

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DRAFT

Carbon Reduction Strategy

OCTOBER 12, 2023



TABLE OF CONTENTS

Introduction	3
Existing NC Greenhouse Gas Reduction Initiatives.....	4
Executive Orders	4
Executive Order 80	4
Executive Order 246	4
Executive Order 271	4
GHG Inventory.....	5
Zero Emission Vehicle Plan	6
Medium and Heavy-Duty Needs Assessment	7
North Carolina Deep Decarbonization Pathways Analysis.....	7
North Carolina Clean Transportation Plan	9
Carbon Reduction Program Strategy	11
MPO	12
Types of projects.....	13
Rural/Statewide	13
Types of projects.....	14
Existing and Future Strategies	14
Conclusion.....	16
Appendix A – Projects Selected for Funding	17

INTRODUCTION

The Carbon Reduction Program was established through the Infrastructure, Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), on Nov. 15, 2021. This program provides funds for projects that reduce carbon dioxide (CO₂) emissions from the transportation sector. Sixty five percent of the state's apportionment is to be obligated to projects based on population. The remaining 35% can be obligated to projects anywhere in the state.

The North Carolina Department of Transportation (NCDOT) has developed this Carbon Reduction Strategy (CRS) to support existing, current and future efforts in reducing transportation sector greenhouse gas emissions (GHG). Future updates to the CRS will be updated at least a minimum over every four years per federal statute (§ 11403; 23 U.S.C. 175). This report is comprised of two main sections: a summary of North Carolina's existing greenhouse initiatives and NCDOT's carbon reduction implementation and strategy.

The first section discusses executive orders and their impacts on various agency efforts led by the N.C. Department of Environmental Quality and the N.C. Department of Transportation. First, the Greenhouse Gas Inventory, developed by NCDEQ, illustrates that the transportation sector is the greatest contributor to gross GHGs in North Carolina. The report also outlines other plans and efforts, including NCDEQ's Pathways Analysis and NCDOT's Clean Transportation Plan. These plans and efforts lay the groundwork for the carbon reduction policy recommendations for state agencies and partners.

The second section summarizes how NCDOT developed a strategy for the utilization of CRP funds. It also provides a modal breakdown of projects in metropolitan planning organizations and in rural areas statewide. Lastly, the report discusses existing and future CRP strategies.

EXISTING NC GREENHOUSE GAS REDUCTION INITIATIVES

In recent years, North Carolina has developed various plans and policies to address reducing greenhouse gas emissions (GHG) across the state. These include executive orders by the North Carolina Governor Roy Cooper, and developing a North Carolina Clean Transportation Plan (NCCTP), and the NC Deep Decarbonization Pathways Analysis. This section outlines key points from these policies and plans on how North Carolina will address GHG emissions for the transportation sector.

EXECUTIVE ORDERS

EXECUTIVE ORDER 80

[Executive Order \(EO\) 80](#) (North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy), signed in 2018, set a target to increase the total number of registered zero emission vehicles (ZEVs) to at least 80,000 vehicles by the year 2025. This will directly impact the transportation sector by setting a target to shift from internal combustion engines (ICE) to ZEVs. Not directly related but relevant to the transportation sector, the EO also aims to reduce GHG emissions by 40% below the 2005 level across the state by 2025. Additionally, the EO aims to reduce energy consumption in state-owned buildings by 40% below the 2002-2003 levels by 2025.

EXECUTIVE ORDER 246

<https://governor.nc.gov/executive-order-no-246> Executive Order 246 (North Carolina's Transformation to a Clean, Equitable Economy), signed in 2022, expanded upon EO 80's target in registering EVs to a new target of 1.25 million ZEVs registered in the state by 2030. The EO also set a target to increase the sale of passenger ZEVs so that 50% of in-state sales are zero emission vehicles by 2030. Also, this EO aims to reduce economy wide emissions by 50% between 2025 and 2030 and achieve net-zero emissions no later than 2050.

This EO also established the need for NCDOT to develop the N.C. Clean Transportation Plan (NCCTP). More on the NCCTP is outlined in its respective section below.

EXECUTIVE ORDER 271

EO 271, signed in 2022, has additional policies that impact the transportation sector. EO 271 outlines the following three key goals:

- Propose a NC Advanced Clean Trucks rule by May 2023 (however state legislation has halted this effort)
- Develop and prioritize statewide complementary strategies to aid in the reduction of GHG emissions

- Complete a ZEV infrastructure needs assessment for light duty vehicles and medium and heavy-duty vehicles to help direct future funding and policy decisions

GHG INVENTORY

The NC GHG Inventory was prepared by the N.C. Department of Environmental Quality in 2019 and updated in 2022. The purpose of this plan was to provide an inventory of GHG emissions that represents the carbon footprint for the entire state. The inventory provides a high-level accounting of GHG emissions from human sources between 1990 and 2018. Additionally, it provides a forecast of GHG emissions from 2019 to 2030.

A summary of gross GHG emissions by economic sector between 2005 and 2018 is shown below from the plan in Figure 1. Based on these findings, the transportation sector produces the majority of GHG emissions throughout the state.

