Nashua Regional Planning Commission Metropolitan Transportation Plan



2023 to 2050

Adopted December 20, 2023

The Nashua Regional Planning Commission has prepared this document in cooperation with the U.S. Department of Transportation - Federal Highway Administration, the New Hampshire Department of Transportation, and the Federal Transit Administration. The contents of the report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Highway Administration, the New Hampshire Department of Transportation, or the Federal Transit Administration. This report does not constitute a standard, specification, or regulation.

Contents

INTRODUCTION	9
OVERVIEW OF THE METROPOLITAN PLANNING ORGANIZATION	9
Map 1: Nashua, Manchester, and Boston Urban Areas	11
SYNOPSIS OF THE METROPOLITAN TRANSPORTATION PLAN (MTP)	12
National and State Planning Emphasis Areas	12
REGIONAL LONG RANGE TRANSPORTATION PLAN GOALS AND OBJECTIVES	15
Vision	15
Mobility	15
Safety	15
System Preservation & Sustainability	16
Transit & Community Transportation	16
Quality of Life & Environment	17
PLANNING EMPHASIS AREAS	20
PERFORMANCE-BASED PLANNING	20
TRANSIT ASSET MANAGEMENT	21
Table 1: Nashua Transit System TAM Goals and Objectives	21
Transit Asset Management (TAM) Targets	22
Table 2: 2023 Nashua Transit System Transit Asset Management Performance Targets	23
Public Transit Agency Safety	23
Table 3: Nashua Transit System Safety Performance Target Summary	24
SAFETY	24
Target Development	25
Target Adoption	26
State and Regional Target Summary	26

Table 4: Five Required Measures for PM2 - 2011 to 2023	26
State and Regional Target Detail	26
Number of Fatalities	26
Table 5: Fatalities - Statewide and NRPC Region 2008 to 2022	27
Rate of Fatalities	27
Table 6: Rate of Fatalities Per 100 million VMT - Statewide and NRPC Region 2008 to 2	202228
Number of Serious Injuries	28
Table 7: Serious Injuries - Statewide and NRPC Region 2011 to 2022	29
Rate of Serious Injuries	29
Table 8: Rate of Serious Injuries/100 million VMT Statewide and NRPC Region 2011 to	2022 30
Number of Non-Motorized Fatalities and Serious Injuries	30
Table 9: Non-Motorized Injuries - Statewide and NRPC Region 2011 to 2022	31
Crash Modification Factors for Projects Impact Analysis	31
INFRASTRUCTURE CONDITION	32
Table 10: NHDOT Baseline Conditions and Targets for Pavement and Bridges	32
Table 11: HPMS Pavement Data Mandated in PM2	33
Table 12: HPMS Bridge Data Mandated in PM2	33
TRAVEL TIME RELIABILITY	34
Figure 1: Non-interstate NHS Travel Time Reliability for NH	34
ENVIRONMENT AND AIR QUALITY	35
AIR QUALITY	35
Transportation and Climate Change	37
WATER QUALITY	37
OPEN SPACE	
ENVIRONMENTAL JUSTICE	
POVERTY	
Table 13: Poverty Rates by Municipality	
Map 2: Poverty Level Populations	40
MINORITY POPULATIONS	41
Table 14: Minority Population by Municipality	41
Map 3: Minority Populations	42
Environmental Justice Zones by Census Tract	43
Table 15: Environmental Justice Zones qualifying under both criteria.	43

CONGESTION MANAGEMENT PROCESS	45
PUBLIC INVOLVEMENT PROCESS	49
Purpose	49
Title VI Policy Statement	51
Online Transportation Survey	52
Communications with Municipalities and Stakeholders	52
EXISTING CONDITIONS	54
DEMOGRAPHICS	54
POPULATION	54
Table 16: Population of NRPC Communities, 2010 to 2020	55
Figure 3. Regional Population Change by Age between 2010 and 2020	56
Table 17: Household Income by Community & Tenure	57
EMPLOYMENT AND COMMUTING	57
Table 18: Mode of Transportation to Work	58
Figure 4. Median Commute Time in 2020, by Municipality	58
Figure 5. Commute Times in 2020, by Municipality	59
Figure 6. Average Regional Commute Times	60
Figure 7. Regional Commuter by Home Origin and Work Destination in 2014 and 2019	60
MTP Survey Respondent Travel Characteristics	60
REGIONAL ROAD NETWORK	61
NORTH-SOUTH ROUTES	61
East-West Routes	62
Crossing the Merrimack River	63
NHDOT Highway Tier System	64
Traffic Volumes and Trends	65
Table 19: Existing Traffic Volumes and Trends	65
ROADWAY CONGESTION	66
Table 20: FE Everett Turnpike Congestion Report	67
Table 21: NH 101A & Canal/Bridge Streets Congestion Report	67
Table 22: NH 101 Congestion Report	68
Table 23: NH 111 Congestion Report	68
Table 24: US 3 Daniel Webster Highway Congestion Report	69
Table 25: Main Street Nashua Congestion Report	69

