



# NORTH CAROLINA

Department of Transportation



# Integrated Mobility Division

# Urban Transit Systems Call

March 15, 2023

# AGENDA

- Grant updates
- 5307 transition updates
- Census impacts
- Multimodal Planning Updates
- CASSI autonomous shuttle
- Carbon Reduction and Low-No Applications
- Partner Survey
- NCPTA Conference
- Transportation Alternatives Program
- Questions & Discussion

# Grant Administration Updates



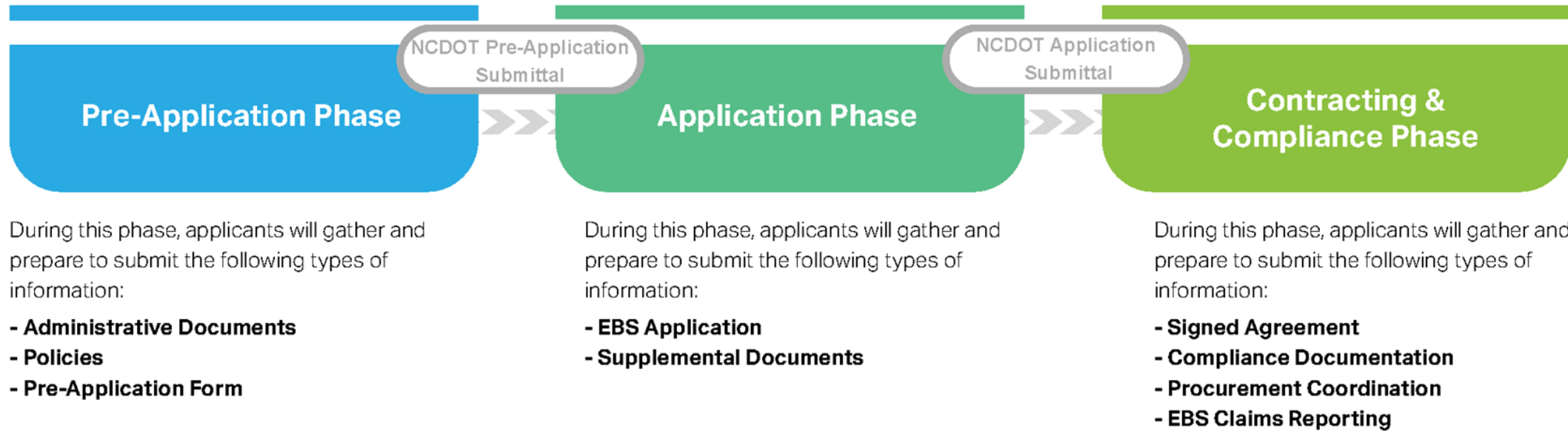
# FY 24 Urban Advance Technology/Urban State Match

## Key Updates

- Urban Advance Technology and Urban State match application are currently moving through the review process.
- Applications are scheduled to be reviewed by the Board of Transportation in May.
- Agreements to follow.



# FY 25 Unified Grant Application (UGA) Process



## Benefits to Applicants

- Interactive, single guidance document
- Organized into 3 distinct phases
- Efficiency by pre-completing some documents in pre-application phase
- State and Federal guidance
- Extended application period
- Simplified process by integrating applications into single process
- Streamlined process and material, and outlining eligibility clearly
- Modernized process by incorporating SmartSheet

**Key Dates: April 3, 2023, Open Call for Projects – Friday, October 6, 2023, Grant Applications due in EBS**

# Unified Grant Application (UGA) Process

## Key Updates



- FY25 training webinars have been scheduled for March 21<sup>st</sup> and March 22<sup>nd</sup>. Meeting information was sent on March 3<sup>rd</sup>. Notice of a conflict with the NCPTA monthly call on March 22<sup>nd</sup> has been made. That call will still be held in the event other participants call in.
- A 3<sup>rd</sup> training webinar will be planned for the week of April 3<sup>rd</sup>, meeting details will follow.
- IMD is looking into developing potential ConCPT Coordination projects focusing on regional collaboration and other feasible transit projects. A SmartSheet survey regarding potential coordination projects will be sent out shortly after the transit call.

