



NORTH CAROLINA

Department of Transportation



NCDOT's Integrated Mobility Division (IMD) – New Transit Directors' Training

Planning

June 9, 2022



Integrated Mobility Division
N.C. DEPARTMENT OF TRANSPORTATION



Integrated Mobility Division

N.C. DEPARTMENT OF TRANSPORTATION

AGENDA

- IMD Planning & Programing Intro
- Regional Planning
- Statewide Planning & Programming



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IMD Planning & Programing Intro

- IMD Mission & Goals
- Organization Chart
- Focus Areas
- Sections
- Partners



Integrated Mobility Division
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Mission

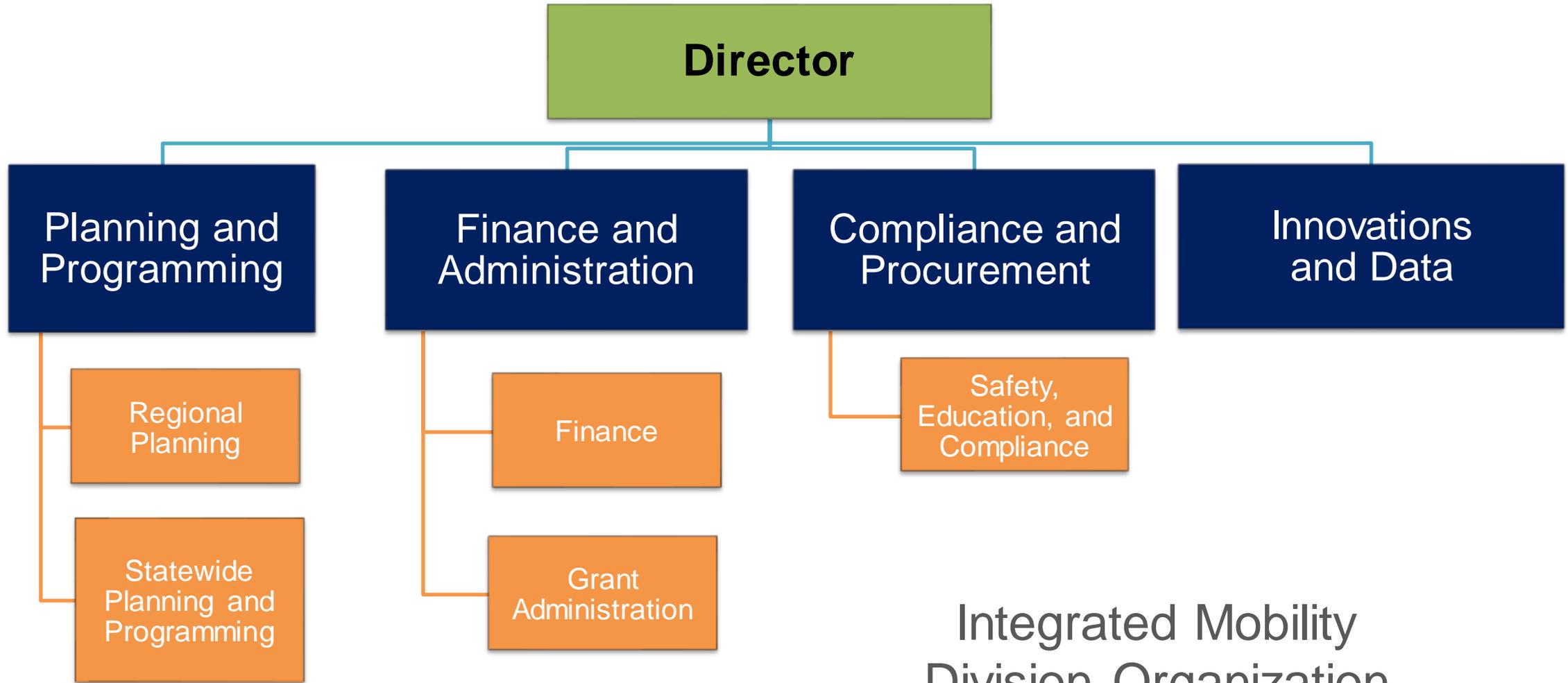
Provide leadership for safe, affordable, and innovative multimodal transportation throughout North Carolina

Core Goals:

Increase
Access

Enhance
Quality of Life

Ensure
Safety



Integrated Mobility Division Organization

Prime Focus Areas



Planning

- Local Planning Grants
- Regional Planning
- Statewide Plan
- State Bike Routes



Safety & Education

- SRTS
- Watch for Me NC
- Helmet Initiative
- Crash Analysis



Project Development

- Complete Streets
- Project Scoping
- Infrastructure Data & Counts



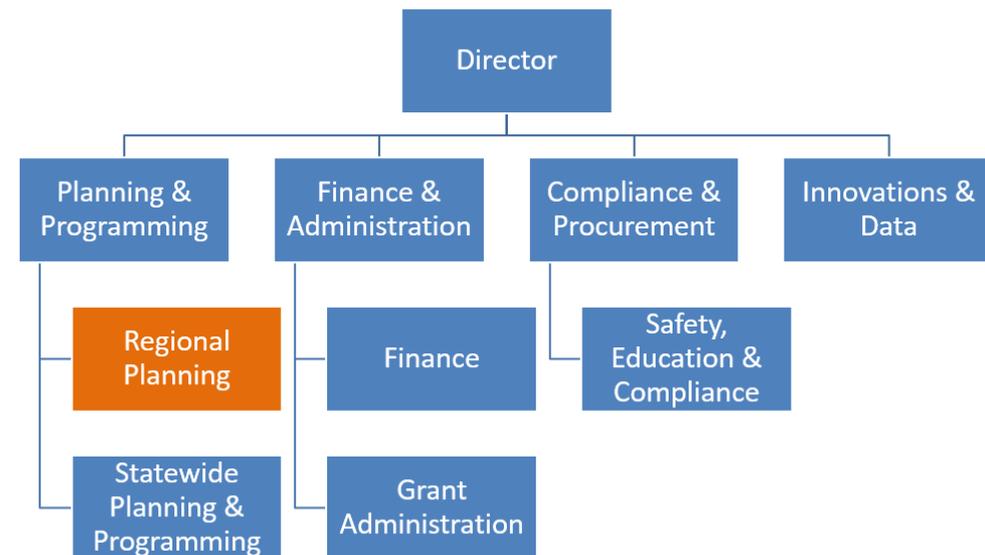
Project Delivery

- Locally Administered Project Delivery
- Partner Outreach
- Prioritization

Regional Planning Section

Manager – Bryan Lopez

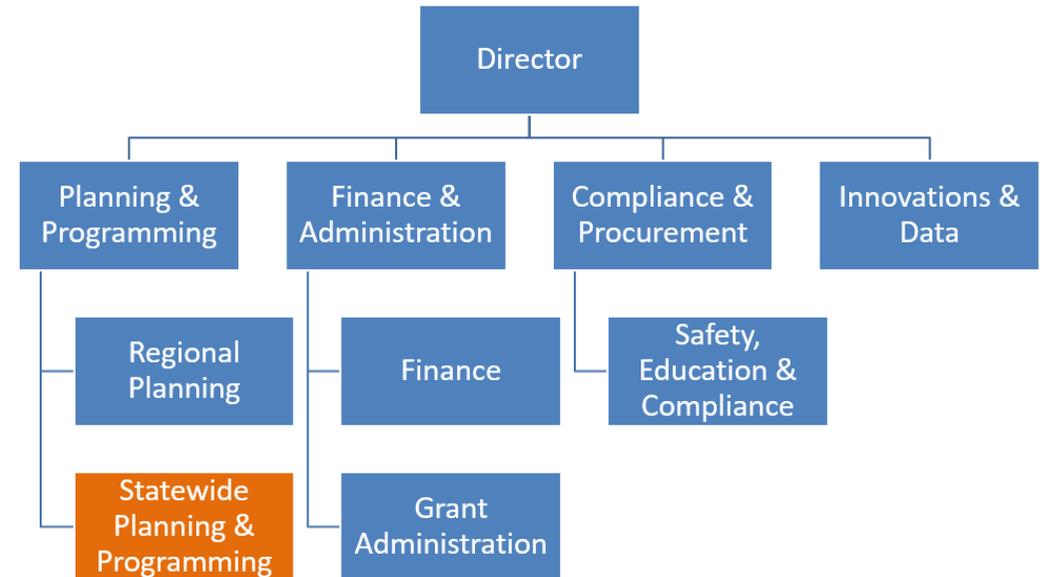
- Engagement with transit agencies, Transportation Planning Division (Comprehensive Transportation Plans), and Metropolitan Planning Organizations (MPOs) and Regional Planning Organizations
- Multimodal Planning Grants
- Regional Transit Plans
- Transportation Demand Management (TDM)
- Technical assistance with facilities or implementation process



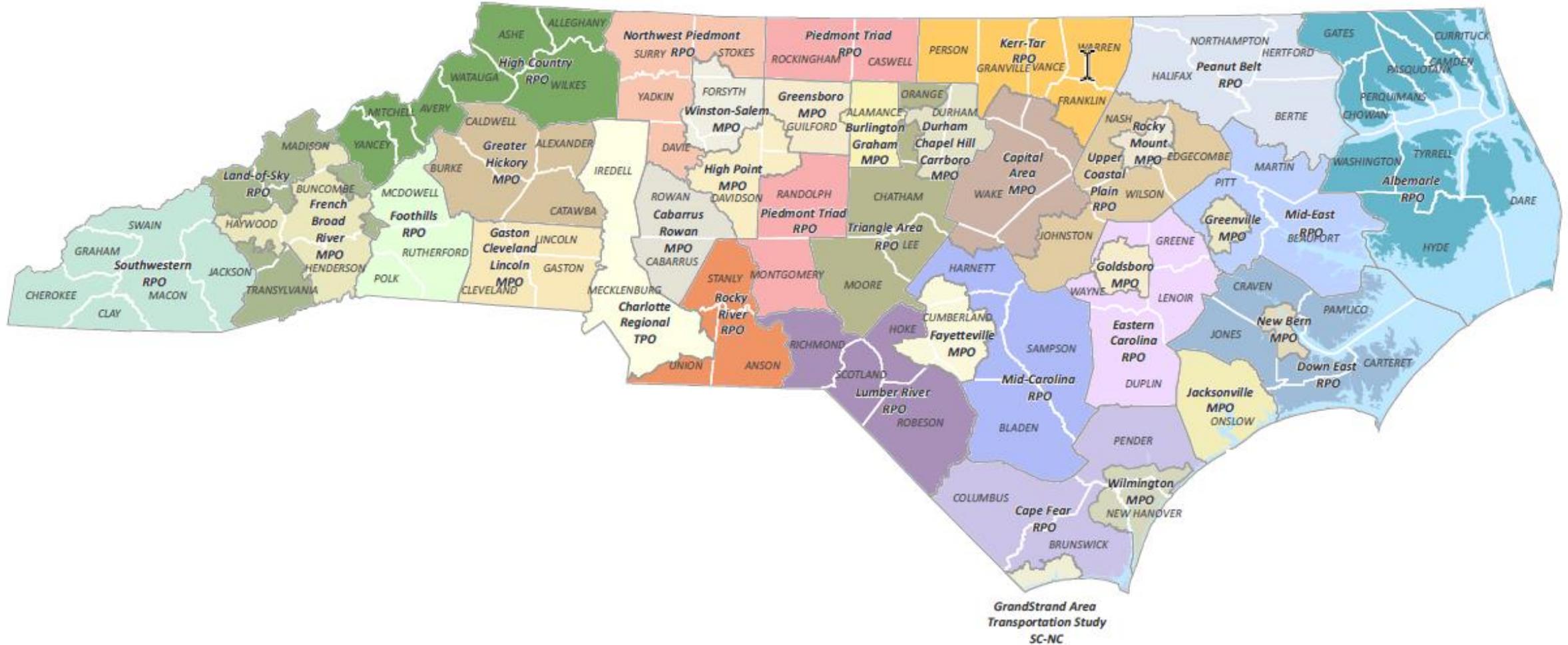
Statewide Planning and Programming Section

Manager – Joe Furstenberg

- Complete Streets Policy & Project Development Review
- Great Trails State Plan
- Feasibility Studies
- Safe Routes to School Coordination
- Bicycle Helmets
- Research Projects
- Special Studies

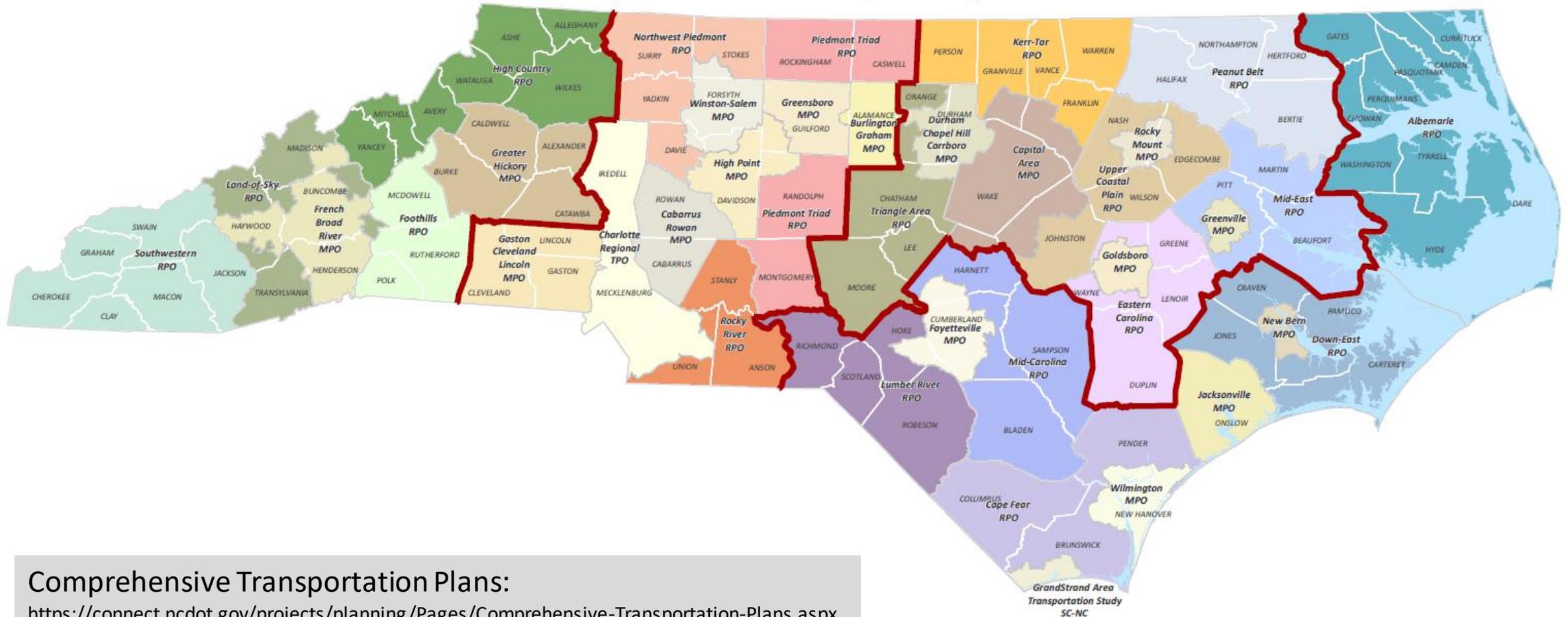


Metropolitan Planning Organizations (MPOs) & Rural Planning Organizations (RPOs)