Table 26: NH 3A Hudson Congestion Management Report	70
Table 27: NH 102 Hudson Congestion Management Report	
Table 28: NH 130 Congestion Management Report	71
Table 29: NH 38 Congestion Management Report	71
FREIGHT MOVEMENT	72
Road Network	72
Freight Railroads	73
Intermodal Facilities in NH	73
Commodity Flow	74
Critical Urban Freight Corridors	74
NH DOT Statewide Freight Plan	75
Best Practices for the Nashua Region	75
BICYCLE AND PEDESTRIAN PLANNING	77
Figure 8: Regional Commute Mode Share	80
Table 30: Bicycle Level of Traffic Stress (BLTS)	82
Table 31: Level of Walkability (LoW)	83
REGIONAL TRANSIT SERVICE	83
NASHUA TRANSIT SYSTEM	83
Map 5: NTS Fixed Route Ridership	85
Nashua Transit System – 2022 System Surveys	86
Nashua Transit System – 2016 to 2025 Comprehensive Plan	
Nashua Transit System – Transit Asset Management Plan	
Future Public Transportation Ridership	
COMMUNITY TRANSPORTATION	
Regional Coordination Council	
Mobility Management Services	
Souhegan Valley Transportation Collaborative	
INTERCITY TRANSIT	91
Manchester Transit Authority	91
Lowell Regional Transit Authority	91
Boston Express	91
EMERGING TRANSPORTATION TRENDS AND TECHNOLOGY	92
Electric Vehicles	

	ITS technologies	94
	Adaptive Traffic Control Systems	94
	Connected/Autonomous Vehicles	95
	Curbside Management	96
	E-Commerce	96
	Shared Mobility	97
	GPS-Related Technologies	97
	Linked Communication/Automation technology	97
FUT	URE NEEDS ANALYSIS	99
Р	OPULATION AND EMPLOYMENT FORECASTS	99
	Table 32: Population and Employment Projections to 2050	100
Т	RAFFIC MODEL FORECASTS	100
	Travel Model Methodology	100
	Table 33: Population by Community	101
	Table 34: Employment by Community	102
	Table 35: Build and No Build Future Year Highway Projects	103
	Table 36: Trip Totals by Trip Purpose	104
	Table 37: Community No Build - VMT Summaries	104
	Table 38: Community Build - VMT Summaries	105
	Table 39: Community No Build vs Build - VMT Summaries	105
	Table 40: Community - VHT Summaries	106
	Table 41: Community Average Speed (mph)	106
Р	UBLIC PERCEPTIONS AND PRIORITIES	107
	Table 42: Congestion Ranked by Highway Location (5 = most congested)	107
	Table 43: Importance of Transportation Projects (1 = most important)	108
	Table 44: Support for Additional Transportation Revenue Sources	108
	Table 45: Importance of Transportation Plan Major Investment Projects (1 = most important)	109
TRA	NSPORTATION PROJECTS AND PROGRAMS	110
Т	EN YEAR PLAN PROJECTS	110
	BRIDGE PROJECTS	110
	Table 46: Bridge Replacements/Rehabilitation	110
	INTERSECTION IMPROVEMENTS	111
	CORRIDOR AND SUBAREA CIRCULATION IMPROVEMENTS	114

INTELLIGENT TRANSPORTATION SYSTEMS PROJECTS	115
PEDESTRIAN AND BICYCLE PROJECTS	115
CAPACITY IMPROVEMENTS	116
REHABILITATION/RECONSTRUCTION/OPERATIONAL IMROVEMENTS OF EXISTING FACILI	TIES118
Railroad Safety Improvements	
RECONSTRUCTION & OPERATIONAL IMPROVEMENTS	118
NH 13/South Main Street Realignment, Brookline	118
NH 130 (Broad Street), Nashua	118
Bridge & Canal Complete Streets Improvements, Nashua	118
PEDESTRIAN/BICYCLE PROJECTS	118
Multi-Modal Path, Amherst	118
Amherst- Baboosic Greenway	119
Merrimack - Town Center Sidewalks	119
Milford - Non-Motorized Improvements	119
Milford - Various Pedestrian Linkages	120
Milford - Osgood Rd. & Melendy Rd. Sidewalks	120
Milford - Nashua St Sidewalks and Bicycle Lane	120
Nashua - Kinsley Street Pedestrian and Bicycle Accessibility Improvements	120
Nashua - Lock & Whitney Streets	120
Hudson - NH 3A and NH 102 Non-Motorized Improvements	120
HIGHWAY CAPACITY ENHANCING PROJECTS	121
Broad Street Parkway Interchange with Franklin Street	121
FEE Turnpike Exit 5 Reconfiguration	121
US 3 Exit 91 (formerly Exit 36) 36 Interchange	
TRANSIT IMPROVEMENTS	123
TRANSPORTATION DEMAND MANAGEMENT	125
ILLUSTRATIVE PROJECTS	126
NH Capital Corridor Passenger Service	126
Northern Merrimack River Crossing	
NH 101 Bypass Interchange to Perry Road, Milford	
NH 101 Capacity Improvements, Wilton-Milford-Amherst	131
Souhegan Valley Rail Trail	131
FINANCIAL PLAN AND FISCAL CONSTRAINT	142