# Section 5307 Transition Update

- Current Status of Activities
  - IMD meets monthly with FTA to determine the status of each transit system transitioning to Direct Recipient status
  - FTA issues concurrences in four major areas: Legal, technical capacity, civil rights, financial capacity
  - Most of the transit systems in the transition only lack the civil rights concurrence
  - IMD may reach out for a few pieces of information, like the dollar amount of expected contracting opportunities and the number of transit-related employees for an agency
- Other initiatives
  - Training - IMD is developing an in-person training for the FTA TrAMS grant making platform – target timeframe is late spring 2023

# Census 2020 UZA Impacts

- What we don't know, yet (FY22 NTD reports remain open)
  - FTA has not released the UZA low-income population
  - Apportionment data unit values for FY24
  - UZA apportionments for FY24
- What we do know
  - Large percentage of UZAs (across the country) saw a decrease in area but an increase in population density
- What we expect to happen if things go as anticipated

| Census Impact           | 5307 | 5311 | ROAP | SMAP | Known Systems Impacted                                  |
|-------------------------|------|------|------|------|---|
| 2020 UZA area Increased | +    | -    | -    | =    | Johnston (new UZA in Clayton plus existing Raleigh UZA) |
| 2020 UZA area Decreased | -    | +    | +    | =    | Iredell, Orange   |
| Loss of Entire UZA      | 0    | +    | +    | =    | Haywood, CARTS  |
| New UZA                 | +    | -    | -    | =    | Moore (new UZA in Pinehurst-Southern Pines)             |



- For the systems most impacted by the 2020 Census UZAs, we are currently working on individual plans to address any funding shortfalls, both short and long term



# TDM Grant Program Overview

- General Purpose- convenient options to reduce single occupancy vehicles/VMT & to enhance accessibility
- Funds staff salaries to administer regional TDM programs, marketing efforts/activities, and planning activities (including the development of a TDM plan)
- Eligible participants – regional transit or planning agencies responsible for TDM-related activities

## TDM APPLICATION OVERVIEW AND GUIDANCE

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**— Program Background**

Transportation Demand Management (TDM) programs promote the use of all transportation options available, rather than defaulting to single occupant vehicle use. Included among these travel options are carpooling, vanpooling, teleworking, transit, bicycle, flexible work hours, compressed work weeks, and parking policies/pricing structures. The NCDOT Integrated Mobility Division (IMD) funds TDM programs to support the provisions of the Ambient Air Quality Improvement Act of 1999, Senate Bill 953, which addressed concerns over ground level ozone pollution from motor vehicles and the need to deal with increasing vehicle miles traveled (VMT) and NOx emissions. The bill established a goal of reducing the growth of commuter vehicle miles traveled (VMT) in the state by 25% from 2000 until 2009 and that goal was achieved. NCDOT continues to make strides in TDM to achieve even more.

**— Who Can Apply?**

Public organizations responsible for promotion of TDM activities, which may include providing services such as carpool/vanpool matching and vehicles for use in vanpooling may apply.

Urban and Rural areas in the state interested in a TDM program (but are not currently receiving state TDM funds) should contact Nick Morrison, Transportation Planner, at (919) 707-2608 or via e-mail at [nemorrison@ncdot.gov](mailto:nemorrison@ncdot.gov) to discuss planning requirements for establishing a TDM program.

**— Timeline & Required Documents**

Completed FY 2024 TDM applications must be submitted through the [Enterprise Business System \(EBS\)](#) no later than Friday, March 17th, 2023.

All required documents must be completed and uploaded to the "FY 2024 Application" in EBS.


The Application Checklist can be found as a part of this application package and may be downloaded from [IMD's website](#).

The document type is listed under Urban Grants. The completed checklist should be uploaded along with other attachments in EBS.

**Naming Convention**

Please name each individual file by the naming convention OrganizationName.FY.DocType (for example, NameofTDMProgram.FY2024.PublicHearingNotice). After all the required documents are completed and scanned, they may be uploaded to the application. **Please do not zip these files together.**

*Note: Do not submit the application without all of the required documents attached. Use the [Application Checklist](#) as a guide. Applicants will receive a confirmation when NCDOT receives the application.*



TDM APPLICATION  
**FY2024** 3

# Transportation Demand Management (TDM) Strategies

Strategies aimed at providing travelers with travel choices such as work location, route, and time and mode of travel to optimize all modes within the transportation system to help reduce single occupancy vehicle (SOV) trips