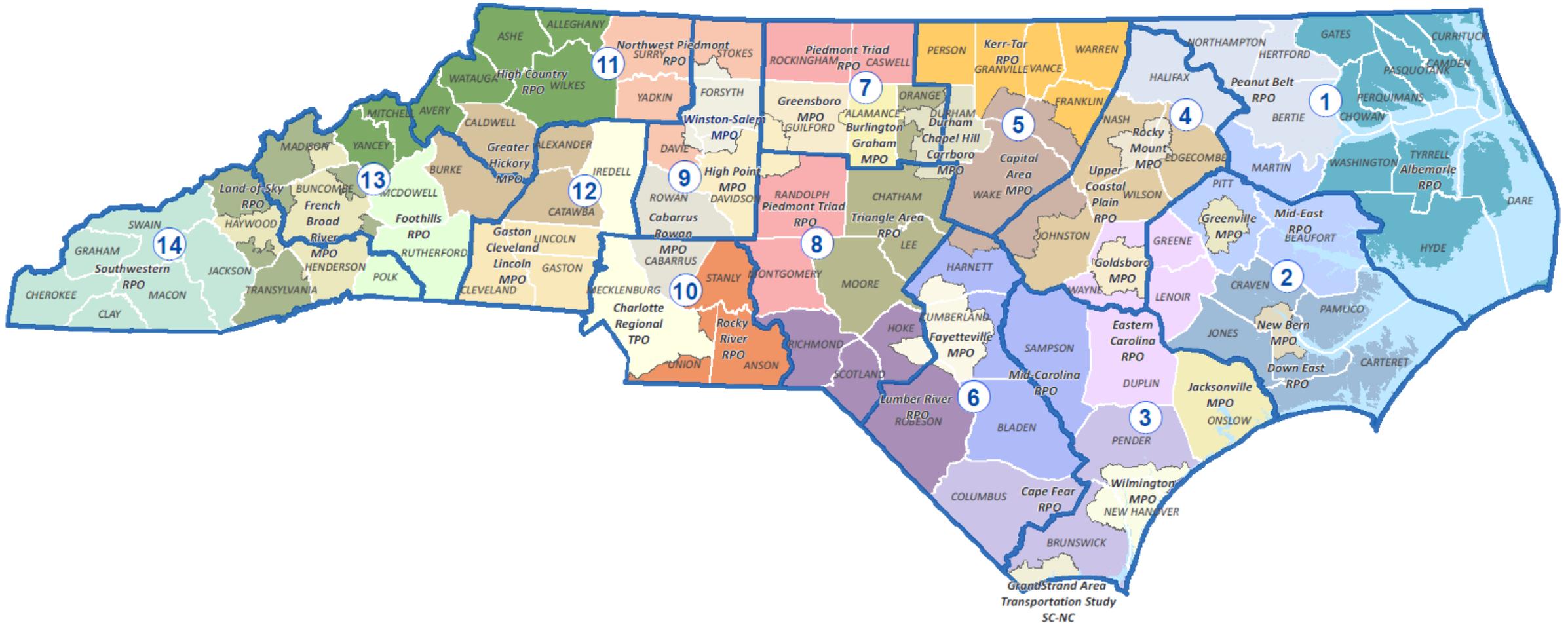
GrandStrand Area Transportation Study SC-NC

NCDOT Transportation Planning Division

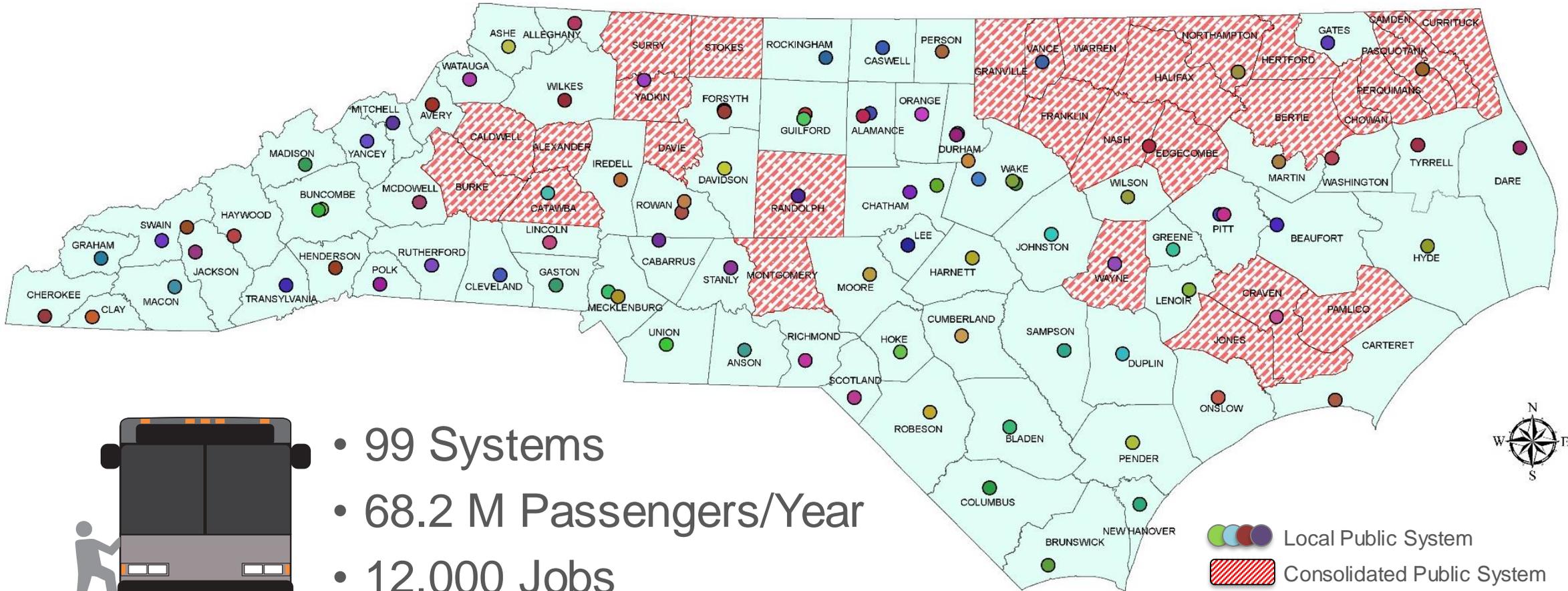


Comprehensive Transportation Plans:
<https://connect.ncdot.gov/projects/planning/Pages/Comprehensive-Transportation-Plans.aspx>

NCDOT Highway Divisions



NC's Public Transportation Systems



- 99 Systems
- 68.2 M Passengers/Year
- 12,000 Jobs



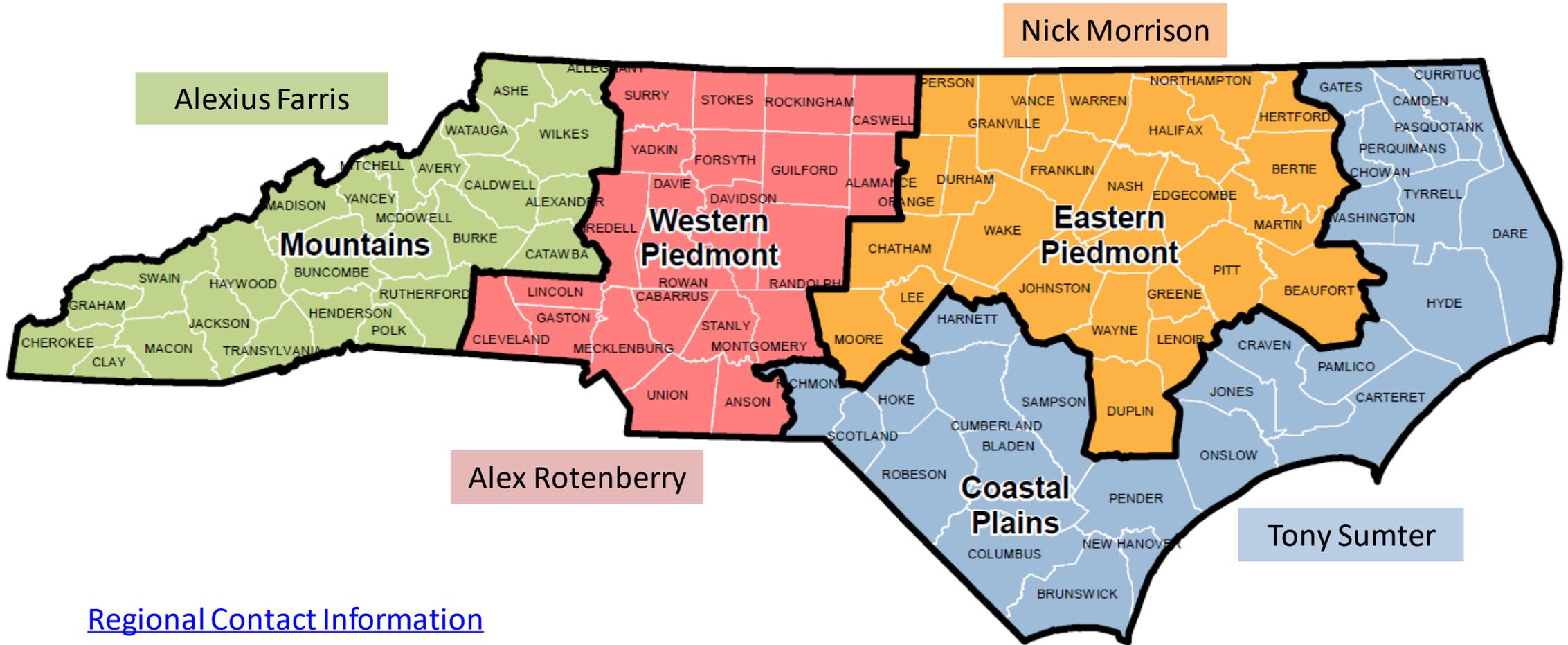
Integrated Mobility Division

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Regional Planning

- Staff Regions
- Multimodal Planning Grants
- Regional Transit Plans
- Locally Coordinated Plan (5310)
- Microtransit Feasibility/Service Planning Studies
- Transit Service/Route Analysis
- Transportation Demand Management
- S-Line TOD Planning Study
- **Visioning Workshops (August – September 2022)**

IMD Regions



[Regional Contact Information](#)

Regional Planner Coordination

- **Regional Planning Team Coordinating with CTP process**
 - Introductions in December 2021 & January 2022
 - Presence at CTP meetings

- **Roles of Regional Planner:**
 - Presentations on bike-ped topics to CTP committees
 - Analysis of bike-ped crashes, BLOS
 - Review of recommendations, purpose & need statements, etc.

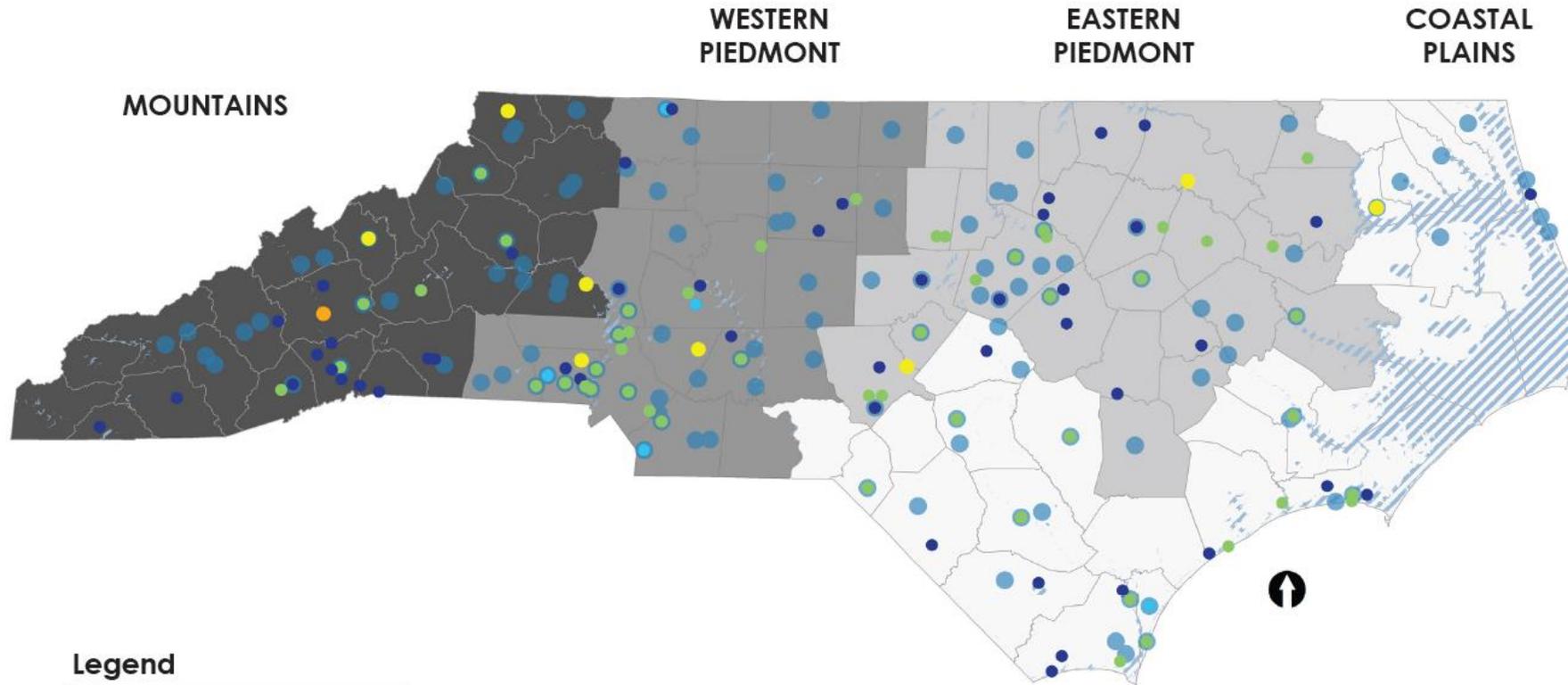
- **Future roles after evaluation in 2022**