FISCAL CONSTRAINT ASSUMPTIONS	143
AIR QUALITY CONFORMITY DETERMINATION	156
New Hampshire Ozone Status	156
Transportation Conformity Requirements	157
Latest Planning Assumptions	158
Consultation	159
Transportation Control Measures	159
Fiscal Constraint	160
Nashua Carbon Monoxide Status	160
ENVIRONMENTAL CONCERNS OF PROJECTS & MITIGATION STRATEGIES	160
EVALUATING PROJECT IMPACTS AND PLANNING FOR ENVIRONMENTAL MITIGATION	160
Appendix A – Detailed Project List	170
APPENDIX B - CLEAN AIR ACT	213
Appendix C - Acronyms and Abbreviations	216

INTRODUCTION

OVERVIEW OF THE METROPOLITAN PLANNING ORGANIZATION

The Nashua Regional Planning Commission (NRPC) region includes the City of Nashua and the towns of Amherst, Brookline, Hollis, Hudson, Litchfield, Lyndeborough, Mason, Merrimack, Milford, Mont Vernon, Pelham, and Wilton. Home to more than 222,818 residents, the NRPC Region is the heart of the dynamic and thriving southern New Hampshire economy. The region enjoys an enviable location that provides urban amenities, while retaining the quality-of-life benefits of rural and suburban areas. The NRPC region is situated in the Merrimack River Valley on the New Hampshire-Massachusetts border and is located just forty-four miles from downtown Boston. The region also enjoys easy access to New Hampshire's famed White Mountains, the Monadnock Mountains, the Lakes Region and the Atlantic Seacoast. Proximity to Boston, along with the rich recreational and cultural offerings of the Granite State have had a strong influence on growth and development patterns within the region.



View of Hollis Center - one of the Region's rural communities

Residents of the NRPC Region enjoy access to an extensive and well-developed highway network which includes the FE Everett Turnpike providing direct access to Manchester, Concord, and other destinations to the north as well as south to Boston. Routes NH101, NH111, NH130 and NH13, US3, provide intra and inter regional travel. Most residents of the region utilize private vehicles for most trips with the region's transportation system oriented to this mode. Highway networks are extensive and provide convenient access to activity centers. Traffic congestion is less severe than experienced in the nearby Boston area, however traffic volumes can exceed capacity during peak hours along portions of the FE Everett Turnpike, NH101A, the Taylor Falls Bridge between Hudson and Nashua and along other major routes. Due to the dominance of suburban development patterns, parking facilities are plentiful and low or no-cost throughout the region.

Pedestrian infrastructure in the region is well developed in most downtown and village center areas, but it is limited in most rural and suburban areas. Dedicated bike and bike/pedestrian paths are found along rails-to-trails in Amherst, Brookline, Mason, Merrimack, Nashua, and along Albuquerque Avenue in Litchfield. Dedicated bike lanes along roads are limited to sections of recently improved highways and are not sufficiently developed to form a comprehensive network.



The Nashua Transit System (NTS) provides bus service throughout the City of Nashua. No fixed-route transit service is currently provided in the Region's other twelve communities except for an NTS service extension to the Walmart in Amherst. Notably, NTS is one of the few transit operators in the state to provide nighttime service. Outside of the City of Nashua, varied transit providers, such as the Souhegan Valley Transportation Collaborative, help fill the gaps in service for populations in need of transit alternatives.

Inter-city bus service to Boston is provided by *Boston Express* which provides daily service between the FE Everett Turnpike Park & Ride at Exit 8 in Nashua, South Station in Boston, and Boston-Logan International Airport. There is also a stop at the Park & Ride in Tyngsborough right over the NH/MA border which is used by many residents of the region. Boston's South Station provides connections to Amtrak passenger rail service to New York City, Washington, DC, and other destinations along the Northeast Corridor, as well as connections to the MBTA's Redline and Silver Line and several inter-city bus services. The Manchester Transit Authority also provides intercity bus service between the Nashua Transit Center in downtown Nashua and the Manchester-Boston Regional Airport as well as downtown Manchester.

Despite its proximity to Boston, the NRPC Region has no passenger rail service, though many commuters drive to the Gallager Terminal in Lowell to access MBTA commuter rail service into Boston's North Station. Limited freight rail service is available on the north-south mainline through Nashua and Merrimack to Manchester and Concord and over an east-west line between Nashua and Wilton.

The NRPC assumed primary responsibility for regional transportation planning in 1973, when the Governor of New Hampshire designated NRPC as the Metropolitan Planning Organization (MPO) for the Nashua-Hudson Urbanized Area. NRPC produced the first comprehensive plan, the Nashua Area Transit Study (NATS), in 1976, followed by the Nashua Mass Transit Study in 1978. There have been periodic revisions in plans through the years and substantial changes in their emphasis. In 1990 NRPC conducted a major update of the NATS, which integrated highway and transit planning into a single document. A key tool developed at that time was the development of a computerized traffic forecasting model, capable of projecting changes in traffic resulting from land use evolution and improvements to the highway network. The transportation plans of the early 1990's focused on major new investment

projects such as the Route 101A Bypass, the Nashua-Hudson Circumferential Highway, the Nashua Southwest Beltway, and the Nashua Broad Street Parkway. Only the latter project, the Nashua Broad Street Parkway, made it to implementation. The others faced constraints on available funding and environmental challenges, although the Nashua-Hudson Circumferential Highway maintains its status as a potential project on a scaled-down basis.