**Carpool/Vanpool**



**Telework**



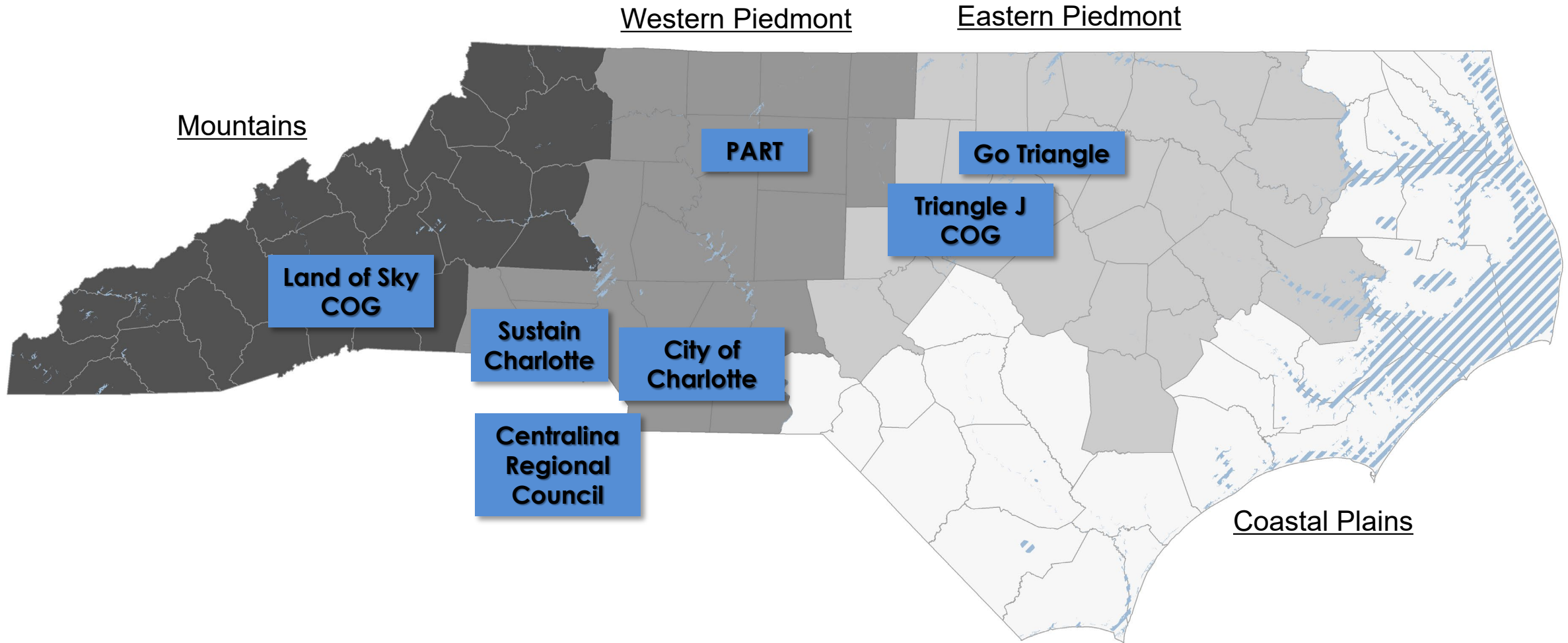
**Alternative Modes**



**Parking Policies**



# Currently Funded TDM Partners



# Key Dates

| Dates       | Task/Event  |
|-------------|---|
| Feb-15-2023 | TDM application materials posted to NCDOT website                               |
| Mar-17-2023 | Deadline for FY 2024 TDM applications & budget to be submitted in EBS           |
| May-2023    | FY 2024 TDM Projects presented to NC Board of Transportation                    |
| Jul-1-2023  | Beginning of State fiscal year & Period of Performance for FY 2024 TDM programs |

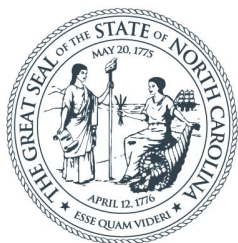
## For Questions or Assistance on TDM

**Nick Morrison**

Multimodal Transportation Planner- Eastern Piedmont

919-707-2608 (Office)

[nemorrison@ncdot.gov](mailto:nemorrison@ncdot.gov)



# NORTH CAROLINA

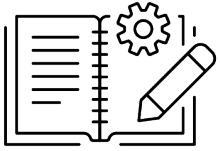
## Department of Transportation



# Multimodal Planning Grant


## Call for Applications

<https://connect.ncdot.gov/municipalities/PlanningGrants/IMD-Multimodal-Planning-Program/Pages/default.aspx>



