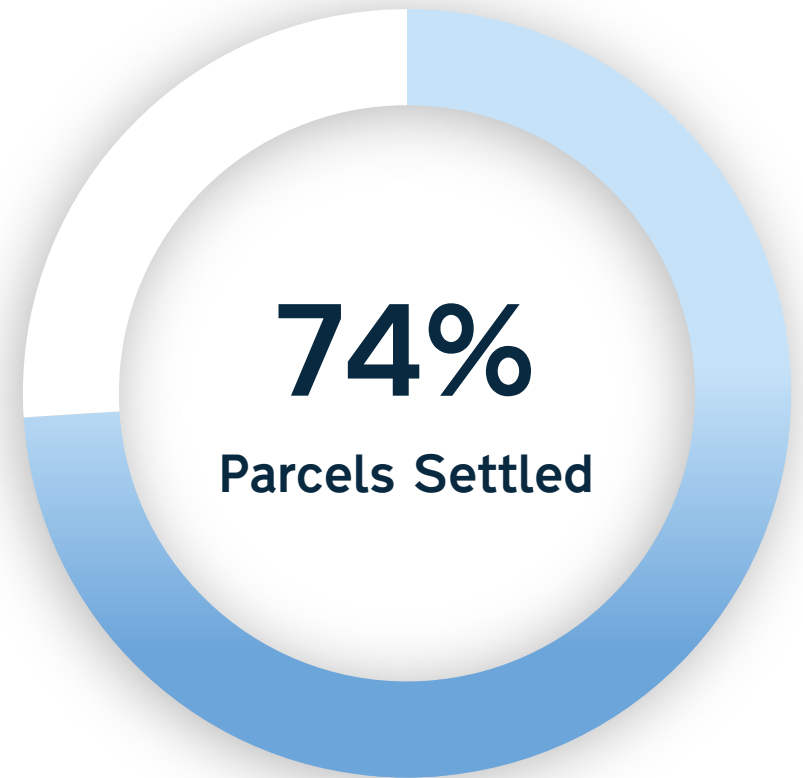
Length of Project

\$403.2M

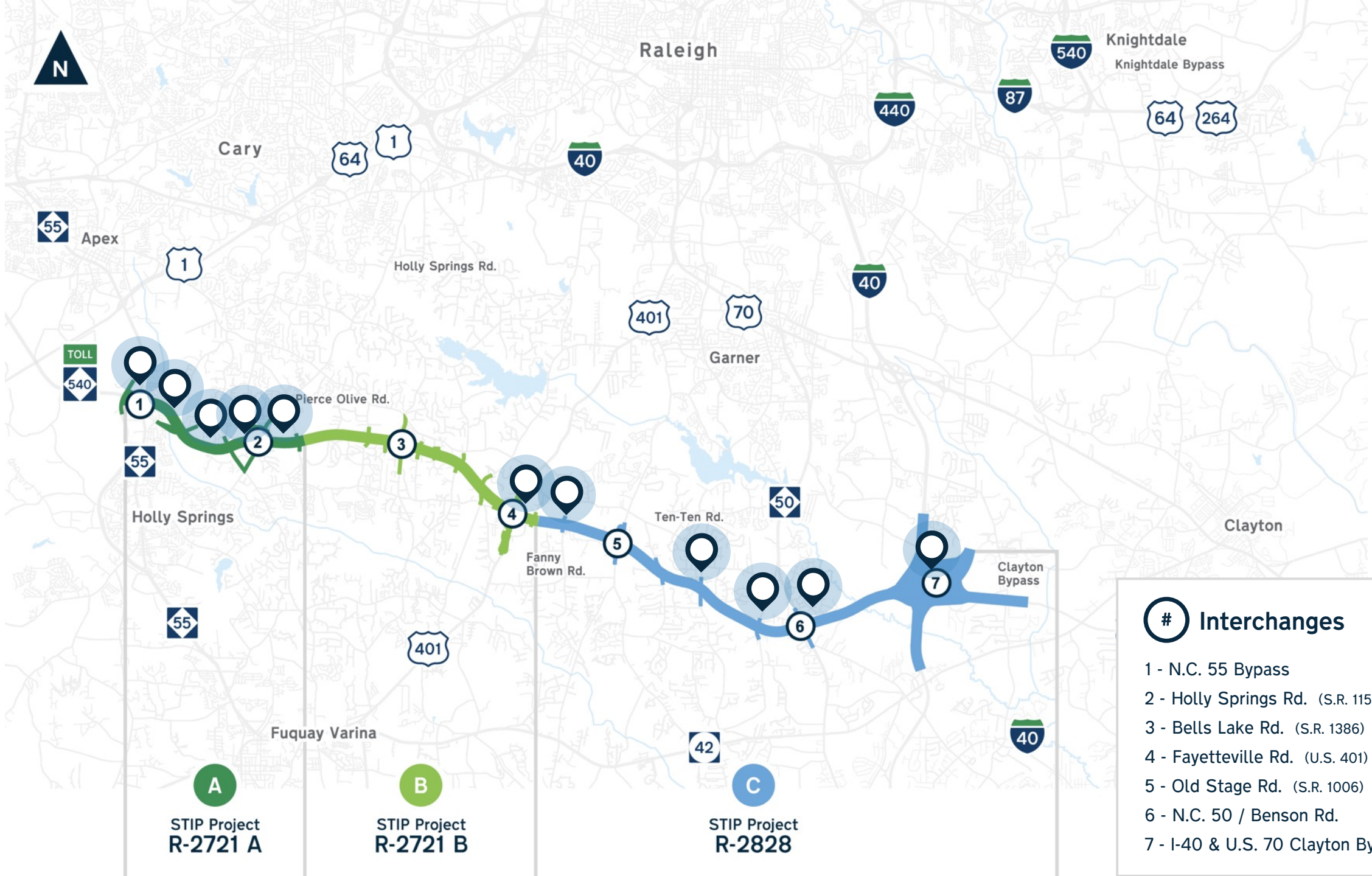
Cost of Contract

363

Design Submittals





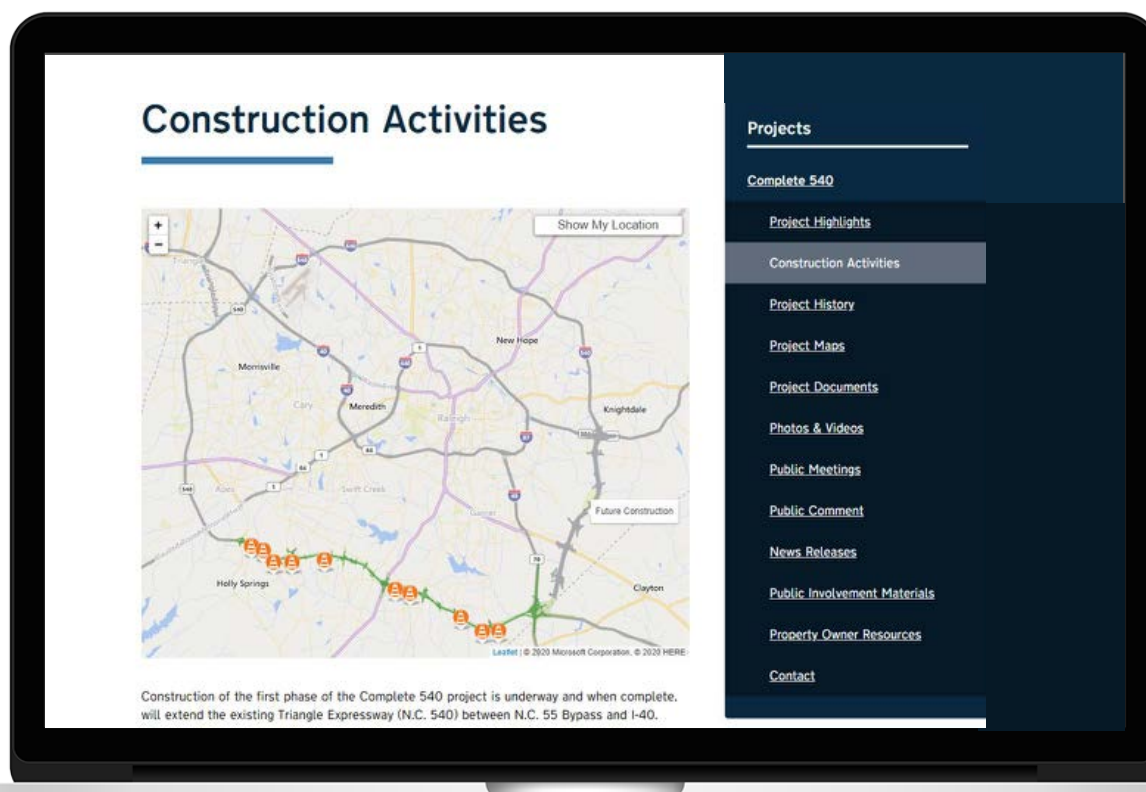


## # Interchanges

- 1 - N.C. 55 Bypass
- 2 - Holly Springs Rd. (S.R. 1152)
- 3 - Bells Lake Rd. (S.R. 1386)
- 4 - Fayetteville Rd. (U.S. 401)
- 5 - Old Stage Rd. (S.R. 1006)
- 6 - N.C. 50 / Benson Rd.
- 7 - I-40 & U.S. 70 Clayton Bypass



# Complete 540 Interactive Map



Creative

Connected

Convenient



# Turnpike Projects



The N.C. Turnpike Authority is authorized to study, plan, develop, build, operate and maintain toll projects.

## Divisions

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[Sections & Units](#)

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[Turnpike Projects](#)

[Toll Collection](#)

[Turnpike Governance](#)

[Investor Relations](#)

[Doing Business](#)

























Wake  
Tech





























# Complete 540 Outreach



Virtual Neighborhood Meetings

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Complete 540 Interactive Map

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Resident Communications

# Service Center Contract Transition

**Manish Chourey**  
Chief Technology Officer



# CSC Covid-19 Response

## Pandemic Update

- Employees and Embedded Consultants working remotely
- Website trends indicate 45%-50% reduction in traffic
- Call volumes remain at 70-80% compared to Feb-2020 volumes
- New debt collections suspended effective 3/30/2020
- NCTA suspended invoice escalation effective 4/3/2020

## CSC Operation is in Code Red

- Walk-in Centers are shutdown since 3/18/2020
- CSR's are spaced out to meet social distancing (6+ feet)
- Plans to Reopen are under considerations
- Keeping current with incoming workload
- Expansion Area occupancy certificate received on 5/22/2020
- Expansion Area is used for CSR Training, Transponder storage and BOS2 upgrade IV&V Test area



# Operations Contract Transition

- Operator GC Services commenced Operations Saturday 5/31/2020.
- Lower production work and call volumes allowed controlled transition.
- Transition of former AECOM (154) staff members to GC employment has been relatively smooth.
- The new GC management team (the six key personnel) become more comfortable with each day.
- GC Services IT transition tasks took longer than planned but had no impact to operations.
- There are no critical outstanding items however GC team continues to close out documentation related to 'Implementation Phase'.
- AECOM's departure was smooth and cordial; three key staff will remain on-site for approximately 60 days for AECOM Contract closure and final invoicing tasks.