An urbanized area with a population over 200,000 as defined by the Bureau of the Census and described in 49 U.S.C. 5303(k) is a Transportation Management Area (TMA). This is in recognition of the greater complexity of transportation issues in large urban areas. The Nashua MPO as a TMA has a stronger voice in setting priorities for implementing projects in the Transportation Improvement Program through "sub-allocation authority". The MPO has authority to conduct project selection using Surface Transportation Program funds in the amount of about \$2.6 million per year. NRPC is also responsible for additional planning products, such as the maintenance of a Congestion Management Process (CMP) that identifies actions and strategies for reducing congestion and increasing mobility. The planning process for the Nashua MPO must also be certified by the Secretary of the U.S. Department of Transportation as following federal requirements.



Map 1: Nashua, Manchester, and Boston Urban Areas

SYNOPSIS OF THE METROPOLITAN TRANSPORTATION PLAN (MTP)

The Nashua MPO has the responsibility for the development and periodic update of the long-range transportation plan for the metropolitan area. A long-range transportation plan is also known as a Metropolitan Transportation Plan under federal regulations. NRPC is on a 5-year schedule for full updates, which entails new forecasts of travel demand, evaluation of future projects, receiving input through the public participation process, and performing fiscal constraint analysis to ensure funding viability for the recommended improvements program. The following ten planning factors have been identified by the USDOT for guiding MPOs in their long-range planning process:

- 1. Support the economic vitality of the metropolitan area, especially by enabling local and global competitiveness, productivity, and efficiency.
- 2. Increase the safety and security of the transportation system for motorized and nonmotorized users.
- 3. Increase the accessibility and mobility of people and freight.
- 4. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements, state and local planned growth, and economic development patterns.
- 5. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- 6. Promote efficient system and operational management.
- 7. Emphasize the preservation of the existing transportation system.
- 8. Improve the resiliency and reliability of the transportation system.
- 9. Reduce or mitigate stormwater impacts of surface transportation.
- 10. Enhance and encourage travel and tourism economic development.

The FHWA New Hampshire Division Office and the FTA Region I Office outlines Federal transportation planning regulation which were most recently updated in the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the "Bipartisan Infrastructure Law"). This Bipartisan Infrastructure Law details the requirements for each State and MPO to carry out under a 3C's planning process. The regulations identify the other agencies and stakeholders with whom coordination is necessary and set forth the ten planning factors for consideration by MPOs in the development of their respective MTPs. Also, MAP-21 in 2012 established a set of seven national goals for the Federal-Aid Highway Program, that an MPO should generally incorporate into their long-range transportation plan. Furthermore, performance management approaches have increased the focus on the national goals that relate to transportation system performance.

National and State Planning Emphasis Areas

National Planning Emphasis Areas (PEAs) were last released on December 30, 2021, and continue to influence the work of the MPO.

- <u>Tackling the Climate Crisis</u> Transition to a Clean Energy Future Ensure that transportation plans and infrastructure investments help achieve the national greenhouse gas reduction goals of 50-52 percent below 2005 levels by 2030, and net-zero emissions by 2050, and increase resilience to extreme weather events and other disasters resulting from the increasing effects of climate change.
- <u>Equity and Justice in Transportation Planning</u> Advance racial equity and support for underserved and disadvantaged communities. Use strategies that: (1) improve

infrastructure for non-motorized travel, public transportation access, and increased public transportation service in underserved communities; (2) plan for the safety of all road users, particularly those on arterials; (3) reduce single-occupancy vehicle travel and associated air pollution in communities near high-volume corridors; (4) offer reduced public transportation fares as appropriate; (5) target demand-response service towards communities with higher concentrations of older adults and those with poor access to essential services; and (6) consider equitable and sustainable practices while developing transit-oriented development including affordable housing strategies and consideration of environmental justice populations.

- <u>Complete Streets</u> Develop and operate streets and networks that prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists.
- <u>Public Involvement</u> Increase meaningful public involvement in transportation planning by integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices.
- <u>Strategic Highway Network/U.S. Department of Defense Coordination</u> Coordinate with representatives from DOD in the transportation planning and project programming process on infrastructure and connectivity needs for STRAHNET routes and other public roads that connect to DOD facilities.
- <u>Federal Land Management Agency Coordination</u> Coordinate with FLMAs in the transportation planning and project programming process on infrastructure and connectivity needs related to access routes and other public roads and transportation services that connect to Federal lands.
- <u>Planning and Environmental Linkages</u> Implement Planning and Environmental Linkages (PEL) as part of transportation planning and environmental review. PEL is a collaborative and integrated approach to transportation decision making that considers environmental, community, and economic goals early in the transportation planning process, and uses the information, analysis, and products developed during planning to inform the environmental review process.
- <u>Data in Transportation Planning</u> Incorporate data sharing and consideration into the transportation planning process. Data sharing principles and data management can be used for a variety of issues, such as freight, bike and pedestrian planning, and equity analyses. Developing and advancing data sharing principles allows for efficient use of resources and improved policy and decision making.

