

North Carolina Turnpike Authority

NCTA Finance Committee Meeting

July 20, 2022



Finance Committee



Robert D. Teer Jr.
Finance Committee
Chairman



John Adcock
Finance Committee
Member



**Dr. Pamela
Gibson Senegal**
Finance Committee
Member



**James 'Jim'
Walker**
Finance Committee
Member

Other Board Members



J. Eric Boyette
Chairman of the Board



Mary N. Clayton
Board Member



Sam Hunt IV
Board Member



Montell W. Irvin
Board Member



**Charles 'Chuck'
Travis III**
Board Member

Opening Comments

J.J. Eden
Executive Director

Complete 540 Construction Update

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























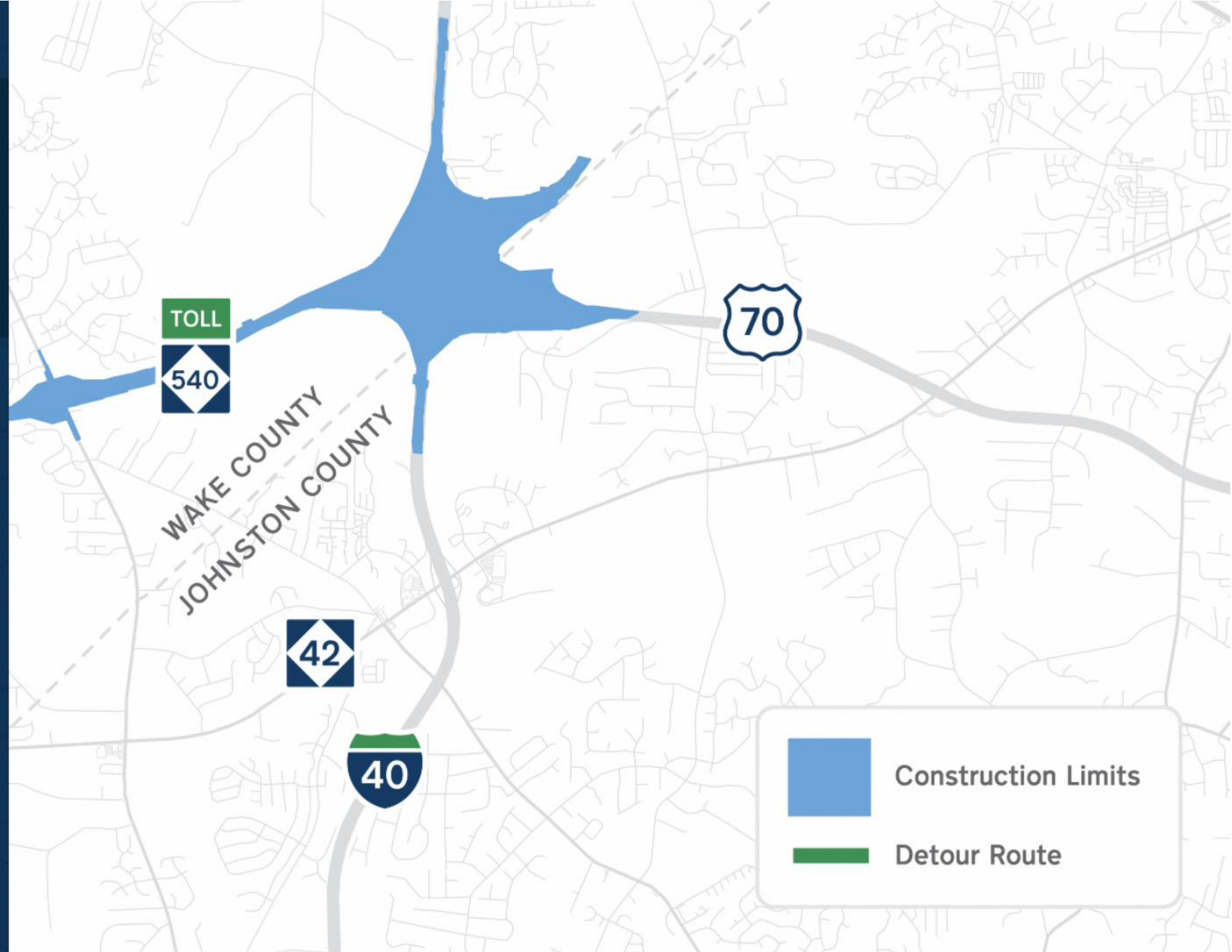








Temporary Detour for U.S. 70 West to N.C. 42 West & I-40 East





PPP, Inc.
4486 Industrial Park Rd.
Green Cove Springs, FL 32043
Office: 904.448.4074
Toll Free: 888.717.7771
Fax: 904.448.4076

To:
North Carolina Turnpike Authority
North Carolina Department of Transportation
1636 Gold Star Drive
Raleigh, NC 27607-3371

Attn: Alan Shapiro
Subject: LaneAlert 2x Production Hold

Dear Alan,

For the past 30-years, I have been dedicated to the distribution, discovery, and development of road safety infrastructure solutions. Solutions that potentially save the lives of our mothers, fathers, sons, and daughters that drive on our roads every day.

For the past 8-years, I have focused primarily on the problem of wrong-way driving. My intent and passionate pursuit was to develop what would eventually become a "simple", economical solution that could be effectively utilized regardless of budgets or borders. The concept was to develop a new class of pavement markings that provided overwhelming effective directional messaging and warning to errant drivers. From this pursuit came the LaneAlert 2x.

We have literally been overwhelmed by the response and interest in the LaneAlert 2x. Individuals of agencies that are dedicated to finding innovative ways to provide safety for those that use and work on our roads daily. Unfortunately, for the past 2-years, our efforts and success have been repeatedly thwarted. The most impactful has been the shortage of materials. No sooner do we find a solution to one developmental problem, does another come up due to the shortages. Thus, we seek, trial, and fast-track alternative materials causing added delays, costs, and problems. In recent weeks the supply chain further tightened. Every component of the LaneAlert 2x has been impacted by these shortages.

These shortages impede our ability to effectively provide a quality pavement marking system. Like many inventors and entrepreneurs do, I have poured my heart, soul, time, and financial resources into this pursuit. So it is with great difficulty that we reach the point where I must resign to the fact, that at this time, we must put the manufacturing of the LaneAlert 2x on hold. Although we are unsure of when we will be able to fulfill our previous commitments, we will make diligent efforts to do so as soon as these materials become available.

For now, we ask that you place any LaneAlert 2x related projects on hold. Likely, we will not have the proper materials needed in the 2022 striping season.

If you would like to withdraw your purchase order, we understand and will accept such requests. Regardless we will alert you immediately when our production is back on line.

Please accept my sincerest apology on this matter.