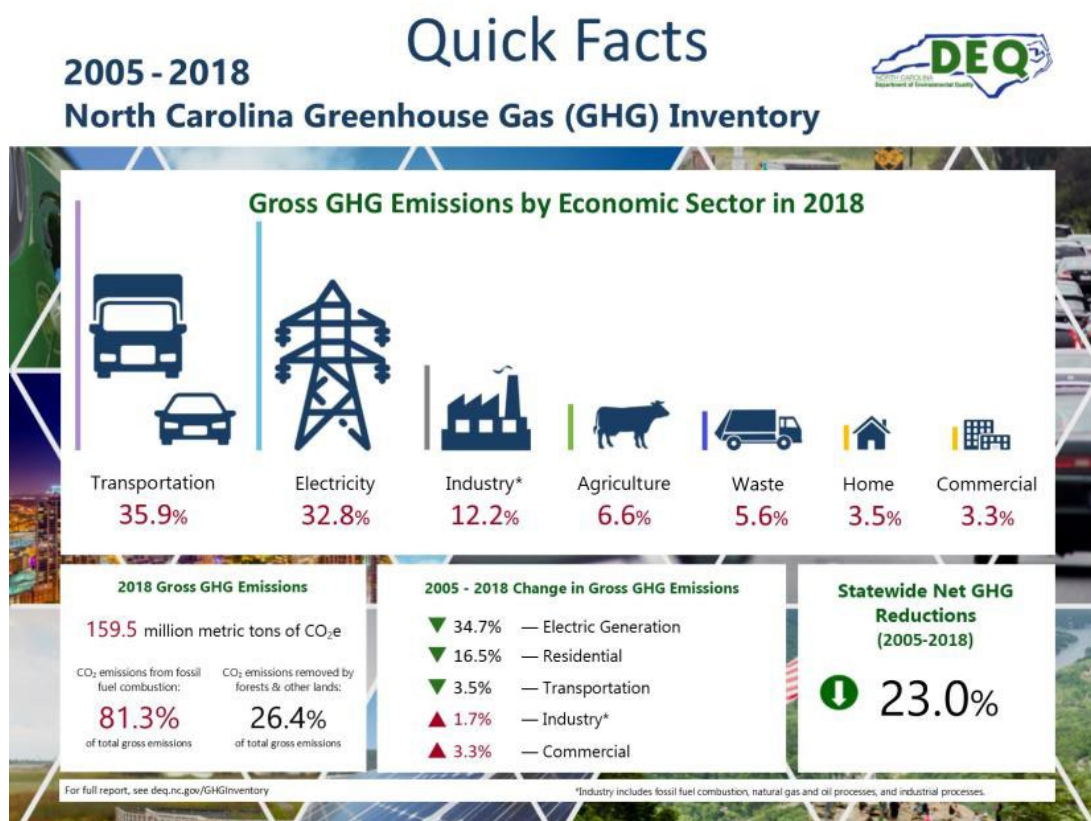


Figure 1: 2005 – 2018 NC Greenhouse Gas (GHG) Inventory Quick Facts

More information on NC DEQ's Greenhouse Gas Inventory can be found here - <https://www.deq.nc.gov/energy-climate/climate-change/greenhouse-gas-inventory>.

ZERO EMISSION VEHICLE PLAN

As a part of EO 80 in 2018, NCDOT developed the NC Zero Emission Vehicles Plan. This plan was completed in 2019 and updated in 2022. The plan identified four key strategies that could impact the registration of more ZEVs. This is shown below in Figure 2

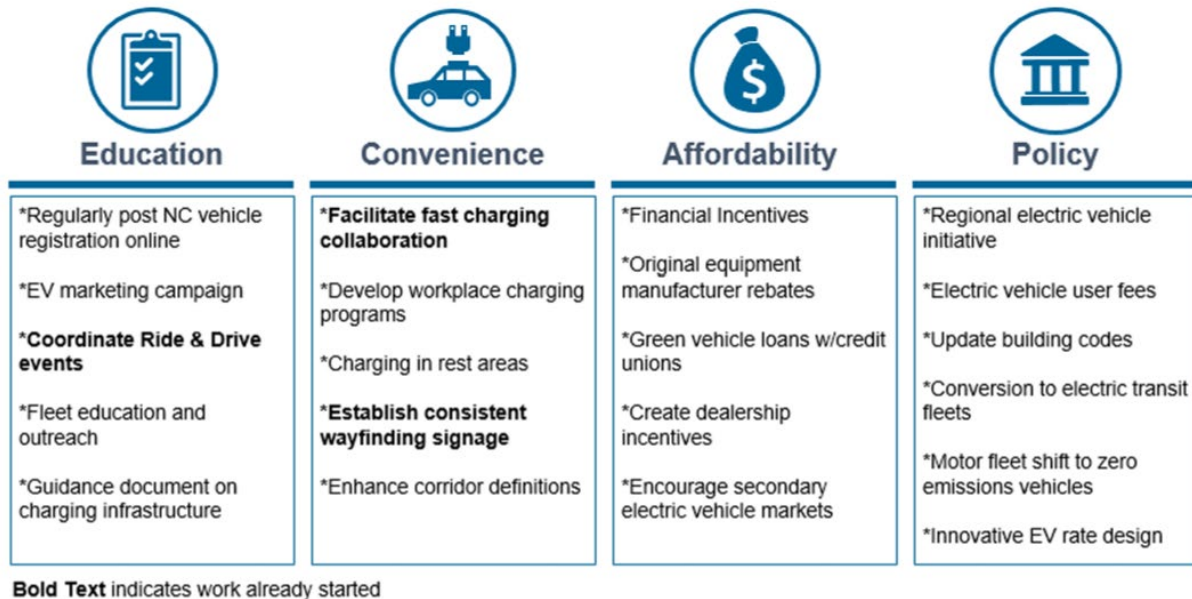


Figure 2: 2018 NC ZEV Plan Strategies

Since this plan has been developed and work on strategies identified in the plan have progressed, ZEV registration data has increased statewide and is on target to meet EO 80's target of 80,000 vehicles by 2025. Registration data from September 2018 to May 2023 is shown in Figure 3.

