

**A Carbon Reduction Strategy
For
New Hampshire**



November 2023



February 20, 2024

In Reply Refer To:
HEPN-30

Mr. William Cass
Commissioner
New Hampshire Department of Transportation
7 Hazen Drive
Concord, NH 03302

Subject: Certification of New Hampshire Carbon Reduction Strategy

Dear Commissioner Cass:

The Federal Highway Administration (FHWA) has completed our review of the New Hampshire Carbon Reduction Strategy required under 23 USC 175. Based on the review, FHWA certifies that the New Hampshire Carbon Reduction Strategy meets the statutory requirements.¹

Certification of this strategy does not indicate FHWA approval or authorization of any specific project. Please continue to coordinate with your FHWA division office on the implementation of programs and projects identified within your Carbon Reduction Strategy.

As a reminder, updates to Carbon Reduction Strategies are required no less frequently than every four years.² The FHWA will follow up with States on specific opportunities for improvement in future year strategies and will continue to provide technical assistance and guidance as States continue implementation.

Sincerely,

Emily Biondi

Emily Biondi
Associate Administrator
Office of Planning, Environment and Realty

cc: New Hampshire Division Office

¹ 23 USC 175(d)(1) and 175(d)(2)

² 23 USC 175(d)(3)

Table of Contents

<i>TOPIC</i>	<i>PAGES</i>
What is a Carbon Reduction Strategy?	4
NH plans, policies & strategies that support Carbon Reduction efforts	5-8
Metropolitan Planning Organizations	5-6
State of New Hampshire	6-8
Consultation with NH's MPOs	9
Funding available to help reduce Carbon emissions from transportation	9-12
A Carbon Reduction Strategy for NH	2-15

What is a Carbon Reduction Strategy?

The passage of the Infrastructure Investment & Jobs Act (IIJA) introduced a new federal funding program known as the Carbon Reduction Program (CRP). The focus of this new program was to support the efforts of states to reduce carbon emissions from the transportation sector. The funds were available to states as part of their regular federal apportionments initially. The IIJA also includes a requirement that states, need to develop a Carbon Reduction Strategy (CRS) by no later than 2 years after enactment of the IIJA (i.e November 15, 2023). The Carbon Reduction Strategy needs to be certified by FHWA that the strategy meets statutory requirements.

What does a Carbon Reduction Strategy involve? Per the IIJA: Each Carbon Reduction Strategy shall¹ :

A. support efforts to reduce transportation emissions.

B. identify projects and strategies to reduce transportation emissions, which may include projects and strategies for safe, reliable, and cost-effective options.

- i. to reduce traffic congestion by facilitating the use of alternatives to single occupant vehicle trips, including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips within the State 12 or an area served by the applicable MPO, if any;
- ii. to facilitate the use of vehicles or modes of travel that result in lower transportation emissions per person-mile traveled as compared to existing vehicles and modes; and
- iii. to facilitate approaches to the construction of transportation assets that result in lower transportation emissions as compared to existing approaches.

C. support the reduction of transportation emissions of the State;

D. at the discretion of the State, quantify the total carbon emissions from the production, transport, and use of materials used in the construction of transportation facilities within the State; and

E. be appropriate to the population density and context of the State, including any metropolitan planning organization designated within the State.

By November 15, 2023, States are required to develop a Carbon Reduction Strategy in consultation with any MPO designated within the State². The Carbon Reduction Strategy shall support efforts to reduce transportation emissions and identify projects and strategies to reduce these emissions.

The Carbon Reduction Strategy must be updated at least once every four years³. States and MPOs are encouraged to obligate CRP funding for projects that support implementation of the State's Carbon Reduction Strategy.