Additionally, the FHWA NH Division Office and FTA Region 1 Office outlined the following additional Planning Emphasis Areas (PEAs) specific to New Hampshire.

• <u>Consideration of MTP Planning Reviews and Findings</u> - Review any outstanding recommendations from joint agency STIP Planning Findings, MPO Planning Reviews, or TMA Certification Reviews that were recently completed.

- <u>Bipartisan Infrastructure Law/Infrastructure Investment and Jobs Act Compliance</u> In particular, the set-aside for increasing safe and accessible transportation options and the inclusion of housing considerations in the metropolitan planning process.
- <u>Urbanized Area Project Selection</u> Selecting all federally funded projects from approved Transportation Improvement Program (TIP) (except those on the National Highway System (NHS) in consultation with the state and any affected public transportation operators. Project selection procedures should be designed to reflect the multimodal nature of the planning process, and of 'flexible' funding streams such as the Surface Transportation Block Grant Program (STBGP), Congestion Mitigation and Air Quality (CMAQ) program, and 5303/PL planning funds.
- <u>Congestion Management Process (CMP) Implementation</u> Ongoing efforts to monitor and evaluate the performance of the identified multimodal transportation system/network.
- <u>Freight Planning</u> To receive funding under the National Highway Freight Program, each State is required to develop a freight plan, which must comprehensively address the State's freight planning activities and investments.
- <u>Fiscal Constraint and Financial Planning</u> Intended to ensure that metropolitan longrange transportation plans reflect realistic assumptions about future revenues.
- <u>Metropolitan and Statewide Travel Demand Model Maintenance</u> A robust metropolitan travel demand model is essential to the development and content of the metropolitan transportation plan.
- <u>Data Collection for FHWA's Highway Performance Monitoring System (HPMS),</u> <u>Performance Measures, five hundred Series Reporting, Weight-In-Motion and</u> <u>Classification Counts</u> - Used for many purposes including the apportionment of formula based Federal-aid funds to states for surface transportation improvements and maintenance. HPMS data is also critical to the establishment of system performance measures and targets related to the use and condition of the state highway network.
- <u>Project Monitoring and Planning Work Program Reporting</u> The timely provision of performance and expenditure reports, due 90 days after the end of the reporting period for annual and final reports.
- <u>Emerging Technologies</u> Consideration of connected and automated vehicles (CAVs) and transportation network companies that provide ridesharing services. Understanding and researching how CAVs and TNCs, and other changes in travel patterns such as shifts towards telecommuting and online shopping, will impact transportation.

REGIONAL LONG RANGE TRANSPORTATION PLAN GOALS AND OBJECTIVES

Vision

An integrated, cost effective, multimodal transportation system that safely and efficiently moves people and goods throughout the region in an equitable and environmentally responsible manner to support economic prosperity and the highest possible quality of life for all users.

The following goals were adopted to support the vision statement for the NRPC region.

Mobility

- Encourage transportation improvements that enhance regional mobility and connectivity, especially enhanced east-west travel.
- Emphasize a Complete Streets approach to project planning and design that accommodates the needs of all foreseeable users including bicyclists and pedestrians as appropriate based on street classification, traffic volumes, design speed, and land use.
- Support travel efficiency measures and system enhancements targeted at congestion management, reduction, and elimination.
- Foster integration of the region's transportation system with the Boston and Manchester metro areas through improved access to state and interstate highways, regional airports, passenger rail and regional bus systems.
- Encourage the use of access management techniques along commercial highway corridors to preserve capacity, increase safety, and improve the aesthetic environment.
- Encourage consideration of intelligent transportation systems and emerging technologies in all aspects of transportation planning including connected and automated vehicles, advanced air mobility, and other emerging technologies.

Safety

- Prevent traffic related deaths and significant injuries by emphasizing a systemwide approach to safe mobility for all users.
- Emphasize a safe system approach to project development that minimizes the risk of injury or fatality to pedestrians, bicyclists, and other vulnerable road users.
- Encourage project planning and design that is responsive to the ways people use the transportation system including recognition of the likelihood of human error.
- Prioritize transportation improvements that reduce or eliminate known safety hazards, especially in locations with identified crashes involving serious injuries or death.



Safe Streets Framework

System Preservation & Sustainability

- Maintain road pavements, bridges, sidewalks, signage, and other transportation infrastructure in a good state of repair.
- Develop cost-effective projects and programs aimed at reducing the costs associated with constructing, operating, and maintaining the regional transportation system.
- Ensure adequate maintenance of the transportation system that enhances safety and reliability.
- Pursue long-term sustainable revenue sources to address regional transportation system needs.
- Encourage public/private sector partnerships and private sector participation in the financing of transportation projects and services including public transit.
- Encourage strategic, systematic planning in the operation, maintenance, and improvement of public transit capital assets including vehicles, bus stops and shelters, and maintenance facilities.
- Improve the resiliency of the transportation system by mitigating potential impacts from floods and other climate related impacts.