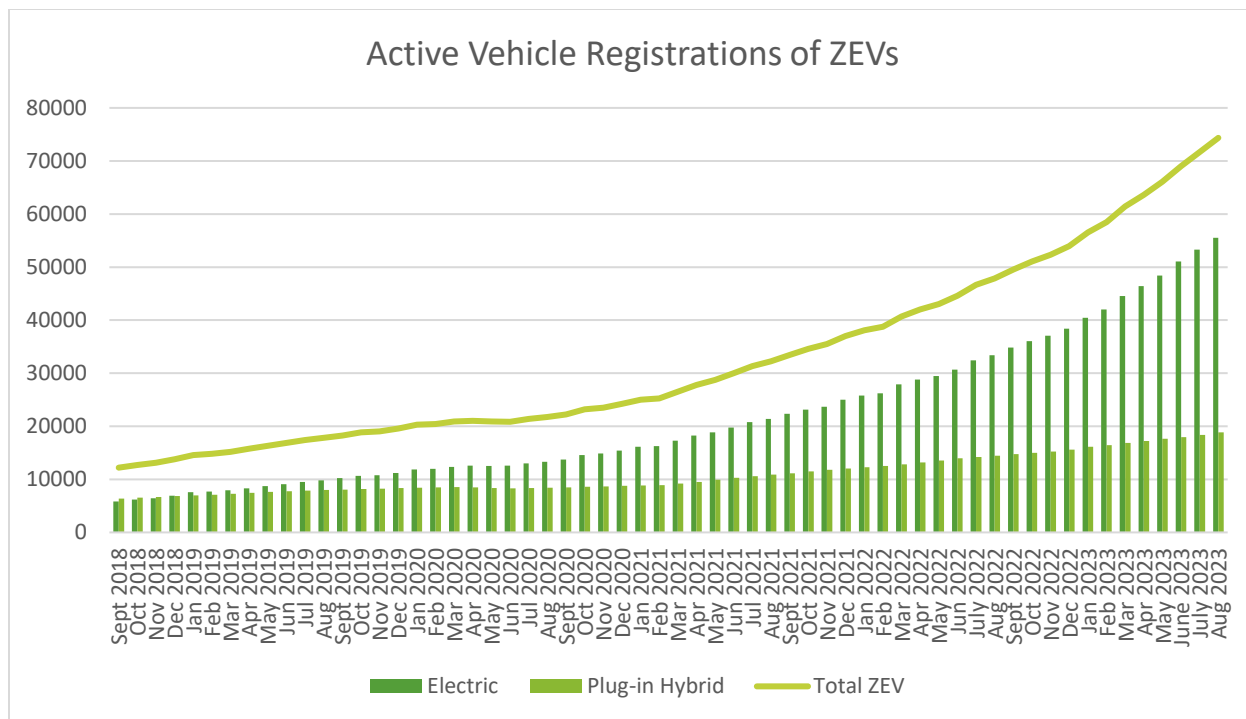


Figure 3: N.C. Active Vehicle Registration of ZEVs (September 2018 – August 2023)

More information on the ZEV plan can be found at <https://www.ncdot.gov/initiatives-policies/environmental/climate-change/Pages/plan.aspx>.

MEDIUM AND HEAVY-DUTY NEEDS ASSESSMENT

Executive Order 271 directed NCDOT to develop a medium and heavy-duty needs assessment to determine the number and types of chargers needed to support the electrification of this sector. This plan was delivered to the governor's office in October 2023. Relevant aspects of this needs assessment will be included into NC's future CRS.

NORTH CAROLINA DEEP DECARBONIZATION PATHWAYS ANALYSIS

The North Carolina Deep Decarbonization Pathways Analysis (Pathways Report) was a directive from EO 245 aimed at identifying technologically feasible GHG reductions consistent with the state's climate goals while identifying policies and plans needed to inform near-, mid-, and long-term decarbonization efforts. This was done with a lens of providing understanding of economy wide decarbonization goals as well as within specific sectors.

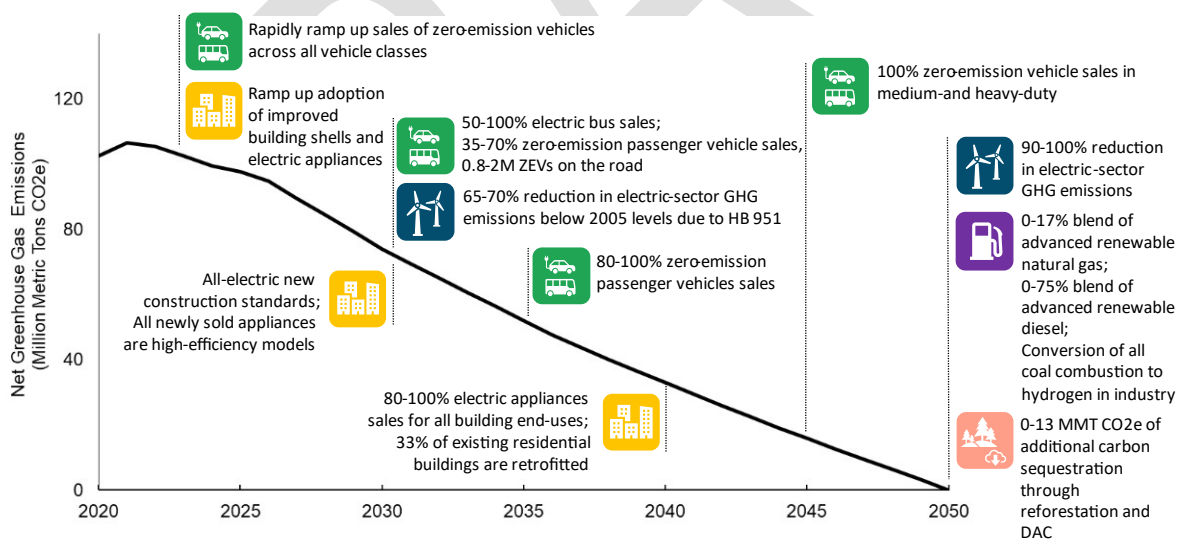
Figure 4 below outlines the priority actions identified in each sector. For transportation, the focus was on reducing emissions from vehicles by improving fuel economy, reducing vehicle miles traveled, and moving to lower carbon fuels such as biofuels and hydrogen.