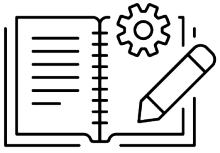
# Multimodal Planning Grants Call for Projects

- Applications currently open through April 10<sup>th</sup>.
- Funding for municipal and county bike-ped transportation plans
  - Transit corridors are evaluated where fixed-route/deviated fixed route services exist
- Local match required, depending on population of jurisdiction
- Planning lead by partner consulting firms

|  | <b>Population<br/>&lt; 10,000</b>  | <b>Population<br/>&gt; 10,000</b>   |
|---|--|---|
| <b>Existing transit service</b><br>(fixed-route or deviated fixed-route)          | <ul style="list-style-type: none"> <li>■ Multimodal Network Plan</li> <li>■ Stand-alone Bicycle Plan</li> <li>■ Stand-alone Pedestrian Plan</li> <li>■ Combined Bicycle &amp; Pedestrian Plan</li> <li>■ Plan Update</li> <li>■ Project Acceleration Plan</li> </ul> | <ul style="list-style-type: none"> <li>■ Multimodal Network Plan</li> <li>■ Stand-alone Bicycle Plan</li> <li>■ Stand-alone Pedestrian Plan</li> <li>■ Plan Update</li> </ul> |
| <b>No existing fixed-route / deviated fixed-route service</b>                     | <ul style="list-style-type: none"> <li>■ Stand-alone Bicycle Plan</li> <li>■ Stand-alone Pedestrian Plan</li> <li>■ Combined Bicycle &amp; Pedestrian Plan</li> <li>■ Plan Update</li> <li>■ Project Acceleration Plan</li> </ul>                                    | <ul style="list-style-type: none"> <li>■ Stand-alone Bicycle Plan</li> <li>■ Stand-alone Pedestrian Plan</li> <li>■ Plan Update</li> </ul>                                    |

*Counties with Population < 100,00 population are eligible to apply for Stand-alone Bicycle or Pedestrian Plans, Plan Updates, or Multimodal Network Plans. Counties with populations > 100,00 are not eligible for the program.*





# Multimodal Planning Grants Call for Projects

Four Plan Types eligible for funding:

Comprehensive Bike and/or Pedestrian Plans

Project Acceleration Plans for towns <10,000 population

Multimodal Plan where existing fixed-route or deviated fixed-route service exists

Plan Updates to existing plans > 5 years old



# NORTH CAROLINA

Department of Transportation



## Microtransit Feasibility Studies

### Call for Applications

<https://connect.ncdot.gov/business/Transit/Pages/Microtransit-Feasibility-Study-Grants.aspx>

## Application Details

- Planning funds for feasibility studies, no local match required
- All transit agencies in NC eligible
- Applications Open March 13 – Monday April 24, 2023
- Applications accepted via EBS only
- Application consists of 8 questions, and some attachments
- You will *not* request a funding amount in EBS, NCDOT will assign the project cost after submission

# What to Expect

- Analysis of microtransit service implementation:
  - Complete public and stakeholder engagement
  - Analysis of ridership demand, existing services, origins/destinations, commuting data, transit performance metrics, etc.
  - Consideration for MaaS vs SaaS service model options, including peer agency review
  - Operational and capital needs guidance (vehicles, drivers, technology, procurement)
  - Pilot project recommendations
  - Funding, grants guidance, and Benefit / Impact analysis

November 2022

## Integrated Mobility Division **CONTENT STANDARDS FOR MICROTRANSIT/ SHARED MOBILITY STUDY**



## Why Apply

- Agencies who are interested in exploring microtransit seriously
- Unmet transit needs existing in community
  - See ITRE Report on Purposes of Microtransit Implementation
- Agencies interested in pilot projects, improved customer experience, engaging elected officials
- Feasibility study may lead to grant opportunities

## Contact

**Bryan Lopez**

IMD Regional Planning Manager

[balopez@ncdot.gov](mailto:balopez@ncdot.gov)

919-707-2606

Program webpage: <https://connect.ncdot.gov/business/Transit/Pages/Microtransit-Feasibility-Study-Grants.aspx>

# Safe Routes to School – Non-Infrastructure Grant Program

- Call for applications ended on Monday February 6<sup>th</sup> for three-year grant program
  - IIJA – codified program and setup structure for funding with TAP and legacy SAFETU funds.
- Applications are currently under review
  - Just over \$5.2 million in grant requests
- Anticipate award announcements in April 2023.



