

# Greensboro Urban Area MPO



Technical Coordinating Committee  
June 21, 2022

# Zoom Platform Basics



# Attendee Verification

# Action Items

**June 21, 2022**

*Action Business Other*



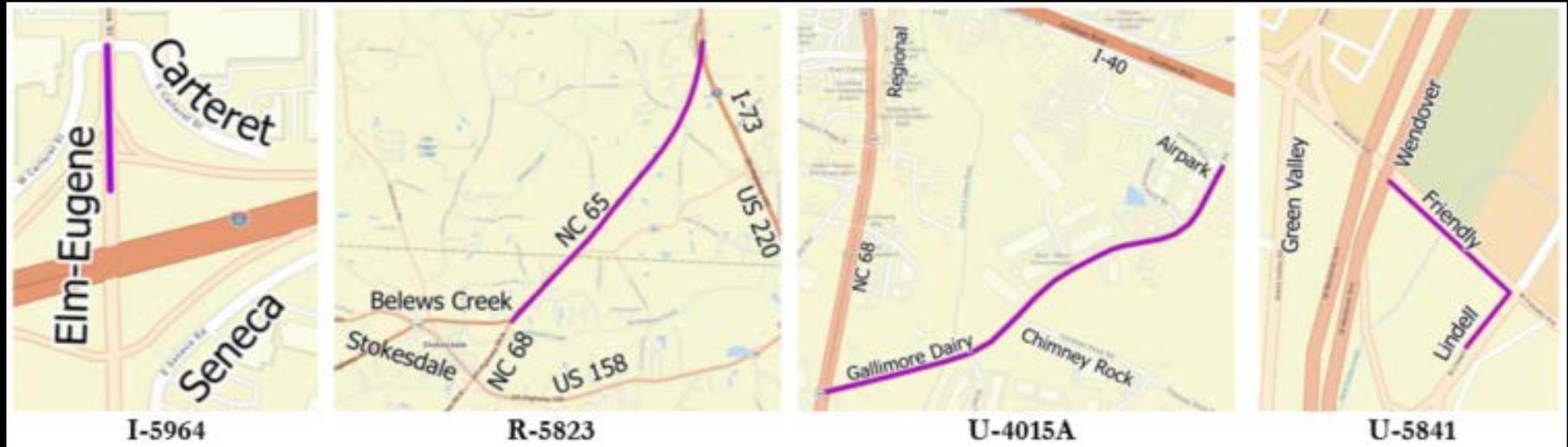
## Technical Coordinating Committee Meeting Minutes of May 10, 2022

2:00 PM, Greensboro, NC  
Zoom Online Virtual Meeting

### Attendance

Tyler Meyer	<i>TCC Chair</i>	George Linney	<i>GLA</i>
Lydia McIntyre	<i>MPO Staff</i>	David Pegg	<i>GLA</i>
Gray Johnston	<i>MPO Staff</i>	Elizabeth Jennigan	<i>GSO P&amp;R</i>
Yuan Zhou	<i>MPO Staff</i>	Scott Whitaker	<i>Summerfield</i>
Tram Truong	<i>MPO Staff</i>	Sean Taylor	<i>Oak Ridge</i>
Chandler Hagen	<i>MPO Staff</i>	Stephen Robinson	<i>NCDOT Div. 7</i>
Craig McKinney	<i>MPO Staff</i>	Tamara Njegovan	<i>NCDOT Div. 7</i>
Hanna Cockburn	<i>GDOT Director</i>	Michael Abuya	<i>NCDOT TPB</i>
Chris Spencer	<i>GDOT/Engineering</i>	Kelly Larkins	<i>PTRC</i>
Deniece Conway	<i>GDOT/Engineering</i>	Suzette Morales	<i>FHWA</i>
Jason Geary	<i>GSO Ec&amp;I</i>	Alex Rotenberry	<i>NCDOT IMD</i>

# MTIP Modification: MPO Area Roadway Projects



- I-5964 I-40 & Elm-Eugene interchange improvements. *CST FY 22 to FY 23.*
- R-5832 widen NC 68 from Belews Creek Road (NC 65) to I-73. *R/W FY 22 to FY 24 & CST FY 24 to FY 26.*
- U-4015A Gallimore Dairy widening from NC 68 to Airpark. *Increase funding by \$2 million, & replace BUILDNC bonds with State Highway Trust Funds.*
- U-5841 widening & intersection improvement at Friendly Avenue & Lindell Road. *Construction FY 22 to FY 23.*

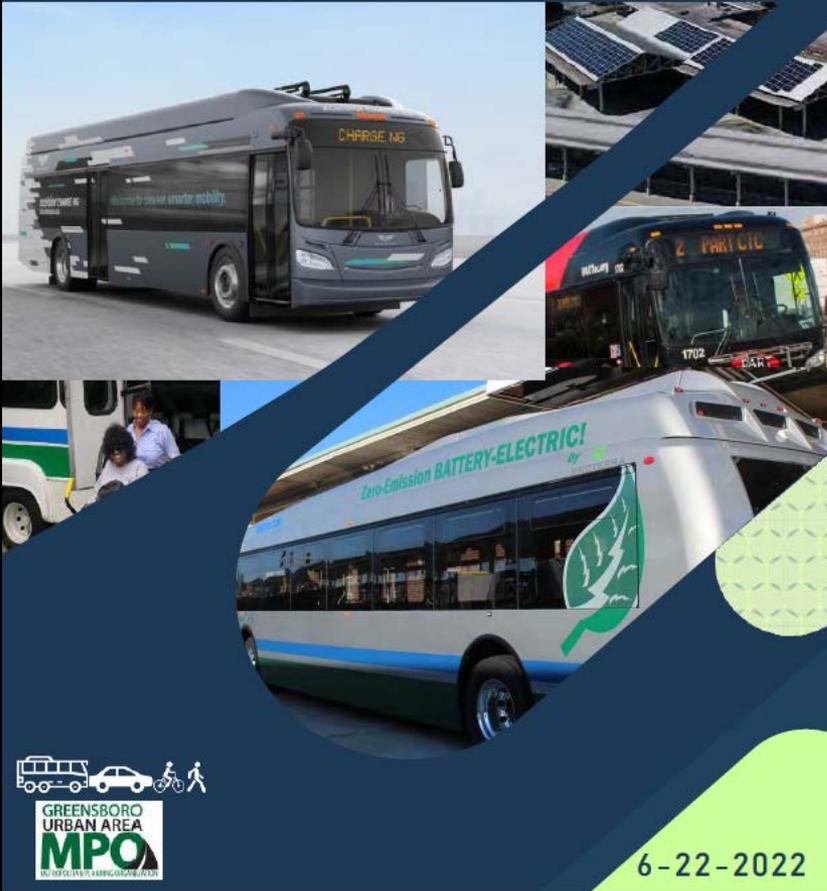
# MTIP Amendment & Modification: MPO Area Transit Projects

- Revises FY 2022 to make end of year adjustments
- Distributes additional IIJA funding between existing projects
  - TO-4971 Fixed Route Operations +\$1,000,000
  - TG-4957 Paratransit Operations +\$163,212
  - TG-5105 routine capital funding +\$157,000 (bus shelters & support vehicles)
  - TG-4759 preventive maintenance +\$795,761
  - PART routine capital and operating assistance use prior year balances
  - PART will not use bus and bus facilities funding in FY 2022
  - PART FY 2022 funding increase (\$207,351) will be programmed in FY 2023
- Updates future year funding levels for FY 2023-2029 based on the FY 2022 numbers

# FY 2022 Program of Projects

## PROGRAM OF PROJECTS

FY 2022



- Accounts for FY 2022 transit grants (year ends 9/30/2022)
  - Covers GTA, PART & TAMS
  - Consistent with MTIP action
- Public comment period 5/13 – 6/12
  - No comments received