Transit & Community Transportation

• Improve convenience and service, and therefore the ridership, of the transit system through expanded weekend and evening services, promote increased frequency of service, and promote transit connections to major destinations outside of the region.

- Promote the extension of transit service to urbanized areas in the towns where feasible, with an emphasis on expanding access to employment centers, housing, major shopping destinations, educational opportunities, hospitals, and other healthcare services.
- Implement access to real-time bus information using smartphones, tablets, electronic ride boards, and other technologies.
- Continue to support community transportation and encourage greater coordination between providers and expanded connections between communities.
- Encourage expansion of on-demand transportation services, including collaborations with private ride hailing services, to fill gaps in community transportation and paratransit networks.
- Ensure equitable access to public transportation with an emphasis on connecting historically disadvantaged and marginalized people and communities to employment, education, healthcare, and other essential facilities and services.



Quality of Life & Environment

• Promote a collaborative approach to transportation planning that protects local community character, environmental quality, and fostering economic development while avoiding disproportional impacts to low income, traditionally disadvantaged, and underserved communities.

- Encourage the deployment of convenient and reliable (EV) electrical vehicle charging stations throughout the region.
- Promote strategies to reduce single-occupancy vehicle travel and associated environmental impacts.
- Expand the region's network of multi-use paths, bike paths and trails in addition to sidewalks and bike lanes to encourage active, healthy lifestyles.



Nashua Riverwalk

The following objectives have been established with the purpose of achieving the goals of this MTP.

• The future highway network should establish shorter routes to cross natural boundaries, relieve traffic congestion, and create a logical progression in increasing the connectivity of the existing road network. The road network should provide for the most efficient circulation of vehicles. Response time for fire apparatus and emergency vehicles at the local and regional level should be reduced through improvements in the road network. The expansion of the road network should be achieved in ways that limit impacts to neighborhood cohesiveness, conserve open space (including woodlands and wetlands), and encourage pedestrian and bicycle travel.

Consideration should be given to lessening the impact of secondary growth due to new highways, which in turn can lead to the re-emergence of traffic congestion.

- Promote transportation demand management practices and the development of a transportation management association to relieve traffic congestion and increase circulation and efficiency in the existing highway network.
- Encourage the use of access management techniques in commercial highway corridors to preserve capacity, increase safety, and improve the aesthetic environment. Support and encourage the redesign of areas and highway corridors that have experienced strip mall development so that they can better accommodate bicycle, pedestrian, and transit use.
- Encourage transportation improvements in urban centers and town centers away from the urban fringe to improve transportation efficiency. Improve convenience and service, and therefore the ridership, of the transit system through the targeting of segments of the market that are not currently part of the Nashua Transit System patronage.
- Promote the extension of transit service to urbanized areas and town centers and include the expansion of sidewalk and pedestrian facilities in those communities.
- Encourage multi-modal use and the integration of alternative modes, coordinated with land use and zoning practices that reduce dependency on the automobile and encourage pedestrian oriented and transit-oriented development.
- Encourage local planning that supports an efficient and cost-effective transportation system including the development of site review regulations that encourage access management techniques and the interconnection between sites and the accommodation of cars, bicycles, and pedestrians.
- Establish inter-city transit routes including passenger rail service.
- Promote access to transportation for the under-served and include plans and projects that ensure that the operational needs and associated infrastructure of transit users, bicyclists, and pedestrians are met.
- Promote plans and projects that link the jobless with jobs on a regional level. Improve the safety and quality of life in low-income areas and minority neighborhoods by reducing traffic congestion and implementing traffic calming techniques.
- Encourage public/private sector partnerships and private sector participation in the financing of transportation projects and services.
- Establish a transportation system that provides for orderly economic growth while preserving the environmental and cultural resources of the region.

PLANNING EMPHASIS AREAS

PERFORMANCE-BASED PLANNING

Passed in 2012, the Federal Transportation Act, Moving Ahead for Progress in the 21st Century Act (MAP-21), mandated that all MPO's and state DOT's use performance measures to work toward specific goals and targets. In 2015, the Fixing America's Surface Transportation (FAST) act was passed to replace MAP-21, which provides additional guidance for performance-based planning. There are now seven national performance goals to be tracked by states and MPO's. The 4 MPO's in NH formed Partnering for Performance New Hampshire (PFPNH) and have met monthly since 2016 to coordinate identifying specific performance measures and targets.

The following seven national performance goals set forward by FHWA are to be tracked by states and MPO's (23 CRF 490) and apply to the National Highway System (NHS). The NRPC applies these standards to all public roadways in the region.