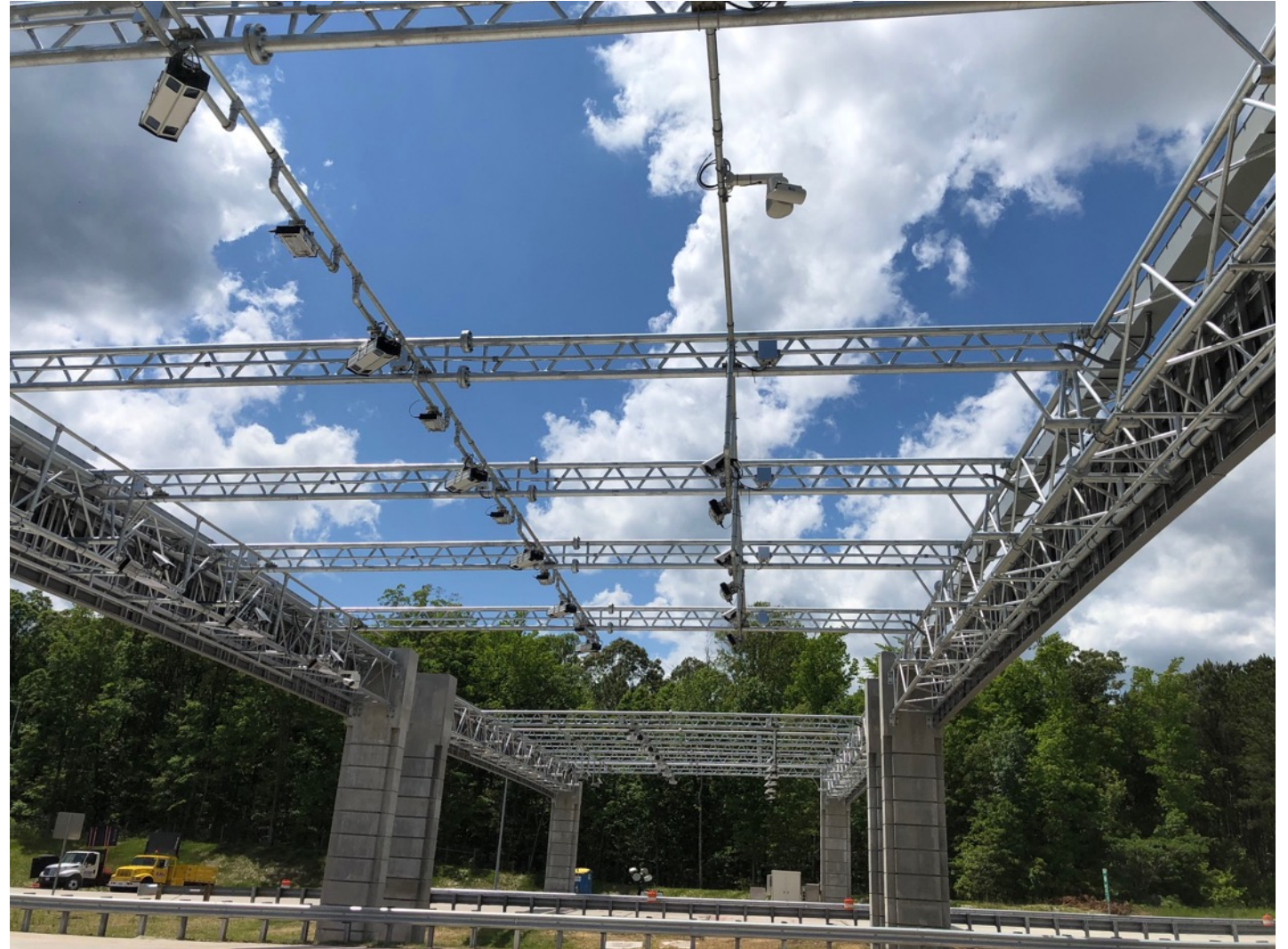


# Morrisville Mainline Toll Zone Transition

**Manish Chourey**  
Chief Technology Officer



# Toll System Installation





# Morrisville Interchange Toll System

## Upcoming Major Milestones

- Working with Kapsch to receive updated project schedule for the remaining work
- Roadside and Host servers are installed at Morrisville CSC data center
- Disaster recovery (secondary) Host server is getting installed in Austin
- Kapsch continues to develop their installation plan for this effort and projects a new plan will be submitted next week

## Testing

- Interface Testing completed first week of June between Legacy and New system
- Roadside and Host system end to end and commissioning test scheduled in July

## Training

- Host Admin Training Workbook and User Manual review completed. Analyzing how the training can be conducted remotely
- CMT: Initial training was provided 5/21 and the STOC staff has confirmed they are now able to support Kapsch ITS devices (installation completed first week of June)