NH has 4 designated Metropolitan Planning Organizations: Southern NH Planning Commission (SNHPC (5B)), Strafford Regional Planning Commission (SRPC (7)), Rockingham Planning Commission (RPC (6)) and the Nashua Regional Planning Commission (NRPC (5C)) in the southeastern corner of the state (Figure 1)

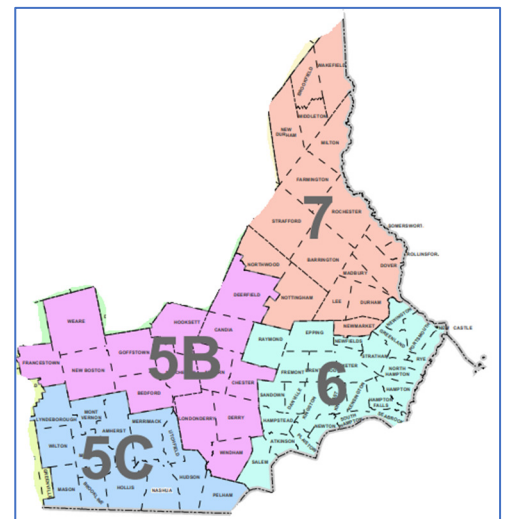


Figure 1

NH plans, policies & strategies that support Carbon Reduction efforts

Metropolitan Planning Organizations (MPOs)

Given the level of importance placed on consultation with the Metropolitan Planning Organizations in the IJA – it is helpful to understand where the 4 designated MPOs in NH stand as it related to reducing carbon emissions from the transportation sector. What follows is a summary of each MPOs specific policies they’ve identified.

Southern New Hampshire Planning Commission (SNHPC)

The 2021-2045 Metropolitan Transportation Plan for the Southern New Hampshire Planning Commission (adopted 1/26/2021) includes the following carbon reduction strategies on page 83:

Table 20: Agencies, Transportation Impacts, and Mitigation Strategies of Environmental Resources

Environmental Resource	Regulatory or Coordinating Agencies	Potential Transportation Project Impacts	Potential Mitigation Strategies
<i>Air Quality</i>	<ul style="list-style-type: none"> NH Department of Environmental Services (Air Resources Division) NH Department of Transportation (Bureau of Environment & other bureaus) Environmental Protection Agency (Region 1) 	<ul style="list-style-type: none"> Increased emissions from vehicles for pollutants of concern (e.g., Volatile Organic Compounds, Carbon Monoxide, Oxides of Nitrogen, and Particulate Matter). Increased dust emissions during construction. 	<ul style="list-style-type: none"> Implementation of Transportation Demand Management (TDM) programs. Incorporation of bicycle/pedestrian infrastructure into the project scope to reduce VMT. Incorporation of ITS components into the project scope to reduce delay. Implementation of local no idling ordinances.

Strafford Regional Planning Commission (SRPC)

The 2023-2045 Strafford MPO Metropolitan Transportation Plan (adopted 2/17/2023) Page 62 (page 18 of the implementation plan) includes the following details on page 62:

Mitigation			
<i>Definition: measures to prevent, reduce, or compensate for adverse effects and environmental impacts of greenhouse gas emissions that are contributing to and accelerating climate change.</i>			
Goal: Decrease the on-road emissions that contribute to climate change and its impacts			
Objective	Strategy	Tools and Resources	Implementation Notes
Increase adoption of electric vehicle technology	Identify strategic locations for new electric vehicle charging stations.	GIS and site prioritization tools	Strafford MPO collaborates with state agencies and municipalities regularly to identify sites
Increase the number of local destinations that are connected by sidewalk and safe bike routes	<ul style="list-style-type: none"> Work with municipalities to develop projects focused on non-motorized accessibility in town/city centers Increase the number of local destinations that are connected by sidewalk and safe bike routes 	<ul style="list-style-type: none"> Bicycle level of stress analysis Regional and local sidewalk assessments Crash data 	Tools are currently being deployed to identify and develop projects
Increase the frequency and dependability of public transit	<ul style="list-style-type: none"> Advocate for public transit investment with state and local decision-makers Implement transit signal prioritization technology along bus routes 	<ul style="list-style-type: none"> Transit on-time performance data Vehicle-to-infrastructure technology Guides from the National Association of City Transportation Officials (NACTO) 	COAST and Dover have already developed a project for potential deployment.
Increase use of mixed-use and transit-oriented development approaches	<ul style="list-style-type: none"> Collaborate with municipalities on efforts to revitalize downtowns for density near public transit routes Work with municipalities to develop projects focused on non-motorized accessibility in town/city centers 	<ul style="list-style-type: none"> Relationships with municipal staff and decision-makers including internal communication between planning area experts at SRPC Guides from NACTO 	Current and ongoing

Rockingham Planning Commission (RPC)