- Safety Achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Infrastructure Condition Maintain pavements and bridges in a good state of repair.
- Congestion Achieve a significant reduction in recurring travel delays on the NHS.
- System Reliability Improve the efficiency of the surface transportation system.
- Freight Movement and Economic Viability Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets and support regional economic development.
- Environmental Sustainability Enhance the performance of the transportation system, while protecting and enhancing the natural environment.
- Reduced Project Delivery Delays Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The FTA added the following two performance measures applicable to public transit operators receiving federal financial assistance.

- Transit Asset Management Plan Promote the creation of strategic and systematic processes of operating, maintaining, and improving public transportation capital assets effectively through their life cycle.
- Public Transportation Agency Safety Plan Promote the development of safety plans to ensure that public transportation systems are safe.

The following sections describe those performance targets which are addressed by NHDOT and MPO's per the deadlines established by the USDOT.

TRANSIT ASSET MANAGEMENT

The Federal Transit Administration describes transit asset management (TAM) as a business model that prioritizes funding based on the condition of transit assets to achieve or maintain transit networks in a state of good repair. It involves a set of strategic and systematic processes and practices for managing the performance, risks, and costs of transit assets over their entire lifecycle for providing safe, cost-effective, and reliable public transportation. Through asset management, transit agencies can more effectively use available funds to improve the physical condition and performance of their system. This, in turn, may result in increased ridership.

The NTS TAM Plan contains the following elements:

- <u>Asset Portfolio</u>: An inventory of the type and number of capital assets (rolling stock, equipment, and facilities) owned, operated and/or maintained by NTS that support the delivery of public transportation services. (Exception: Equipment with an acquisition value under \$50,000 that is not a service vehicle.)
- <u>Asset Condition Assessment</u>: A process of inspecting, evaluating, and reporting the visual and/or measured condition of NTS' inventoried assets.
- <u>Management Approach</u>: The strategies, requirements, processes. and activities needed over the course of the life of the assets, from design/procurement, operation, maintenance, and rehabilitation to replacement and disposal.
- <u>Work Plans and Schedules:</u> The prioritized investments or projects needed to maintain a state of good repair or to enhance the condition and performance of NTS' assets.

NTS has established specific, measurable, achievable, realistic, and time-bound (SMART) goals.

Table 1: Nashua Transit System TAM Goals and Objectives

TAM Goals	TAM Objectives					
Maintain a state of good repair for the NTS Fleet	Update the Fleet Maintenance Plan every 4 years, concurrent with the TAM Plan.					
	Review transit needs for inclusion in the City of Nashua's Capital Equipment. Reserve Fund (CERF) annually by July to ensure that required improvements are included in September submittal.					
	Apply for all applicable grants to provide the Federal match for additional Rolling Stock purchases (ongoing).					
Maintain a state of good repair for facilities and equipment	Update the Facilities and Equipment Maintenance Plan 4 years.					
	Review transit needs for inclusion in the City of Nashua's CERF (for equipment) and/or Capital Improvement Program (for facilities) annually by July to ensure that required improvements are included in September submittal.					

Improve Customer Satisfaction	Educate the public about new fixed route and para-transit fleet replacements, through public meetings, social media, and educational materials (ongoing).
	Conduct annual rider surveys to assess customer satisfaction and use feedback as a basis for future projects that enhance the user experience.

Transit Asset Management (TAM) Targets

The Federal Transit Administration (FTA) <u>Final Rule on Transit Asset Management (49 CFR Part 625)</u>. The rule required targets for transit assets to be developed by January 1, 2017 for the following fiscal year. The targets deal with four broad areas of asset categories: Rolling Stock, Equipment, Infrastructure, and Facilities. NTS is not required to set targets for infrastructure as that requirement pertains only to fixed guideway/rail systems, which NTS does not operate.

It is not necessary for MPOs to update their targets annually when transit systems conduct their updates. The FTA provided MPOs with the following guidance:

While transit agencies must update and report their targets annually, MPOs are not required to update their targets annually. **The MPO's targets must be revisited at least with every MTP update (4 years).** You may want to consider updating them with TIP updates if you choose. Depending on how each MPO's cycle aligns with the 4-year cycle of the TAM plan, there may be value in coordinating MPO target updates with the TAM plan cycle. The timing of setting new metropolitan targets is a local decision that should be coordinated (and documented) between the MPOs and transit agencies.

Table one details the NTS TAM target for 2023, adopted by the Nashua MPO Policy Committee concurrently with this FY 2023-2026 TIP and MTP Minor Update in February 2023. NTS set targets for rolling stock and equipment based upon the anticipated number of assets in each class that will have met or exceeded the Useful Life Benchmark (ULBs) on October 1, 2023, divided by the anticipated number of assets in each class for the target years. The ULBs for rolling stock are based on guidance from the FTA, with adjustments made based on NTS records and experience. Baseline conditions were calculated based upon the number of assets in each class that met or exceeded the ULB on October 1, 2017. ULBs for equipment are derived from the minimums documented in <u>FTA Circular 5010.1E</u> and are also adjusted based on historical records. Targets for facilities are developed by applying the FTA's Transit Economic Requirements Model (TERM) scale to facilities used in the provision of public transportation. The TERM scale is a 5-point scale ranging from poor condition (1.0) to excellent condition (5.0). The performance measure is the number of facilities with an overall condition below a 3.0, which means adequate.