## Public Hearing

- Comments due by 5PM 6/13
  - No comments submitted



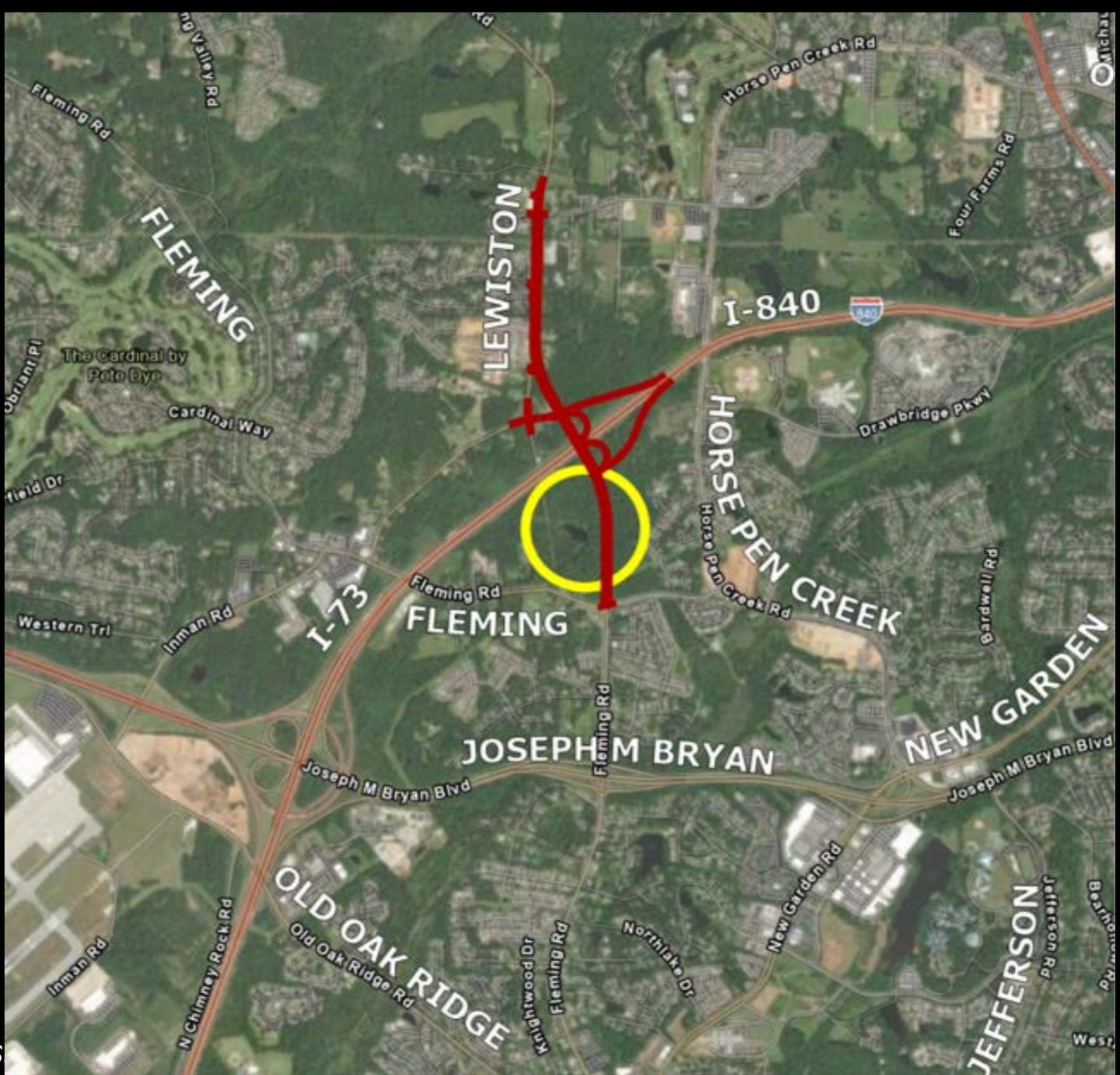
# Business Items

**June 21, 2022**

*Action Business Other*

# External Request to Remove from Plans: Fleming-Lewiston Connector & Interchange

- Added to Thoroughfare Plan in 1996
  - New road connection from Fleming to Lewiston
  - Interchange midway between Friendly and Battleground
  - Purpose: improve interstate access and direct road connection
- Road construction originally envisioned prior to Urban Loop with bridge added as part of Loop construction
- Project funding outlook unlikely for foreseeable future
  - History of low scores in STI project submittals
  - Poses relatively high level of engineering complexity
  - High price tag: current estimate +/- \$50 million



# External Request to Remove from Plans: Fleming-Lewiston Connector & Interchange

## External Request

- Developer proposes to develop site on east of interchange
- Requests removal of the project to facilitate development plans
- Development plan for area has not been provided
- Developer traffic study under development, expected by June 30

## Next Steps

- Preliminary feedback from TCC & TAC
- Staff review of developer's analysis
- Staff analysis of future travel demand & need for interchange
- Public comments
- Staff recommendation
- Final consideration at August TCC/TAC meetings

# Transportation Improvement Program Update



## 2024-2033 DRAFT STATE TRANSPORTATION IMPROVEMENT PROGRAM

NOTES: COSTS AND SCHEDULES ARE AS OF APRIL 25, 2022 AND ARE SUBJECT TO CHANGE. AMOUNTS SHOWN ARE PROJECT ESTIMATE AMOUNTS REMAINING. ANY AMOUNTS PROGRAMMED FOR ACTIVITIES OTHER THAN RIGHT-OF-WAY, UTILITIES

BASIC PROJECT INFORMATION

FISCAL YEAR PROJECT PHASE SCHEDULED TO START

ROUTE/CITY	DESCRIPTION	MODE	DIVISION(S)	MPOs/RPOs	PROJECT ID	STI CATEGORY FUNDED	FUNDING SOURCE (SEE FUNDING SOURCES TAB FOR MORE INFO)	RIGHT-OF-WAY PROJECTED SCHEDULE	TOTAL REMAINING FUNDS NEEDED FOR RIGHT-OF-WAY	UTILITIES PROJECTED SCHEDULE	TOTAL REMAINING FUNDS NEEDED FOR UTILITIES	CONSTRUCTION PROJECTED SCHEDULE	TOTAL REMAINING FUNDS NEEDED FOR CONSTRUCTION	PROJECTED SCHEDULE FOR OTHER ACTIVITIES	TOTAL RE FUNDS FOR ACTIVITY
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	RUNWAY 5R-23L EXTENSION PROGRAM	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5701	STATEWIDE MOBILITY	O, T					2023	\$21,000,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	CONSTRUCT NORTHWEST APRON TO INCREASE CAPACITY FOR FUTURE EXPANSION.	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5802	STATEWIDE MOBILITY	O, T					2023	\$11,000,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	CONSTRUCT TAXIWAY G.	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5707	STATEWIDE MOBILITY	O, T					2023	\$16,900,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	CONSTRUCT TAXIWAY OVER FUTURE F-73 EAST OF SR 2085 (BRYAN BOULEVARD).	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5708	STATEWIDE MOBILITY	T					2020	\$1,500,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	HIGH SPEED TAXIWAY TO RUNWAY 5R-23L	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5718	STATEWIDE MOBILITY	O, T					2023	\$4,000,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	RUNWAY 5R-23L GROUP VI UPGRADE.	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5715	STATEWIDE MOBILITY	O, T					2024	\$11,000,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM (SMGCS) UPDATE.	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5711	STATEWIDE MOBILITY	O, T					2022	\$9,000,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	TAXIWAY F. CONSTRUCT TAXIWAY INCLUDING BRIDGE OVER TED JOHNSON PARKWAY.	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5803	STATEWIDE MOBILITY	O, T					2024	\$28,000,000		
PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	TAXIWAY J EXTENSION, TAXIWAY D TO TAXIWAY J2.	AVIATION	7	GREENSBORO URBAN AREA MPO	AV-5800	STATEWIDE MOBILITY	O, T					2023	\$7,000,000		
A&Y GREENWAY	SPRING GARDEN STREET TO SOUTH OF ROLLINS ROAD IN GREENSBORO. CONSTRUCT MULTIUSE PATH.	BIKE/PED	7	GREENSBORO URBAN AREA MPO	EB-6037C	DIVISION 7	BGANY, L TAANY					2022	\$8,936,000		
BENJAMIN PARKWAY; WESTOVER TERRACE	BENJAMIN PARKWAY FROM ELAM AVENUE TO BATTLEGROUND AVENUE, AND WESTOVER TERRACE FROM BENJAMIN PARKWAY TO SEMINOLE DRIVE IN GREENSBORO. CONSTRUCT SIDEWALK ON BENJAMIN PARKWAY FROM ELAM AVENUE TO AYCOCK STREET. CONSTRUCT SIDEWALK ON BENJAMIN PARKWAY FROM AYC	BIKE/PED	7	GREENSBORO URBAN AREA MPO	EB-5986	DIVISION 7	L TAANY	2022	\$70,000			2024	\$1,200,000		
CEDROW DRIVE	WEST OF I-74 TO EAST OF I-74 IN HIGH POINT. CONSTRUCT MULTIUSE FACILITY ACROSS I-74.	BIKE/PED	7	HIGH POINT URBAN AREA MPO	EB-5989	DIVISION 7	L TA5200	2025	\$50,000			2026	\$1,200,000	2024	
CONE BOULEVARD	US 29 (O'HENRY BOULEVARD) TO ST. REGIS ROAD IN GREENSBORO. CONSTRUCT SIDEWALK.	BIKE/PED	7	GREENSBORO URBAN AREA MPO	EB-5985	DIVISION 7	L TAANY	2022	\$78,000			2023	\$471,000	2022	
FARMINGTON DRIVE	HOLDEN ROAD TO SR 4121 (WEST GATE CITY BOULEVARD) IN GREENSBORO. CONSTRUCT SIDEWALKS.	BIKE/PED	7	GREENSBORO URBAN AREA MPO	EB-5877	DIVISION 7	L TAANY	2022	\$25,000			2022	\$300,000		
GREEN VALLEY ROAD	FRIENDLY AVENUE TO WESTOVER TERRACE IN GREENSBORO. CONSTRUCT SIDEWALKS.	BIKE/PED	7	GREENSBORO URBAN AREA MPO	EB-5997	DIVISION 7	L TAANY	2023	\$45,000			2025	\$358,000		
HIGH POINT RAILROAD ESPLANADE	LINDSAY STREET TO CENTENNIAL STREET IN HIGH POINT. CONSTRUCT GREENWAY.	BIKE/PED	7	HIGH POINT URBAN AREA MPO	EB-5990	DIVISION 7	L TA5200					FUNDED FOR PRELIMINARY ENGINEERING ONLY	\$8,000,000	2028	