Priority Actions that Impact Emissions

 Buildings	- Increased sales of high efficiency appliances - Improved building shells in new and retrofit buildings - All-electric, new construction standards - Increased sales of electrified devices for all end uses (space and water heating, drying, cooking)
 Transportation	- Improved fuel economy for new vehicles sold - Reductions in vehicle-miles traveled through transit and smart growth - Increased sales of ZEVs, including battery-electric and hydrogen fuel cell vehicles
 Clean Electricity	- Scale up of renewable electricity sources (wind and solar) and battery storage - Targeted role for zero-carbon firm generation that can provide electricity at any time (e.g., hydrogen combustion, advanced nuclear technologies)
 Decarbonized Fuels	- Production of advanced biofuels with sustainable biomass feedstocks - Production of green hydrogen through electrolysis using renewable electricity
 Carbon Sequestration	- Reforestation and restoration to enhance carbon sinks from natural and working lands - Application of negative emissions technologies such as direct air capture of CO2

Figure 4: N.C. Active Vehicle Registration of ZEVs (Sept 2018 – May 2023)

To meet the net zero target of 2050 outlined in EO 246, the transportation sector must quickly ramp up sales of ZEVs with 100% of sales of light duty passenger vehicles being zero emission by 2035. Due to fleet turnover taking several years, this will also require the transition of the medium- and heavy-duty sectors to occur by 2045 as shown in Figure 5 below.



Note: MMT CO₂e is defined as million metric tons of carbon dioxide equivalent

Figure 5: North Carolina GHG Emissions Reduction Measures: Net Zero Scenario Ranges

NORTH CAROLINA CLEAN TRANSPORTATION PLAN

The N.C. Clean Transportation Plan (NCCTP) was a document, adopted in 2023, that provides a coordinated strategy for hastening the decarbonization throughout the transportation sector. It balanced both equity and the development of realistic strategies for reducing GHGs statewide from transportation.

A variety of work groups and stakeholders were consulted throughout the development of this plan. These include local governments, regional associations, state agencies, nonprofits, social justice and equity groups, and the private sector.

Five key work groups were created to help develop the NCCTP. These are shown in Figure 6 below.