Greg Driskell
PPP, Inc. President/CEO



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Greg Driskell
PPP, Inc. President/CEO

www.pppcatalog.com

Community Outreach



2022 Complete 540 Outreach



Presentations

Nearly 500 participants
over 17 meetings



Informing Residents

Over 5,682 postcards
& 10 Nextdoor posts



Resident Inquiries

223 emails & 164 calls to
the Complete 540 Hotline

Upcoming Presentations: Knightdale Town Council,
Johnston County Building Industry Association,
Triangle Commercial Realtors Association

Interns Update

Sam Capps

Bio

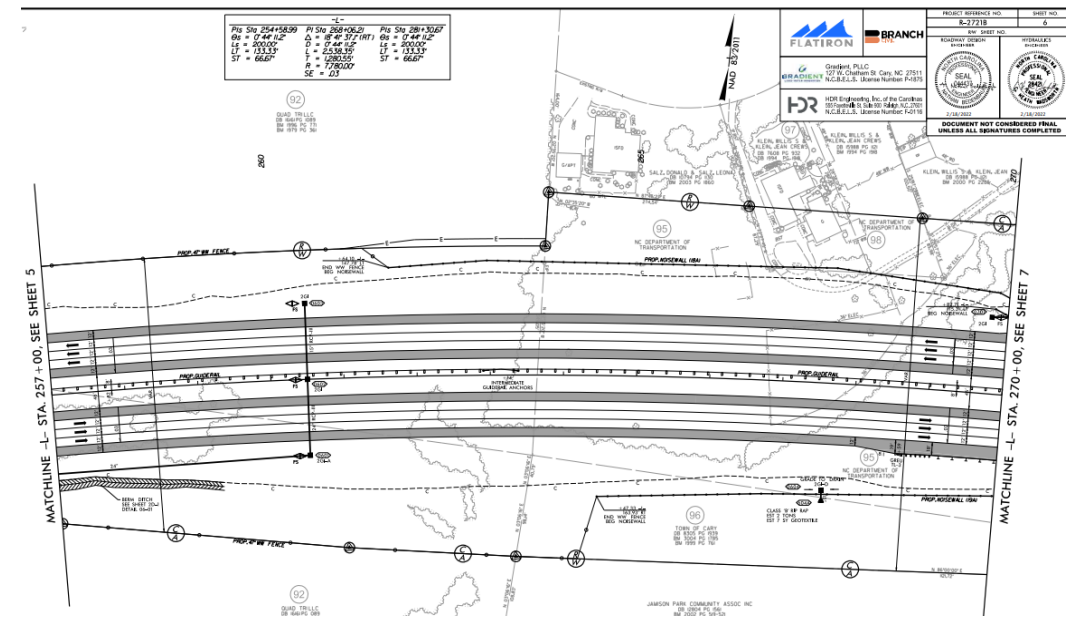
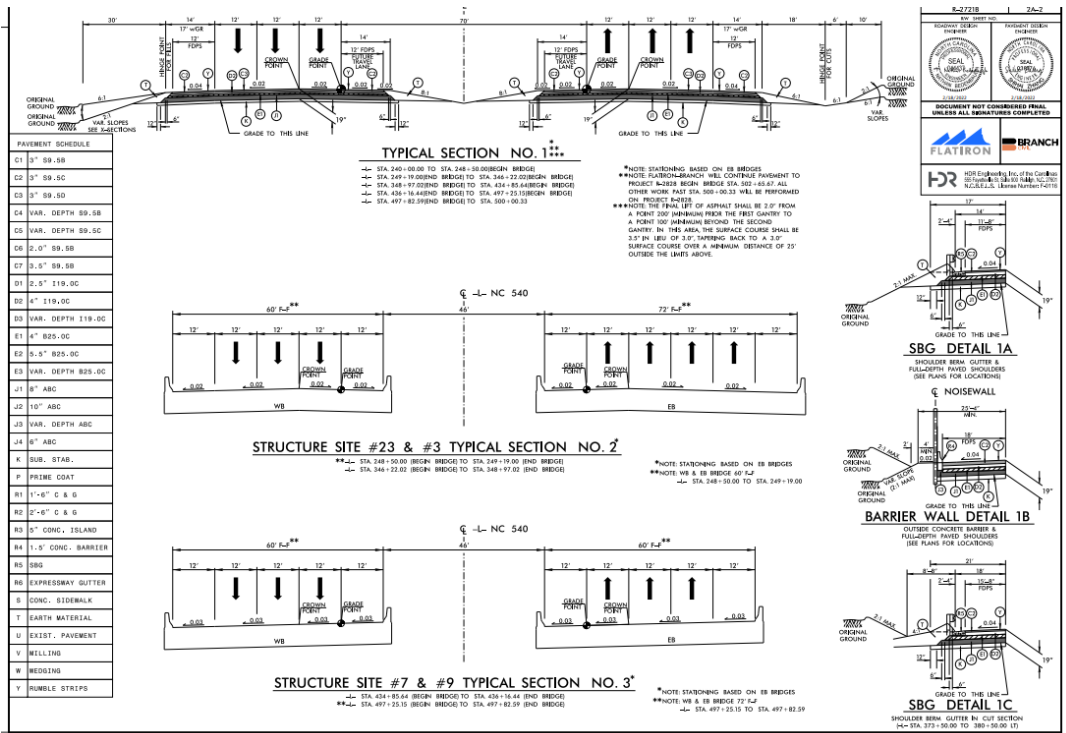


Sam Capps– Construction Engineering Intern

- North Carolina State University
- Class of 2025
- Civil Engineering

Experiences:

- Project Scope
- Survey
 - Grade
 - Drainage
 - Bridges
- Structures



Long Term Benefits

- School
- Career



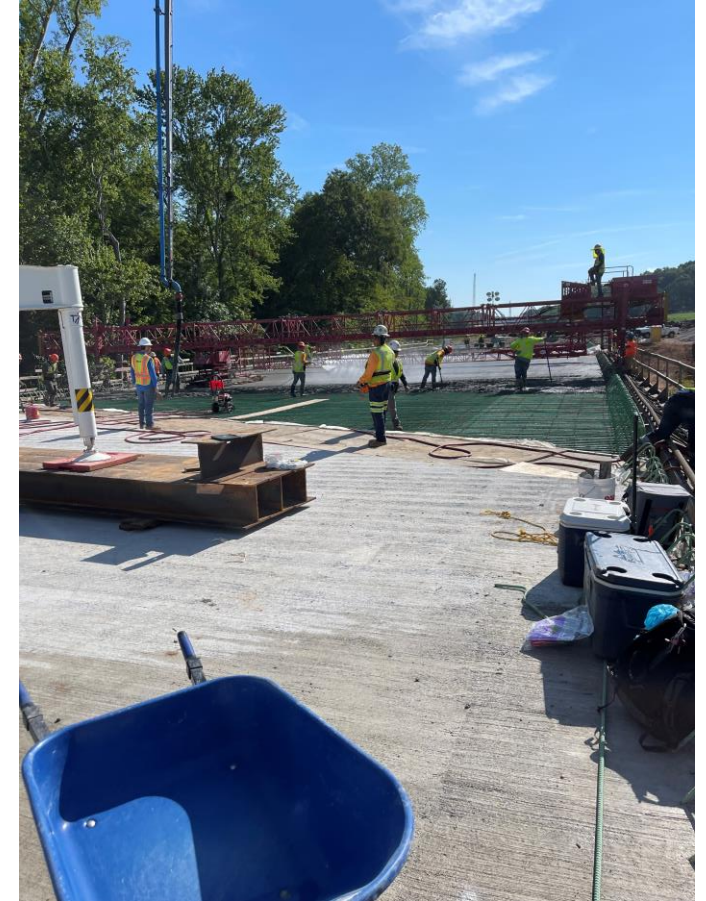
**NC STATE
UNIVERSITY**



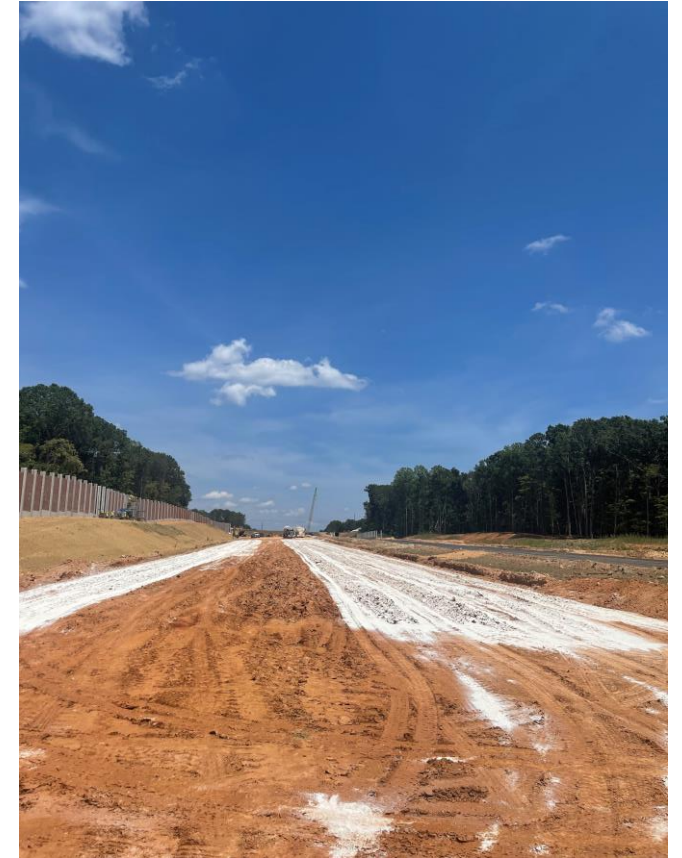
**COLLEGE OF
ENGINEERING**

Highlight of the Summer for me:

- Concrete Testing



Thank you



Complete 540 Spend Update

Travis Feltes, P.E.
Project Engineer

Plan of Finance Cost Tracking

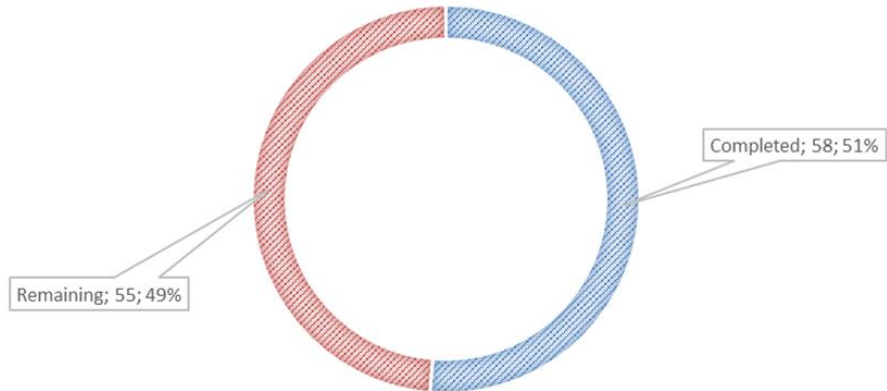
	DESCRIPTION	Cost Estimate (\$M)	Spent as of June 30, 2022	% of Budget Spent
R-2721A	Construction	\$ 227.75	\$ 137.34	60%
	Landscaping	\$ 2.67	\$ -	0%
	Right of Way	\$ 74.93	\$ 75.91	101%
	Utilities	\$ 20.67	\$ 13.92	67%
	Agency Costs:	\$ 26.48	\$ 14.13	53%
	PROJECT SUB-TOTAL	\$ 352.50	\$ 241.29	68%
R-2721B	Construction	\$ 205.68	\$ 126.23	61%
	Landscaping	\$ 2.32	\$ -	0%
	Right of Way	\$ 81.67	\$ 83.44	102%
	Utilities	\$ 18.76	\$ 12.38	66%
	Agency Costs:	\$ 21.55	\$ 14.99	70%
	PROJECT SUB-TOTAL	\$ 329.98	\$ 237.05	72%
R-2828	Construction	\$ 422.41	\$ 236.88	56%
	Toll Integration	\$ 21.24	\$ 0.43	2%
	Landscaping	\$ 5.84	\$ -	0%
	Right of Way	\$ 48.99	\$ 51.79	106%
	Utilities	\$ 36.57	\$ 31.12	85%
	Agency Costs:	\$ 77.92	\$ 51.58	66%
	PROJECT SUB-TOTAL	\$ 612.97	\$ 371.81	61%
TOTAL	Construction	\$ 855.83	\$ 500.45	58%
	Toll Integration	\$ 21.24	\$ 0.43	0%
	Landscaping	\$ 10.83	\$ -	0%
	Right of Way	\$ 205.59	\$ 211.15	103%
	Utilities	\$ 76.00	\$ 57.41	76%
	Agency Costs:	\$ 125.95	\$ 80.70	64%
	PROJECT COST FOR FINANCING	\$ 1,295.44	\$ 850.14	66%

Right of Way Update

Project	Standard Parcels	Condemnation Parcels	MAP Act Parcels	Total
R-2721 A	140	44	28	212
R-2721 B	129	33	60	222
R-2828	128	36	51	215
Total	397	113	139	649

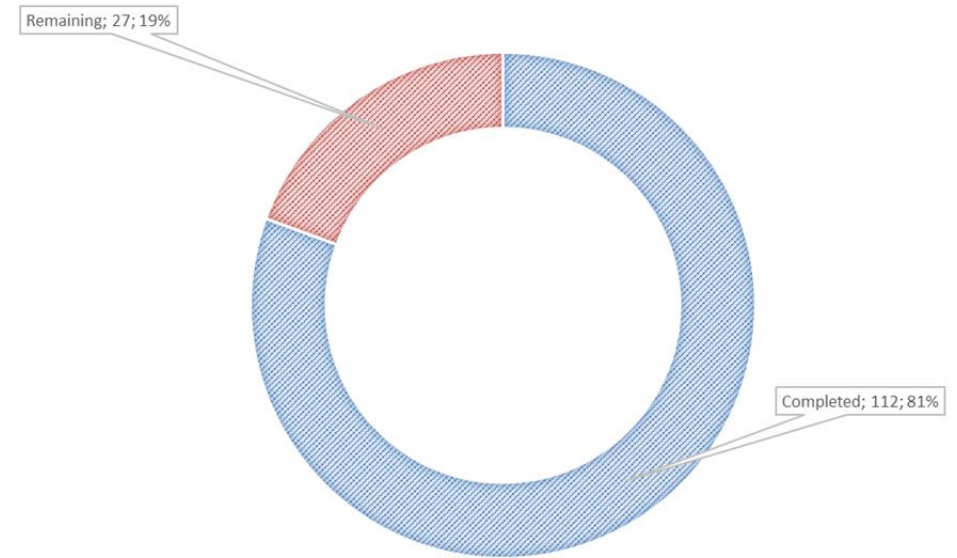
CONDEMNED PARCELS, 113 TOTAL
(190 INCLUDING MAP ACT PARCELS)

■ Completed ■ Remaining



MAP ACT PARCELS, 139 TOTAL

■ Completed ■ Remaining



Contingencies

Contingency Item	Current Plan of Finance Budget	Previous Report (3/31 /2022 Data)
Third Party Delay Contingency	\$0	\$2,570,000
Contingency & Reserves	\$0	\$3,180,000
Fuel & AC Reserves	\$4,900,000	\$4,990,000
Total	\$4,900,000	\$10,740,000

Project	Supplement Budget	Supplemental Agreement Total	% Spent	Amount Remaining	% Remaining
R-2721 A	\$43,747,150	\$43,747,150	100%	\$0	0%
R-2721 B	\$47,684,328	\$47,684,328	100%	\$0	0%
R-2828	\$31,215,891	\$29,695,891	95%	\$1,520,000	5%
Total	\$122,647,369	\$121,127,369	99%	\$1,520,000	1%

Fuel Cost/Hedge

Early in the project, NCTA entered into a Fuel Hedge to de-risk the plan of finance. The premium for this plan was \$254,000 and the strike price for the hedge is \$2.40/gallon.