# Bicycle Helmet Initiative

- Call for applications ended on Friday February 3<sup>rd</sup>
- Applications are currently under review internally
  - New record of 290 applications submitted and over 22,000 helmets requested in the program
- Anticipate award announcements in April 2023.
- BHI recipient report from 2022 is being finalized





## Paved Trails & Sidewalks Feasibility Study Grant Program

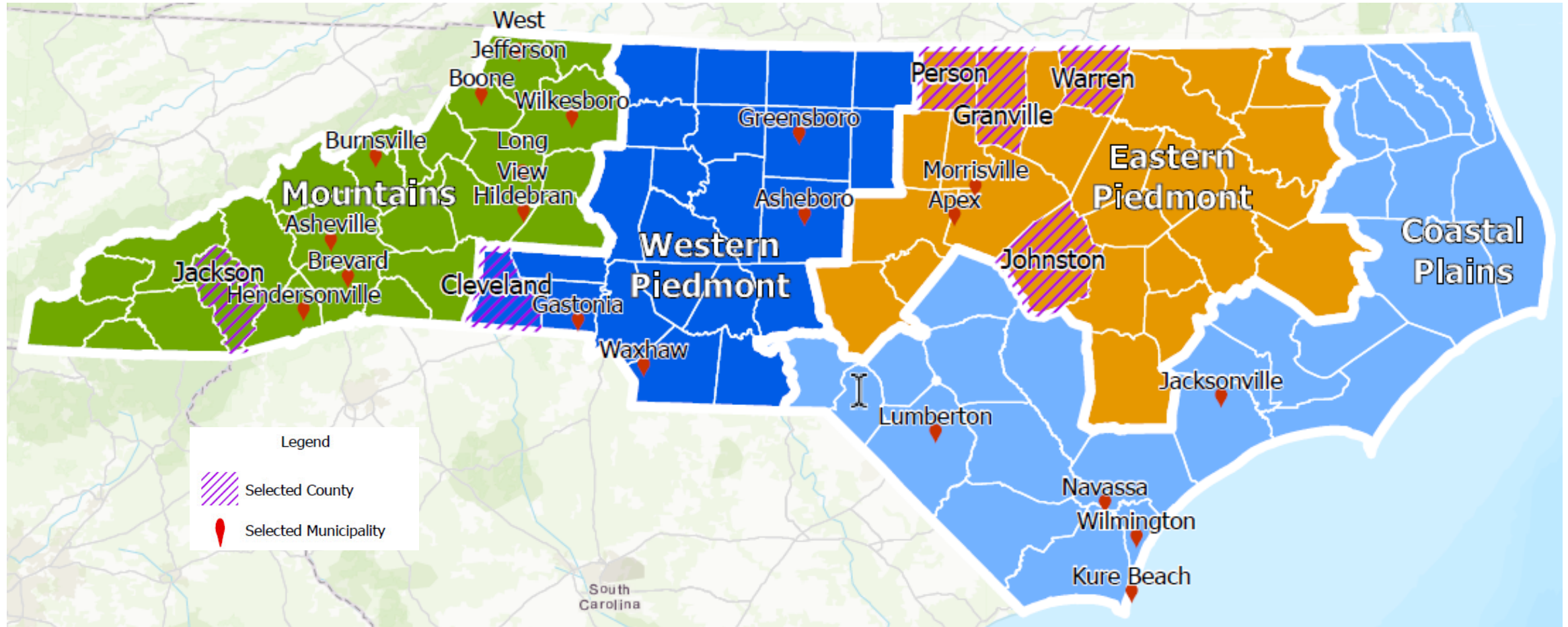
- Pipeline of projects – planning, feasibility, funding, design/acquisition, construction
- Types of projects selected: paved trails, greenways, sidepaths, sidewalks
- Applicants - local governments, regional planning agencies, non-profits
- 59 applications / 25 awarded
- ~\$5M requested / ~\$2.5M awarded
- Study components:
  - Community engagement
  - Existing condition analysis
  - Environmental, utility, right-of-way and other considerations
  - Alternative evaluation
  - Recommended alignment, cost estimate
  - Implementation plan
- Studies will start in spring 2023



[Feasibility Study Program](#) (link)

# Paved Trails & Sidewalks Feasibility Study Grant Program

## Selected Communities



## CASSI Advances Shared Autonomous Mobility Technologies in NC

NCDOT's **Connected Autonomous Shuttle Supporting Innovation (CASSI)** is a program (not a product) that **demonstrates the capability of shared autonomous vehicles** to prepare for the future of mobility and enhance public transportation services.