The Rockingham Planning Commission (RPC), identified the following strategies that promote the reduction of carbon emissions from transportation uses through its current 2045 Long Range Transportation Plan update as adopted on 2/8/2023:

- Promote compact, mixed-use development, including Transit Oriented Design (TOD) where appropriate.
- Implement a complete streets policy and corresponding approach for all federally funded transportation projects.
- Encourage communities to conduct rigorous traffic impact analysis as part of development site review and expanded use of the Developments of Regional Impact process.
- Work with state and regional partners to increase service on key fixed public transit routes.
- Work with State and regional partners to sustain and expand regional and inter-city rail and bus transportation options.
- Ensure accessibility of the state's multimodal transportation options, including safe pedestrian access to adjacent land uses at transit stops and ADA compliance.
- Re-establish a dedicated pool of funding for local Safe Routes to School planning efforts that connect neighborhoods to schools.
- Expand data collection on bicycle and pedestrian volumes, routes, and facility conditions to provide a better basis for evaluating bicycle and pedestrian project needs.
- Allocate funding to implement key Vulnerable Road User (VRU) safety improvements identified through the NH Pedestrian/Bicycle Plan and NH VRU Safety Assessment.
- Collaborate with regional and statewide partners on education, enforcement, and encouragement initiatives to promote multimodal transportation safety and initiatives.
- Prioritize investment in rail, the Port of New Hampshire, and connecting transportation infrastructure.
- Integrate Intelligent Transportation Systems (ITS) and other efficiency strategies into the design of transportation projects as appropriate.
- Continue to track NAAQS criteria pollutant levels and greenhouse gas emissions in the region and prioritize projects that improve air quality.
- Utilize Congestion Management Process (CMP) as a tool for targeting congested locations.

Nashua Regional Planning Commission (NRPC)

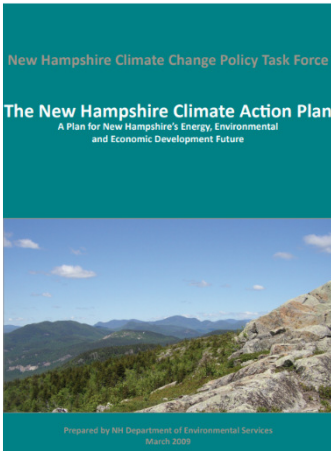
The NRPC identifies mitigation strategies in their draft 2023-2050 Metropolitan Transportation Plan as follows:

Potential Mitigation Strategies

- Implementation of Transportation Demand Management (TDM) programs.
- Incorporation of bicycle and pedestrian infrastructure into a project's scope to provide alternatives and truly reduce VMT.
- Incorporation of ITS components into a project's scope to potentially reduce delays.
- Implementation of municipal no idling ordinances.

The State of New Hampshire

New Hampshire Climate Action Plan (2009): While this 14-year-old plan precedes the federal and state focus on opportunities to reduce carbon emissions specifically, it does identify opportunities to reduce greenhouse gasses generally – and provides a strategic roadmap for coordinated efforts at the federal, state and local government levels as well as opportunities to partner with outside groups. Specific transportation strategies related to Carbon Reduction efforts include the following (including page numbers):



3. Support regional and national actions to reduce greenhouse gas emissions (page 22):

- Support Stricter Corporate Average Fuel Economy Standards (TLU 1.A.1)
- Support Fuel Economy Standards for Heavy-Duty Vehicles (TLU 1.A.2)
- Adopt a Low-Carbon Fuel Standard (TLU 1.C.1)
- Promote Advanced Technology Vehicles and Supporting Infrastructure (TLU 1.C.2)

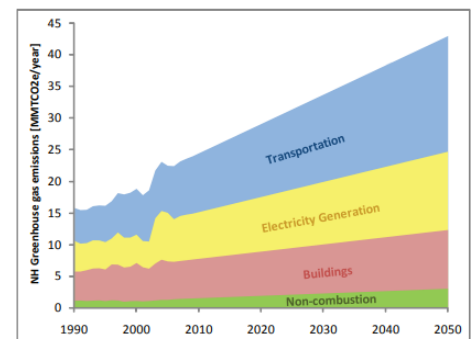
4. Reduce vehicle emissions through state actions (page 22):