Introduction PLEASE READ!

Full Draft STIP

Projects Eligible for Swaps

Fund Sources

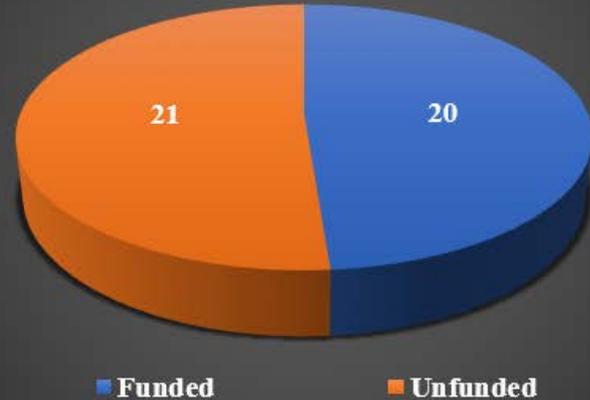


# Transportation Improvement Program Update

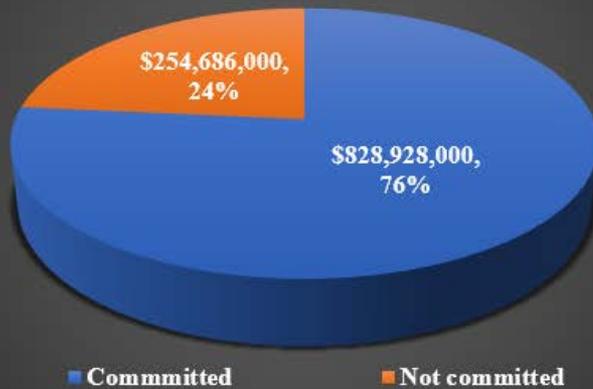
**CURRENT 2020-2029 STIP**  
# of Projects



**DRAFT 2024-2033 STIP**  
# of Projects



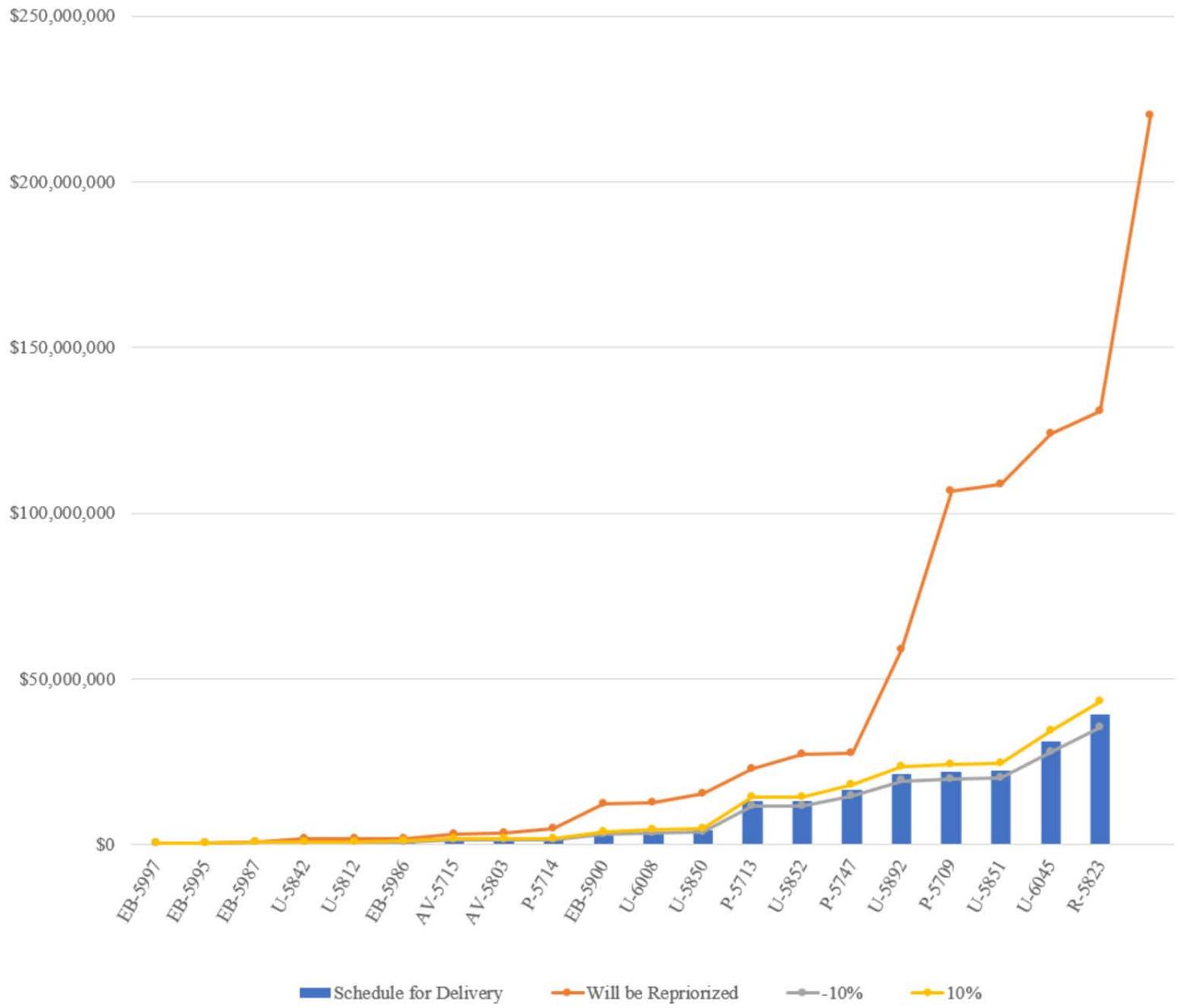
**CURRENT 2020-2029 STIP**  
Project Fund



**DRAFT 2024-2033 STIP**  
Project Fund



Swap Eligible Projects STI Funds Comparison (Full Set)