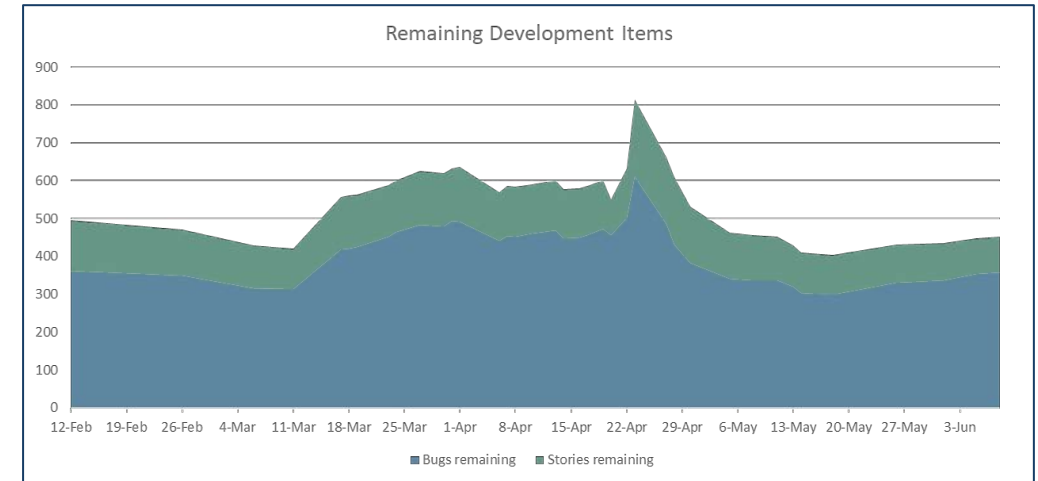
# Toll Technology Update

**Manish Chourey**  
Chief Technology Officer



# BackOffice System Update

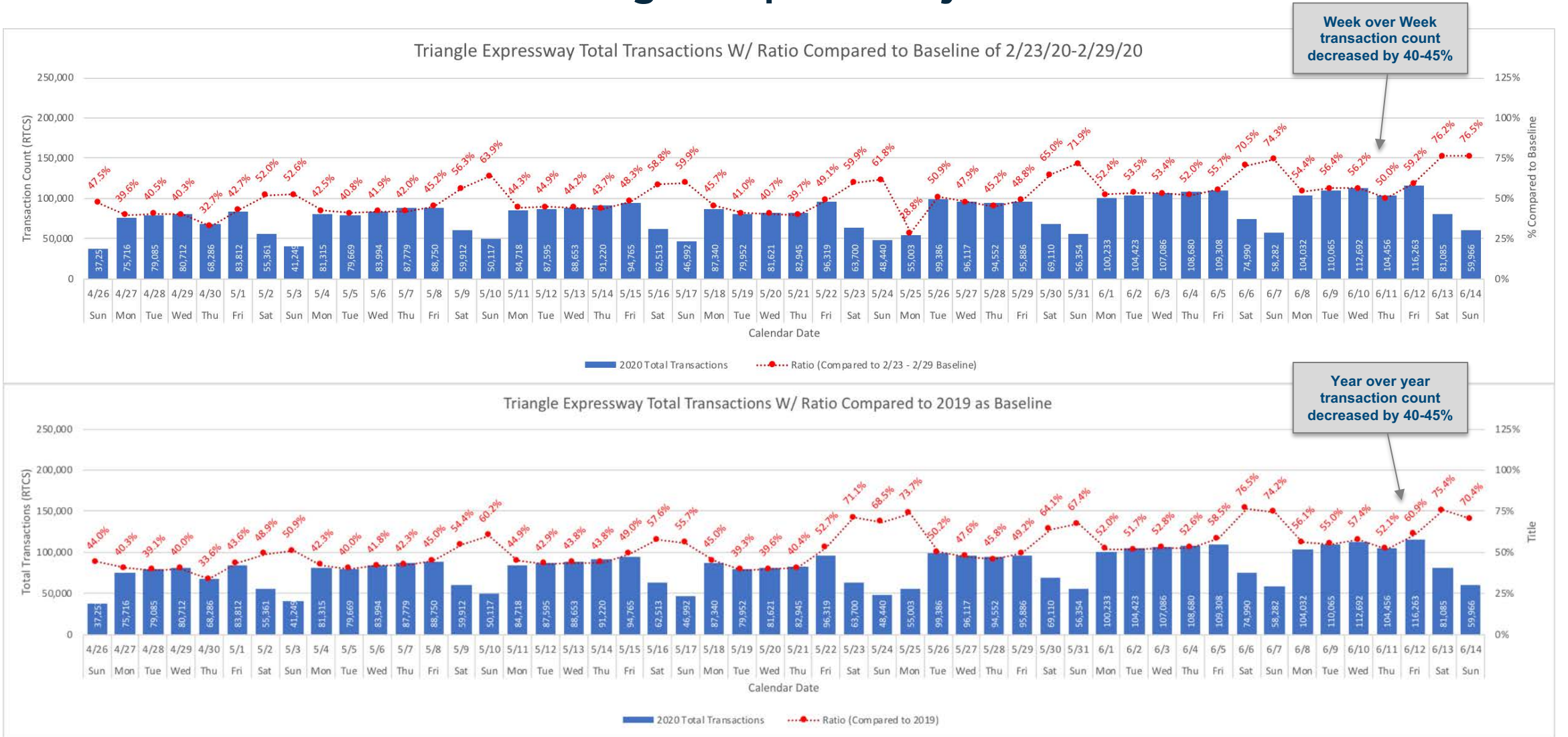
- Data migration multiple iterations planned
  - first iteration completed
  - Incremental iteration started
- 3 different phases of testing
  - Functional testing few punch items left to close (Delayed by over 7 months)
  - Interface testing – Summer 2020
  - Performance testing – Fall 2020
- Additional testing Independent Validation and Verification (IV&V) cycle
- CSR Training – 30-45 days prior to system transition date
- System Transition – Fall 2020



Interface	Dev	Connectivity	Test	Summary
IVR	✓	✓	95%	Testing various scenarios on IVR
Mailhouse	✓	✓	90%	Testing correspondence sample files (19 of 23 documents formally approved)
RTCS	✓	✓	90%	LFFTC testing w/Monroe – bug fixes underway
IAG	✓	✗	90%	Testing Correction Interface
SE Hub	✓	✗	90%	Testing Correction Interface
NC DMV	✓	✗	90%	Test connectivity established, pending prod connection
NC SAP	✓	✗	90%	Pending completion of Finance Recon to test with SAP
License Plate Lookup	✓	✓	90%	Pending DMV agreements from NCTA
Retail Payment Provider	✓	✗	75%	MG setting up testing site
ACH and CC Payment	✓	✓	90%	Working through AMEX refresh
Lockbox	✓	✓	95%	CDM setup complete, testing underway for CDM
Collections	85%	✗	60%	Provided sample new assignment and payment file to Duncan
HOV – RTCS	✓	✓	90%	APIs developed, pending test with I-77
Email / SMS – Twilio	✓	✓	92%	Corr content and triggers have been loaded, testing