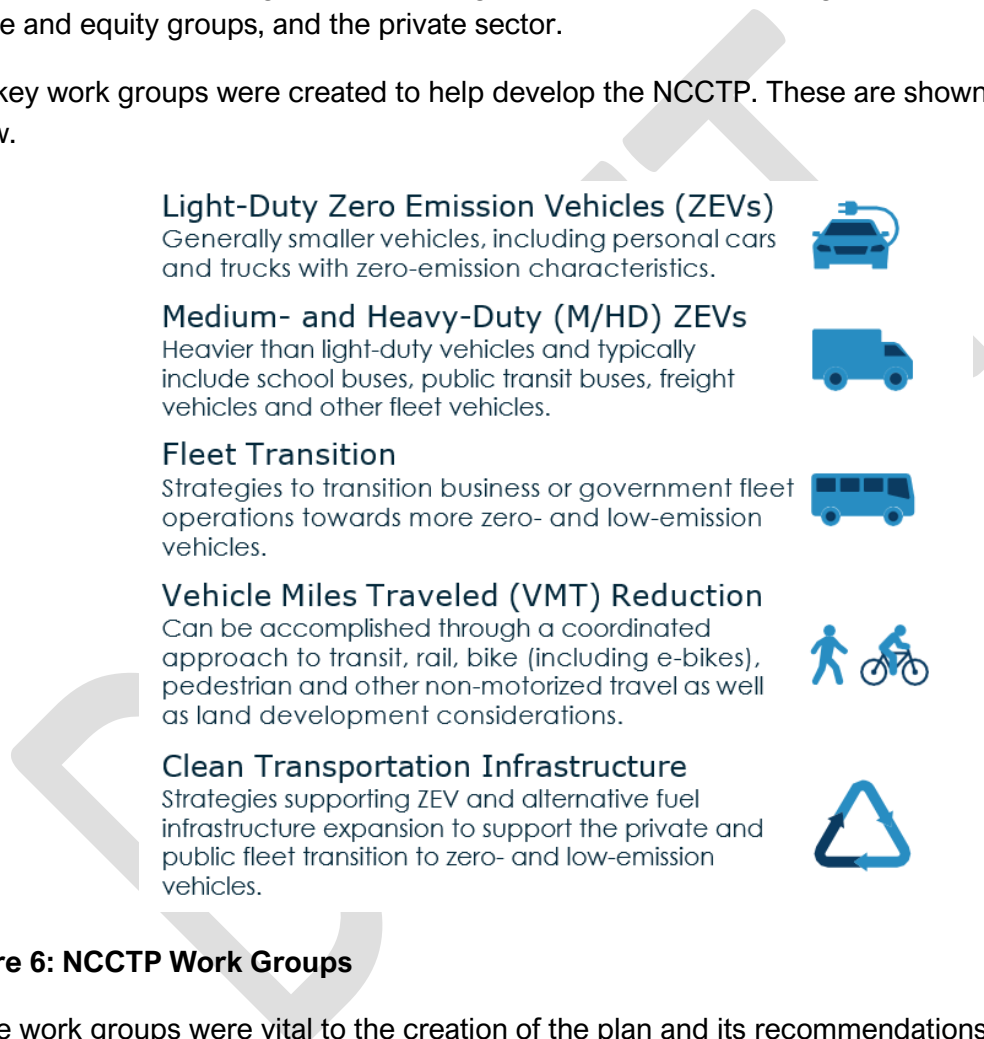


Figure 6: NCCTP Work Groups

These work groups were vital to the creation of the plan and its recommendations. The recommendations for the NCCTP are grouped into four categories – Infrastructure, Funding & Finance, Communications & Engagement, and Governance. The strategies and recommendations from these categories are shown in Figure 7.

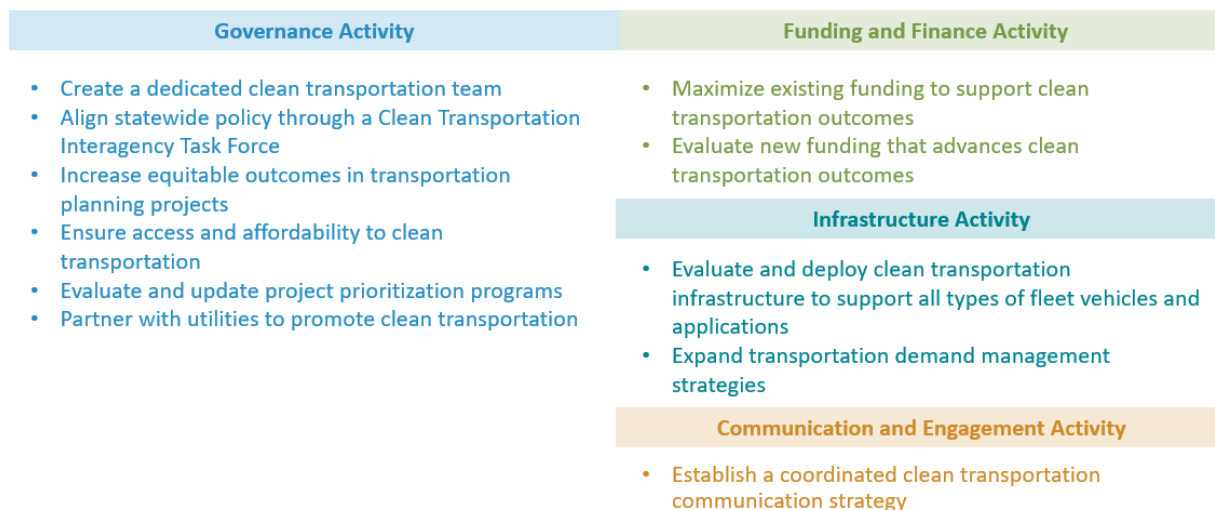


Figure 7: NCCTP Focus Areas and Recommendations

Throughout the development of the North Carolina Clean Transportation Plan, the public and a variety of stakeholders were engaged. This included 30 meetings of the work groups, advisory committee meetings, as well as public information sessions. Over 220 people were involved in the process and over 3,300 ideas and comments were synthesized to develop the plan.

These stakeholders included representatives from the Metropolitan and Rural Planning Organizations (MPOs/RPOs), equity and environmental justice groups, state agencies, electric utilities and advocacy groups. This extensive engagement over 18 months forms the basis of North Carolina's strategy to reduce carbon emissions from the transportation sector and informs decision-making on how the state will invest its CRP funds.

CARBON REDUCTION PROGRAM STRATEGY

North Carolina's CRS aligns with existing and future transportation planning initiatives. It bolsters project implementation for projects that are part of locally adopted plans such as Comprehensive Transportation Plans and Metropolitan Transportation Plans. It also identifies new projects based on recently identified transportation needs and community feedback. The strategy can integrate new projects into future transportation plans and amendments. Additionally, the NCDOT CRS works in concert with the existing statewide GHG reduction efforts identified in the previous section.

For the first two years of the Carbon Reduction Program, once carbon reduction eligibility was verified, the main goal was to provide geographic equity in funding CRP projects across North Carolina. This was done by working with Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs) to ensure that each jurisdiction had at least one project selected for funding. A map of North Carolina's planning organizations is shown below in Figure 8.