Regional Planner Coordination

- MPO Engagement in Q1 2022 in coordination with TPD

- **Regional Planners** building partnerships with MPO & RPO's
 - Updates on TCC meeting agendas
 - Special committees or BPACs
 - Presentations on programs and policy
 - Inventory requests

Bicycle and Pedestrian Planning Grants

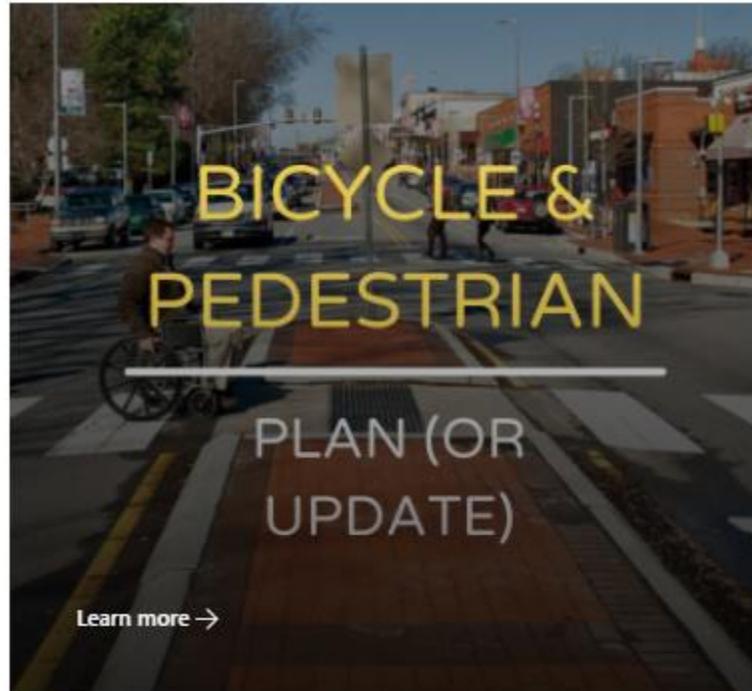
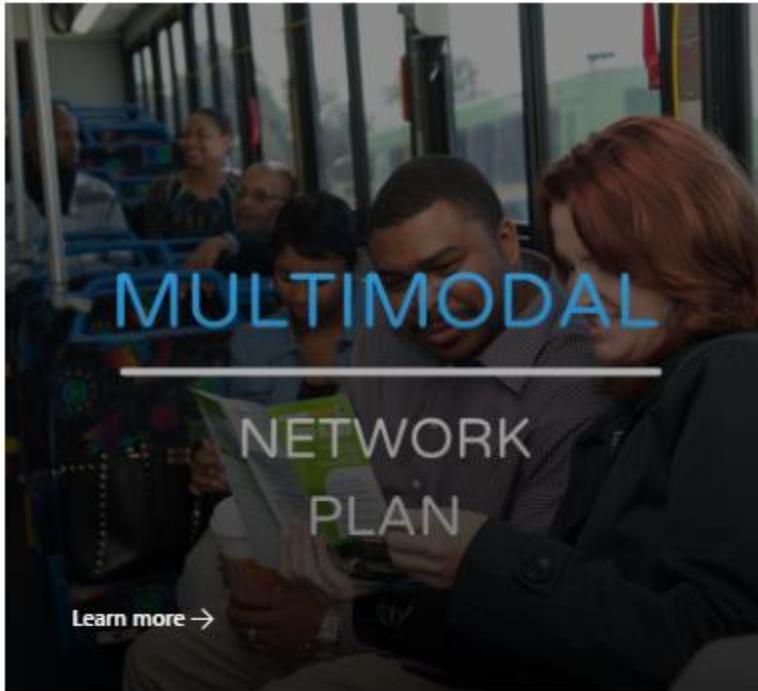


Legend

- Combined Bike/Ped Plan
- Bike Plan
- Pedestrian Plan
- Project Acceleration Plan
- Plan Update
- Corridor/Small Area Plan

245 Plans across 85 Counties

Multimodal Planning Grant Program



Future Planning Studies

- Microtransit / Shared Mobility Study
- Access to Transit
- Small Area / Corridor Study

Multimodal Planning Grants - Plan Types

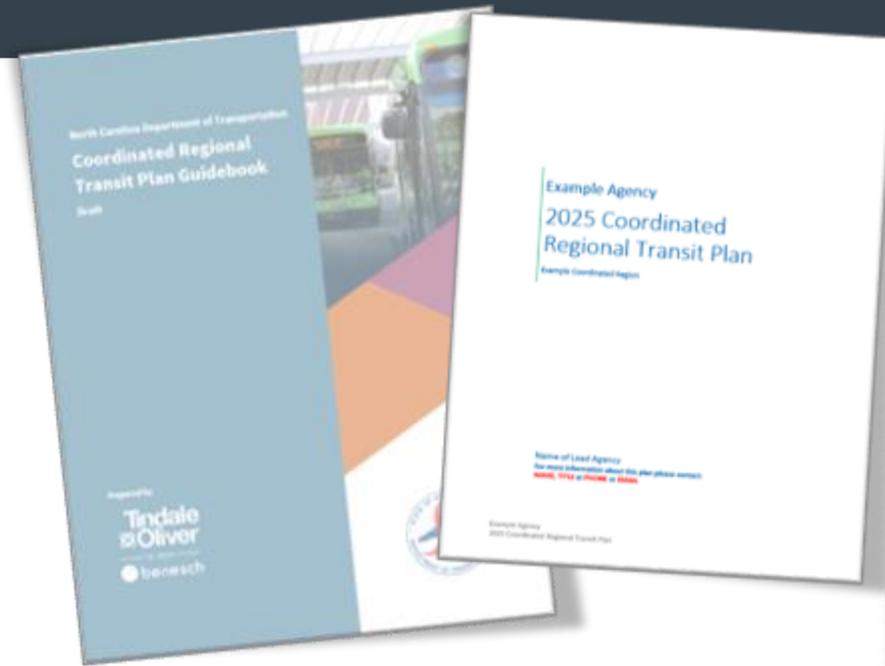
Jurisdiction Type	Stand-Alone Pedestrian or Bicycle Plan (or Plan Update)	Multimodal Network Plan	Project Acceleration Study
Town or city with pop. <5,000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Town or city with pop. between 5,000 & 9,999 & no transit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Town or city with pop. Between 5,000 & 9,999 & existing transit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Town or city with pop. >10,000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Counties with pop. <100,000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Counties with pop. <100,000 with fixed or deviated fixed transit		<input checked="" type="checkbox"/>	

[Planning Grant Initiative Connect Page](#)

March Call for Projects

Coordinated Regional Transit Plan Program

- Resources to support coordinated regional planning
 - ✓ Guidebook
 - ✓ Document Template
 - ✓ Analytical Template
 - ✓ Map Template
- Defined coordinated regions
 - 100 counties → 20 suggested Coordinated Regions
 - Each classified as:



Rural Coordinated Region

Comprising one or more RPOs and not located within an urbanized area.



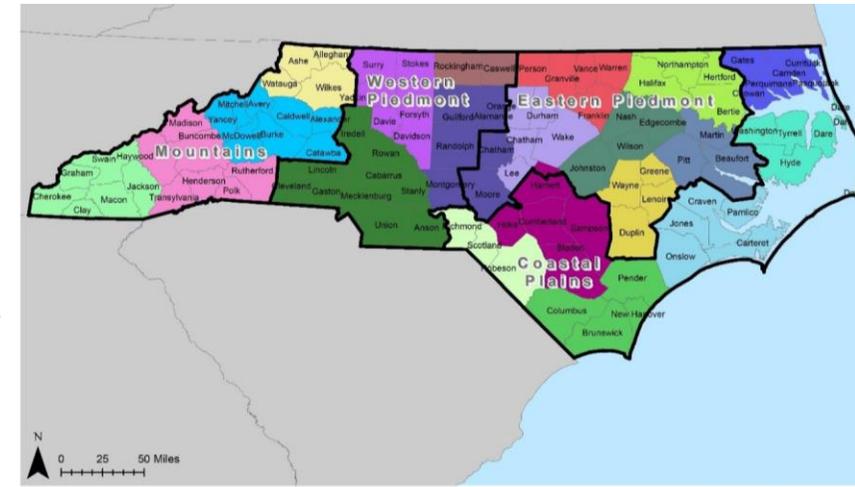
Rural/Urban Coordinated Region

Includes both RPOs and MPOs and contains characteristics of both the urban and rural Coordinated Region.



Urban Coordinated Region

Includes only MPOs and comprises an urbanized area.

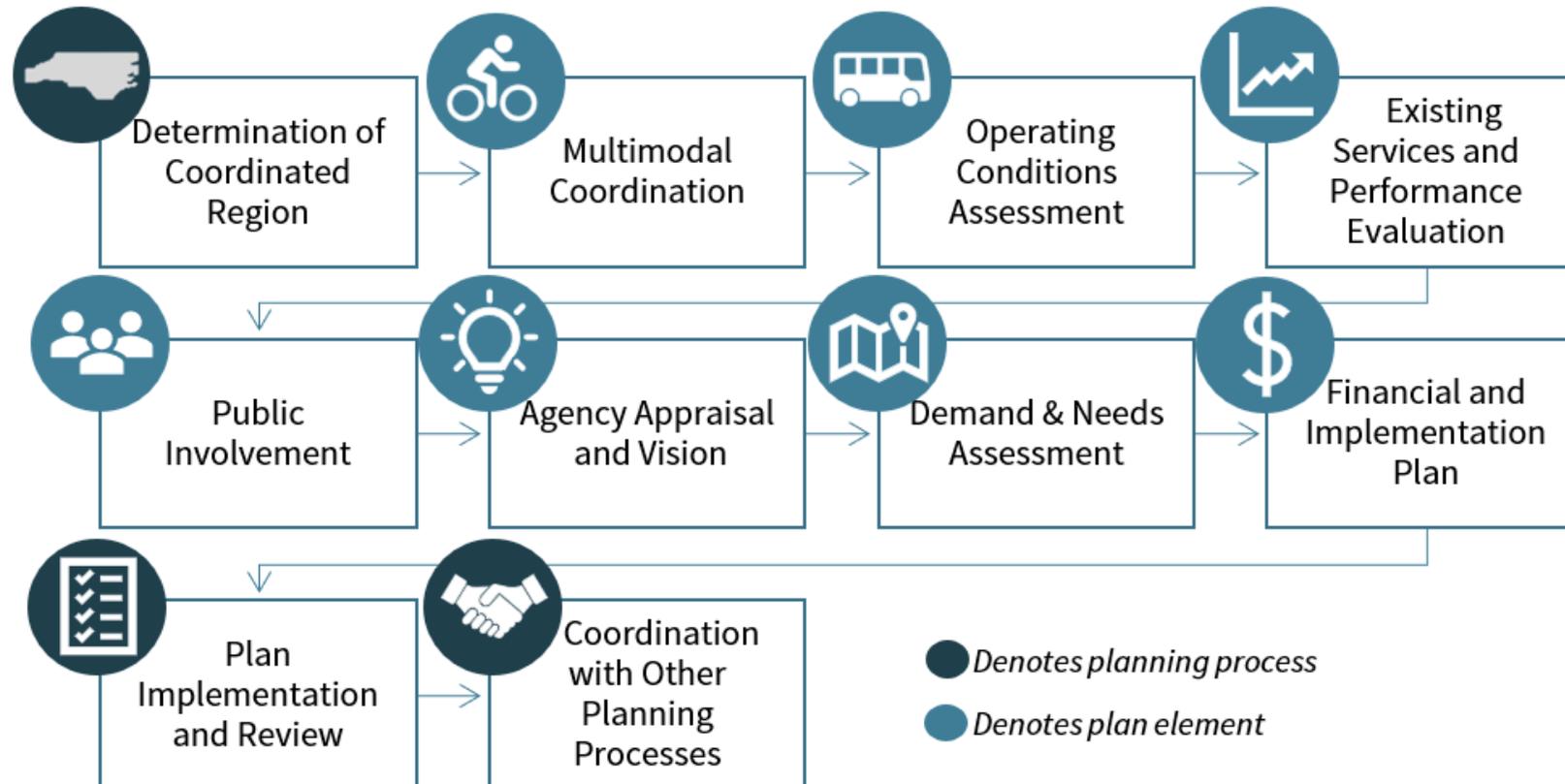


Coordinated Regional Transit Plan Program

Summer 2022 – Two Pilot Regions

- Upper Coastal Plain
- High Country

- Standardized regional transit planning process
 - Resources/templates adaptable by the user
 - Guidance based on applicability of each element by Coordinated Region Type



Locally Coordinated Plan (5310)

- The current Statewide Locally Coordinated Plan (LCP) satisfies the Federal Transit Administration (FTA) requirement for a locally developed Coordinated Public Transit-Human Services Transportation Plan (also referred to as a Locally Coordinated Plan).
- A plan is required for programming of funding under Section 5310 Program—Enhanced Mobility of Seniors and Individuals with Disabilities.
- A plan update is needed for the FY2025 grant cycle.
- Requirement can be satisfied with one statewide plan and/or regional transit plans.
- Approximate deadline for plan(s) completion – March 2024.