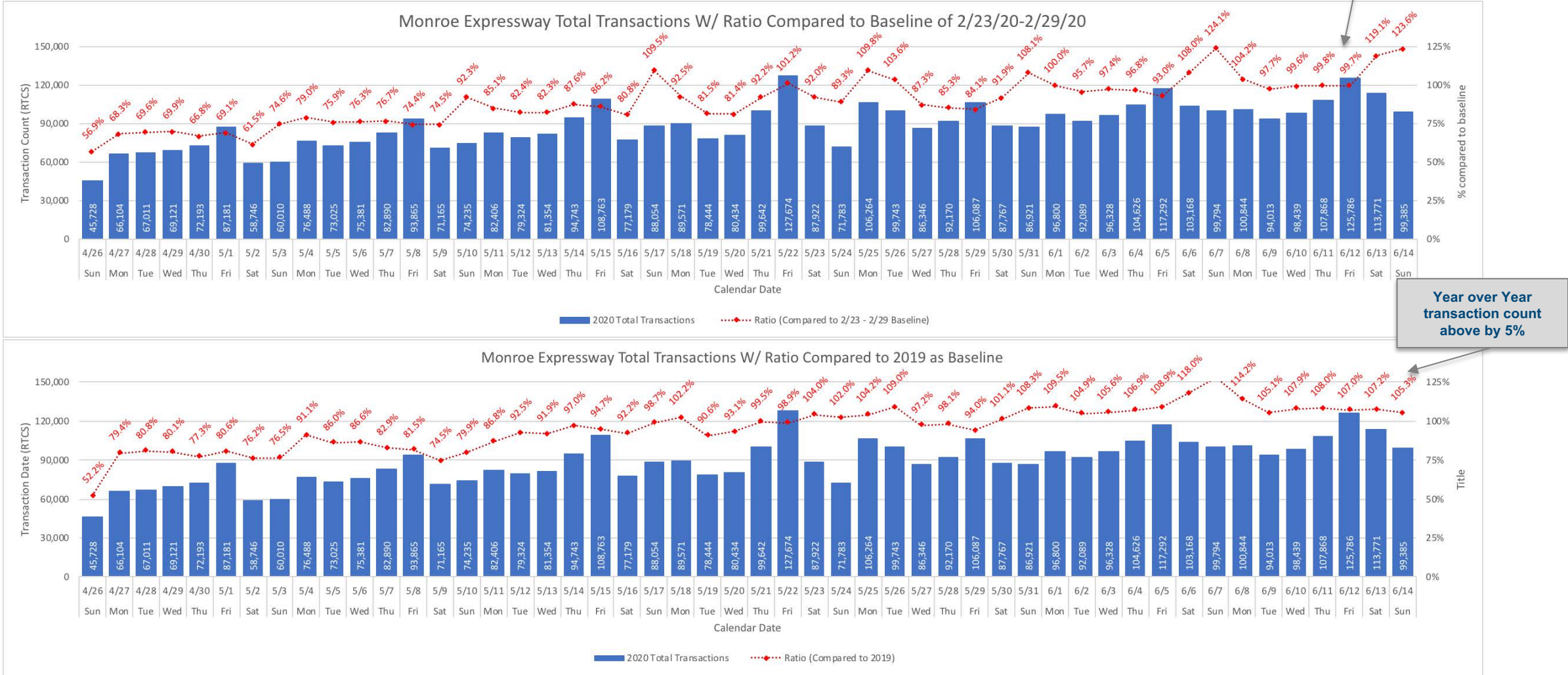


# Transaction Statistics – Triangle Expressway





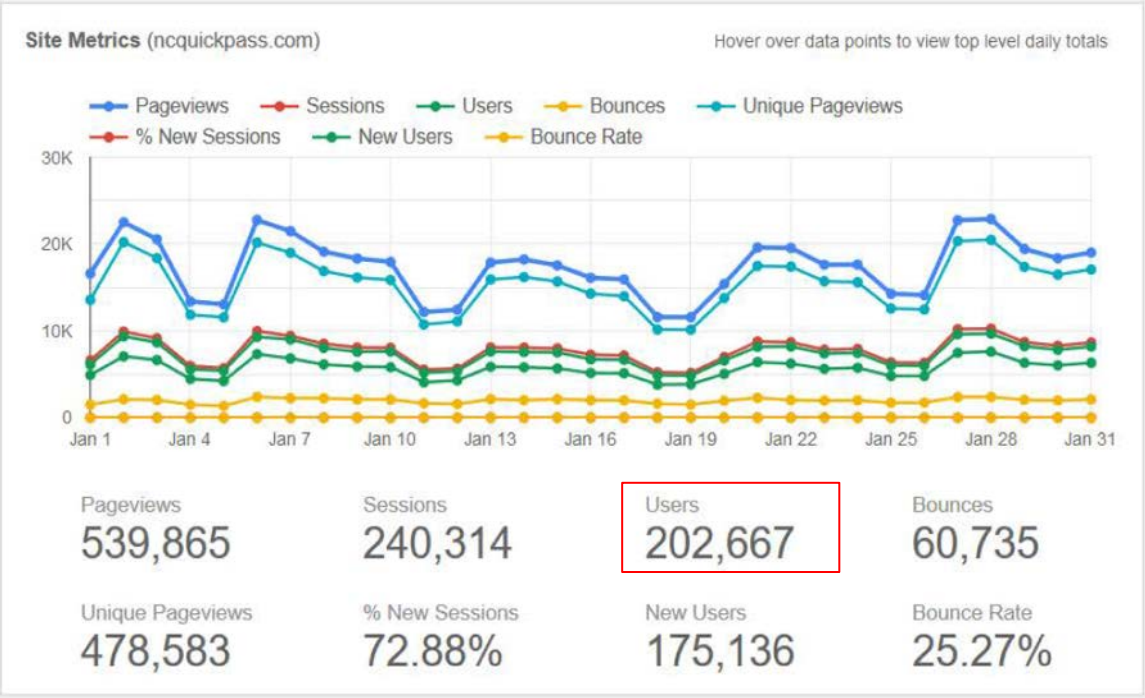
# Transaction Statistics – Monroe Expressway





# NCTA Quick Pass Web Site Metrics

January-2020



May-2020





# I-485 Express Lanes Update

**Andy Lelewski, P.E.**  
Director of Program Development



# Division 10 Construction Update

- 4 structures and 1 box culvert are under construction.
- Over 29 miles of portable concrete barrier have been installed.
- Approximately 11,000 LF of pipe have been constructed.