CASSI evaluates how autonomous vehicles can best be used by riders with different needs and in different environments.

Examples include:

- Transit applications such as first mile/last mile solutions
- Connected vehicle infrastructure

# CASSI is Evolving to Include Latest Technological Advancements

CASSI includes the **continued demonstration of novel-design, low-speed autonomous shuttles** and the **testing and integration of autonomy-enabled conventional vehicles** into high quality, on-demand transit services.

## Novel-design, low-speed automated vehicles



(3) Completed Projects  
**2020-2021**



NPS Report

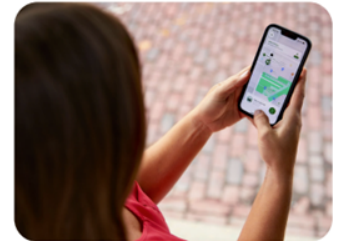


USDOT Report



(2) Planned Projects  
**2023**

## Autonomy-enabled conventional vehicles



## Connected, Rural, Equitable, and Autonomous Transportation for Everyone (CREATE)

FY 2022 USDOT Advanced Transportation Technology and Innovation Program Grant Application



Grant Application Information 28

# CASSI in Cary's Bond Park

March 6 – June 2, 2023

Weekdays from 10 a.m. to 4 p.m. on four-stop route

**NCDOT has partnered with the Town of Cary to bring a novel-design, low-speed autonomous shuttle to Bond Park through the CASSI program.**

Manufactured by France-based Navya and operated by Lake Nona, Florida-based Beep, the shuttle relies on LiDAR, cameras, and GPS technology to navigate on a fixed route.

## Facts about the autonomous shuttle:

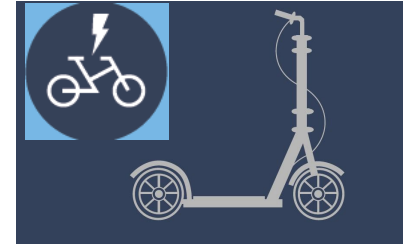
- There is no cost to ride
- Transports up to 8 people and an attendant
- Wheelchair accessible
- Fully electric
- Operates at speeds up to 12 mph

[townofcary.org/cassi](http://townofcary.org/cassi)



[ncdot.gov/cassi](http://ncdot.gov/cassi)

## Micromobility Strategy



- IMD led research project with the purpose to:
  - Understand the current scale, practice and interest in micromobility services in North Carolina
  - Determine NCDOT's role with regards to policy, regulation, safety, data management, equity, funding and more
- Study focusing primarily on electric-powered transportation devices, including e-bicycles (+ shared human-powered bicycles), e-scooters, and similar
- Benefits – 1st/last mile, reduced vehicle trips, accessibility, etc.
- Challenges – parking of device, safety, regulatory challenges, etc.
- Survey of municipalities, MPOs/RPOs, universities/community colleges – survey launch date = **February 14**
- Deliverables – Summary infographic document and final action-oriented report outlining recommendations and strategies to guide NCDOT in the integration of micromobility in plans, programs, policy and practice.

# FY23 Carbon Reduction Program (CRP)

- The Infrastructure Investment and Jobs Act (IIJA) authorizes the CRP to reduce transportation emissions through the development of State carbon reduction strategies and by funding projects that reduce transportation emissions.
- FHWA allocated \$33.5M to North Carolina in FY23
- NCDOT is accepting **internal** applications from its units/divisions to fund projects statewide.
- IMD will be seeking approx. \$2.9 million in funding for an electric bus, charging station, feasibility studies, and tracking of key performance indicators (KPI).
- **Due March 17, 2023**