Fuel Cost Adjustment					Fuel Hedge Payout
	R-2721A	R-2721B	R-2828	Total	Total
Prior FY's	\$ 28,519.21	\$ 12,411.64	\$ 297,379.21	\$ 338,310.06	\$ -
July-21	\$ (8,370.45)	\$ (7,473.57)	\$ 10,987.53	\$ (4,856.49)	\$ -
August-21	\$ (9,471.19)	\$ (8,865.94)	\$ 20,128.27	\$ 1,791.14	\$ -
September-21	\$ (8,217.97)	\$ (14,792.33)	\$ 14,886.91	\$ (8,123.39)	\$ -
October-21	\$ (5,593.66)	\$ (16,434.65)	\$ 3,738.51	\$ (18,289.80)	\$ 16,311.27
November-21	\$ (3,131.71)	\$ (22,684.91)	\$ (18,783.96)	\$ (44,600.58)	\$ -
December-21	\$ (8,474.37)	\$ (11,382.53)	\$ (9,654.21)	\$ (29,511.11)	\$ -
January-22	\$ (3,086.89)	\$ (2,641.35)	\$ (1,171.27)	\$ (6,899.51)	\$ 6,463.71
February-22	\$ (4,784.90)	\$ (12,392.96)	\$ (34,036.97)	\$ (51,214.83)	\$ 14,878.44
March-22	\$ (23,735.68)	\$ (27,156.05)	\$ (41,134.92)	\$ (92,026.65)	\$ 171,461.24
April-22	\$ (46,748.63)	\$ (66,634.72)	\$ (126,509.17)	\$ (239,892.52)	\$ 262,007.44
May-22	\$ (52,574.34)	\$ (44,724.51)	\$ (59,599.74)	\$ (156,898.59)	\$ 372,491.87
June-22	\$ (56,641.44)	\$ (62,785.29)		\$ (119,426.73)	\$ 468,836.50
	\$ (202,312.02)	\$ (285,557.17)	\$ 56,230.19	\$ (431,639.00)	\$ 1,312,450.47

Project	Price/Gallon
R-2721A	\$ 1.8075
R-2721B	\$ 1.8075
R-2828	\$ 2.3501

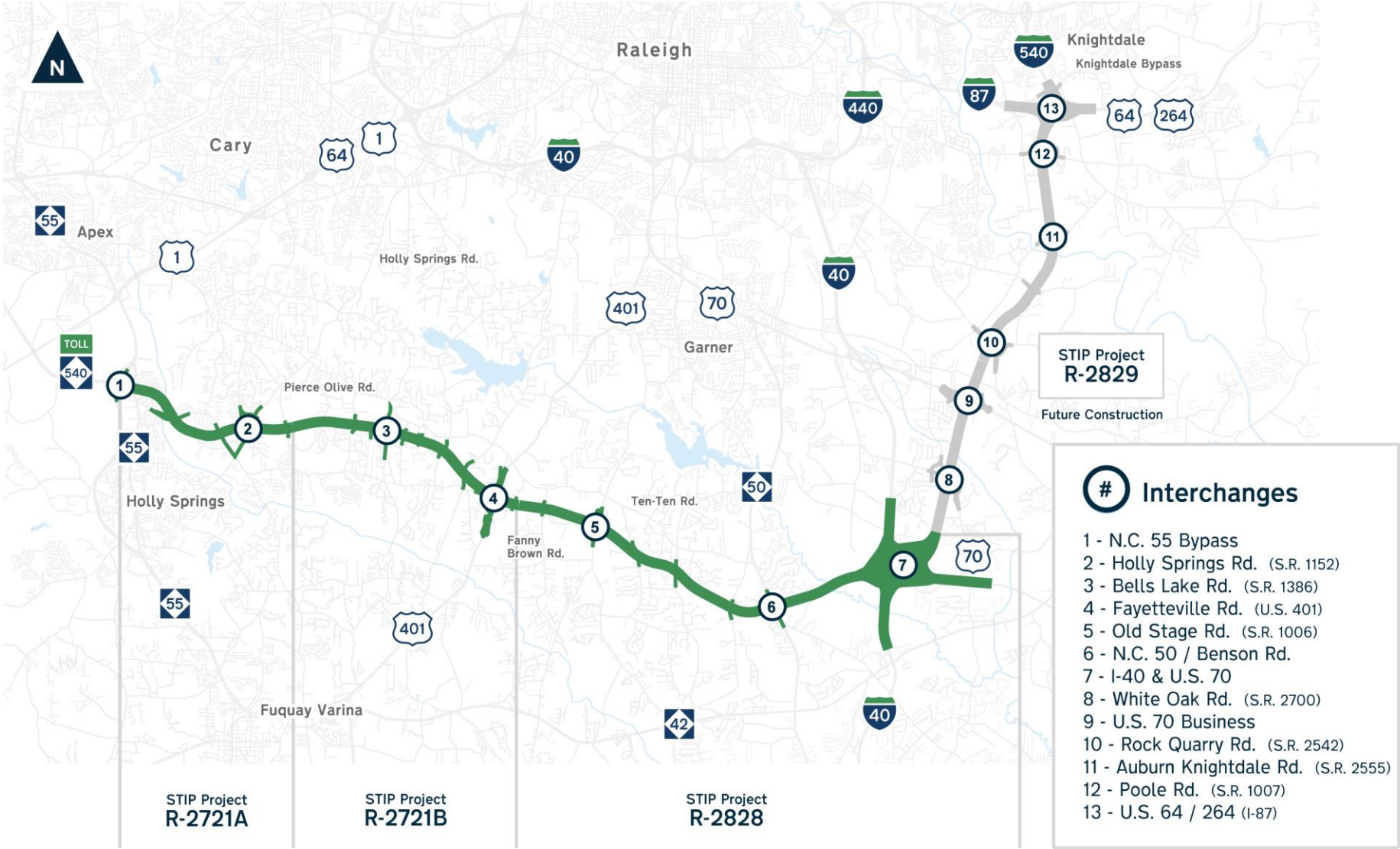
Paid out to the contractor	\$ (855,895.38)
Received from the contractor	\$ 424,256.38
Received from the hedge	\$ 1,312,450.47
Net Total	\$ 880,811.47

Complete 540 Phase 2 Update

David Roy
Chief Financial Officer

Dennis Jernigan, P.E.
Interim Chief Engineer

Complete 540 Phases 1 and 2



Projects Under Development

Initial Draft 2024-2033 State Transportation Improvement Program (STIP)