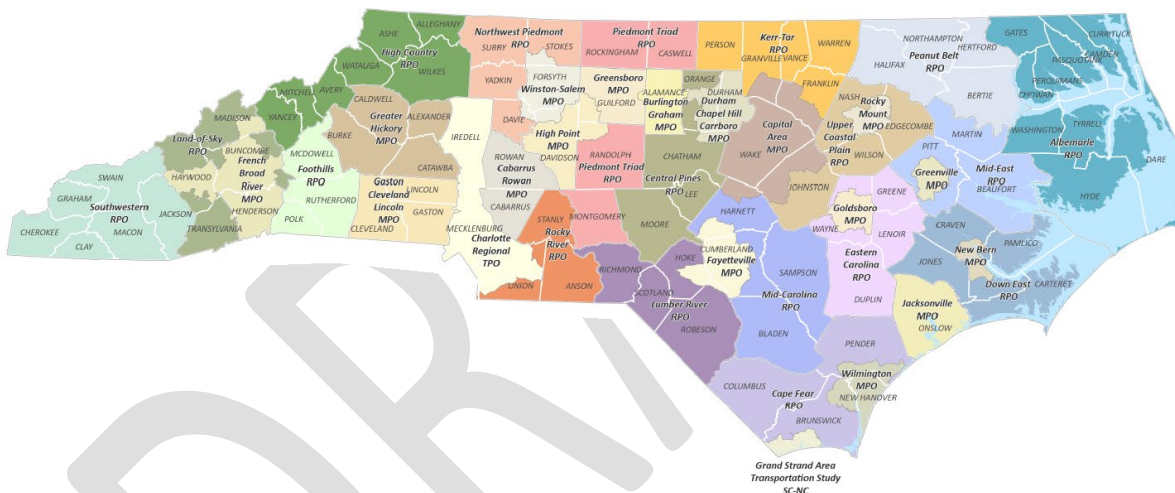


Figure 8: NC MPO and RPO Map

Additionally, statewide projects were considered from other NCDOT internal business units such as the Integrated Mobility Division, which oversees transit programs and bicycle and pedestrian planning for the department. A modal breakdown of projects funded/anticipated to be funded is shown below in Table 2.

Table 2: Modal Summary of All CRP Projects

Mode	CRP Only Funds	Percentage of CRP Funds
Pedestrian	\$5,082,458	9.7%
Highway	\$19,130,928	36.6%
Transit	\$12,666,708	24.2%
Bicycle/ Pedestrian	\$15,267,734	29.2%
EV Infrastructure	\$132,000	0.3%
Total	\$52,279,828	100%

MPO

Urban areas in North Carolina with populations greater than 50,000 were given a direct allocation of CRP funding. NCDOT contacted each MPO to confirm the allocation amount for the fiscal year and outline the process for identifying and including projects in the State Transportation Improvement Program (STIP):

1. MPOs will develop a process for selecting projects to receive CRP funding or may utilize existing processes in place to select other locally administered projects. This will allow MPOs to select carbon reducing transportation projects that meet the priorities of the area.
2. Once projects are selected by the MPO, NCDOT will verify eligibility and program projects in the STIP. For transit related projects, NCDOT will work to flex the funds to FTA.
3. A notification letter outlining the scope with the STIP identifier, will facilitate the required amendment to the Metropolitan Transportation Improvement Program (MTIP).

Coordination with the MPOs was facilitated using two processes. The first included funding letters sent to each MPO outlining the Carbon Reduction Program and including information about the eligible project types and funding amounts. These letters will be sent at the beginning of each federal fiscal year, once CRP funding is allocated to the state. The second coordination effort involved a June 15, 2023 virtual meeting with all MPOs to discuss the program and answer questions.

The virtual meeting also facilitated discussion between MPOs on how projects were selected and equity was considered. Informally, NCDOT was available by request to discuss possible projects and help facilitate the calculation of emission benefits. Also, the MPOs were engaged on the NCCTP through the plan's development and presentations the MPOs provided to their

Transportation Advisory and Technical Coordinating Committees and at their annual MPO conferences.

TYPES OF PROJECTS

Below, Table 3 provides a modal breakdown of MPO CRP funded projects. Most CRP funds were used for pedestrian and pedestrian/bicycle projects. Transit made up the next greatest share of projects, followed by the highway mode. A final project list is included in Appendix A.

Table 3: Modal Summary of MPO CRP Projects

Mode	CRP Only Funds	Percentage of CRP Funds
Pedestrian	\$486,806	0.9%
Highway	\$4,219,739	8.1%
Transit	\$8,746,708	16.7%
Bicycle/ Pedestrian	\$8,853,000	16.9%
EV Infrastructure	\$132,000	0.3%
Total	\$22,438,253	100%

RURAL/STATEWIDE

Projects outside of MPOs, including areas covered by Rural Planning Organizations and other statewide projects, made use of the following CRP funding categories:

- Populations less than 5,000 people
- Populations between 5,001 and 50,000 people
- Anywhere/Statewide

Some of the Anywhere/Statewide funds have been used or will likely be used to supplement RPO projects and other projects from other NCDOT business units, groups and jurisdictions. For example, Anywhere/Statewide funds are anticipated to support efforts led by NCDOT's Integrated Mobility Division and NCDOT division projects.

For the first two years of CRP funding, the goal was to focus on identifying and funding at least one eligible project in each of North Carolina's RPOs. NCDOT asked each RPO to provide projects for consideration in each of the population-based categories: up to 12 projects in areas with less than 5,000 residents and six projects in areas with more than 5,000 people but fewer than 50,000 people. If multiple projects were submitted, NCDOT asked the RPOs to rank their projects based on local priorities. NCDOT committed to funding each RPO's top priority. Three RPOs did not have projects to submit, and NCDOT is working with the regional division offices to identify projects that would use CRP funding to reduce congestion or improve intersections.

TYPES OF PROJECTS

Below, Table 4 demonstrates the breakdown of RPO CRP funded projects by different modes of transportation. Most projects funded with CRP funds in RPOs were in the highway category. Most of these highway projects were roundabout projects. Additionally, there is a good mix of bicycle/pedestrian and transit projects in rural areas. A final project list is included in Appendix A.