- Adopt California Low Emission Vehicle (CALEV) Standards (TLU 1.A.3)
- Create a Point-of-Sale Financial Incentive for Higher Efficiency Vehicles (TLU 1.B.1)
- Install Retrofits to Address Black Carbon Emissions (TLU 1.C.3)
- Implement Commuter Trip Reduction Initiative (TLU 2.A.1)
- Increase Highway Automobile Efficiency (TLU 1.D.1)
- Address Vehicle Idling (TLU 1.D.2)
- Improve Traffic Flow (TLU 1.D.3)

6. Reduce vehicle-miles traveled through an integrated multi-modal transportation system (pages 22-23):

- Improve Existing Local/Intra-Regional Transit (Bus) Service (TLU 2.B.1.b)
- Expand Local/Intra-Regional Transit (Bus) Service (TLU 2.B.1.a)
- Improve Existing Inter-City Bus Service (TLU 2.B.2.h)
- Expand and Improve Bicycle and Pedestrian Infrastructure (TLU 2.B.1.c)
- Maintain and Expand Passenger Rail Service (TLU 2.B.2.a)
- Maintain and Expand Freight Rail Service (TLU 2.B.2.b)
- Implement a Stable Funding Stream to Support Public Transportation (TLU 2.B.2.c)
- Expand Park-and-Ride Infrastructure (TLU 2.B.2.e)

Figure 2.1 – New Hampshire’s Historical and Projected Greenhouse Gas Emissions (Business as Usual)

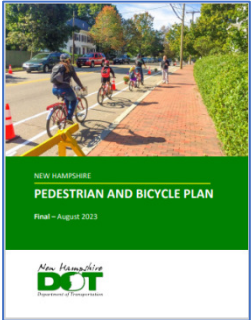


With the recent award of \$3M in funding from the US Environmental Protection Agency (EPA) (see below), this 2009 planning document will be updated to reflect accomplishments and opportunities to further NH state efforts to reduce carbon emissions.

The NH Climate Action Plan may be found online via the following link:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/r-ard-09-1.pdf>

New Hampshire Climate Pollution Reduction Grant: U.S. EPA Region 1 recently announced a \$3 million grant award from the agency's Climate Pollution Reduction Grants (CPRG) program to the State of New Hampshire 's Department of Environmental Services. The New Hampshire funding will focus on the development of plans and innovative strategies to cut climate pollution and build clean energy economies.



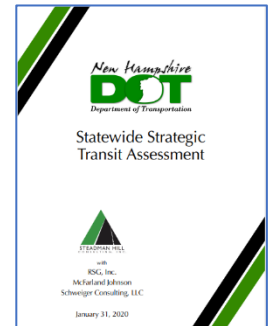
New Hampshire Pedestrian and Bicycle Plan (2023): This recently updated document does not explicitly deal with carbon emissions from transportation uses – but does provide policy guidance and a prioritized strategy for implementing a more accommodating, inclusive and interconnected non-motorized transportation network. Opportunities to shift trips from internal combustion powered transportation to more active modes certainly support efforts to reduce transportation emissions. The New Hampshire Pedestrian and Bicycle plan may be access online via the following link:

<https://mm.nh.gov/files/uploads/dot/remote-docs/nh-ped-bike-plan-2023.pdf>

New Hampshire Strategic Statewide Transit Assessment (2020): The Strategic Statewide Transit Assessment (SSTA) is intended to be a guide toward a sustainable future for public transit in New Hampshire. Through more than a dozen separate tasks, the study team, led by Steadman Hill Consulting, Inc., worked with NHDOT's Bureau of Rail and Transit to take a comprehensive look at bus transportation in the state and consider ways that it could better meet the needs of New Hampshire residents. The results of this work identified a priority approach to investment in NH's Public Transportation System.

The NH Strategic Statewide Transit Assessment may be found online via the following link:

<https://www.dot.nh.gov/projects-plans-and-programs/strategic-plans/strategic-statewide-transit-assessment>



Performance Measures: As part of its existing obligations under Federal Rules, NHDOT address CO emissions as a performance measure subject to 1.) target setting and 2.) documented performance in meeting those identified targets. Specifically, NH identifies a 4-year Carbon Monoxide emissions target as follows:

The 4-year target for statewide Total Emissions Reduction (total daily kilograms) of CO for the Federal Fiscal Year 2018-2021 Performance Period. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(b)(2)(ii)(E)]: 123.830

Additionally, the performance reporting requirements include a comparison of actual performance vs. the proposed target. In the case of CO notes that: NHDOT routinely makes investments that reduce the potential CO emissions through CMAQ and other programs.