Fiscal Year that Funding Begins

1

Complete 540 Phase 2
R-2829

2026 - ROW, Utilities
2028 - Construction

2

Mid-Currituck Bridge
R-2576

2024 - ROW, Utilities, Construction

3

U.S. 74 Express Lanes
U-6103 and U-2509

2027 - ROW, Utilities
2030 - Construction

4

I-77 South Express Lanes
I-5718

Funded for Preliminary Engineering Only

Complete 540 Phase 2 - Preconstruction Activities

Completed Activities

- Environmental Document
- Section 404/401 Corridor Permits
- Biological Opinion
- Air Quality Conformity
- Final Surveys
- Traffic Forecasts and Analysis
- Service Road Study
- Confirmation of Environmental Mitigation Availability
- Roadway and Structure Geotechnical Investigations

Activities Underway

- Refining Preliminary Design
- Developing Pavement Design and Life Cycle Analyses
- Advanced Acquisition of Certain Right-of-Way Parcels
- Coordination with Owners of Towers Regarding Needed Relocations
- Planning for Community Water and Sewer Conflict Resolutions
- Railroad Coordination
- Planning for Other Long Lead-Time Items

Future Preconstruction Activities

- Update Project Cost Estimate
- Complete Pavement Design and Life Cycle Cost Analyses
- Refine Plans for Right-of-Way Acquisition
- Utility Coordination
- Developer Coordination
- Industry Coordination
- Design-Build Procurement

Complete 540 Phase 2 - Financing Activities

Items Completed

- Submitted Letter Of Intent (LOI) to TIFIA
- Invited into creditworthiness by TIFIA
- Provided responses to TIFIA's due diligence questions with CDM Smith support

Items in Progress

- Discussions with department surrounding GAP funding, STIP timeline, and project schedule
- Working with PFM to update Preliminary Plan of Finance
 - Fundings sources may include Revenue Bonds, TIFIA Loan, NC GARVEE Proceeds (From NCDOT), State and Local Match
- Beginning discussions with TIFIA on securing loan agreement

FY 2023 Budget Overview

Kim Medlin
Controller

Operations & Maintenance Budget Departments

Finance

- NCTA & Consultant Labor, Professional Services supporting NCTA's Financial Management, and NCDOT System Charges

Highway Operations

- NCTA & Consultant Labor, Routine Maintenance, Damage Claims and TMC Staffing & Facility costs

Service & Safety Patrol

- Highway Patrol and IMAP

Toll Operations

- NCTA & Consultant Labor, Utilities, RTCS & ETCS Maintenance, and BOS Maintenance

Customer Service

- NCTA & Consultant Labor, CSC Staffing & Facility Costs, and CC Expenses

Communications & Marketing

- NCTA & Consultant Labor, Sponsorships, Marketing Materials

Administrative

- NCTA Labor & Travel, NCTA Supplies & Materials, Annual Audit

FY2023 Budgets

Triangle Expressway

Operations & Maintenance		
Department	Budget	Change from FY 2022
Finance	\$1,108,255	27.9%
Highway Operations	3,313,060	9.0%
Service & Safety Patrol	270,600	2.1%
Toll Operations	12,673,969	51.7%
Customer Service	9,603,481	33.9%
Communications & Marketing	517,250	43.5%
Administrative	540,000	27.1%
Total	\$28,026,615	36.8%

Major Change from FY 2022 include:

- Finance: NCDOT indirect cost rate increases
- Toll Operations: \$3.4M retrofit carryover and switch from buy versus lease for back-office system
- Customer Service: operations staff rate increases and additional staff at Rocky Mount center
- Communications: reprioritization of marketing efforts to pre-pandemic level
- Administrative: staff salary increases and travel to pre-pandemic level