Statewide 5310 Locally Coordinated Plan
North Carolina Department of Transportation
Public Transportation Division
August 2018

Prepared by Whitman, Requardt and Associates, LLP

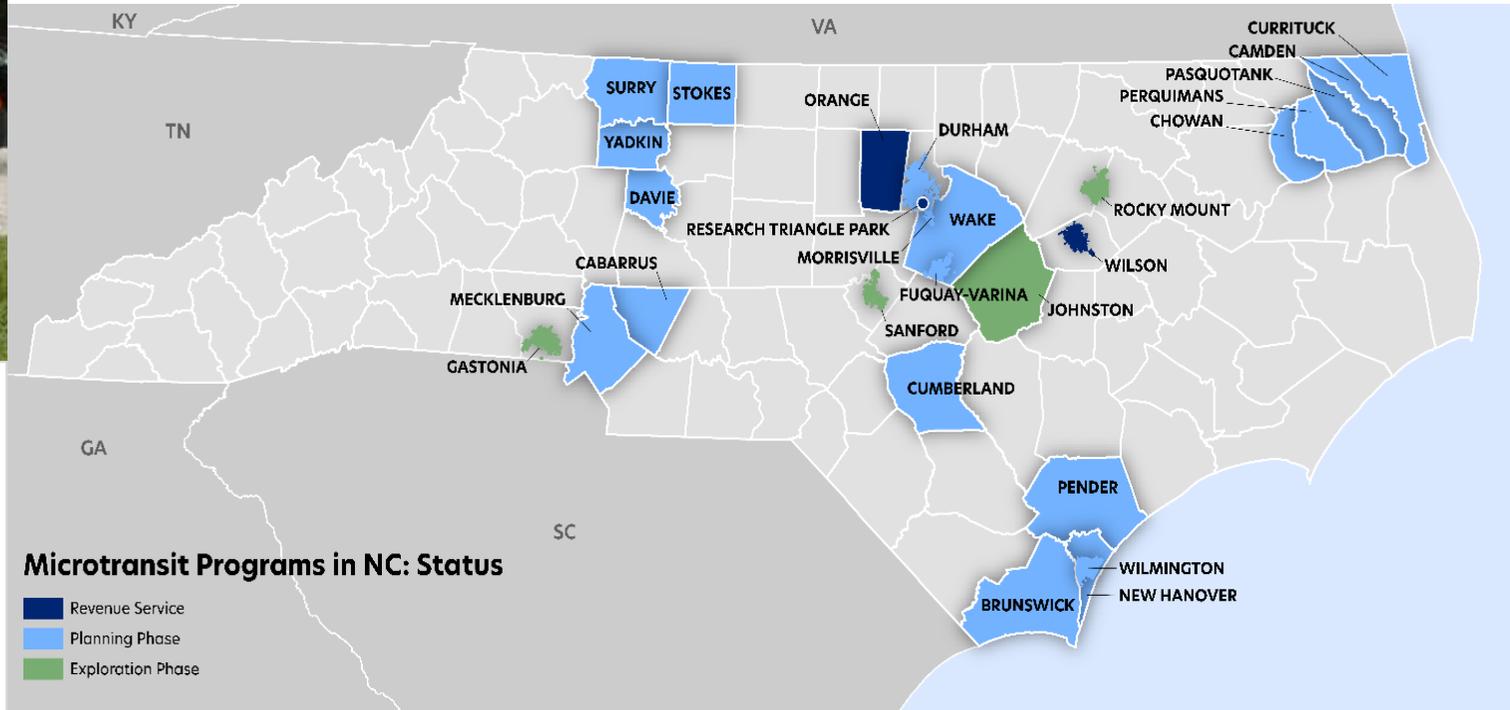




On-Demand Microtransit

- Similar to rideshare services like Uber or Lyft, but subsidized and provided as a form of public transportation.
- 15 minute average wait time after requesting a ride.
- First pilot launched in September 2020 and has been highly successful, doubling transit ridership in Wilson, even amid the pandemic.
- NCDOT is actively exploring additional deployments with communities throughout the state, including Wake and Lee Counties

Microtransit Feasibility/Service Planning Studies



Mobility-as-a-Service (MaaS) – Journey planning, trip scheduling, payment, and real time tracking across all modes of transportation in one common application.

Making transit, walking and biking as easy as driving

Transit Service/Route Analysis

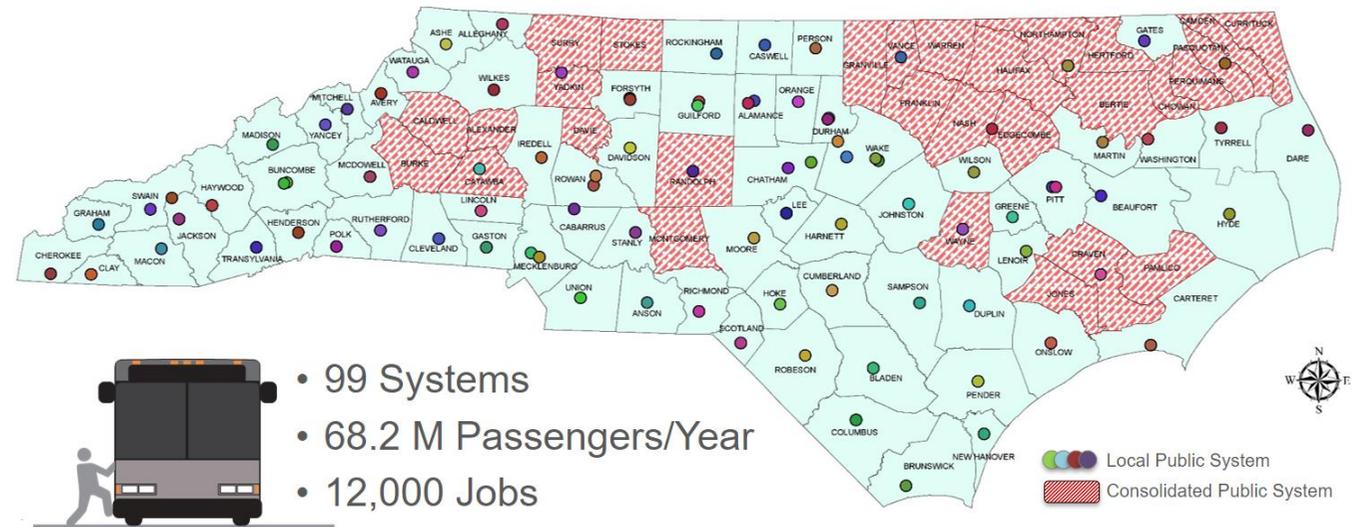
Contact your Regional Planner

Abbreviated Analysis

- NC State's Institute for Transportation Research and Education (ITRE)
- In FY2023, IMD plans to implement an online technical assistance request form for transit systems to use to request planning assistance or related information.

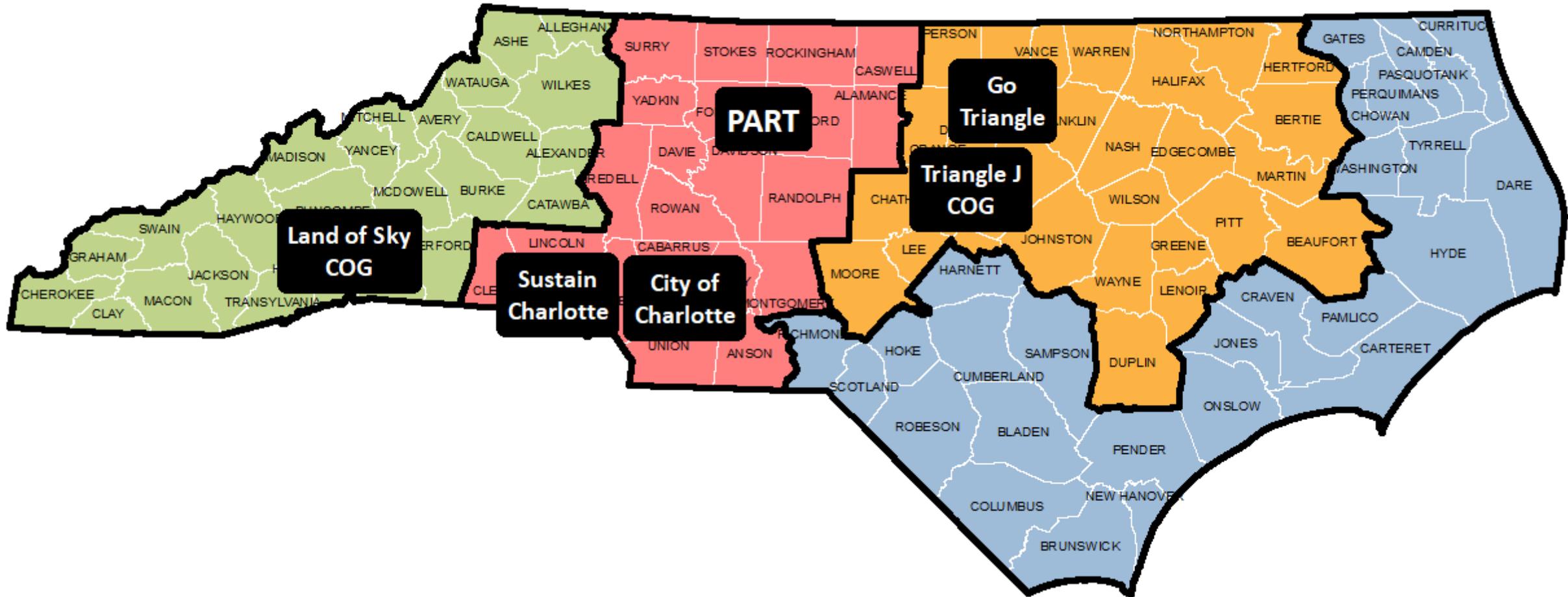
Comprehensive Analysis

- On-call Consultants
- Feasibility/Service studies – Microtransit, Multimodal Plans, Regional Transit Plans/Studies