Table 4: Modal Summary of RPO CRP Projects

Mode	CRP Only Funds	Percentage of CRP Funds
Pedestrian	\$4,595,652	8.8%
Highway	\$14,911,189	28.5%
Transit	\$3,920,000	7.5%
Bicycle/ Pedestrian	\$6,414,734	12.3%
EV Infrastructure	\$-	0.0%
Total	\$29,841,575	100%

EXISTING AND FUTURE STRATEGIES

NCDOT has implemented several strategies and plans to incorporate other strategies in the future. Existing strategies include:

1. Soliciting projects continuously – NCDOT accepts CRP applications on a continuous basis, meaning prospective applicants can submit a completed application to NCDOT at any time. NCDOT groups these applications in quarterly batches. At the end of each

quarter, NCDOT reviews and awards new projects if they are approved in the following quarter. The end dates of each quarter are:

- Quarter 1 – January 1 to March 31
 - Quarter 2 – April 1 to June 30
 - Quarter 3 – July 1 to September 30
 - Quarter 4 – October 1 to December 31
2. Modal split – NCDOT is working with the Governor’s Office to establish modal splits targets for CRP awards. A draft set of modal targets has been developed and NCDOT will strive to meet those targets through 2026.
 3. Diversity, Equity and Inclusion (DEI) - NCDOT ensures DEI principles through existing strategies and policies. Additionally, NCDOT seeks to improve its DEI policy with CRP fund utilization. This is discussed in the section below.
 - a. MPOs – Project selection must follow the MPO’s Public Involvement Process (PIP) and the MPO’s locally administered projects program (LAPP), if a LAPP exists. This helps ensure that project selection complies with federal requirements.
 - b. RPOs – The majority of projects selected in rural areas were in areas with a medium-to-high transportation disadvantage index (TDI) score and environmental justice (EJ) index scores, compared to the state’s average for these indices. More work needs to be done to incorporate TDI and EJ index scores into future project selection. However, the partnership between RPOs and local NCDOT division offices enabled officials to apply CRP funds to numerous projects in rural areas that serve disadvantaged groups. More information on the EJ and TDI Index Tools can be found at - <https://connect.ncdot.gov/projects/planning/Pages/EJ-TDI-maps.aspx>

Future carbon reduction strategies include:

1. Establishing a CRP working group that works with MPO, RPO, and other CRP eligible partners. This working group will help identify areas of improvement and modify the future CRP strategy. One key area that needs work is developing a prioritization system for statewide and rural projects.
2. Identifying existing CO₂ reductions across all CRP projects funded in the STIP and establishing performance targets. These performance targets will be focused on modal split, equity (TDI and EJ indices), and overall GHG reduction. Performance targets will be set in coordination with the CRP working group and NCDOT staff.
3. Improving CRP application management, data management, and performance tracking of CRP project by working with information technology partners. This will include the development of an online application process and metrics dashboard. The dashboard will demonstrate both GHG performance and fiscal performance across the program.

CONCLUSION

This CRS was developed to demonstrate North Carolina's existing and planned strategies for reducing GHG emissions in the transportation sector. NCDOT is dedicated to improving its environmental impact by funding projects and promoting policies that reduce carbon and other harmful pollutants. Further work is needed and NCDOT will continue to work with local, state, federal and other partners to help reduce GHGs through implementation of the Carbon Reduction Program. Future modifications to NCDOT's Carbon Reduction Strategy and Program will be updated as policy changes occur.

DRAFT

APPENDIX A – PROJECTS SELECTED FOR FUNDING

Below is a table of projects that have been selected for funding for both MPOs and RPOs. Most of the projects have been included in the NCDOT's STIP or await inclusion into the STIP and/or MPOs transportation plans.

Project Selection Funding Table Key*

< 5K Population	5K to <50K Population	50K to 200K Population	>200K Population
-----------------	-----------------------	------------------------	------------------

* This excludes CRP Anywhere funds since these funds are mainly used to supplement funds needed from the RPO and MPO categories.

CRP Projects Selected for Funding

TBD = Project Information "To Be Determined" and/or not finalized

RPO/MPO	Mode	County	Description	CRP Amount	Match Amount	Total
TARPO	Pedestrian	Chatham	Town Lake Park Sidewalk	\$506,000	\$126,500	\$632,500
LRRPO	Highway	Robeson	Construct a roundabout at N.C. 71 and S.R. 1312 (Oxendine School Road)	\$2,720,000	\$680,000	\$3,400,000
PTRPO	Transit	Randolph	Asheboro Flexible (Deviated) Route Transit Launch	\$440,000	\$293,333	\$733,333
PBRPO	Pedestrian	Northampton	Sidewalk Connectivity Project in the Severn	\$1,341,862	\$335,466	\$1,677,328

SWRPO	Pedestrian	Jackson	Monteith Greenway Bridge	\$560,000	\$140,000	\$700,000
DERPO	Pedestrian	Jones	Main Street Pedestrian Improvements, Pollocksville, N.C.	\$440,000	\$110,000	\$550,000
LRRPO	Highway	Robeson	Construct a roundabout at N.C. 71 and S.R. 1001	\$2,720,000	\$680,000	\$3,400,000
NWPRPO	Bicycle/ Pedestrian	Surry	Dobson School Greenway Connector	\$1,227,772	\$306,943	\$1,534,715
DERPO	Pedestrian	Carteret	West Fort Macon (N.C. 58) Sidewalk Extension (North)	\$358,720	\$89,680	\$448,400
LRRPO	Highway	Robeson	Construct a roundabout at N.C. 130 and N.C. 904	\$2,720,000	\$680,000	\$3,400,000
NWPRPO	Pedestrian	Yadkin	Yadkinville CBD Pedestrian Improvements	\$704,000	\$176,000	\$880,000
FHRPO	Highway	Rutherford	U.S. 64/U.S. 74 A at N. Washington Street Intersection Improvement H150569 (Roundabout)	\$1,916,445	\$479,111	\$2,395,556
CFRPO	Bicycle/ Pedestrian	Pender	Burgaw Multi-use Pathway - East Phase 1 - from the Downtown Business District to the U.S.	\$733,000	\$183,250	\$916,250