FY2023 Budgets

Monroe Expressway

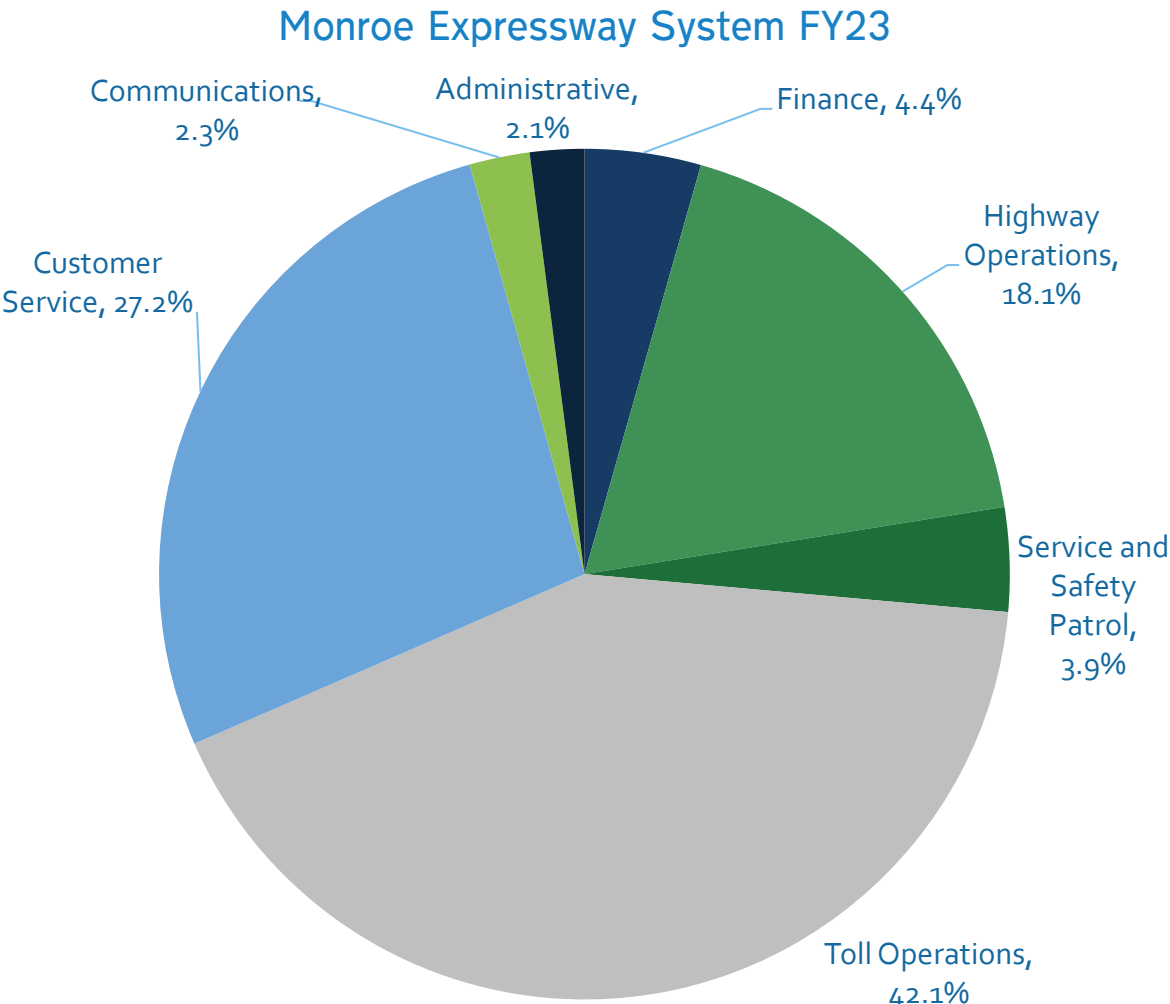
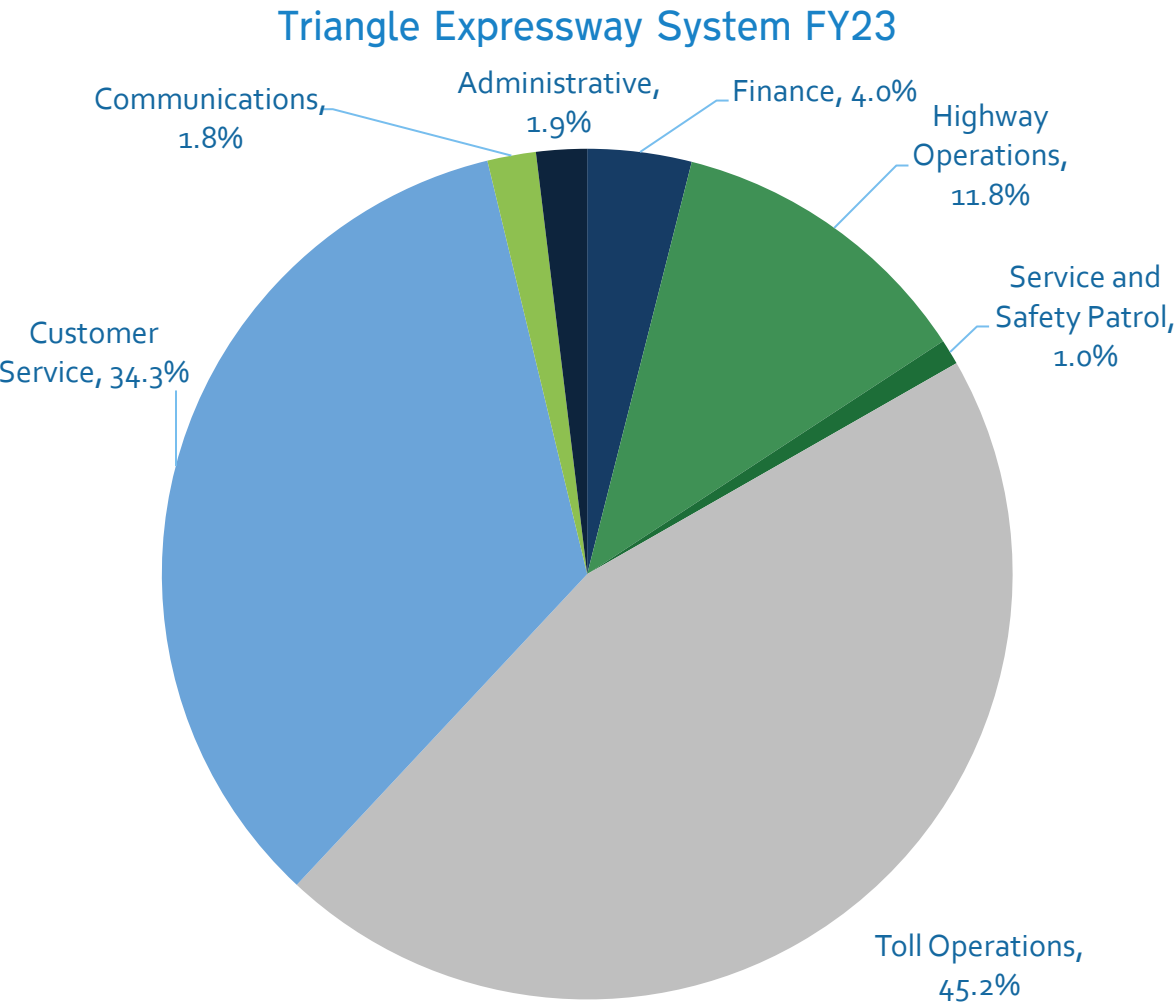
Operations & Maintenance		
Department	Budget	Change from FY 2022
Finance	\$721,671	5.2%
Highway Operations	2,952,249	9.6%
Service & Safety Patrol	645,640	1.8%
Toll Operations	6,874,938	0.4%
Customer Service	4,442,300	31.4%
Communications & Marketing	373,751	-5.3%
Administrative	337,500	-18.2%
Total	\$16,348,049	8.6%

Major Change from FY 2022 include:

- Customer Service: operations staff rate increases and additional staff at Rocky Mount center

Operations & Maintenance Budget Departments

Budget Departments as a Percentage of Total Budget



Renewal & Replacement Budget Departments

Finance

- NCDOT System Charges – Charges for various NCDOT program uses (e.g., Business System Improvement Project Costs)

Highway Operations

- Roadway – Capital costs associated with roadway improvement

Toll Operations

- Facilities – Costs associated with vaults that house toll gantry related equipment
- Intelligent Transportation Systems (ITS) – Costs associated with roadside devices for toll collection systems (CCTV, MVDS, etc.)
- Toll Collection Systems – Costs associated with the toll collection system itself (Back Office System, Roadside Toll Collection Systems, Electronic Toll Collection Systems, etc.)

FY2023 Budgets

Triangle Expressway

Renewal & Replacement	
Department	Budget
Finance	\$308,464
Highway Operations	7,542,000
Toll Operations	161,000
Total	\$8,011,464

Major FY23 R&R Activities include:

- Re-sheeting Signs: \$3.3M shift from FY22
- Remove/Replace Markings/ Lenses: \$2.1M shift from FY22
- Patch/Re-Seal Concrete: \$1.3M shift from FY22

FY2023 Budgets

Monroe Expressway

Renewal & Replacement	
Department	Budget
Finance	\$28,890
Highway Operations	270,000
Toll Operations	849,500
Total	\$1,148,390

FY2023 Budget Report

- Final budgets are presented publicly in the Annual Budget Report
 - Published on NCTA Investor Information website
<https://www.ncdot.gov/divisions/turnpike/investor/Pages/default.aspx>
- Submitted to Government Finance Officers Association (GFOA)
 - NCTA received the “Distinguished Budget Presentation Award” for Fiscal Years 2021 and 2022
- Provides a comprehensive look at NCTA’s budgets and financial status



GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

**North Carolina Turnpike Authority
North Carolina**

For the Fiscal Year Beginning

July 01, 2021

Christopher P. Morill

Executive Director

Communications & Marketing Intern Update



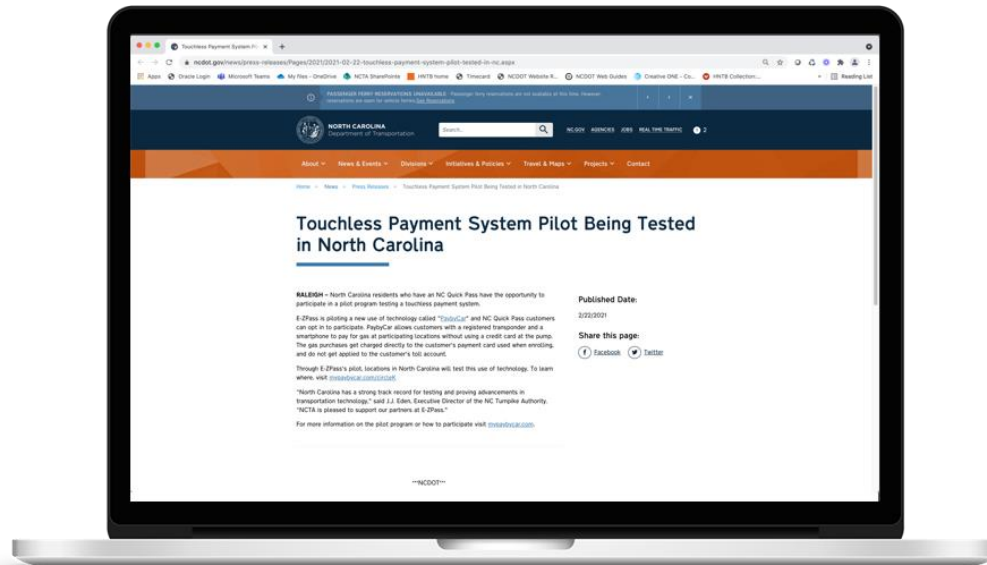
Caroline Hiel
Communications Intern

- University of South Carolina
- Class of 2023
- Marketing Advertising Major

Projects

1	Graphic Design and Communications Training
2	Complete 540 Grand Opening
3	NCTA Employee Reference Guide

Complete 540 Grand Opening



NCTA Employee Reference Guide

2021



North Carolina Turnpike Authority

An Enterprise Fund of the North Carolina Department of Transportation



Trainings



Technical Writing



Press Release Tips
and Tricks



Workplace Best Practices



Graphic Design

Interns Update

Areeba Khokhar

Areeba Khokhar

- Rising Junior at the University of North Carolina-Chapel Hill
- Pursuing a Computer Science B.S and Business Administration B.S.B.A
- Second-year returning intern with HNTB and NCTA
- Continuing work with Power BI and automatic data refresh for dashboards



Develop and Automate Dashboards

- The goal is to consolidate traffic reporting across all roadways
- Expansion of Power BI dashboards to Monroe and GoToll transactions
- This project has given me a chance to further develop my work and skills from last summer and learn about how data is visualized and used differently at technical and business levels

Date	Toll Zone	Total Transactions	AVI Reads	Sample	Duplicate Count	Spurious Count	Missing Images	AVI Read Fail	Class Fail	Image Fail	AVI Rate	Failed Transactions	KPI
Saturday, January 01, 2022	T29	882	646	188	1	0	0	2	0	0	73.24	2	98
Sunday, January 02, 2022	T29	826	642	218	0	0	0	1	0	0	77.72	1	99
Monday, January 03, 2022	T29	1709	1257	506	1	0	0	6	0	0	73.55	6	98
Tuesday, January 04, 2022	T29	2069	1487	597	1	1	1	6	0	0	71.87	6	98
Wednesday, January 05, 2022	T29	2090	1533	630	2	1	0	8	0	0	73.35	8	98
Thursday, January 06, 2022	T29	2224	1589	606	3	0	0	4	0	0	71.45	4	99
Friday, January 07, 2022	T29	2093	1473	600	0	0	0	6	0	0	70.38	6	99
Saturday, January 08, 2022	T29	1290	964	336	0	1	0	1	0	0	74.73	1	99
Sunday, January 09, 2022	T29	1044	783	230	1	0	0	4	0	0	75.00	4	98
Monday, January 10, 2022	T29	1971	1440	606	0	0	0	3	0	0	73.06	3	99
Tuesday, January 11, 2022	T29	2032	1449	588	0	1	0	2	0	0	71.31	2	99
Wednesday, January 12, 2022	T29	2079	1518	600	1	1	0	5	0	0	73.02	5	99
Thursday, January 13, 2022	T29	2048	1441	575	1	0	0	1	0	0	70.36	1	99
Friday, January 14, 2022	T29	1975	1381	515	1	1	0	2	0	0	69.92	2	99
Saturday, January 15, 2022	T29	1223	885	304	1	0	0	3	0	0	72.36	3	99
Sunday, January 16, 2022	T29	174	132	46	0	0	0	0	0	0	75.86	0	100
Monday, January 17, 2022	T29	1099	820	283	0	0	0	2	0	0	74.61	2	99
Tuesday, January 18, 2022	T29	1888	1311	519	0	2	0	2	0	0	69.44	2	99
Wednesday, January 19, 2022	T29	2189	1557	666	0	0	1	3	0	0	71.13	3	99
Thursday, January 20, 2022	T29	1945	1396	631	0	0	0	3	0	0	71.77	3	99
Friday, January 21, 2022	T29	621	432	167	1	0	0	2	0	0	69.57	2	98
Saturday, January 22, 2022	T29	375	279	85	0	0	1	1	0	0	74.40	1	98
Sunday, January 23, 2022	T29	787	597	209	0	0	0	0	0	0	75.86	0	100
Monday, January 24, 2022	T29	1600	1164	491	0	0	0	1	0	0	72.75	1	99
Tuesday, January 25, 2022	T29	2192	1582	657	1	1	0	1	0	0	72.17	1	99
Wednesday, January 26, 2022	T29	2174	1572	694	0	1	0	2	0	0	72.31	2	99
Thursday, January 27, 2022	T29	2134	1531	636	1	1	0	3	0	0	71.74	3	99
Friday, January 28, 2022	T29	2207	1564	632	1	0	0	2	0	0	70.87	2	99
Saturday, January 29, 2022	T29	1032	772	271	0	0	0	1	0	0	74.81	1	99
Sunday, January 30, 2022	T29	1603	1234	365	0	0	0	1	0	0	75.64	1	99
Total		331663	235058	94984	163	59	57	241	25	0	71.24	266	99

Date

1/1/2022

6/19/2022

Toll Zone

T01 T05 T09 T13 T15 T17 T21 T25 T29 T31 T33

T02 T06 T10 T14 T16 T18 T22 T26 T30 T32 T34

58

Interns Update

Shubhankar Shindgikar

Bio



Shubhankar Shindgikar, M.S. – Advanced Technology Intern

- Currently pursuing a Ph.D. in Civil Engineering – Transportation at University of South Florida, Tampa, FL
- Researching on Connected and Automated Vehicle (CAV) Technology
- Aim is to making informed decisions about impact of these new technologies through data-based modelling, analysis and simulation
- Future goal is to leverage my interdisciplinary knowledge towards a safer, equitable, accessible and greener transportation ecosystem

Project Details

Dashboards for Insights into Back Office Systems (BOS) and Operations

- Utilize big data generated through the BOS and provide visualizations for easier understanding and deeper insights into operations and keep track of key performance indicators
- Developed 4 dashboards – Accounts, Case Management, Payments, Operations