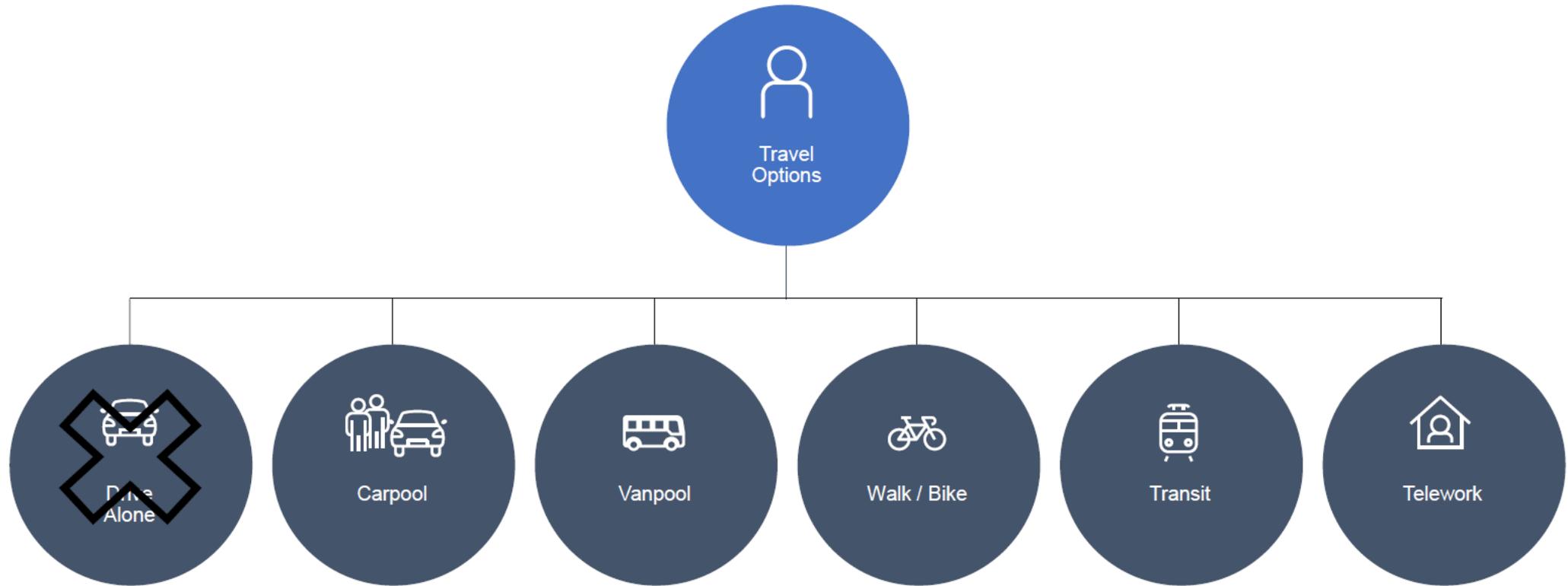


- 99 Systems
- 68.2 M Passengers/Year
- 12,000 Jobs

TDM Partners



Sustainable Travel Options



Transportation Demand Management (TDM) Program

Current Program

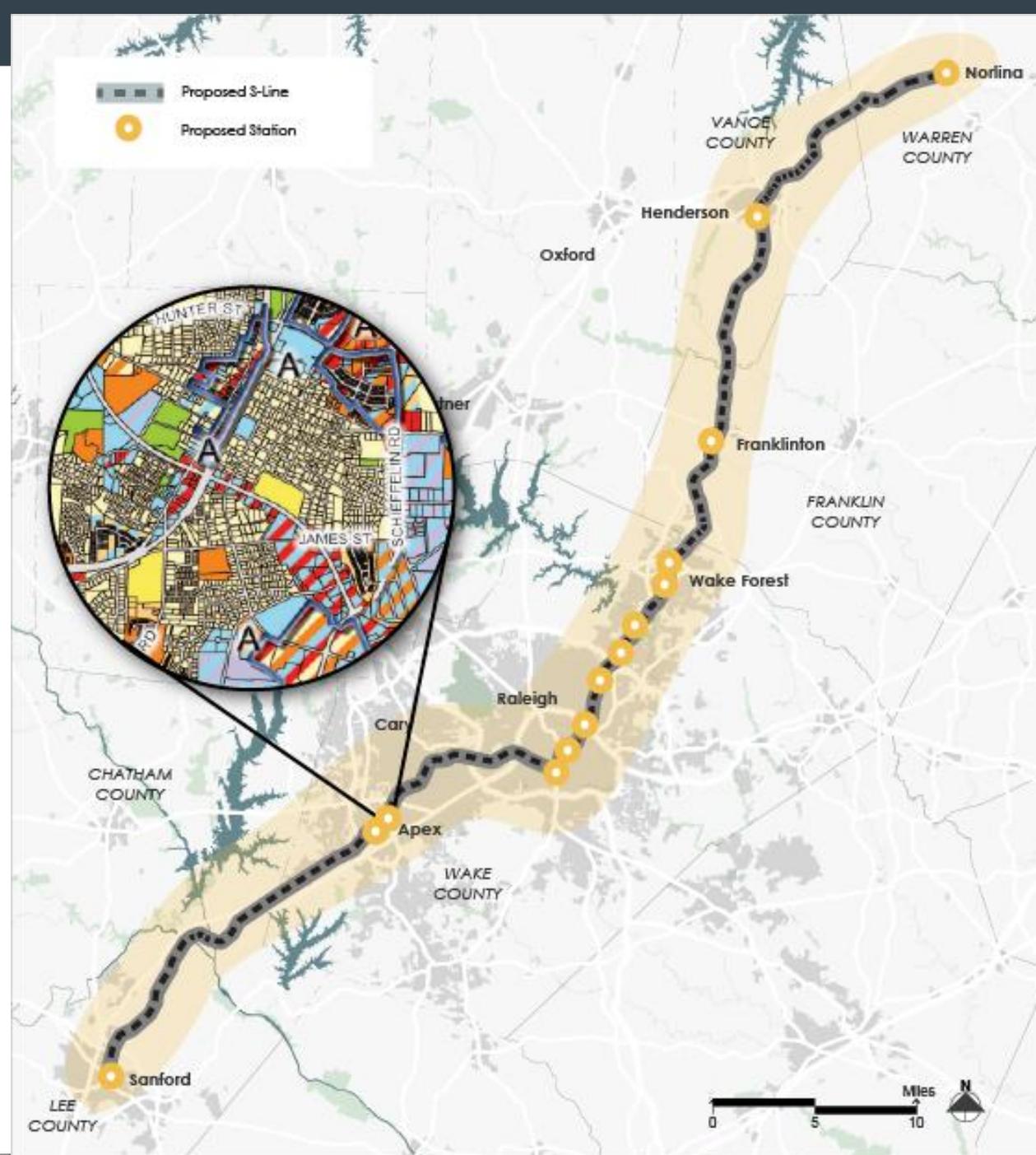
- Travel Options
 - Travel Options Coordinator
 - Education of Travel Options (Marketing)
 - Recruitment of Travelers into Non-SOV Modes (Outreach)
 - Tools for Employers and Commuters (Programs)
 - Pilot Programs
 - Transportation Innovations
- TDM Workplan
- TDM Scorecard

Future Focus

- Small Urban and Rural Partners
- Evolving TDM strategies: MaaS,
 - Microtransit, Micromobility
- TDI and Accessibility
- Statewide TDM Programming
- TDM Coordinators

S-Line TOD Planning Study

<https://www.ncdot.gov/divisions/rail/s-line-study/>





COMMUNITY DESIGN WORKSHOPS

JUNE 7-16

<https://tinyurl.com/SLineTOD>



DATE	COMMUNITY	WORKSHOP 1:00 - 4:00 P.M.	PUBLIC DROP-IN 5:30 - 7:00 P.M.
JUNE 7	HENDERSON	PERRY MEMORIAL LIBRARY 205 Breckenridge Street	PERRY MEMORIAL LIBRARY 205 Breckenridge Street
JUNE 7	FRANKLINTON	OWL'S ROOST BREWING 20 North Main Street	OWL'S ROOST BREWING 20 North Main Street
JUNE 8	WAKE FOREST	RENAISSANCE CENTRE 405 S. Brooks Street	RENAISSANCE CENTRE 405 Brooks Street
JUNE 9	WAKE FOREST	RENAISSANCE CENTRE 405 S. Brooks Street	WAKE FOREST TOWN HALL 301 Brooks Street
JUNE 9	APEX	APEX TOWN HALL 73 Hunter Street	APEX TOWN HALL 73 Hunter Street
JUNE 14	RALEIGH	THE LOADING DOCK 1053 East Whitaker Mill Road	METHOD COMMUNITY CENTER 514 Method Road
JUNE 15	RALEIGH	THE LOADING DOCK 1053 East Whitaker Mill Road	MILLBROOK EXCHANGE PARK 1905 Spring Forest Road
JUNE 16	SANFORD	THE DEPOT 106 Charlotte Avenue	THE DEPOT 106 Charlotte Avenue
JUNE 16	NORLINA	WARRENTON AMORY CIVIC CENTER 501 US Hwy 158 Bus. East, Warrenton	WARRENTON AMORY CIVIC CENTER 501 US Hwy 158 Bus. East, Warrenton

Visioning Workshops

- Purpose: Inspire new practices and services for transit agency operations
- Areas to explore:
 - What is visioning and why is important?
 - Vision statement for each transit agency
 - Emerging technologies, brainstorm ways to adopt locally
 - New types of coordination & local/regional partnerships
- Visions developed during regional workshops (7) in August/September 2022

Visioning Workshops

Project Timeline

- June 21 Webinar:
 - <https://attendee.gotowebinar.com/register/8374196540429198093>
- August-September 2022 In-person regional workshops
- November 2022 report compiled
- 6 months of follow-up technical assistance

Visioning Workshops

- Webinar Agenda (June 21)
 - Jarrett Walker, Transit Consultant, [Jarrett Walker and Associates](#) and [Human Transit Blog](#)
 - Marcela Moreno, AICP, Transit Technologist, [National Center for Applied Transit Technology](#)
 - Tim Palermo, Planning & Data Analytics Manager, [Denton County Transportation Authority](#)
 - Lora B. Byala, AICP, Founder & CEO, [Foursquare Integrated Transportation Planning](#)
 - Gibran Hadj-Chikh, Project Manager & Co-Lead for Urban Transit and Emerging Technologies, [Kittelson & Associates](#)



Integrated Mobility Division

N.C. DEPARTMENT OF TRANSPORTATION

Statewide Planning & Programming

- Complete Streets
- Feasibility Studies
- Strategic Prioritization
- Great Trails State Plan
- State Bicycle Routes
- Bicycle Helmet Initiative
- SRTS Non-Infrastructure Grants
- Interim Design Safety Project
- Accessibility Metrics
- Research
- NC Non-Motorized Volume Data Program
- Transportation Disadvantage Index Tool

NC Complete Streets Policy (2019) Highlights

Complete Streets is North Carolina's approach to interdependent, multi-modal transportation networks that *safely accommodate access and travel for all users.*

NCDOT is committed to:

- Enhancing safety for **all transportation modes**
- Providing an efficient multi-modal transportation network in North Carolina such that the access, mobility, and safety needs of motorists, **transit users, bicyclists, and pedestrians** of all ages and abilities are safely accommodated
- Working in partnership with local government agencies, interest groups, and the public to plan, fund, design, construct, and manage complete street networks that sustain mobility through **walking, biking, transit** and driving

Complete Streets Implementation



General Goals

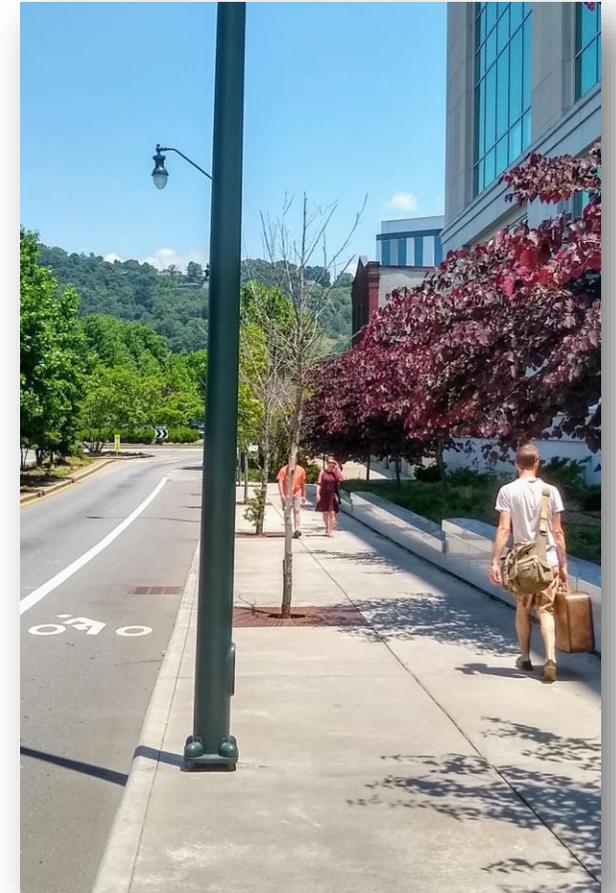
- Reduce pedestrian crashes and unsafe conditions
- Improve access and mobility for those without a vehicle
- Enhance quality of life by providing transportation choices
- Ensure NCDOT has an equitable transportation system that works for everyone

NCDOT Policy / Guidance

- NCDOT Board adopts Complete Streets Policy (2009)
- NCDOT Board updates Complete Streets Policy (2019) – Implementation Guidance
- Release of updated methodology for Complete Streets Review (2022)
 - Why update?
 - 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.

Complete Streets: *Key Changes in Policy and Approach*

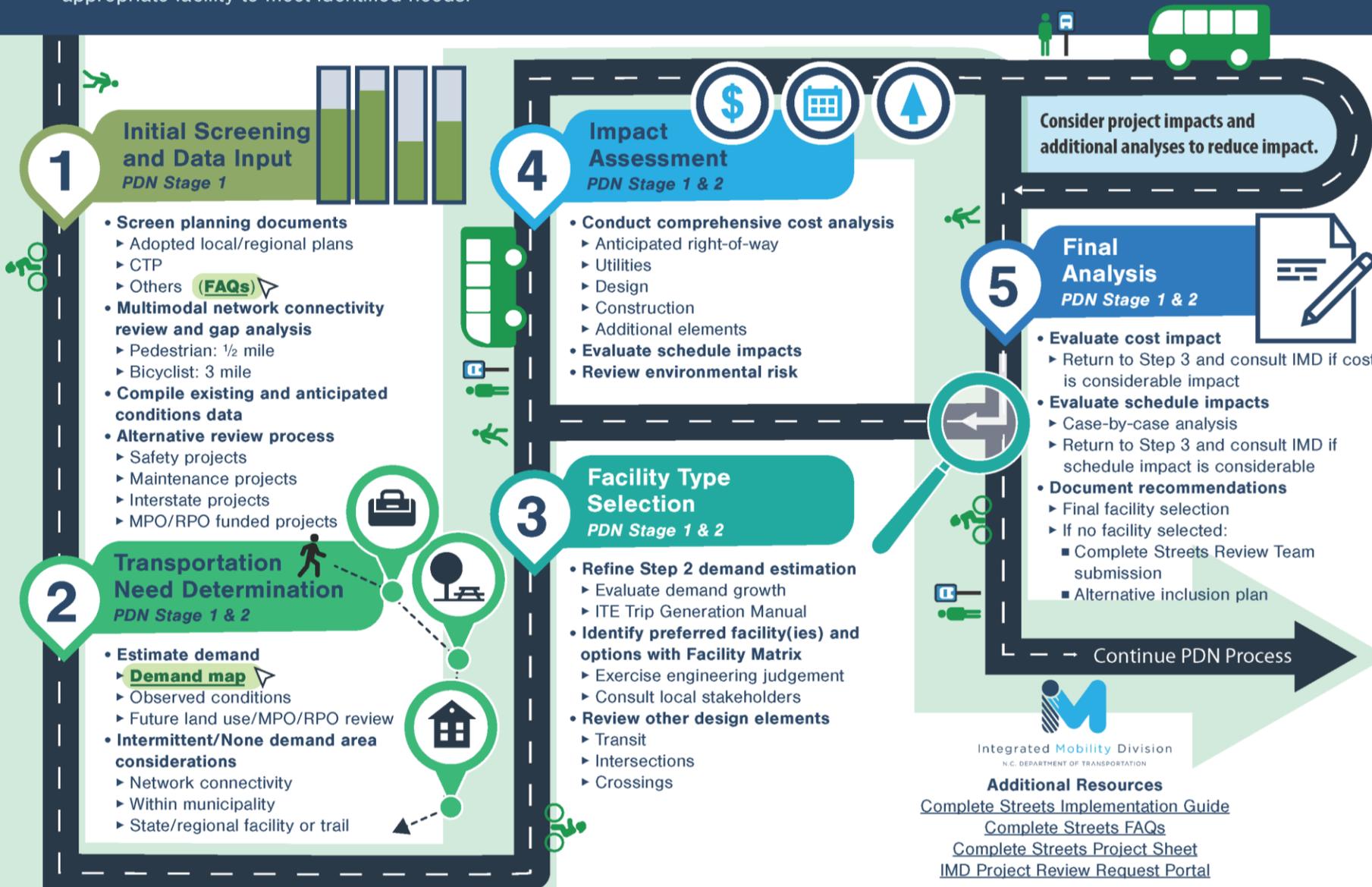
- The Complete Streets policy requires NCDOT to evaluate all projects for bicycle and pedestrian needs and include enhancements to address needs.
- The new (2022) evaluation methodology is standardized and streamlined and will guide project managers through a process of identifying needs, selecting the appropriate facility type, and estimating added impacts to the project.
- Numerous consultation points with **LGAs and MPOs/RPOs** during the process.
- Program managers should consult with the **local transit system operator** to discuss integration of transit facilities into the roadway project.
- Tools/guidance should be supplemented with **local conversations** and project-specific information when making decisions within each step.



IMD's Role in Project Development

- **Current:**
 - Project reviews, project sheets – two key tools in NCDOT's Complete Streets implementation
 - Includes two formal reviews steps in project development process (PDN)
 - Staff review project data, characteristics, existing and planned materials for the project location, as well as public and local input and then utilize formal design guidance principals to make facility type recommendations
 - Transit Agency input is key when highway projects take place along transit routes or within transit-oriented development locations, we hope to expand transit agency involvement in NCDOT project development.
 - Field technical assistance requests from Divisions, MPOs/RPO's, transit agencies, and municipality staff
- **Future:**
 - IMD's role as main project reviewer will transition eventually and Divisions will take the lead on most project reviews.
 - At that time IMD's role will shift to more of a "Project Manager" role in the implementation of Complete Streets, providing QA/QC and continued technical assistance to stakeholders

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.