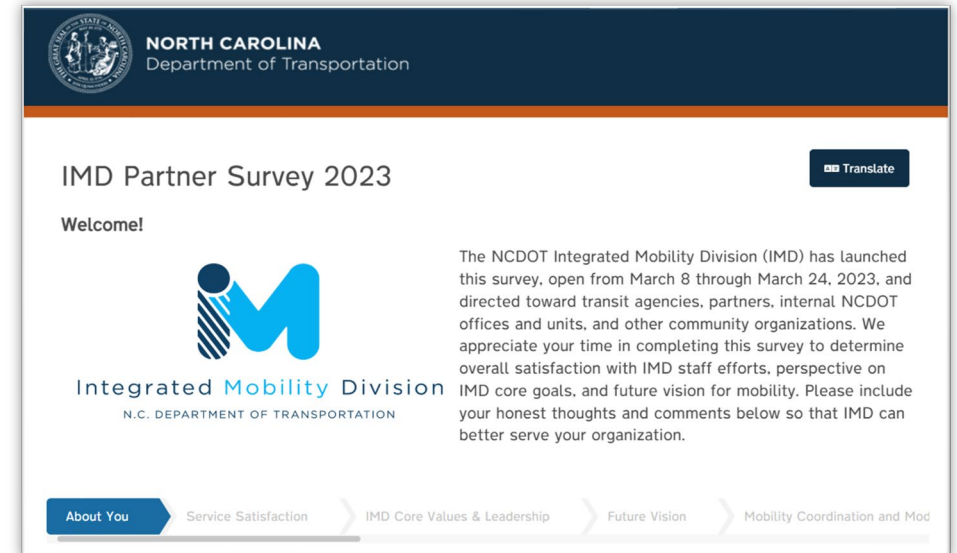
# FY23 Low-No and Bus and Bus Facilities

- \$1.7 billion available in FY23 for FTA to buy or modernize buses, improve bus facilities, and support related workforce development.
  - Low or No Emissions provides funding for the purchase or lease of zero-emission and low-emission transit buses and improvements to supporting facilities.
    - 25% reserved for Low Emission vehicles
  - Bus and Bus Facilities provides funding to assist in the financing of buses and bus facilities capital projects.
- IMD is coordinating applications with transit systems that responded to a call for interest survey.
- Seeking funding for electric buses, charging stations, propane fueling, and facility expansion. Applications will also include a workforce development component.
- **Due April 13, 2023**



# NCDOT IMD FY23 Partner Survey Overview

- IMD is launching a survey to determine stakeholder and partner satisfaction with IMD staff, programs, processes, activities, achievements and strategies.
  - Open March 8 – March 24, 2023
  - Available online via [PublicInput.com](https://publicinput.com)
  - Takes 15-20 minutes to complete
  - Results will be compiled and shared by IMD
  - Results will help IMD make improvements to better meet stakeholder and partner needs
- <https://publicinput.com/imd-partner-survey-2023>



# IMD SESSION TOPICS TO BE PRESENTED AT NCPTA CONFERENCE

- **IMD Best Practices & Resources** (2 Sessions with different topics)
- **Session 1** - This session will be packed with best practices and information from peers and consultants! Topics covered will be:
  - Grants management and preparation – focused on creating a local budget that incorporates grant funds requests;
  - Understanding DBE goals and how rural systems can meet them;
  - How grant applications and change requests, relate to federal funding, and why it's important to plan ahead when submitting to IMD.
- **Session 2** - Session two will be more best practices along with resource information and meeting IMD staff. Topics of this session will include:
  - Capital assets budgeting and maintaining transit assets;
  - Local procurement processes – the good, the bad, and the ugly;
  - Resources, Training & Technical Assistance offered by IMD including the new (and developing) NCRTP;
  - Town Hall Question & Answers with IMD Staff.
- **Innovations in Shared Mobility** – IMD staff will share updates on their innovative shared mobility projects and programs, including:
  - The Connected Autonomous Shuttle Innovation (CASSI) program;
  - Mobility-as-a-Service (MaaS) initiatives;
  - Transportation Disadvantage Index (TDI) and Environmental Justice (EJ) tools and dashboards.
- **The Future of Regional Multimodal Planning with IMD** - IMD will present on a variety of multimodal planning activities the Division is currently leading. The session will focus on:
  - Regional transit/multimodal plans;
  - NCDOT's locally-coordinated plan (5310);
  - Multimodal network plans;
  - Microtransit feasibility studies;
  - Transportation demand management (TDM) plans.

# IMD SmartSheet Links for Transit Systems

## IMD SmartSheet Links for Transit Systems

*This page will list commonly used SmartSheet Links will doing business with IMD. Please send any questions to Timothy Blair Chambers, Jr., Compliance & Procurement Branch Manager, Integrated Mobility Division, North Carolina Department of Transportation, 919-707-4693 (office) or [tbchambers@ncdot.gov](mailto:tbchambers@ncdot.gov).*