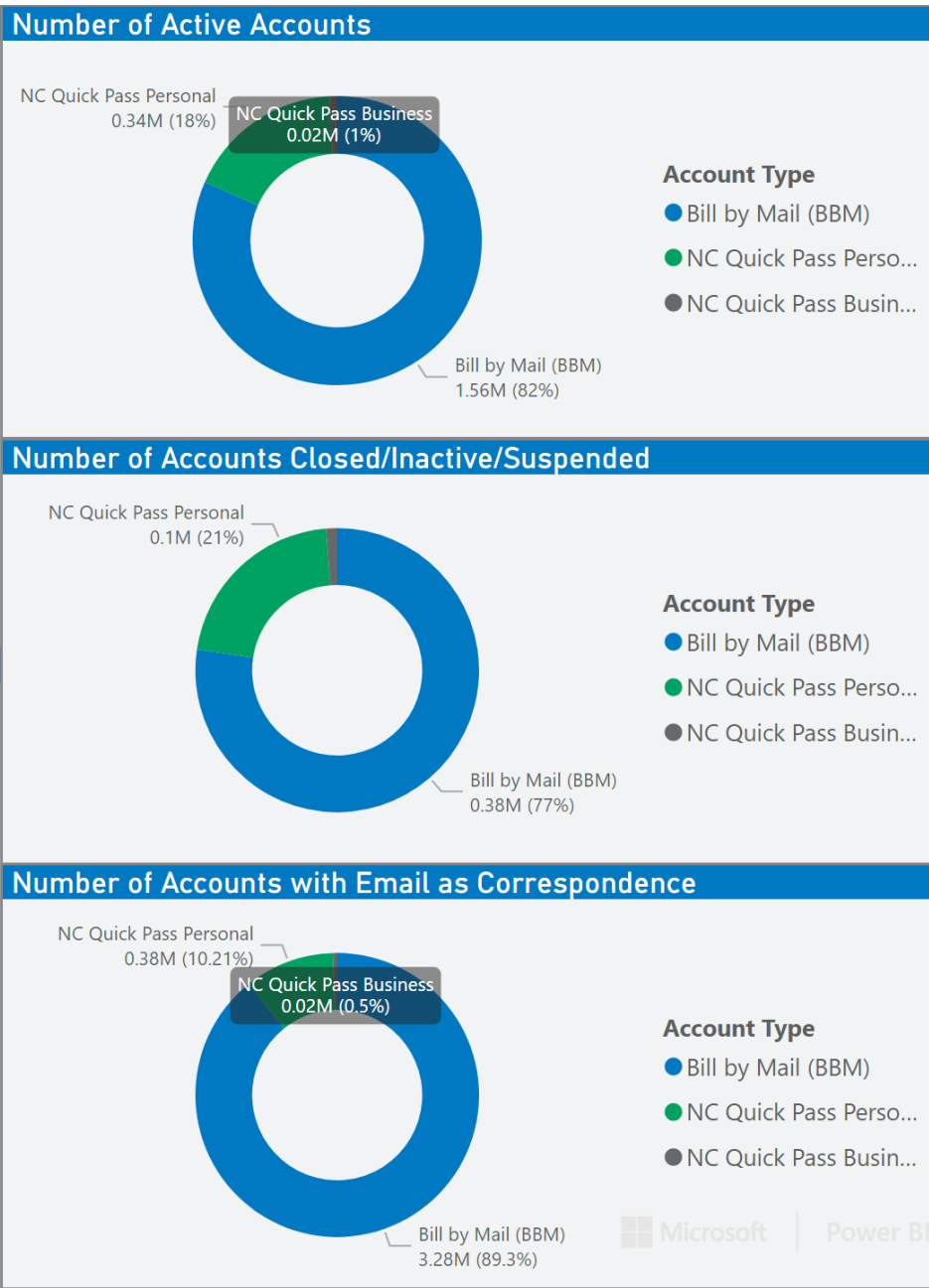
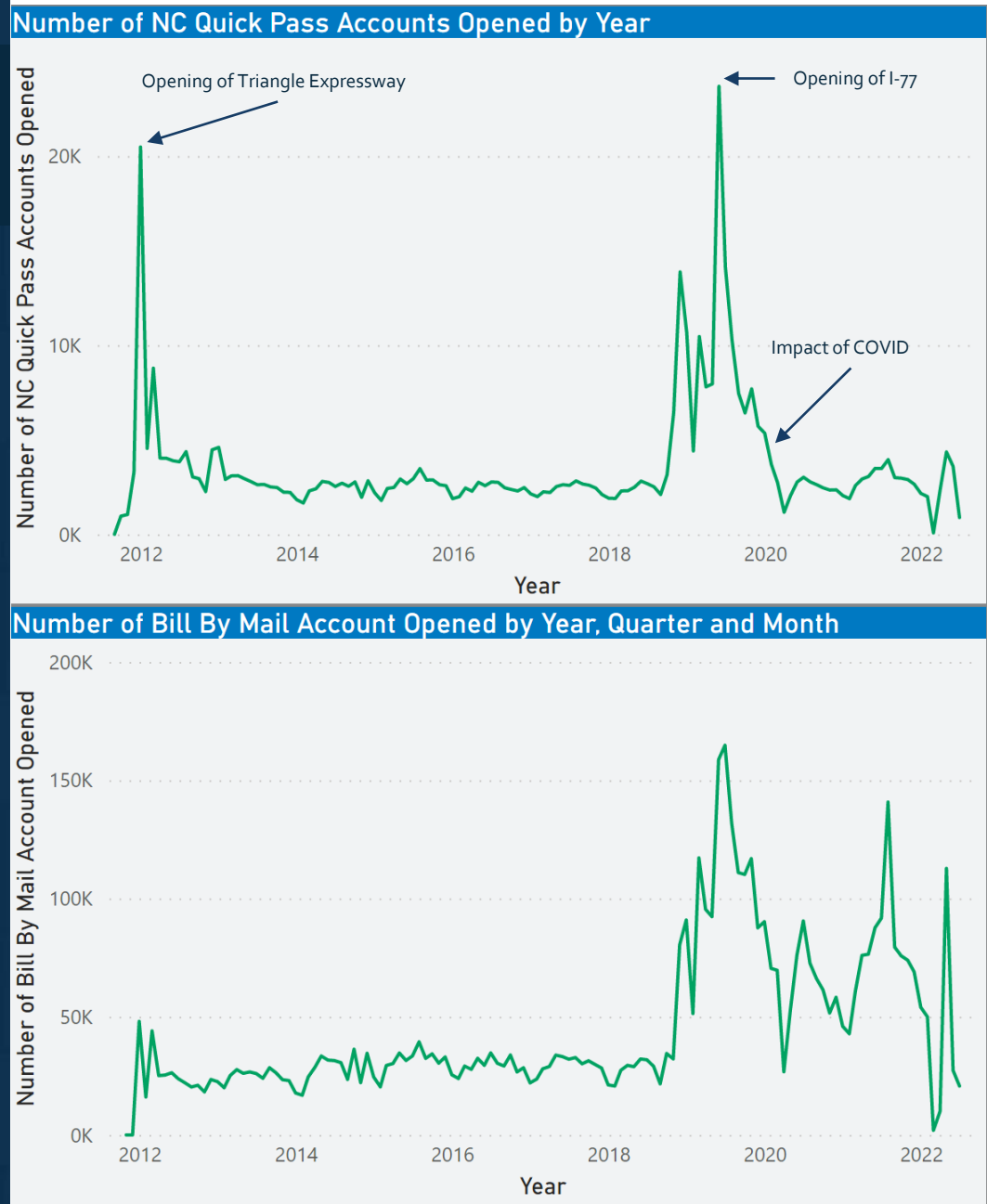
Automate Process for Data Ingestion into Power BI

- Develop tools and flows to automate data merge, migration and processing to design dashboards and reduce repetition of tasks

Accounts Dashboard

[View in Power BI](#)

- The purpose of the dashboards is to provide insights into the number of active/closed accounts by account type over time
- This dashboard also maps how the NCQP program is growing and indicates the location of customers



Contact Us



ncdot.gov/turnpike

ncquickpass.com



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The background features a dark blue field with a subtle, repeating pattern of hexagons. Overlaid on this are several dynamic, glowing green particle trails. These trails consist of numerous small dots that form fluid, wavy lines, suggesting movement or data flow. One prominent trail curves from the upper left towards the center, while others are visible in the lower half of the frame.

Thank you!