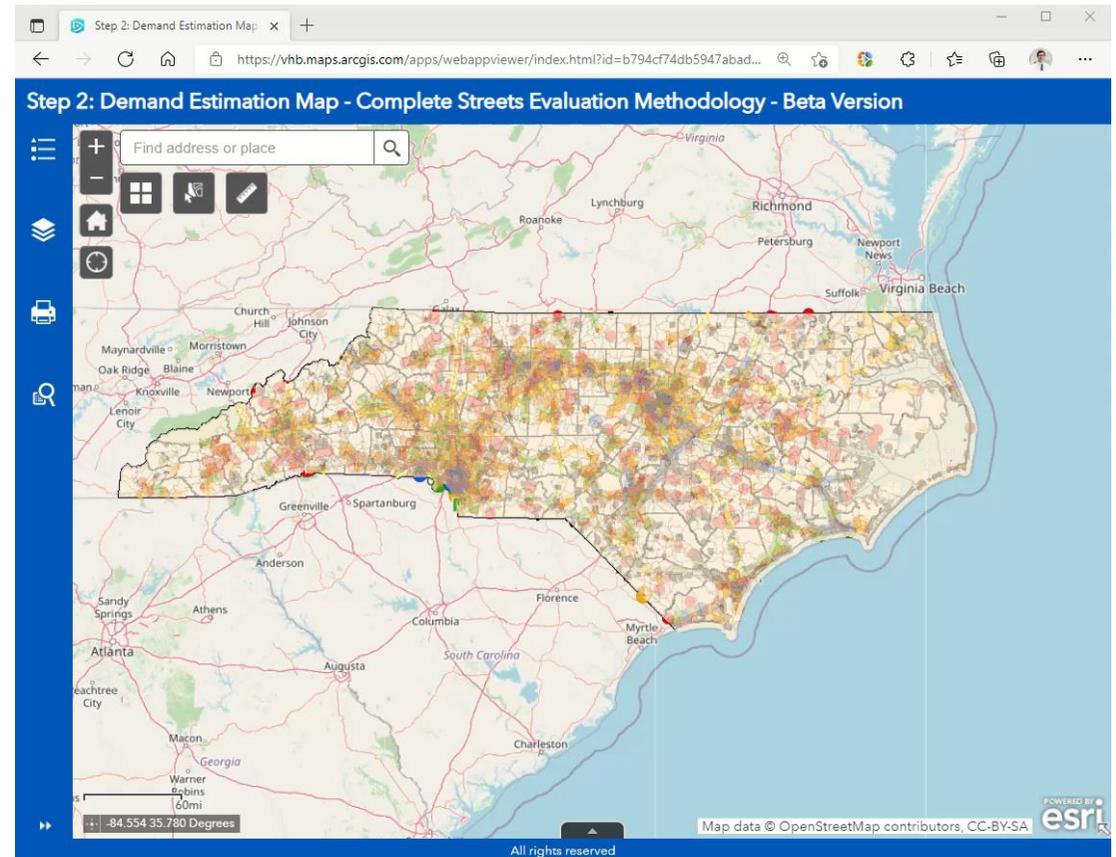
[Complete Streets Connect Page](#)

- Evaluation Methodology
- Implementation Guide
- FAQs
- Project Sheet
- Dashboard

Transportation Need Determination

Step 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



Ongoing Discussions on Key Issues for Implementation

- Evaluation methodology / demand estimation map:
 - Additional indicators/data – options may be intersection density, transportation disadvantage, crash locations, and other potential indicators of demand
 - Metrics to measure the benefits of complete streets elements
- Policy implementation:
 - Maintenance of separated multimodal facilities, particularly outside of municipal boundaries & inclusion of complete streets elements on maintenance projects. – *Work Group*
 - Harmonization of complete streets processes with the Project Delivery Network (PDN) including Planning and Express Design. – *Work Group*
 - Cost estimation – *Work Group*
 - Alignment of pedestrian/bike need determination between CTP and Complete Streets methodologies.

Feasibility Studies / Grant Program

- Feasibility Studies template and pilot projects
 - Two Examples:
 - Middle Fork Greenway Feasibility Study (connecting the Town of Boone to the Village of Blowing Rock)
 - N. Main Street Sidepath Feasibility Study (City of Marion)
- \$2 Million – Paved Trails Feasibility Studies – Call for projects in summer 2022
- FY23 SP&R (pending approval) – Sidewalk/Sidepath projects to pair with Feasibility Studies call.

- Proposed Timeline:



Strategic Prioritization

- **IMD Role:**
 - Provide input to Prioritization Workgroup (on-going)
 - Review Bicycle/Pedestrian & Transit Project Submittals

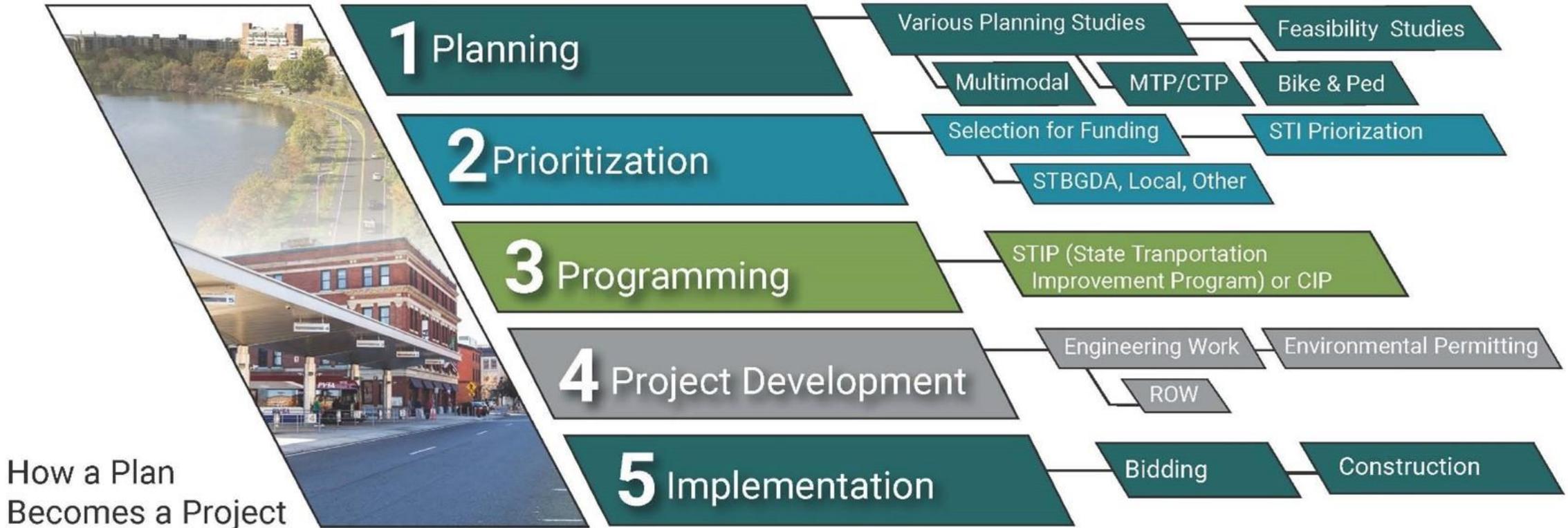
Bike/Ped Eligibility:

- Minimum project cost = \$100,000
- 20% of total project costs is required as non-federal match by local governments
- Project must be included in an adopted plan

Criteria	Measure	Division Needs (50%)
Safety	(Number of crashes x 40%) + (Crash severity x 20%) + (Safety risk x 20%) + (Safety benefit x 20%)	20%
Accessibility/ Connectivity	Points of Interest pts + Connections pts + Route pts	15%
Demand/ Density	# of households and employees per square mile near project	10%
Cost Effectiveness	(Safety + Accessibility/Connectivity + Demand/Density) / Cost to NCDOT	5%

Multimodal Program Strategy

From Planning to Prioritization



Great Trails State Plan: A Visionary Plan for North Carolina

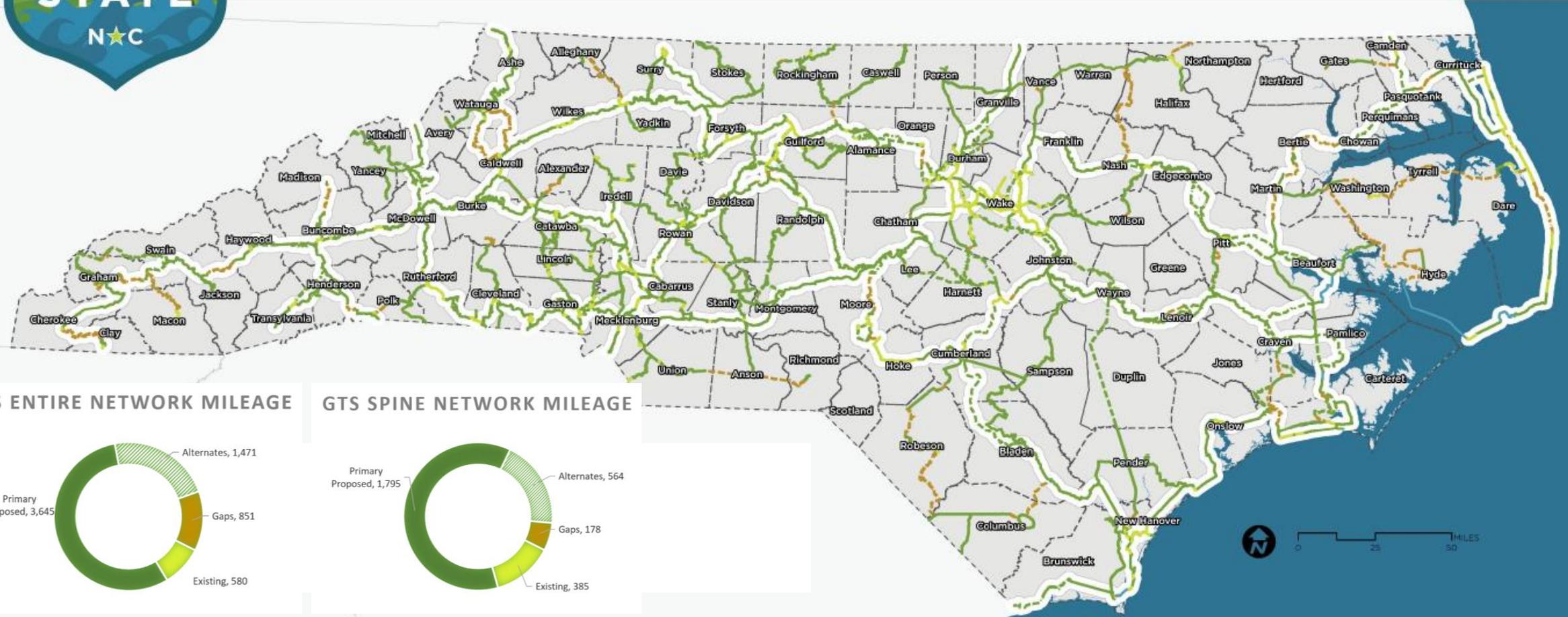


- Decades in the making, through hundreds of local plans and initiatives, the Great Trails State is ready to become a reality.
- For the first time in the state's history, this plan identifies a proposed network of trails that would connect all 100 counties throughout the state, creating lasting investments in rural and urban areas alike.

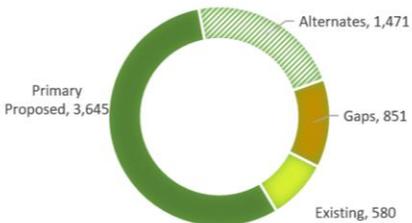
Great Trails State Plan: Trail Network



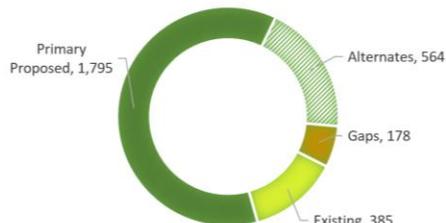
-  **Proposed Shared Use Path**
Best route based on existing plans and input to-date
-  **Existing Shared Use Path**
Existing SUPs within the proposed GTS Network
-  **Gap**
Connection desired, but lacks specific route planning
-  **Draft Alternate Route**
This or another parallel alternate should be selected
-  **Potential Spine Network**
Routes w/ greatest potential for regional connections
-  **Ferry**



GTS ENTIRE NETWORK MILEAGE



GTS SPINE NETWORK MILEAGE



Great Trails State Plan: A Few Next Steps

- Action Plan
- Great Trails State Coalition
- 2023 North Carolina's Year of the Trail
- Feasibility Studies Program
- Complete Streets implementation
- **Phase II**
 - Identification/feasibility analysis of trail projects in transportation disadvantaged areas
 - Natural surface trail connections
 - ArcGIS StoryMap



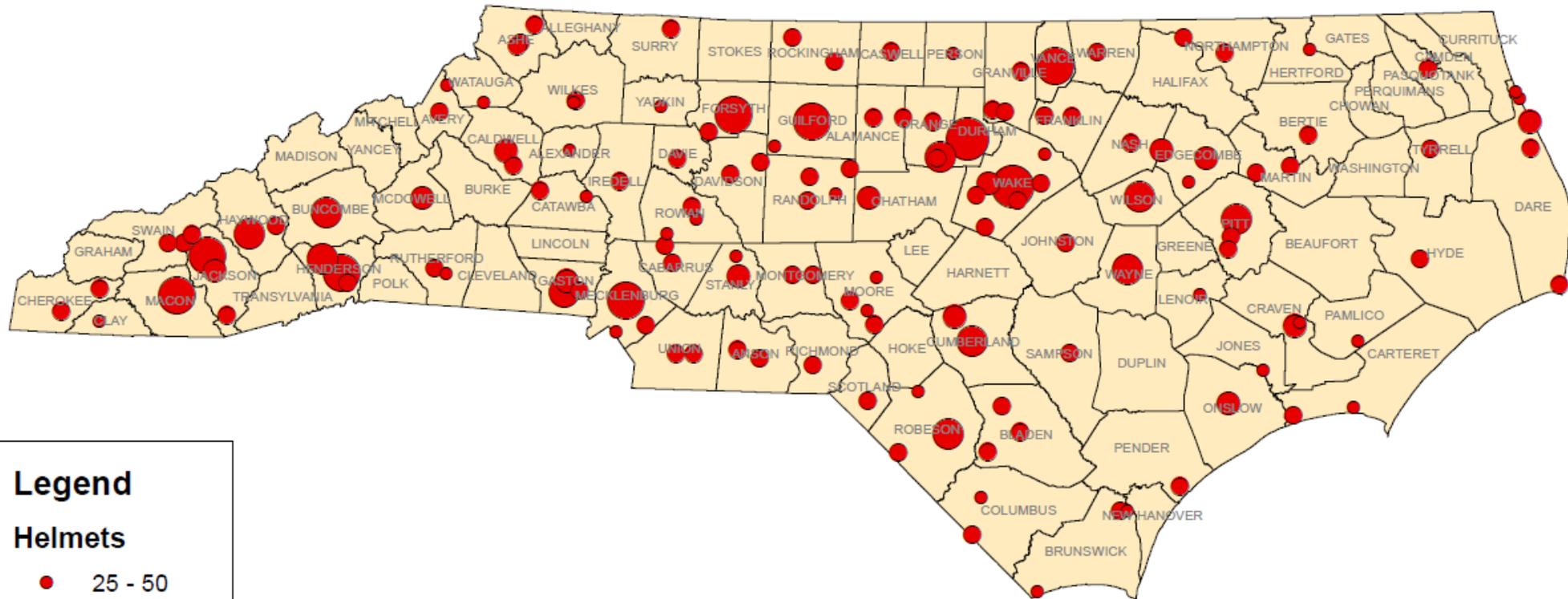
Bicycle Helmet Initiative

- Funded by proceeds from North Carolina's ["Share the Road" specialty license plate](#), the program distributes helmets to government and non-government agencies conducting bicycle safety events for underprivileged children.