# Comparison of Project Schedules Status: Current Draft STIP

## Funded Projects in Draft STIP

TIP #	Facility	Description	Mode	STI Category	20-29 TIP Status	Prioritization score at the time project was committed	20-29 CST Schedule	24-33 CST Schedule	TOTAL STI FUNDS
AV-5803	PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	Taxiway F. Construct Taxiway including Bridge over Ted Johnson Parkway.	AVIATION	STATEWIDE MOBILITY	P5.0 COMMITTED	89.64	2024	2024	\$1,500,000
P-5713	NORTH CAROLINA RAILROAD (NCR) / NORFOLK SOUTHERN	Hilltop Road in Greensboro. Convert at-grade crossing to grade separation.	RAIL	STATEWIDE MOBILITY	P4.0 COMMITTED	70.60	2025	2028	\$13,016,000
AV-5715	PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)	Runway 5R-23L Group Upgrade.	AVIATION	STATEWIDE MOBILITY	P3.0 COMMITTED	60.28	2024	2024	\$1,500,000
P-5747	NCRR NORFOLK SOUTHERN H LINE	South English Street in Greensboro. Construct grade separation and close crossing.	RAIL	REGION D	P5.0 COMMITTED	78.45	2026	2031	\$16,455,000
P-5714	NCRR NORFOLK SOUTHERN	Pomona Yard. Extend auxiliary track and add power turnouts.	RAIL	REGION D	P5.0 COMMITTED	76.01	2024	2024	\$1,600,000
P-5709	NORFOLK SOUTHERN H LINE	Construct grade separation at Franklin Boulevard crossing in Greensboro, and close O'Ferrell Street crossing.	RAIL	REGION D	P4.0 COMMITTED	72.79	2024	2024	\$22,075,000
U-5892	US 220 (BATTLEGROUND AVENUE)	Westridge Road to Cotswold Avenue in Greensboro add lanes.	HIGHWAY	REGION D	P3.0 COMMITTED	57.29	2026	2030	\$21,404,000
EB-5986	BENJAMIN PARKWAY; WESTOVER TERRACE	Benjamin Parkway from Elam Avenue to Battleground Avenue, and Westover Terrace from Benjamin Parkway to Seminole Drive in Greensboro. Construct sidewalk on Benjamin Parkway from Elam Avenue to Aycock Street, Construct sidepath on Benjamin Parkway from Ayc	BIKE/PED	DIVISION 7	P5.0 COMMITTED	89.12	2024	2024	\$1,016,000
EB-5987	OLD BATTLEGROUND ROAD	Lake Brandt Road To Bicentennial Greenway In Greensboro. Construct Multiuse Path.	BIKE/PED	DIVISION 7	P5.0 COMMITTED	88.76	2025	2025	\$719,000
U-6008	BRYAN BOULEVARD	New Garden Road At Horsepen Creek Road In Greensboro. Interchange Improvements, Including New Ramp From Westbound New Garden Road To Westbound.	HIGHWAY	DIVISION 7	P4.0 COMMITTED	85.18	2029	2029	\$3,998,000
U-5812	VARIOUS	Lawndale Drive And Pisgah Church Road In Greensboro. Intersection Improvements At Lawndale Road And Pisgah Church Road, At Lawndale Road And Martinsville Road, And At Martinsville Road And Pisgah Church Road	HIGHWAY	DIVISION 7	P3.0 COMMITTED	80.82	2024	2024	\$744,000
R-5823	NC 65 / NC 68	NC 65 In Stokesdale (Southernmost Intersection) To US 220 / Future I-73. Widen To Multilanes.	HIGHWAY	DIVISION 7	P4.0 COMMITTED	77.81	2024	2024	\$39,124,000
U-5842	PISGAH CHURCH ROAD	North Elm Street In Greensboro. Intersection Improvements.	HIGHWAY	DIVISION 7	P3.0 COMMITTED	72.98	2024	2024	\$744,000
U-5850	RANDLEMAN ROAD	Elmsley Drive To Glendale Drive In Greensboro. Widen To Multilanes.	HIGHWAY	DIVISION 7	P3.0 COMMITTED	67.14	2025	2025	\$4,300,000
U-5851	CHURCH STREET	US220 Wendover Avenue To East Cone Boulevard In Greensboro. Add Lanes.	HIGHWAY	DIVISION 7	P3.0 COMMITTED	66.99	POST YEAR	2030	\$22,396,000
U-5852	BENJAMIN PARKWAY / BRYAN BOULEVARD	US 70 (Wendover Avenue To Holden Road In Greensboro. Add Lanes.	HIGHWAY	DIVISION 7	P3.0 COMMITTED	66.89	2024	2024	\$13,055,000
EB-5995	LAWNDALE DRIVE	Pisgah Church Road To Lake Brandt Road In Greensboro. Construct Sidewalk.	BIKE/PED	DIVISION 7	P5.0 COMMITTED	65.29	2025	2025	\$343,000
U-6045	SANDY RIDGE ROAD	I-40 To West Market Street In Greensboro. Widen To Multilanes.	HIGHWAY	DIVISION 7	P4.0 COMMITTED	64.41	POST YEAR	2030	\$31,100,000
EB-5997	GREEN VALLEY ROAD	Friendly Avenue To Westover Terrace In Greensboro. Construct Sidewalks.	BIKE/PED	DIVISION 7	P5.0 COMMITTED	62.04	2025	2025	\$322,000
EB-5900	SUMMERFIELD SOUTH GREENWAY	US 220 To Centerfield Road In Summerfield. Construct Multiuse Path.	BIKE/PED	DIVISION 7	P4.0 COMMITTED	53.07	2024	2024	\$3,429,000

## Comparison of Project Schedules & Status: Current & Draft STIP

### Unfunded Projects in Draft STIP

TIP #	Facility	Description	Mode	STI Category	20-29 TIP Status	Prioritization score at the time project was committed	20-29 CST Schedule	24-33 CST Status	TOTAL STI FUNDS
I-6004	I-40 / I-85	Rock Creek Dairy Road Interchange. Upgrade Interchange Area.	HIGHWAY	STATEWIDE MOBILITY	P5.0 COMMITTED	87.82	POST YEAR	FUNDED FOR PE ONLY	\$12,729,000
P-5735	NORFOLK SOUTHERN MAIN LINE	Yanceyville Street in Greensboro. Construct Grade Separation and Close Crossing.	RAIL	STATEWIDE MOBILITY	P5.0 COMMITTED	82.97	2027	FUNDED FOR PE ONLY	\$15,390,000
I-5965	I-40 / BUSINESS 85 US 29 / US 70 / US 220	Freeman Mill Road to US 29 / US 70 / US 220 in Greensboro. Add Lanes, Improve Randleman Road and Elm-Eugene Street Interchanges, And Replace Norfolk-Southern Railroad Bridge Overpass East of Elm-Eugene Street.	HIGHWAY	STATEWIDE MOBILITY	P4.0 COMMITTED	80.4	POST YEAR	FUNDED FOR PE ONLY	\$123,932,000
I-5712	I-40 / US 421	Sandy Ridge Road in Greensboro. Interchange Improvements.	HIGHWAY	STATEWIDE MOBILITY	P3.0 COMMITTED	80.28	2027	FUNDED FOR PE ONLY	\$27,634,000
U-6108	US 70 / US 220 (WENDOVER AVENUE)	Battleground Avenue in Greensboro. Reconfigure Battleground Avenue, Lawndale Drive, And Westover Terrace Between Fernwood Drive and Wendover Avenue. Improve Traffic Flow and Safety. Improve Wendover Avenue Connections at Westover Terrace, Battleground	HIGHWAY	REGION D	P5.0 COMMITTED	86.6	POST YEAR	FUNDED FOR PE ONLY	\$58,700,000
U-6122	NC 68	Gallimore Dairy Road to Triad Center Drive in Greensboro. Upgrade Corridor To Superstreet.	HIGHWAY	REGION D	P5.0 COMMITTED	80.98	2027	FUNDED FOR PE ONLY	\$22,700,000
U-6127	NC 68	Fogleman Road to Alcorn Road) in Oak Ridge. Access Management Improvements.	HIGHWAY	REGION D	P5.0 COMMITTED	79.71	2027	FUNDED FOR PE ONLY	\$12,300,000
U-6121	US 70 (WENDOVER AVENUE)	Eastchester Drive in High Point to Guilford College Road in Greensboro. Widen to 6 lanes and construct sidewalks.	HIGHWAY	DIVISION 7	P5.0 COMMITTED	91.94	2029	FUNDED FOR PE ONLY	\$27,301,000
U-6129	WEST FRIENDLY AVENUE	Pembroke Road Intersection and Green Valley Road intersection in Greensboro. Construct intersection and pedestrian improvements. From Pembroke Road to Green Valley Road, Construct roadway and access management improvements.	HIGHWAY	DIVISION 7	P5.0 COMMITTED	86.9	2029	FUNDED FOR PE ONLY	\$602,000
U-6181	MCKNIGHT MILL ROAD	Minorwood Road upgrade intersection.	HIGHWAY	DIVISION 7	NOT COMMITTED	80.99	POST YEAR	FUNDED FOR PE ONLY	\$1,916,000
U-6185	MCCONNELL ROAD	Gorrell Street And Willow Hope Street In Greensboro. Construct Roundabout.	HIGHWAY	DIVISION 7	NOT COMMITTED	79.8	POST YEAR	FUNDED FOR PE ONLY	\$1,680,000
U-6186	NORTH CHURCH STREET	Archergate Road and Spencer-Dixon Road in Greensboro. Realign intersection.	HIGHWAY	DIVISION 7	NOT COMMITTED	78.83	POST YEAR	FUNDED FOR PE ONLY	\$4,950,000
U-6211	PLEASANT RIDGE ROAD	Fleming Road in Summerfield. Construct turn lanes.	HIGHWAY	DIVISION 7	NOT COMMITTED	75.28	POST YEAR	FUNDED FOR PE ONLY	\$3,500,000
U-6212	NC 62	Randleman Road. Construct turn lanes.	HIGHWAY	DIVISION 7	NOT COMMITTED	74.79	POST YEAR	FUNDED FOR PE ONLY	\$1,800,000
EB-5992	SPRING GARDEN STREET	West Market Street to Pomona Drive and Merritt Drive to Holden Road in Greensboro. Construct sidewalk.	BIKE/PED	DIVISION 7	NOT COMMITTED	66.74	2028	FUNDED FOR PE ONLY	\$252,000