Segment C Median  
Widening near Rea Road



# Division 10 Construction Update

- Over 8 miles of median widening is under construction.
- Soil stabilization, ABC placement, and asphalt paving is ongoing.
- Over 6,000 LF of conduit has been installed for ITS/AET facilities.



Segment C Median  
Widening near  
Providence Road



# Division 10 Construction Update

- John St. interchange bridge widening is underway.





# Division 10 Construction Update

- Ballantyne Commons Parkway bridge foundations began on 6/1/20.





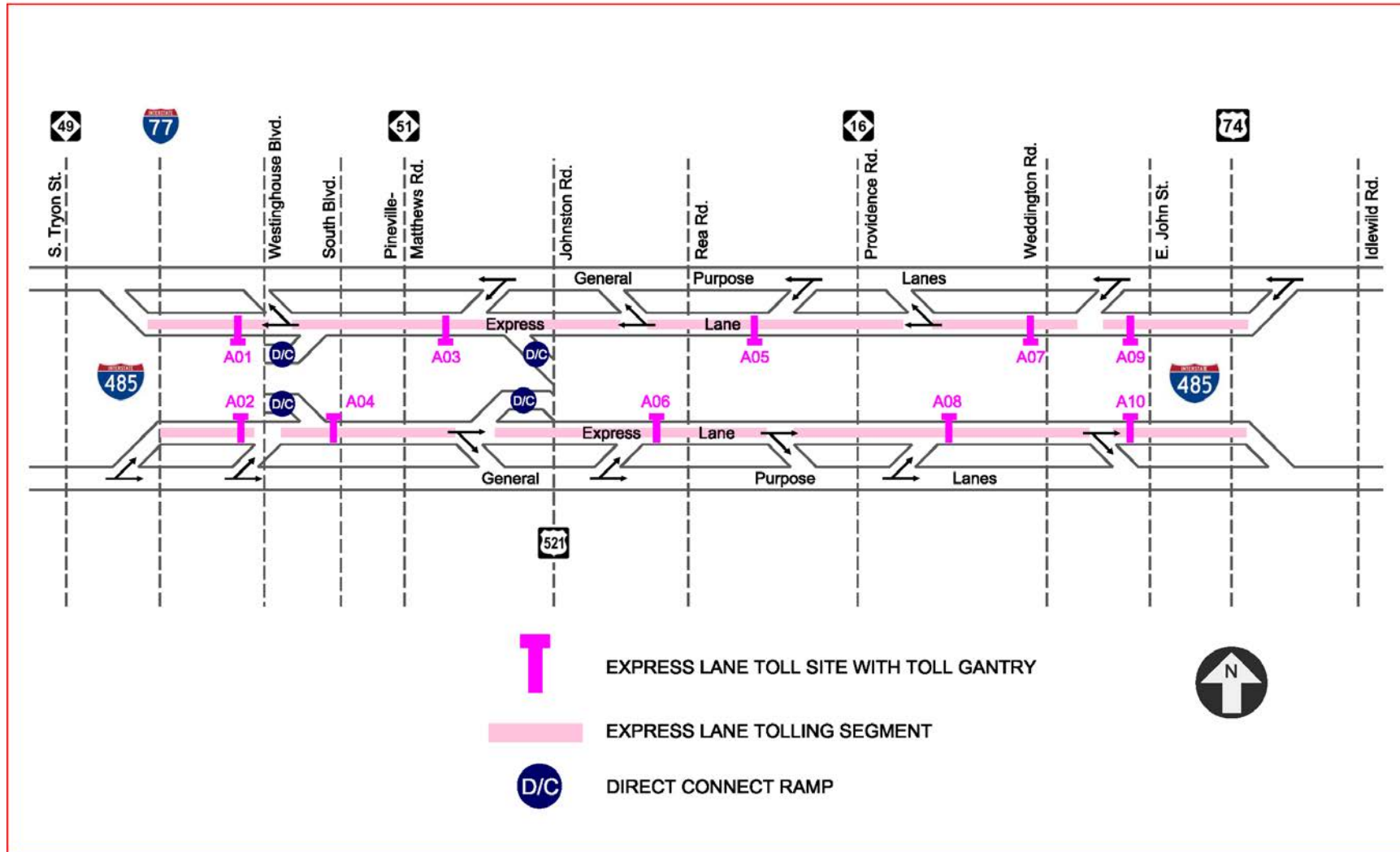
# Toll Collection System

## NCTA will provide:

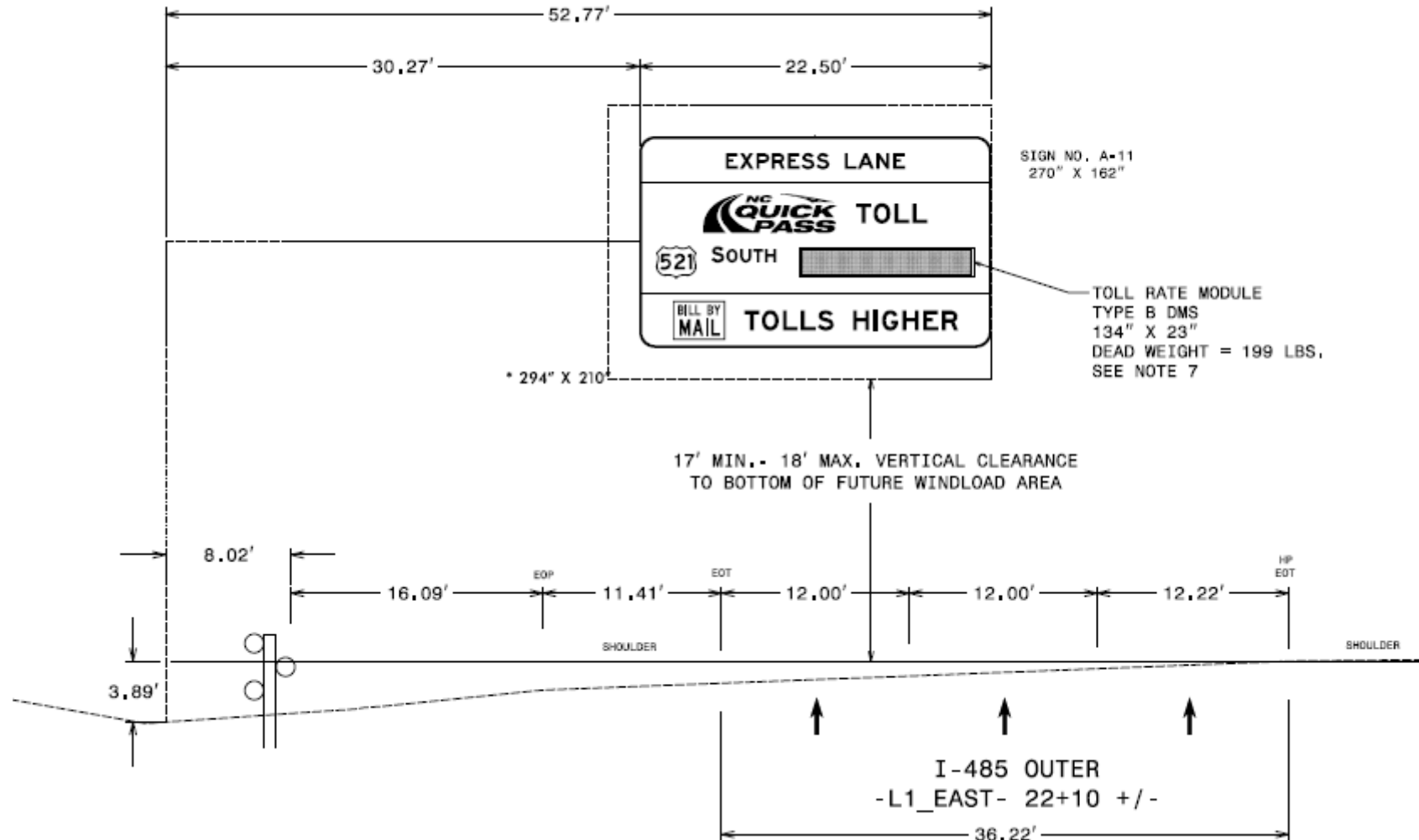
- Design, test, installation, operations, and maintenance of the Roadside Toll Collection System (RTCS)
- Dynamic pricing system
- Operations and maintenance of some components of the Intelligent Transportation System (ITS)