[Web Link](#)

2022 Bicycle Helmet Initiative



Legend

Helmets

- 25 - 50
- 51 - 125
- 126 - 200
- 201 - 400
- 401 - 800
- 801 - 1200

[Web Link](#)

SRTS Non-Infrastructure Grants

2019 Award Recipients

Albemarle Planning Commission
City of Durham
City of Greensboro
City of Winston-Salem
Foothills Regional Commission
Hoke County Health Department
Jackson County Health Department
Kerr-Tar Council of Governments
Planning Department
Triangle J Council of Government
Wake County Health & Human Services

- For non-infrastructure programs and activities over a three-year period
- \$50,000 to \$100,000 per project.
- Support activities for community-wide, regional or statewide programs
- Partners: local governments, regional transportation agencies, school districts, nonprofit organizations
- Next call – ?2022?



[website](#)

Profile: City of Winston-Salem SRTS N-I Grant

- Ongoing Success from Original SRTS N-I Grant
 - Bicycle Education Program
 - 2021-2022: ~800 students with training and properly-fitted helmets
 - Since 2012: ~10,000 students
- Program Expansion with Current SRTS N-I Grant
 - Enhance Walking Education Program
 - Add Emphasis on Walking School Bus, Bike/Walk to School Days, Remote Drop Off
 - Menu of Activities and Materials for Schools
- Engagement with Winston-Salem / Forsyth County Schools
 - 174 survey responses from teachers and staff in WSFCS
 - Assistant Superintendent for Operations, Assistant Director of Transportation, Director of Healthful Living Program, Director of Safety and Security, and Principals



Note: Slide from the City of Winston-Salem

Interim Design Safety Project (Tactical Urbanism)

- FHWA STIC project
- Interim design countermeasures to be evaluated - protected intersections, curb extensions and median refuge islands
- Coordination with Highway Divisions
- Installation
- Evaluation/Data Collection

CURB EXTENSION



Curb extensions reduce vehicle turning speeds, shorten crossing distances for pedestrians, and increase space for those waiting to cross.

MEDIAN REFUGE ISLAND



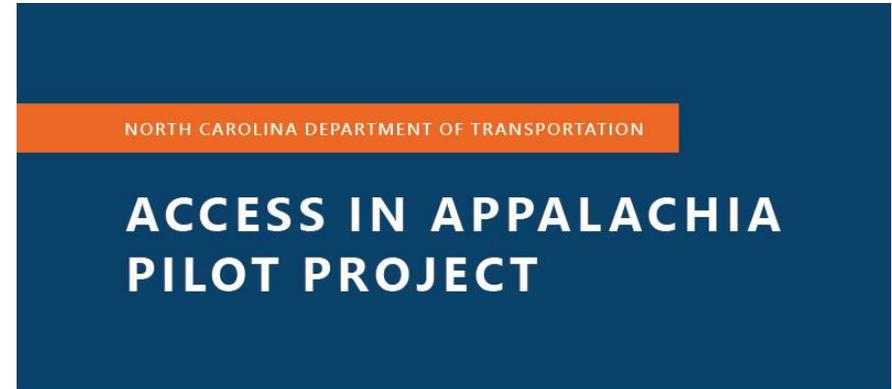
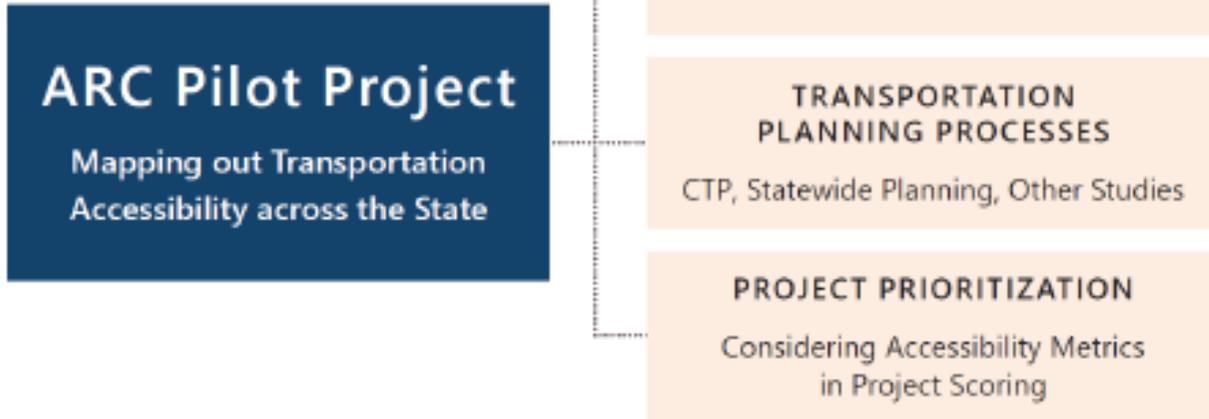
Median refuge islands reduce crossing distances and provide protected space in the center of the roadway for pedestrians and bicyclists.

PROTECTED INTERSECTION



Protected intersections reduce vehicle turning speeds, improve sight lines, and provide people on bicycles advanced queuing to travel through an intersection.

Accessibility Metrics



PROPOSAL | JUNE 2021



Current Research

Assessment of Separated Bike Lane Applications in NC

Yielding Compliance at High Visibility Crosswalks

Crossing Treatment Process for Safer Shared Use Path Crossings

Public Microtransit Pilots in the State of North Carolina: Benefits, Costs and Lessons Learned

Economic Impacts of Transit Investments, Social Challenges, and Strategies for Sustaining High Ridership

Quantifying the Economic, Mobility, and Health Benefits of Multimodal Projects (Technical Assistance)



NC Non-Motorized Volume Data Program (NC NMVDP)

- NC State Institute for Research and Education (ITRE) – installation, QA/QC, data management
- Eco-counter – equipment
- Agreement/ownership structure



Counter Locations

Brevard

CAMPO

○ Raleigh

○ Apex

○ Cary

Wake Forest

Charlotte

Davidson

DCHC MPO

○ Durham

○ Chapel Hill

○ Carrboro

Duck

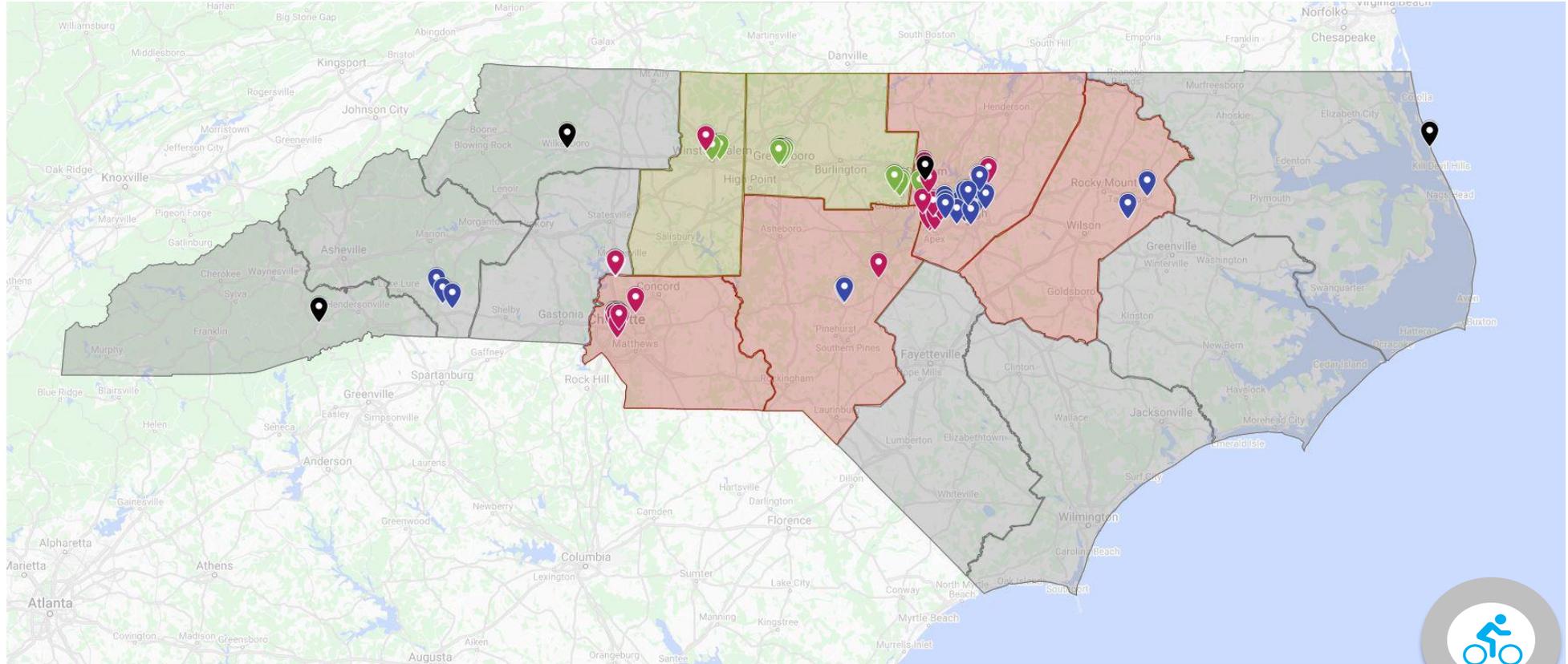
Durham

Greensboro

North Wilkesboro

Sanford

Winston-Salem



Onboarded Locations (not on map)
 City of Raleigh Parks/Rec/Cultural Res Dept
 Town of Cary
 NC DHHS (DHHS)
 Isothermal Plan/Dev Comm
 + and more



Transportation Disadvantaged Index (TDI) Tool

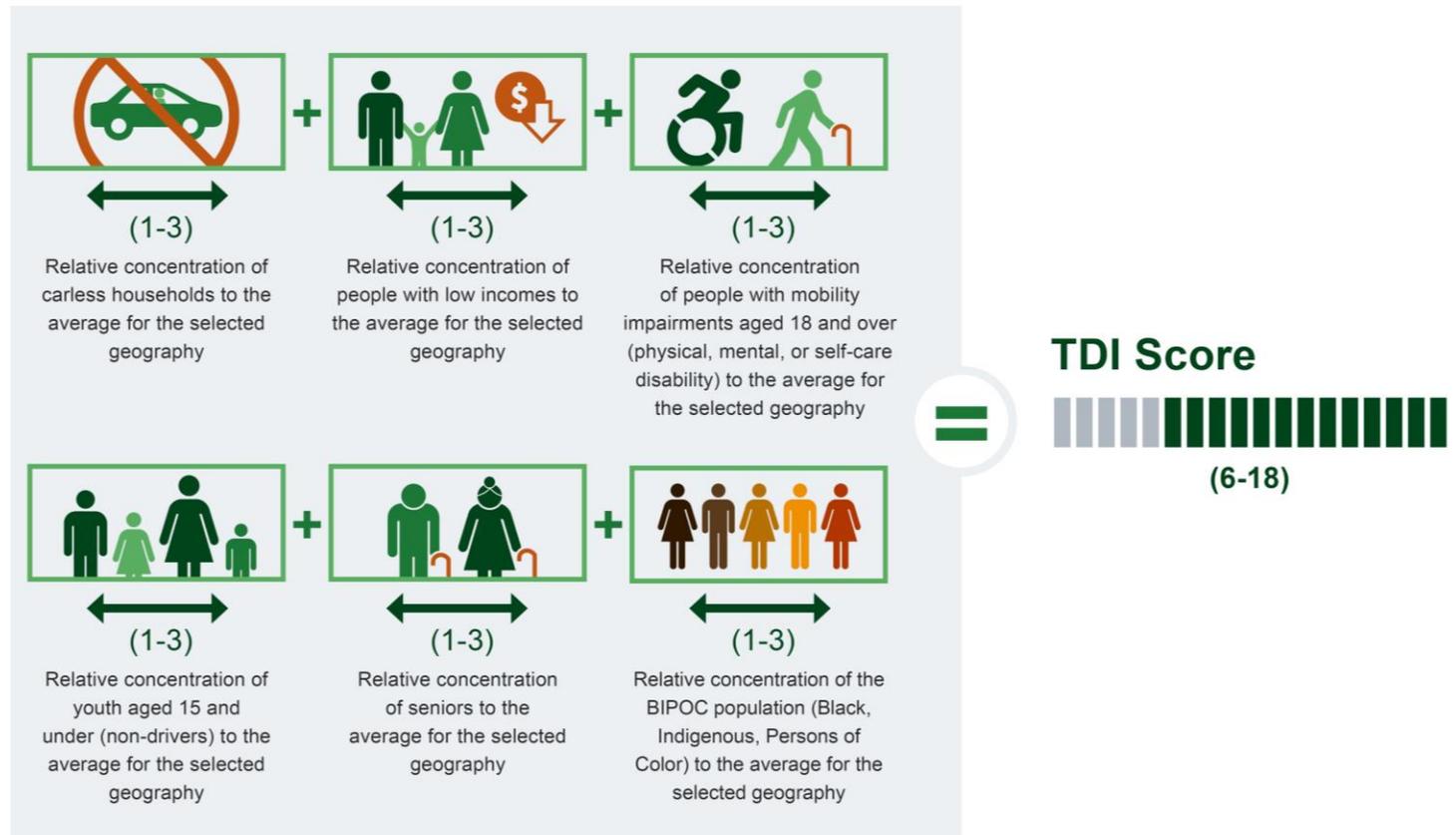
- NCDOT's mission seeks to improve the quality of life, build healthy communities, support job creation and provide equal opportunities so all people can thrive
- Transportation disadvantage is a concept that **identifies and calculates relative barriers to accessing transportation.**
- Understanding and evaluating transportation disadvantage can:
 - Help achieve NCDOT's mission
 - Improve policies, planning, and project development
 - Change the culture on addressing impacts
 - Foster adoption across NCDOT's programs

Transportation Disadvantage Index Methodology

Six indicators to generate a Block Group score based on variance from the geographic mean.