Consultation with New Hampshire's MPOs

As identified earlier in this document, the passage of the Infrastructure Investment and Jobs Act (IIJA) brought with it the requirement that all states develop a Carbon Reduction Strategy. The Carbon Reduction Strategy development explicitly requires that strategy to be developed in consultation with all Metropolitan Planning Organizations (MPOs) in each state. Regarding consultation with the 4 MPOs in NH, NHDOT relied on the existing Partnering for Performance NH (PfPNH) group. The PfPNH was initiated in 2012 as part of an FHWA Strategic Highway Research Program (SHRP2) PlanWorks Implementation Assistance Program funding grant. The initial efforts to stand-up this collaborative interagency planning effort have resulted in a standing monthly meeting involving the 4 MPOs, NHDOT and FHWA to address cooperative performance planning needs in NH.

Within this existing framework, NHDOT initiated a discussion relative to the NHDOT plans for its proposed path forward on a Carbon Reduction strategy at the April 2023 PfPNH meeting, with a request to introduce discussion as a formal agenda item at the May PfPNH meeting. At the May meeting, NHDOT provided a high-level overview of the proposed strategy development and schedule which featured plans to provide a draft of the proposed Strategy document at the October PfPNH meeting for review and comment by the group.

The October PfPNH meeting featured a group discussion on the proposed NHDOT draft strategy document and general comments were offered. Based on that discussion, the NHDOT invited formal written collaborative comments from the 4 MPOs that would serve to compliment the separate early review comments from FHWA. The MPOs provided those collaborative comments on October 27, 2023. Following receipt of these proposed comments, NHDOT requested additional detailed information from each of the MPOs to include in the NH Carbon Reduction Strategy. Those items included:

- Identification of specific supporting NH strategies for both the state and MPOs.
- Incorporation of proposed programs/projects to support Carbon reduction in NH.

The comments received by the MPOs and FHWA, and the additional information NHDOT requested have been incorporated into the NH Carbon Reduction Strategy.

Funding available to help NH reduce Carbon emissions from transportation

NHDOT has access to a wide range of federal funds through the US Department of Transportation's (USDOT) Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to address efforts to reduce carbon emissions from transportation sources. The following programs are intended to offer a brief overview of those programs that specifically aim to reduce carbon emissions – but the list is not intended to be exhaustive or complete.

Carbon Reduction Program Funding

As part of the federal Infrastructure and Investment in Jobs Act (IIJA), there is funding set aside in the FHWA funding apportionment to states focused on reducing Carbon emissions from transportation. Those funds are identified as Carbon Reduction Program (CRP) funds.

Eligible uses of Carbon Reduction Program funding include:

- Establishment or operation of a traffic monitoring, management, and control facility or program, including advanced truck stop electrification systems.
- a public transportation project eligible for assistance under 23 U.S.C. 142 (this includes eligible capital projects for the construction of a bus rapid transit corridor or dedicated bus lanes as provided for in BIL Section 11130 (23 U.S.C. 142(a)(3));
- Transportation alternatives projects as described in 23 U.S.C. 101(a)(29) as in effect prior to the enactment of the FAST Act, including the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation.
- Advanced transportation and congestion management technologies.
- Deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle-to-infrastructure communications equipment, including retrofitting dedicated short-range communications (DSRC) technology deployed as part of an existing pilot program to cellular vehicle-to-everything (C-V2X) technology.
- Replacement of street lighting and traffic control devices with energy-efficient alternatives.
- Development of a carbon reduction strategy
- A project or strategy designed to support congestion pricing, shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads, including electronic toll collection, and travel demand management strategies and programs.
- Efforts to reduce the environmental and community impacts of freight movement.
- Projects to support deployment of alternative fuel vehicles, including— (i.) the acquisition, installation, or operation of publicly accessible electric vehicle charging infrastructure or hydrogen, natural gas, or propane vehicle fueling infrastructure; and (ii.) the purchase or lease of zero-emission construction equipment and vehicles, including the acquisition, construction, or leasing of required supporting facilities.
- Diesel engine retrofit (per 23 U.S.C. 149(b)(8))
- Certain types of projects to improve traffic flow that are eligible under the CMAQ program, and that do not involve construction of new capacity; (23 U.S.C. 149(b)(5) and 175(c)(1)(L)); and
- Reduction of transportation emissions at port facilities, including through the advancement of port electrification.
- Other projects that are not listed above may be eligible for CRP funds if they can demonstrate reductions in transportation emissions over the project’s lifecycle.
- Projects including alternative uses of highway right-of-way (ROW) that reduce transportation emissions are also eligible. For example, renewable energy generation facilities, such as solar arrays and wind turbines, can reduce transportation emissions, and biologic carbon sequestration practices along highway ROW to capture and store CO₂ may demonstrate potential for substantial long-term transportation emissions reductions.
- Projects that maximize the existing right-of-way for accommodation of nonmotorized modes and transit options that increase safety, equity, accessibility, and connectivity may be eligible. Projects that separate motor vehicles from pedestrians and bicyclists, match vehicle speeds to the built environment, increase visibility (e.g., lighting), and advance implementation of a Safe System approach and improve safety for vulnerable road users may also be eligible.