## Comparison of Project Schedules & Status: Current & Draft STIP

TIP #	Facility	Description	Mode	STI Category	20-29 TIP Status	Prioritization score at the time project was committed	20-29 CST Schedule	24-33 CST Status	TOTAL STI FUNDS
EB-5996	NORTH CHURCH STREET	Henry Street / Electra Drive To Lees Chapel Road In Greensboro. Construct Sidewalk.	BIKE/PED	DIVISION 7	NOT COMMITTED	62.52	2028	FUNDED FOR PE ONLY	\$347,000
EB-6009	SUMMIT AVENUE	Sullivan Street to Fourth Street In Greensboro. Construct bicycle, pedestrian and safety improvements.	BIKE/PED	DIVISION 7	NOT COMMITTED	58.81	POST YEAR	FUNDED FOR PE ONLY	\$2,975,000
U-6100	US 29; US 70; US 220	Gate City Boulevard to South Of I-785 In Greensboro. Construct access management improvements and safety enhancements, including ramp closures and consolidations, reconfigure Summit Avenue / Phillips Avenue interchange, and replace bridge	HIGHWAY	NOT FUNDED	NOT COMMITTED	79.78	POST YEAR	NOT FUNDED	\$106,552,000
R-5889	US 29 (FUTURE I-785)	Hicone Road in Greensboro to US 158 / NC 14 In Reidsville. Upgrade Corridor To Interstate Standards.	HIGHWAY	NOT FUNDED	P5.0 COMMITTED	77.53	2029	NOT FUNDED	\$220,000,000
U-6068	US 421 (SALEM PARKWAY)	Future I-74 In Kernersville To I-40 In Guilford County. Widen to 6 lanes.	HIGHWAY	NOT FUNDED	NOT COMMITTED	77.04	POST YEAR	NOT FUNDED	\$130,714,000
R-2577B	US 158	Belews Creek Road in Forsyth County to Anthony Road in Guilford County	HIGHWAY	NOT FUNDED	P5.0 COMMITTED	75.79	POST YEAR	NOT FUNDED	\$108,800,000

**Notes:**

- STI category: STI tier in which the project was selected for funding
- 20-29 TIP status: shows whether a project was previously considered committed for delivery or subject to reprioritization.
- 24-33 CST Schedule & CST Status: resets project status and schedules per FY 2024-2033 funding constraints

## Next Steps

- Staff analyzing overall TIP numbers
- Assessing extent and distribution of impact
- Determining any potential swap options



# NORTH CAROLINA

Department of Transportation



## Complete Streets Updates

Stephen Robinson  
NCDOT Division 7

6/17/2022



# Topics

- Complete Streets goals
- Evolution of Complete Streets in North Carolina
- Implementation challenges
- Summary of new implementation guidance for project development
- Next steps & resources





# Complete Streets Goals

- Reduce pedestrian crashes and unsafe conditions
- Improve access and mobility for those without a vehicle
- Enhance quality of life by providing transportation choices
- Ensure NCDOT has an equitable transportation system that works for everyone

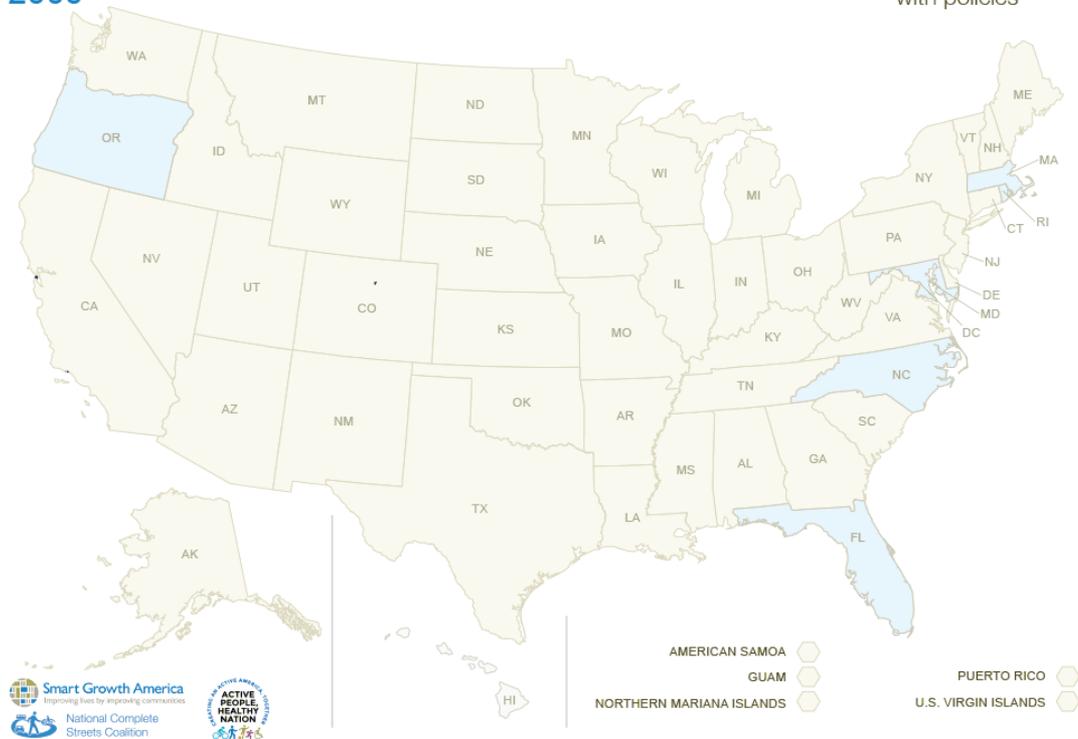


# US Progression of Complete Streets

- Policy establishes framework for decisions
- Plans and state/national guidance assist with project design and implementation
- 2021 Bipartisan Infrastructure Law emphasizes Complete Streets

## Complete Streets Policy Adoption 2000

9 jurisdictions with policies



# Evolution of Complete Streets and NCDOT

- NC first State to establish a Bicycle Program (1974)
  - Expanded in 1992 to also address Pedestrian accommodations.
- NCDOT Board adopts Complete Streets Policy (2009)
  - Supplemental planning and design guide created
  - Bicycle and Pedestrian Policies continue
- NCDOT Board updates Complete Streets Policy (2019)
  - Rescinded and replaced previous policies and guidelines
  - Integrated into IPD, Roadway Design Manual, and ATLAS (ongoing)
- Bike/Ped Merger with Public Transit to become the Integrated Mobility Division (IMD) (2019-2021)
- Release of updated methodology for Complete Streets Review (Feb 2022)
  - Workgroups to address policy gaps: maintenance, cost estimation and impacts, IPD, planning (March – July 2022)



# Implementation Challenges

Key challenges with implementation of the Policy include:

- Inconsistent implementation across Divisions
- Lack of standards and need to streamline
- Policy gaps in key areas (e.g. maintenance)
- Limited metrics, data and tracking
- Need for enhanced training



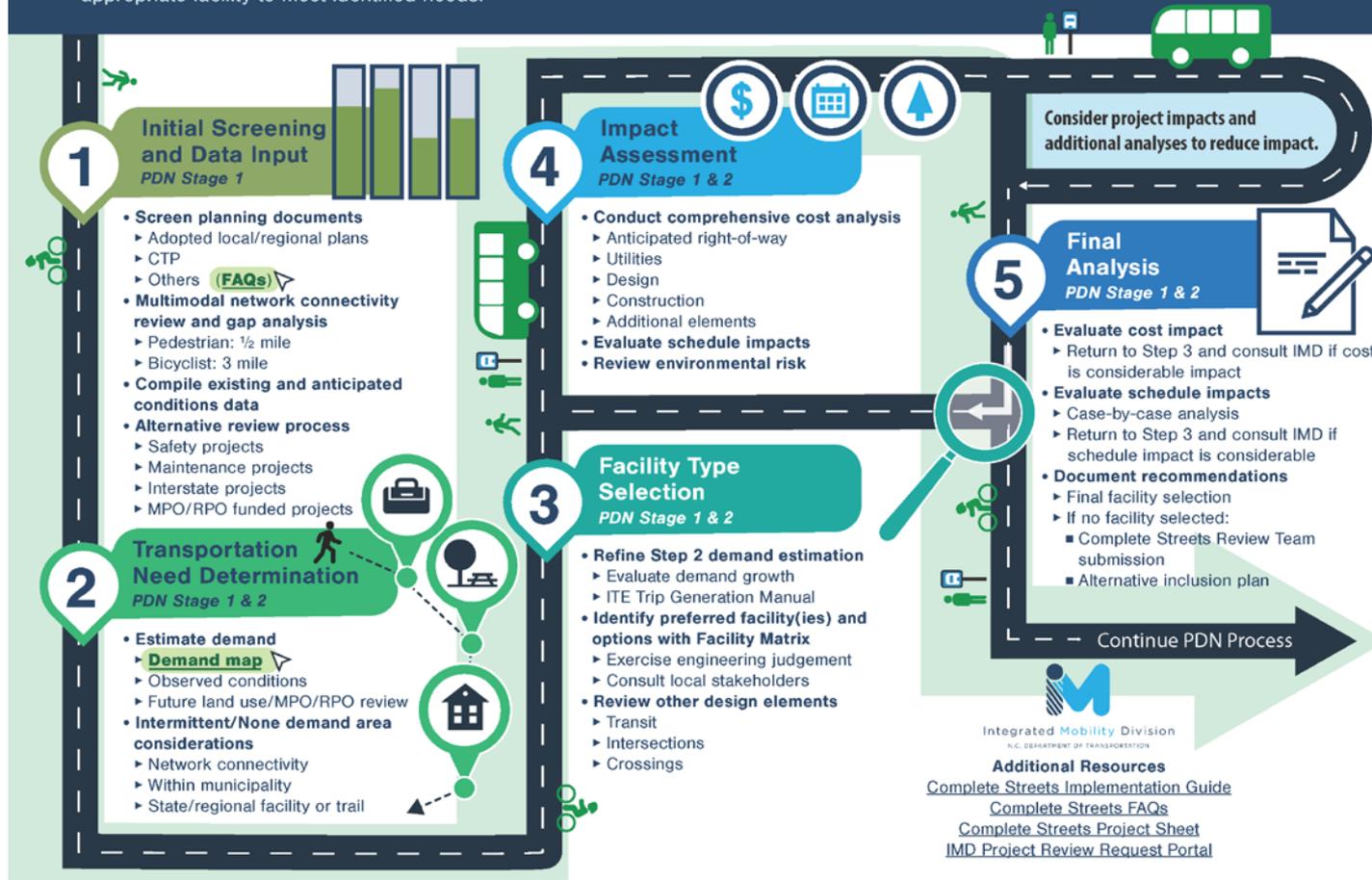
# Proposed Implementation Improvements

- New project evaluation methodology to identify multimodal needs, select the appropriate facility type, and assess impacts.
- Modifications to Implementation Guide to integrate new evaluation methodology and to clarify key guidance areas, including:
  - Clarify that NCDOT pays the full cost of complete streets elements when a need is identified *AND* the elements are in a plan.
  - Clarify that maintenance agreements are needed for all separated facilities, with some exceptions (exceptions parameters are under development).

# Goals of New Evaluation Methodology

- NCDOT's new evaluation methodology is standardized and streamlined, and will guide project managers through a process of identifying needs, selecting the appropriate facility type, and estimating added impacts to the project.
- The new approach better integrates Complete Streets evaluation into project development and will lead to more consistent inclusion of appropriate bicycle and pedestrian facilities on NCDOT projects statewide.
- Tools developed for the new process will be supplemented with site observations, project-specific data, and discussions with local partners when determining need and choosing an appropriate facility type.

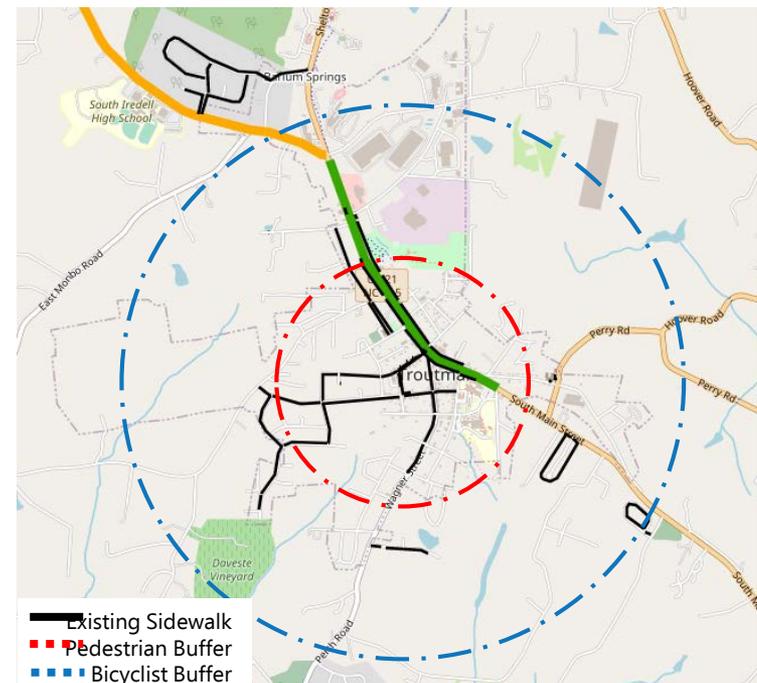
**The Complete Streets Project Evaluation Methodology process** serves as guidance to aid in the evaluation of highway projects for Complete Streets elements. This guidance is intended to support Project Leads and Managers throughout the PDN stages, beginning with all five steps in PDN Stage 1 and select steps revisited in PDN Stage 2. Project Leads and Managers should supplement this process with local conversations, detailed analysis of conditions, and engineering judgement to design the appropriate facility to meet identified needs.