# Toll Sites & Toll Segments

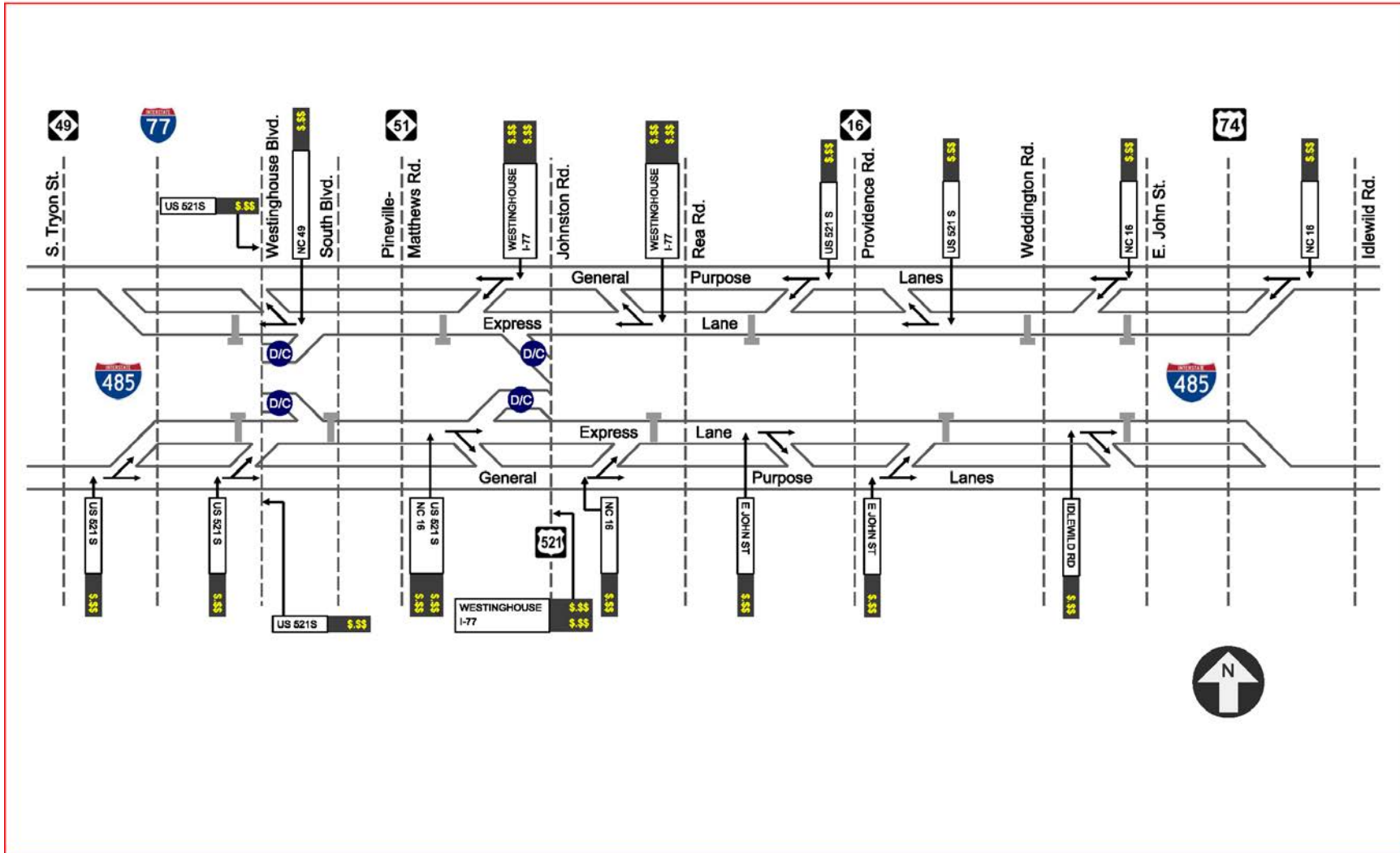


# Toll Rate Sign Detail

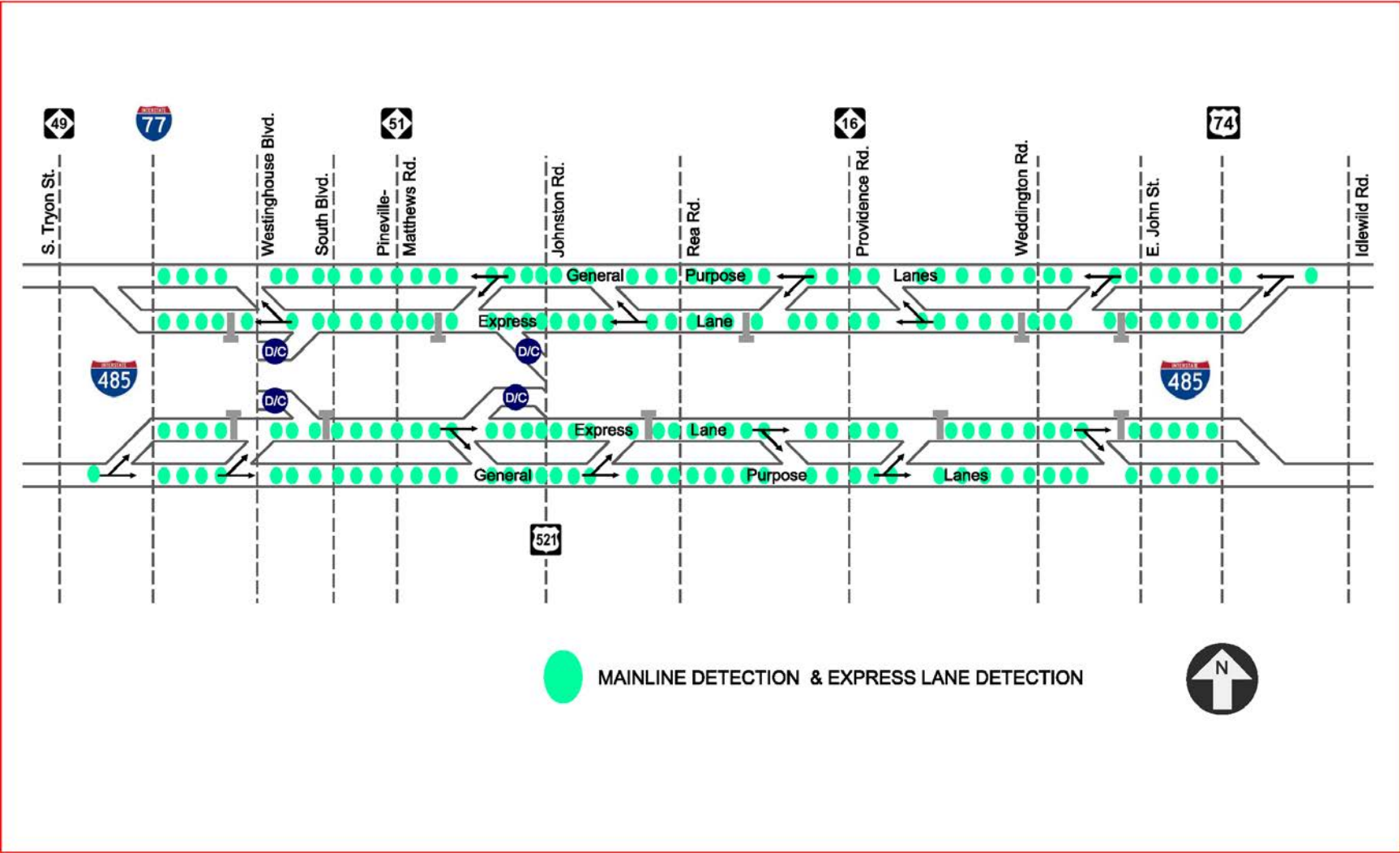




# Toll Rate Signs



# Dynamic Pricing Detection





# NCTA Activities

## Recent NCTA Accomplishments

- Review of Toll Zone Infrastructure, Intelligent Transportation System, Toll Collection Signing/Pavement Marking submittals

## Upcoming NCTA Work

- Continue review of submittals
- Monitoring of Early Work along the corridor
- Development of RTCS Request for Proposals

## Schedule

- Summer 2020 – Release of RTCS Request for Proposals
- Fall 2022 – Commencement of tolling



**Thank you!**