			117 Bypass Business Corridor			
CFRPO	Highway	Columbus	Construct modern roundabout to replace existing traffic signal at the intersection of U.S. 701 Business (Madison Street)/S.R. 1916 (Lee Street) / S.R. 1953 (Franklin Street) for delay reduction	\$2,800,000	\$700,000	\$3,500,000
ECRPO	Bicycle/ Pedestrian	Lenoir	Kinston Riverwalk Phase 2	\$2,679,560	\$669,900	\$3,349,460
HCRPO	Pedestrian	Watauga	Town of Boone Sidewalk Project #10	\$685,070	\$171,269	\$856,339
KTRPO	Highway	Granville	Veazey Road / Central Avenue / Westbrook Intersection Roundabout	\$2,034,744	\$507,936	\$2,542,680
LOSRPO	Bicycle/ Pedestrian	Transylvania	Estatoe Trail at Tannery Park	\$528,000	\$132,000	\$660,000
Integrated Mobility Division	Transit	Watauga	Decarbonizing North Carolina through the Transit Life Cycle: Feasibility, Implementation, and Evaluation	\$3,480,000	\$870,000	\$4,350,000

UCPRPO	Bicycle/ Pedestrian	Johnston	W. Market Street Multi-Use Path	\$1,246,402	\$311,598	\$1,558,000
JUMPO	Pedestrian	Onslow	Construct 1,000 feet of sidewalk from intersection of N.C. 53 (Western Boulevard) and Gum Branch Road to the city limits of Jacksonville. Construct 1,600 feet of sidewalk from Onsville Drive to Onsville Drive.	\$320,000	\$80,000	\$400,000
BGMPO	EV Infrastruct ure	Alamance	Purchase, construct, and install an electric charging station at Joe Davidson Park in Burlington that can charge up to two (2) vehicles. Burlington has agreed to purchase Buy America compliant chargers when undergoing their procurement process.	\$132,000	\$33,000	\$165,000
GSMPO	Highway	Brunswick	Shallotte Adaptive Signal System	\$160,000	\$40,000	\$200,000
Goldsboro MPO	TBD	TBD	TBD	TBD	TBD	TBD
RM MPO	TBD	TBD	TBD	TBD	TBD	TBD
HPMPO	TBD	TBD	TBD	TBD	TBD	TBD

Greenville MPO	TBD	TBD	TBD	TBD	TBD	TBD
NBMPO	TBD	TBD	TBD	TBD	TBD	TBD
DCHC MPO	Transit	Durham	Replacement Bus. (Battery replacement, bus refurbishment, and paratransit vehicles and bus purchases.) All funds have been flexed to FTA.	\$1,572,608	\$756,470	\$3,782,350
CAMPO	Highway	Wake	U.S. 401/Mill Creek Road Intersection Improvements	\$1,228,000	\$307,000	\$1,535,000
CAMPO	Bicycle/ Pedestrian	Wake	Phases I, II & V, West Dynasty Drive to Old Reedy Creek Road in Cary. Construct Greenway.	\$4,000,000	\$1,246,000	\$6,231,000
CAMPO	Highway	Wake	Construct Townwide ITS / Signal System. Town of Fuquay-Varina.	\$2,320,000	\$580,000	\$2,900,000
CRTPO	Transit	Mecklenburg	CATS - Battery Electric Bus Chargers	\$6,546,100	\$1,636,525	\$8,182,625
CRTPO	Transit	Union	Indian Trail – EV Chargers - Install Type 2 EV chargers at Crooked Creek Park, Chestnut Square Park and Crossing Paths Park	\$468,000	\$117,000	\$585,000

CRTPO	Transit	Union	Union Co. Transportation - Low Emission Alternative Fuel Conversion	\$160,000	\$40,000	\$200,000
FBRMPO	Bicycle/ Pedestrian	Buncombe	Woodfin Greenway	\$1,282,000	\$321,000	\$1,603,000
GUAMPO	Bicycle/ Pedestrian	Guildford	A&Y greenway - Spring Garden Street to south of Rollins Road in Greensboro. Construct multi-use path.	\$2,123,000	\$530,750	\$2,653,750
GHMPO	Bicycle/ Pedestrian	Catawba	Clement Boulevard to 9th Avenue NW in Hickory. Construct multi-use trail.	\$280,000	\$70,000	\$350,000
GHMPO	Bicycle/ Pedestrian	Catawba	9th St NW connector - city walk to old Lenoir Road in Hickory. Construct multi-use trail along 9th Street NW.	\$1,168,000	\$292,000	\$1,460,000
WSUAMPO	Pedestrian	Forsyth	Shallowford Road Sidewalk Project in Lewisville	\$166,806	\$41,701	\$208,507
WSUAMPO	Highway	Forsyth	N.C. 109 Traffic Signal and Turn Lane Project in Winston Salem	\$310,739	\$77,685	\$388,424

WSUAMPO	Highway	Forsyth	Lewisville-Clemmons Road & Holder Road Signal Installation in Clemmons	\$201,000	\$50,250	\$251,250
CRMPO	TBD	TBD	TBD	TBD	TBD	TBD
GCLMPO	TBD	TBD	TBD	TBD	TBD	TBD
FAMPO	TBD	TBD	TBD	TBD	TBD	TBD
WMPO	TBD	TBD	TBD	TBD	TBD	TBD

DRAFT