# Initial Screening and Data Input

*PDN Stage 1*

- Screen planning documents
  - Comprehensive Transportation Plan (CTP)
  - Adopted local/regional plans
  - Others (See [FAQs](#))
- Multimodal network connectivity review and gap analysis from project limits
  - Pedestrian: ½ mile
  - Bicyclist: 3 miles
- Compile existing and anticipated conditions data
- Alternative review process
  - Safety projects
  - Maintenance projects
  - Interstate projects where y-lines are not modified
  - Others (see methodology)



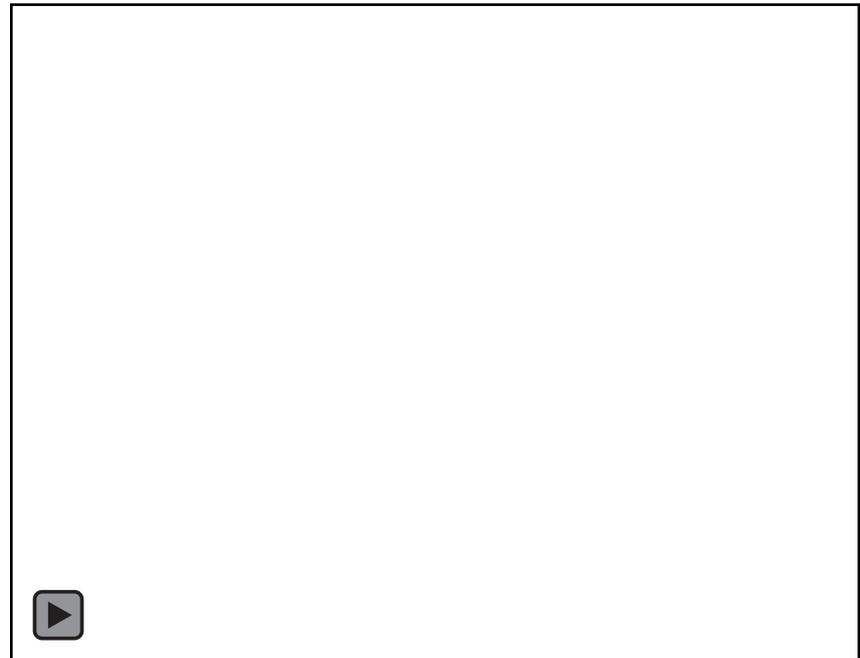
*Conceptual gap analysis for discussion only*



# Transportation Need Determination

*PDN Stage 1 & 2*

- Estimate demand (several tools available)
  - [Demand map](#) (see right)
  - Observed conditions
  - Land use (current and future)
  - Other tools (see methodology)
- Intermittent/None demand area considerations
  - Continue evaluation if any of the following apply:
    - Network connectivity gap
    - Within municipality
    - State/regional facility or trail

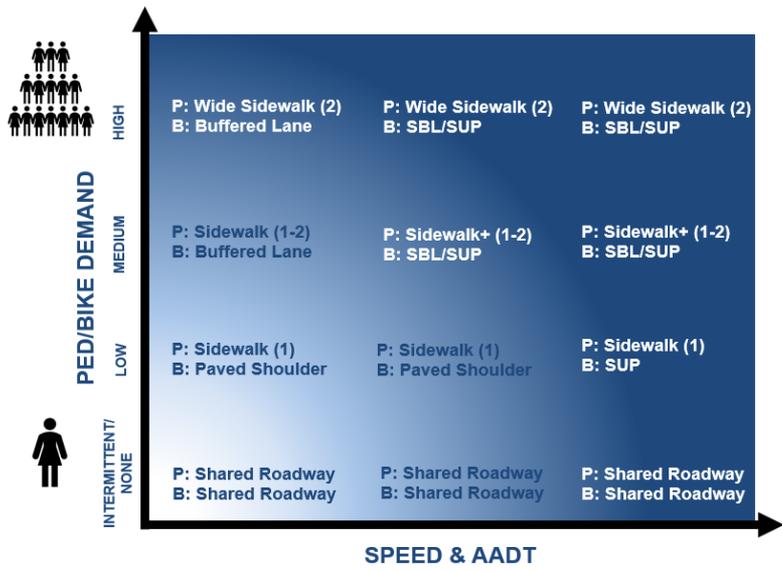




# Risk Assessment and Facility Type Selection

*PDN Stage 1 & 2*

- Refine Step 2 demand estimation
  - Update vehicular and bike/ped levels with project growth rate(s), *OR*
  - ITE Trip General Manual.
  - Also, incorporate local consultation on future land use.
- Identify preferred and option facility types with Facility Selection guidance
  - Select facility types using refined anticipated demand levels and planned roadway configuration.
  - Exercise engineering judgement.
  - Consult local stakeholders.
- Review other design elements
  - Transit
  - Intersections
  - Midblock crossings



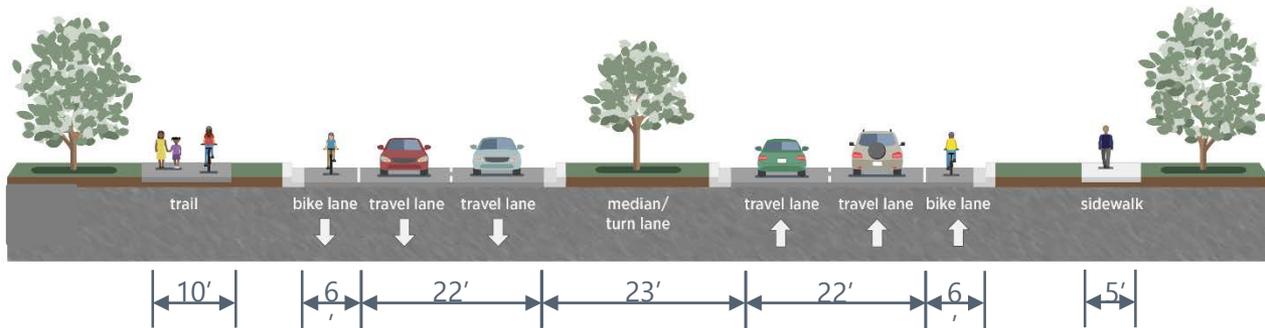
*Conceptual graphic depicting facility selection given demand, operational speed, and vehicle AADT*



# Impact Assessment

*PDN Stage 1 & 2*

- Conduct comprehensive cost analysis
  - Anticipated right-of-way
  - Utilities
  - Design
  - Construction
  - Additional enhancements
- Evaluate schedule impact
- Review environmental risk



*Conceptual cross section, illustration only*



# Final Analysis

*PDN Stage 1 & 2*

- Evaluate cost impact
  - Projects that exceed a 10% cost increase would be subject to greater scrutiny.
  - Review of NCDOT let lists has shown typical Complete Streets increase is 2%-10%.
  - Return to Step 3 and consult IMD if cost impact is considerable; evaluate alternative facility types and design modifications to meet the identified transportation need.
  - Discuss project modifications with LGA to manage cost impact.
- Evaluate schedule impact
  - Case-by-case analysis.
  - Return to Step 3 and consult IMD if schedule impacts are considerable; evaluate alternative facility types and design modifications to meet the identified transportation need.
  - Discuss project modifications with LGA to manage schedule impact.
- Document recommendations
  - Final facility selection.
  - If no facility recommended, submit Complete Streets Review Team report for review and develop alternative inclusion plan if Complete Streets Review Team grants request.

## Ongoing Discussions on Key Issues

- Maintenance of separated multimodal (i.e. sidewalks, shared-use paths, etc.) facilities, particularly outside of municipal boundaries.
- Inclusion of complete streets elements on maintenance projects.
- Harmonization of complete streets processes with the Project Delivery Network (PDN) including Planning and Express Design.
- Alignment of pedestrian/bike need determination between CTP and Complete Streets methodologies.
- Local coordination when determining bike/ped needs and choosing facility.
- Determining costs and benefits of complete streets elements.
- Incorporating complete streets elements in projects prior to programming.

## Work Groups

- Convening three work groups to refine PDN harmonization, cost estimates, and maintenance issues.
- Representatives from Divisions, other units, and MPO/RPOs.
- Anticipated discussions March – July
- Recommendations incorporated in next Complete Streets updates.



## Next Steps Summary

- 
- Continue training and outreach on the methodology and resources.
  - Convene work groups and develop update recommendations.
  - Make updates to Complete Streets resources as necessary and provide revised guidance and/or trainings.
  - Collect data, monitor implementation, and identify additional improvements to guidance for planning, prioritization, project development, and maintenance activities.

# Thank you!

Policy and support documents for Complete Streets are available online: [Complete Streets Connect](#)

Contact IMD with questions at [completestreets@ncdot.gov](mailto:completestreets@ncdot.gov)

# Division Seven Report



Action Business Other

# Locally Administered Project Updates

# Bid Openings

## **Downtown Greenway, Phase 4 - Contract 2015-0030**

Bid opening was on March 24, 2022

Low bid was 65% higher than project estimate, NCDOT would not provide concurrence

Currently exploring value engineering options to rebid at a later date

## **Greene Street Streetscape - Contract 2018-0480**

Currently discussing start date due to material delays and future public events

The completion date for the contract is 450 days from NTP

Projects limits are from Washington St. to Bellemeade St.