### General/Surveys

- Provide feedback from Transit Calls and Ideas for training topics here.
- Vehicle Rebuild Waiver Survey (Closes 01/13/23)
- 🔗 HOPE Grant Project - Mountains to Sea: Electrifying North Carolina's Transit Fleets Webinar (Jan 17)
- 🔗 NCDOT-IMD Presents "Claim Submittal 101" (Jan 12)
- 🔗 Disadvantaged Business Enterprise Stakeholders Meeting (Jan 10)

### ROAP Reports

- ROAP Report Entry (Monthly)

### Transit Activity Reporting

- Accident/Incident Reporting (Active)

### Charter Reports

- Charter Report Quarterly Submission (new)

### Vehicle Related Reporting

- Vehicle Disposition Tracking (Coming Soon)

# Transit Communication Hub

IMD Calendar (Website) (View Only) : smartsheet Report Abuse Help

Calendar View Filter

February - March 2023

1 Month

February 2023

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| S  | M  | T  | W  | T  | F  | S  |
| 29 | 30 | 31 | 1  | 2  | 3  | 4  |
| 5  | 6  | 7  | 8  | 9  | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 |    |    |    |    |

March 2023

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| 26 | 27 | 28 | 29 | 30 | 31 |    |

April 2023

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| 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 1  | 2  | 3  | 4  | 5  | 6  |

| Sunday  | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|--------|---------|-----------|----------|--------|----------|
| February 5  | 6      | 7       | 8         | 9        | 10     | 11       |
| Areas of Persistent Poverty Program FY 2023 Survey of Interest Window                           |        |         |           |          |        |          |
| FY23 Low or No Emission Grant Program & the Grants for Buses and Bus Facilities Competitive Pro |        |         |           |          |        |          |
| FY24 5303 Planning Application Window   |        |         |           |          |        |          |
| Transit System  |        |         |           |          |        |          |
| 12  | 13     | 14      | 15        | 16       | 17     | 18       |
| DAMIS Report  |        |         |           |          |        |          |
| FY23 Low or No Emission Grant Program & the Grants for Buses and Bus Facil                      |        |         |           |          |        |          |
| FY24 5303 Planning Application Window   |        |         |           |          |        |          |
| Multimodal Up   |        |         |           |          |        |          |
| 19  | 20     | 21      | 22        | 23       | 24     | 25       |
| FY24 5303 Planning Application Window   |        |         |           |          |        |          |
| 26  | 27     | 28      | March 1   | 2        | 3      | 4        |
| Monthly Claim   |        |         |           |          |        |          |
| FY24 5303 Planning Application Window   |        |         |           |          |        |          |
| 5   | 6      | 7       | 8         | 9        | 10     | 11       |
| Transit System  |        |         |           |          |        |          |
| FY24 5303 Planning Application Window   |        |         |           |          |        |          |

**View Detail**

FY23 Low or No Emission Grant Program & the Grants for Buses and Bus Facilities Competitive Program Survey of Interest Window

**Date**  
02/07/23

**End Date**  
02/15/23

**Time**

**Link**  
<https://app.smartsheet.com/b/form/6ef27e6b03434abc8fe>

**Point of Contact**  
Blair Chambers

**Contact Email**  
tbchambers@ncdot.gov



# Transit Communication Hub

Due in the Last 30 Days & the Next 45 Days (View): [smartsheet](#)

|   |          |
|---|----------|
| Transit System Meeting @ 1pm                    | 02/08/23 |
| DAMIS Report FY23 (Jan - Dec) (CT)              | 02/15/23 |
| Multimodal Updates Meeting                      | 02/15/23 |
| Monthly Claims Due (w/DBE and Progress Reports) | 02/28/23 |
| Transit System Meeting @ 1pm                    | 03/08/23 |

## Communications

| ✓ Date Sent |  Name   | Subject       |
|-------------|--|---------------|
| 2/7/2023    |  <a href="#">FY23 5339 Survey of Interest</a> ✱   | Announcements |
| 2/6/2023    |  <a href="#">TLDP Registration - Spring 2023</a> ✱  | Training      |
| 1/30/2023   |  <a href="#">FY2024 Application Certs and Assurances Package</a>                              | Announcements |
| 1/30/2023   |  <a href="#">Areas of Persistent Poverty Program FY2023 Notice of Funding Opportunity</a> ✱ | Announcements |

# QUESTIONS



Previous slides, recordings and FAQs:

<https://connect.ncdot.gov/business/Transit/Pages/Transit-Meeting-Resources.aspx>

Provide feedback and ideas for topics:

<https://app.smartsheet.com/b/form/f626a9fbbd7649e4ba4dd45b3bedbcfd>