Congestion Mitigation & Air Quality (CMAQ) funding

The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) established the CMAQ Program, substantially expanding the focus and purpose of Federal transportation funding and programs to address air quality. The program has continued through the current Infrastructure Investment and Jobs Act (IIJA).

Eligible projects or programs for the use of CMAQ funds include those which would result in an air quality benefit and are likely to contribute to the attainment of national ambient air quality standards. Projects that are eligible for funding under this category include:

- Alternative fuel projects including participation in vehicle acquisitions, engine conversions, and refueling or charging facilities.
- Projects that improve traffic flow, including efforts to provide signal system optimization, construct HOV lanes, streamline intersections, add turning lanes, improve transportation systems management and operations, implementing ITS and other CMAQ-eligible projects, including efforts to improve incident and emergency response or improve mobility, such as through real time traffic, transit, and multimodal traveler information.
- Transit investments, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity, as well as operating assistance for new services or the incremental cost of expanded services.
- Transportation-focused (non-recreational) bicycle transportation and pedestrian improvements that provide a reduction in single-occupant vehicle travel.
- Transit investment, including transit vehicle acquisitions and construction of new facilities or improvements to facilities that increase transit capacity, as well as operating assistance for new services or the incremental cost of expanded services.

In NH the CMAQ program application/award cycles generally run every other Ten-Year Plan cycle. Additional details regarding the NHDOT's CMAQ program may be found online here:

<https://www.dot.nh.gov/projects-plans-and-programs/programs/lpa-programs/congestion-mitigation-and-air-quality-cmaq>

Transportation Alternatives (TA) funding

The goal of the federally funded Transportation Alternatives Program (TA) is to provide choices for non-motorized users that are safe, reliable, and convenient.

TA was created under a federal law known as Moving Ahead for Progress in the 21st Century (MAP-21) to consolidate many stand-alone programs into a single, more flexible program. Programs replaced by TA are Safe Routes to School, Recreational Trails, Transportation Enhancement, and Scenic and Cultural Byways. The Recreational Trails Program is administered by the Department of Resource and Economic Development.

Each project is eligible to receive no more than 80% of the project costs in federal funds, with the remaining 20% provided as matching funds by the applicant. Based on experience from the Transportation Enhancement Program (TE) and the Safe Routes to School Program (SRTS), a high and

low limit for project funding was set. The minimum amount in the most recent round was set at \$400,000 (\$320,000 fed.) and a maximum amount was set at \$1,000,000 (\$800,000 fed.)

Additional information regarding the Transportation Alternatives Program may be found online here:

<https://www.dot.nh.gov/projects-plans-and-programs/programs/transportation-alternatives-program>

National Electric Vehicle Infrastructure (NEVI) program funding

The *Infrastructure Investment and Jobs Act* (IIJA) created the National Electric Vehicle Infrastructure (NEVI) Program to provide funding to States to strategically deploy electric vehicle (EV) charging infrastructure and to establish an interconnected network to facilitate data collection, access, and reliability. The NHDOT – in cooperation with numerous partners including the NH Department of Environmental Services has worked to develop an implementation plan to guide investment of these federal funds to support the strategic expansion of the Electric Vehicle charging network in New Hampshire.