- Vehicle ownership
- Income
- Disabilities
- Age: Youth
- Age: Seniors
- BIPOC

Higher score = greater level of transportation disadvantage.



TDI Dashboard

Indicator panels default to showing statewide averages.

Selecting a geography will zoom the map and update the statistics shown in the top row of indicator panels.

Color shading of each individual block group reflects the block group's score relative to the selected geography, or to the state as a whole (if no selection).

County:
(None Selected)

NCDOT Division:
(None Selected)

MPO/RPO:
(None Selected)

STIP Project - Corridor:
(Search by TIP number)

STIP Project - Point:
(Search by TIP number)

*** Select only ONE geography (County, Division, or MPO/RPO) at a time, and RESET selection before choosing another.**

Population Average for North Carolina

Age 15 and Under:
18%

Age 65 and Over:
16%

Poverty:
24%

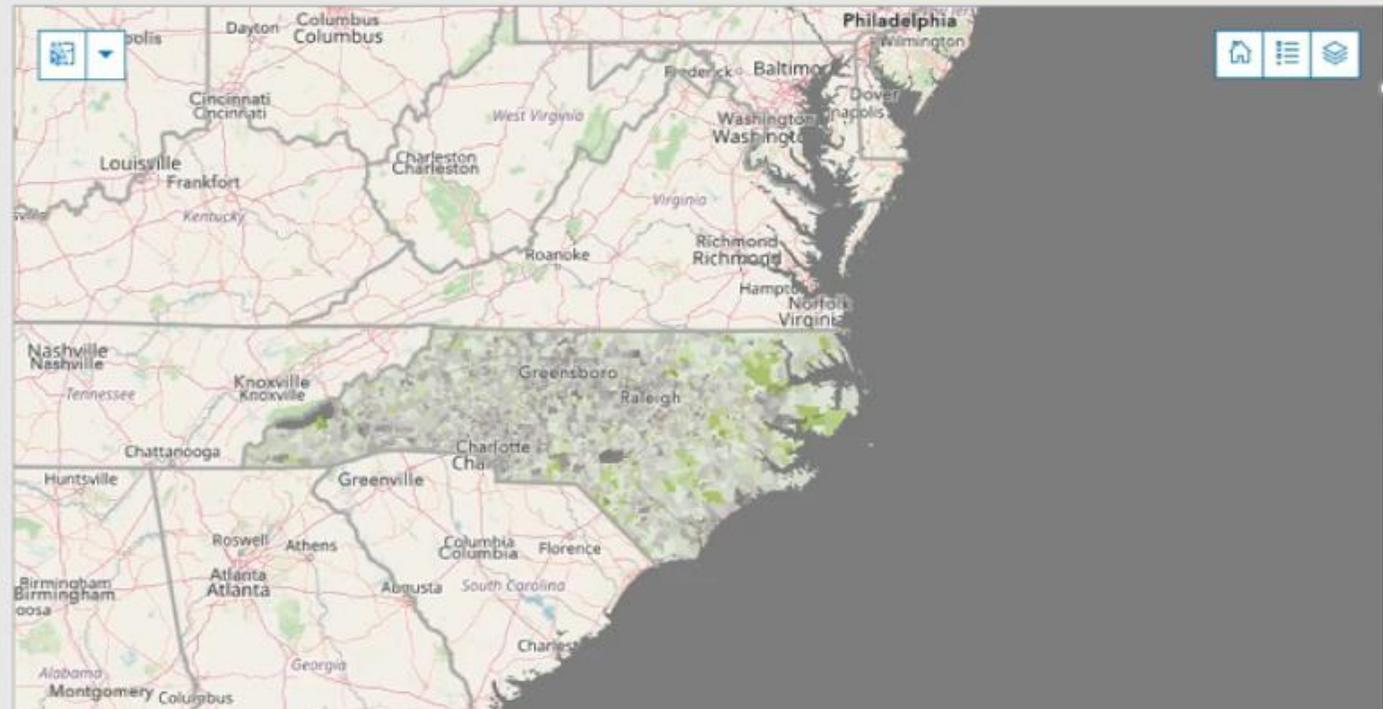
BIPOC Population:
31%

Zero-Car Households:
6%

Disability (Adult Population):
16%

Transportation Disadvantage Index Scores

Values will appear when a block group is selected from the map



TDI Dashboard

Age 15 and Under:
18%

Age 65 and Over:
16%

Poverty:
24%

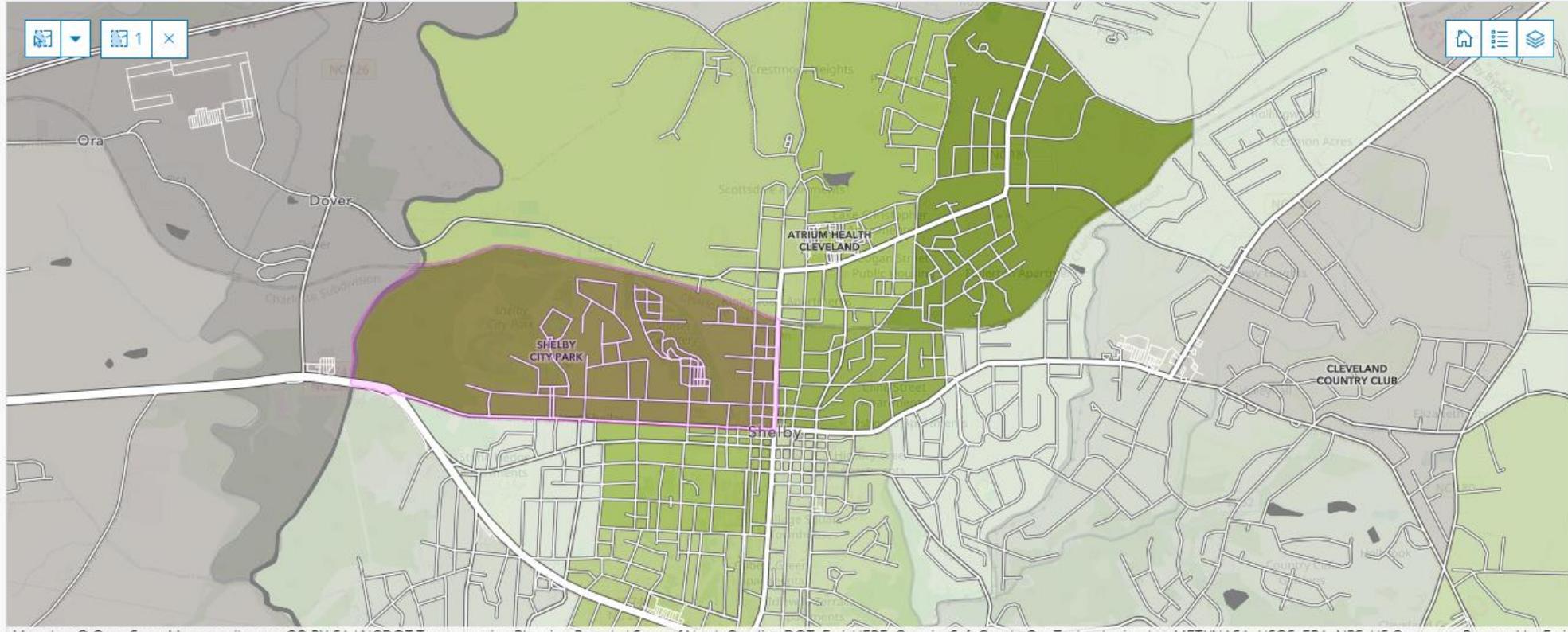
BIPOC Population:
31%

Zero-Car Households:
6%

Disability (Adult Population):
16%

Transportation Disadvantage Index Scores

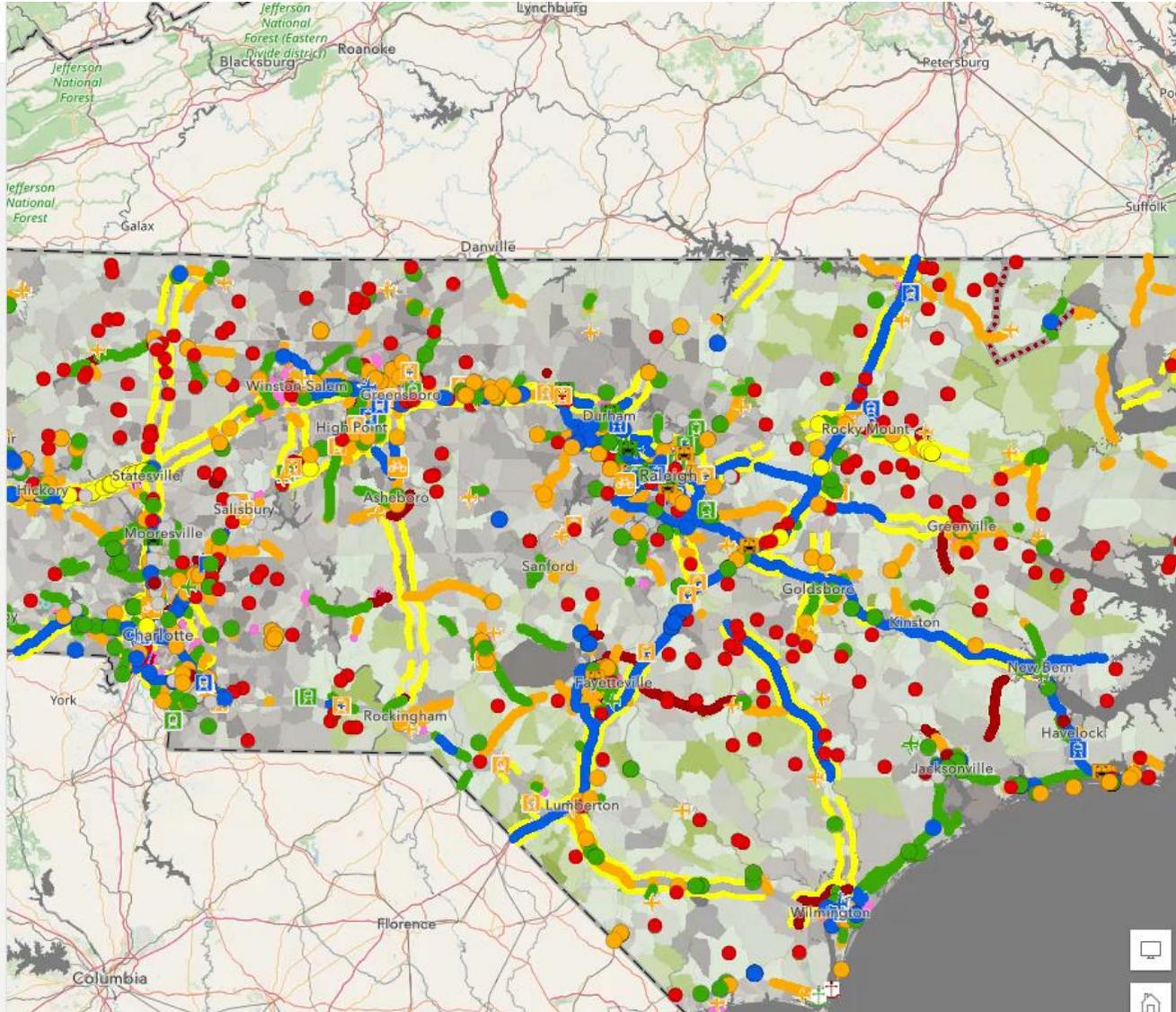
TDI Score, relative to State (max=18)	17
TDI Index Score, relative to County	16
TDI Index Score, relative to Division	17
TDI Index Score, relative to MPO	17
Age 15 and Under	25% (vs NC Average of 18%)
Age 65 and Over	26% (vs NC Average of 16%)
Poverty	54% (vs NC Average of 24%)
BIPOC Population	61% (vs NC Average of 31%)
Zero-Car Households	27% (vs NC Average of 6%)
Disability Prevalence (Adult Population)	25% (vs NC Average of 16%)



TDI Map

Layers

- Human Geography Label ...
- NCDOT Current 2020-2029 STIP ...
- Human Geography Detail ...
- MPO RPO Boundary ...
- Division Boundary ...
- County Boundary ...
- Transportation Disadvantage Index - MPO ...
- Transportation Disadvantage Index - NCDOT Division ...
- Transportation Disadvantage Index - County ...
- North Carolina (MPO Mask) ...
- North Carolina (Division Mask) ...
- North Carolina (County Mask) ...
- Transportation Disadvantage Index Score by Block Group ...
- Bounding Boxes ...



Transportation Disadvantage Index Score by Block Group

Properties

Information

Symbology

Show in map legend

Transportation Disadvantage Index Score by Block Group



[Edit layer style](#)

Appearance

Visible range

Refresh interval

Automatically refresh layer

Feature display order

Custom parameters

Application / Next Steps



Apply tool to USDOT grants and other project reviews



Evaluate how the TDI / EJ tools can be integrated in pre-planning, regional planning, and understanding context



Coordinate with other partners, such as DHHS, to explore other tools and datasets for informing planning and project prioritization



Incorporate feedback from NCDOT partners – Highway Divisions and Transportation Planning Division



Launch map tool on NCDOT's ArcGIS Online site (GO NC!) – ESRI Story Map



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