# Current Projects

## **Alamance Church Road Improvements - Contract 2011-0670**

Construction has begun with clearing operations taking place  
New waterline and storm sewer installation is beginning  
Construction is expected to be completed by spring 2024

## **Ballinger Road Bridge Replacement - Contract 2016-037A**

Bridge work is currently underway  
Additional grading and storm replacement to coincide with bridge work  
Expected to be complete by December 2022

## **Eugene & Bellemeade Streetscape - Contract 2020-0180**

Waterline has been installed on Bellemeade St. from Edgeworth St. to Eugene St.  
Construction has been placed on hold until end of this year's baseball season

# Current Projects

## Ballinger Road Bridge



# Current Projects



Ballinger Road Bridge

Action Business Other

# Current Projects

## **Horsepen Creek Road Widening - Contract 2010-010**

Construction is continuing on last half mile on eastern portion  
This portion was delayed to existing utility conflicts  
Expected to be complete by August 2022

## **Summit Avenue Streetscape - Contract 2018-0200**

Utility relocation is currently underway  
Some streetscape work has been completed in areas outside utility relocation areas  
Phase 1 is expected to be completed by Spring 2023  
Phase 2 work will begin upon completion of phase 1

# Current Projects

Horsepen Creek Road



# Current Projects

Summit Avenue



# Current Projects

## Sidewalks

### College/New Garden Road Sidewalk - Contract 2014-0400

East side - Approximately 500' south of W. Friendly Avenue to Guida Drive

West side - W. Friendly Avenue to Ballinger Road

Construction is underway. Expected to be completed by the end of the year

### North Elm Street Sidewalk - Contract 2019-0640

Both Sides from Cone Blvd. to Cornwallis Drive

Contract has been awarded and construction to start this week

# Current Projects

New Garden Sidewalk



# Strategic Reports

*Action Business Other*



- Gas taxes provide funding linchpin in NC & US
- Revenues under strain as fuel efficiency increases
- Eastern Transportation Coalition piloting mileage-based user fees
- MPO participants are requested for the pilot
- Any volunteers?

### The Problem

We depend on our roads and bridges to get to where we need to go, deliver packages to our doors, and keep groceries on the shelves. This transportation system is funded mainly from a pay-at-the-pump fuel tax. As vehicles go farther on less fuel and some stop using any fuel at all, it will be difficult to maintain a viable transportation system in North Carolina without developing a new sustainable approach.

### The Pilot

The Eastern Transportation Coalition, a partnership of 17 states and Washington D.C., needs your help to explore an alternative approach, called a Mileage-Based User Fee (MBUF). A Mileage-Based User Fee means each driver pays for the miles they drive instead of the fuel they buy. The Coalition is partnering with North Carolina to conduct a Pilot Program to determine if an MBUF would be a more equitable and sustainable approach.

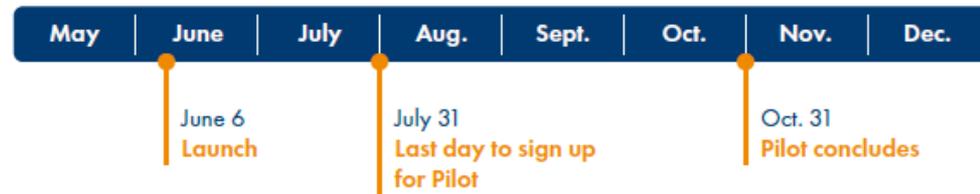
### Why Join?

The Coalition needs representatives from your organization to enroll and provide crucial feedback to shape the future of transportation funding in North Carolina. The Pilot is free and designed with strict privacy protection measures to safeguard your data. Participation involves four easy steps:

1. **Enroll** - Fill out the enrollment form by clicking the link on the website.
2. **Insert** - Plug a small device into your vehicle to record mileage.
3. **Drive** - Then drive as you normally do.
4. **Return** - After a few months, mail back the device.

*\*These steps may vary depending on the mileage-reporting option selected.*

### 2022 Pilot Timeline



### Funding

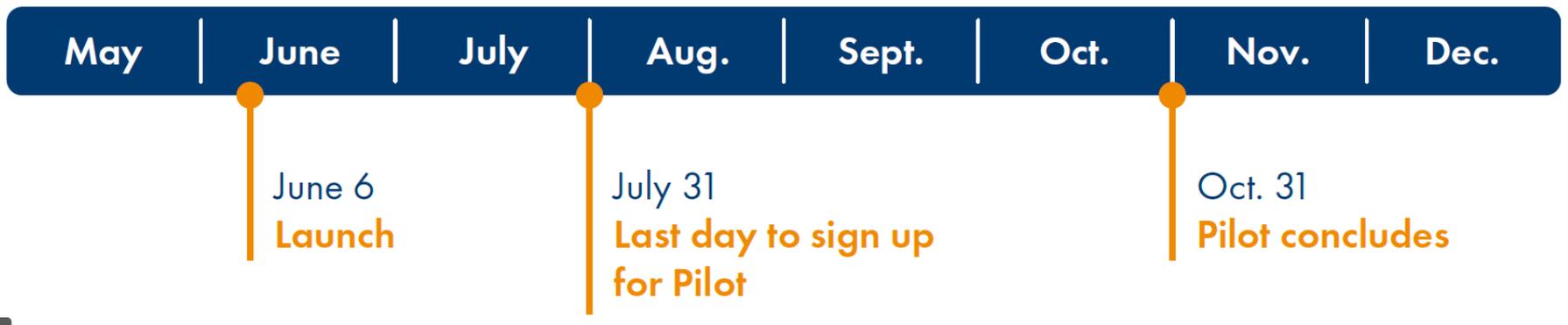
The pilot is funded through the U.S. Department of Transportation Surface Transportation System Funding Alternatives (STSEA) grant program established under the Fixing America's Surface Transportation Act. This grant provides funds to programs that utilize a user fee structure.

# Mileage-Based User Fee

1. Enroll: [NorthCarolinaMBUFpilot.com](http://NorthCarolinaMBUFpilot.com)
2. Insert: Small device into your vehicle to records mileage
3. Drive: As you normally do
4. Return: After a few months, mail back the device.

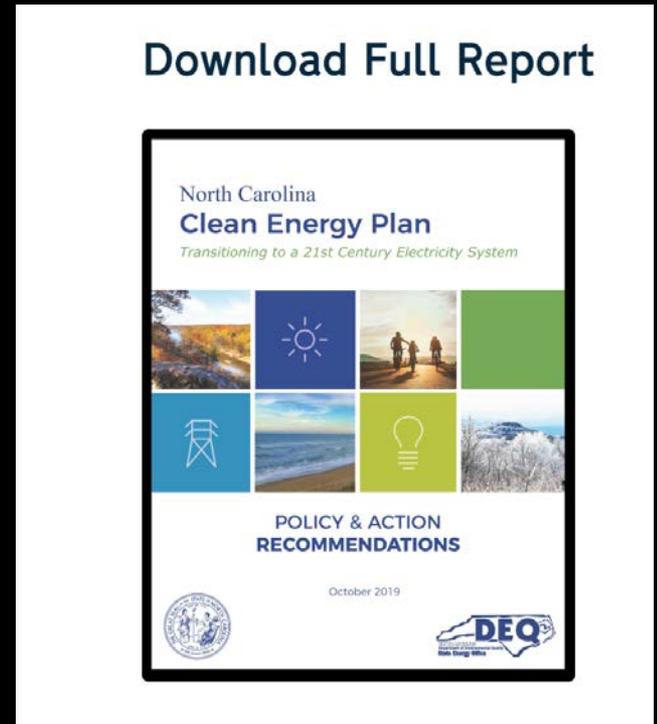
*These steps may vary upon mileage-reporting option selected.*

## 2022 Pilot Timeline



# N.C. Clean Energy Plan

- Second public information session
- 6/28/22 virtual meeting 6 to 7:30 pm
- Topics
  - Update on plan development
  - Coordination with Clean Transportation Plan
  - Potential emission-reduction pathways to help NC reach emission goals
- Registration required; contact Craig for information if interested



# Bicycle & Pedestrian Advisory Committee

## Second Quarter

*Virtual Meeting*

June 24, 2022, 2-4p



## Meeting Agenda

1. Shared Micromobility Services
2. Safe Routes to School
3. 2022 Resurfacing Projects
4. Project Updates
5. Participatory Budget
6. GTA Update
7. TAC Communications
8. BPAC Member Announcements



# Other Items

1. Member Agency Updates
2. Wrap up

*Next TCC meeting August 8, 2022 at 2:00 PM*

# Greensboro Urban Area MPO



Technical Coordinating Committee  
June 21, 2022