Additional information regarding the National Electric Vehicle Infrastructure Program may be found online here: <https://www.dot.nh.gov/projects-plans-and-programs/ev-charging-infrastructure>

The most recent adopted National Electric Vehicle Infrastructure plan for NH may be found online here: <https://www.dot.nh.gov/sites/g/files/ehbemt811/files/inline-documents/updated-nevi-plan-8-1-2023.pdf>

A Carbon Reduction Strategy for NH

NHDOT has supported ongoing efforts to reduce carbon emissions from the transportation users without explicitly calling attention to those efforts, whether it's focused on supporting safe, effective, and efficient public transit options via contracts with public and private operators or in finding/leveraging additional funding.

The NHDOT has also supported improved efficiencies in the system operations through infrastructure improvements to intersections or signal equipment or operations or via the provision of safer options for residents and visitors alike to choose a non-motorized transportation option.

The NHDOT does this through a variety of funding sources – both those listed previously in this document, as well as other federal and state sources to manage and maintain the state's transportation system. This approach is further supported by the biennial efforts to update the state's Ten-Year Transportation Plan. This process – as outlined in the graphic below – involves outreach to the state's Regional Planning Commissions (RPCs) to identify priority projects from each region that fit within the regional financial allocation available to them. The funds allocated to the RPCs to program projects against represents the largest pool of funds for new projects in the Ten-Year plan, and projects selected for funding for this pool of funds are representative of identified needs in their respective regions.

The Ten Year Plan process then moves to an intensive period of work with the NH Governor's Advisory Commission on Intermodal Transportation (GACIT), which consists of NH's 5 elected Executive Councilors (each representing one-fifth of the state) and the Commissioner of the NHDOT. These work efforts are focused on detailing assumptions regarding available revenues and system needs – which result in a schedule of proposed projects for a ten-year period. After the draft Ten Year Plan is developed, the NHDOT facilitates GACIT's efforts to host numerous public comment opportunities which generally number greater than two dozen such meetings in-person around the state. This process also now features extensive remote access opportunities, as well as an online survey – all for the purpose of understanding the public's thoughts on the proposed plan and whether or where projects should occur.

This extensive public involvement effort results in a revised Ten-Year Plan that is adopted by GACIT and submitted to the NH Governor. The Governor then has an opportunity to provide additional comments and make changes before transmittal to the NH Legislature, where the Ten-Year Plan becomes part of the legislative process before passage as law. This approach – while detailed and lengthy – ensures that the state of NH is responsive to the transportation needs of the businesses, residents, and visitors of NH.

Historically, this process has featured regular requests for additional funding for public transportation service support and expansion, safer and expanded pedestrian, and bicycle infrastructure to allow for increased non-motorized travel opportunities and functional improvements to the state's transportation network to reduce congestion for the travelling public. The expectation is that this process will continue for the foreseeable future – with an added emphasis on the following projects/programs/opportunities:

Electric Vehicle (EV) infrastructure

NHDOT proposes to continue efforts to expand the EV charging network as established in the NEVI infrastructure plan using the NEVI program funds to accomplish this. Additionally, NHDOT is considering the expansion of funding for future CMAQ program solicitation rounds to include Carbon Reduction program formula funds to fund eligible efforts like EV Charging systems. The result will be an expanded Electric Vehicle charging network in NH in a more rapid fashion and in concert with additional external partners.

Operation of traffic monitoring, management, or control facility

NHDOT proposes continued funding of the Transportation Systems Management & Operations (TSMO) program. Specific focus will be on efforts to fund the NHDOT portion of the Tri-State COMPASS contract. Compass consists of:

- an Advanced Transportation Management System (ATMS): The ATMS includes an Event Management Module, monitoring, and control of ITS field devices, provides automated incident response scenarios that will streamline notification, detection, and verification of an incident, and provides a robust performance management system to report, manage and review incidents and events.
- a Regional Traveler Information System: provides a traveler information website and email/text alerts subscription service for state-maintained roads in the tri-state region and which is located online at <http://www.newengland511.org>.
- a Data Fusion Hub: The DFH primarily facilitates the exchange of information between the ATMS, the 1201 data feed to the private sector, the TIS and regional partners and stakeholders.

Proposed program of projects

NHDOT's proposed focus is on existing projects in the State's adopted 10-Year Transportation Improvement Plan that would reduce transportation emissions. Funding would be programmed as needed to utilize CARBON apportionments that would otherwise not be authorized in a particular year. This list of potential projects includes the following projects and phases:

Statewide 43932 : This project will install 23 continuous count stations and 12 continuous volume count stations statewide.

CRP Eligibility: *a project described in 23 U.S.C. 149(b)(4) to establish or operate a traffic monitoring, management, and control facility or program.*



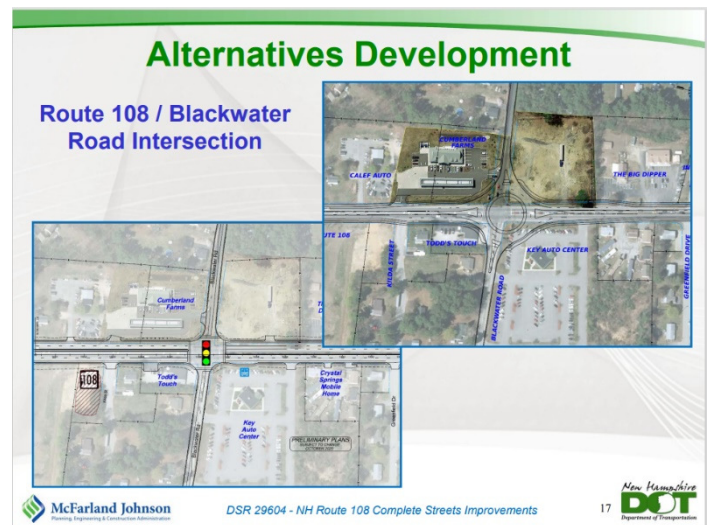
Figure 2: Jaffrey 16307

Jaffrey 16307 : This project involves the reconfiguration of the existing 'dogleg' intersection of US202, NH124, & NH137 in the Town of Jaffrey's downtown area. The reconfiguration will involve construction of a new roundabout that is intended to reduce the significant congestion caused by the current configuration.

CRP Eligibility: *certain types of projects to improve traffic flow that are eligible under the CMAQ program, and that do not involve construction of new capacity.*

Dover-Somersworth-Rochester 29604: This project involves improving traffic operations, congestion, and safety along NH108 between the intersections NH 108 with Indian Brook Rd. and Innovation Drive. The project was first identified in the former Spaulding Turnpike Exit 10 study as alternative U-3.

CRP eligibility: *certain types of projects to improve traffic flow that are eligible under the CMAQ program, and that do not involve construction of new capacity.*



Statewide Rail Trail Crossing Improvement Program: Rail trail infrastructure is an essential and well-utilized component of the statewide bicycle and pedestrian infrastructure network. There are numerous rail trail crossings of state roadways, including some in mid-block locations, that would benefit from improvements to current safety standards. The four MPOs proposed that the NHDOT consider utilization

of approximately \$2.5 Million of Carbon Reduction Program funds for a statewide effort, led by NHDOT, to begin addressing this need. Crossing improvements may include warning signage, Rectangular Rapid Flashing Beacons, or Pedestrian Hybrid Beacons based on the unique conditions of each crossing and NHDOT's engineering judgment.

Statewide Transit Signal Prioritization Program: Transit signal prioritization has the potential to be a high-impact investment with cumulative benefits. The technology increases efficiency of public transit operations to improve on-time performance, thereby making transit a more attractive alternative to driving alone. Upgraded signal technology can also be programmed to optimize corridor traffic flow for additional carbon reduction benefits. The use of transit signal prioritization technology is enabled under NH RSA 265:15, II(e). Some fixed-route public transit operators in the state have already investigated and quantified the benefits of transit signal prioritization technology, including COAST (in cooperation with the City of Dover) and Advance Transit (in cooperation with the City of Lebanon). The four MPOs propose that the NHDOT consider utilizing \$1.8 Million of Carbon Reduction Program funds for a statewide effort, led by NHDOT in partnership with fixed-route public transportation providers and affected municipalities, to begin addressing this need.