		FY2023 Tar	get		FY2023 Act	tual	FY2024 Target			
Asset Category	Asset	ts over ULB o	on 10/1/23	Assets	over ULB o	n 10/1/2023	Assets over ULB on 10/1/2024			
Revenue Vehicles	Total #	# Over ULB	% Over ULB	Total #	# Over ULB	% Over ULB	Total #	# Over ULB	% Over ULB	
Transit Buses	12	0	0%	12	0	0%	12	0	0%	
Paratransit Vans	aratransit Vans 9		0%	9	3	33%	9	1	11%	
Equipment	Total #	# Over ULB	% Over ULB	Total #	# Over ULB	% Over ULB	Total #	# Over ULB	% Over ULB	
Non-Revenue/Service Vehicles	2	0	0%	2	0	0%	2	0	0%	
Trucks and other Rubber Tire Vehicles	5	4	80%	5	2	40%	4	3	75%	
Facilities	Total #	# Below 3.0	% Below 3.0	Total #	# Below 3.0	% Below 3.0	Total #	# Below 3.0	% Below 3.0	
Administrative Offices	1	0	0%	1	0	0%	1	0	0%	
Passenger Facility		0	0%	1	0	0%	1	0	0%	
Maintenance Garage	1	0	0%	1	0	0%	1	0	0%	

Table 2: 2023 Nashua Transit System Transit Asset Management Performance Targets

Public Transit Agency Safety

The Public Transportation Agency Safety Plan (PTASP) regulation (49 CFR § 673.11(a)(3)) requires covered public transportation providers and NHDOT to establish safety performance targets (SPTs) to address the safety performance measures (SPMs) identified in the National Public Transportation Safety Plan.

A safety performance target (SPT) is a quantifiable level of performance or condition expressed as a value for the measure related to safety management activities to be achieved within a set period (§ 673.5). A safety performance measure (SPM) is a quantifiable indicator of performance or condition that is used to establish targets related to safety management activities, and to assess progress toward meeting the established targets (§ 673.5). Transit providers may choose to establish additional targets for the purpose of safety performance monitoring and measurement.

To reflect the broad and varied nature of public transportation, FTA's National Public Transportation Safety Plan (NSP) relies on SPMs that: (1) can be applied to all modes of public transportation and (2) are based on data currently submitted to the National Transit Database (NTD). Transit providers and State DOTs report this data following the NTD Safety and Security Policy Manual (PM).

As described in the NSP, transit providers must establish by mode seven SPTs in four categories:

- <u>Fatalities</u>: Total number of fatalities reported to NTD and rate per total vehicle revenue miles (VRM) by mode.
- <u>Injuries</u>: Total number of injuries reported to NTD and rate per total VRM by mode.
- <u>Safety Events</u>: Total number of safety events reported to NTD and rate per total VRM by mode.
- <u>System Reliability</u>: Mean distance between major mechanical failures by mode.

Transit providers must make their SPTs available to their State and Metropolitan Planning Organizations (MPOs) (§ 673.15(a)). Transit providers also must coordinate with States and MPOs in the selection of State and MPO safety performance targets, to the maximum extent practicable (§ 673.15(b)). During this coordination process, to ensure consistency across the transportation modes represented in the state/regional planning process, States and MPOs may request that transit agencies use specific time periods for "total number" SPTs and specific VRM values for "rate" SPTs.

When establishing SPTs for total numbers, transit providers may consider the total number of fatalities, injuries, and safety events they expect to experience per year (calendar, fiscal, or NTD reporting year). The annual timeframe may be established to ensure consistency with the state/regional planning process. Likewise, in setting rates per VRM, transit providers may use total annual VRM, or another number (e.g., 100,000 VRM, 1,000,000 VRM, or 10,000,000 VRM) as needed for consistency with state/regional planning requirements.

FTA has not established, and does not impose, penalties for not meeting safety performance targets set by transit providers. NTS has included annual target totals for fatalities, injuries, safety events, and system mechanical failures. Table 3: Nashua Transit System Safety Performance Target Summary presents the safety performance targets recommended for adoption by the Nashua MPO concurrently with adoption of the FY 2023-2026 TIP.

Table 3: Nashua Transit System Safety Performance Target Summary

Safety Performance Targets

Specify performance targets based on the safety performance measures established in CFR 49 Part 673. Events and Injuries outlined in the table below occur when the vehicle was in revenue service.

The estimated VRM (vehicle revenue mile) is based upon the mileage from the prior year.

Mode of Service	Safety Events*	Safety Events* per 1Mil Vehicle Revenue Mile	Injury Events Total*	Injuries* per 1Mil Vehicle Revenue Mile	Fatalities*	System Reliability Failures	VRM / System Reliability Failure*	Estimated VRM prior year			
Fixed-Route	25	53.16	4	8.5	0	0 50 9,40		470,309			
Demand Response	9	81.44	2	18.08	0	17	6,505	110,588			
The Events outlined below may occur at the NTS Maintenance Facility and/or Transit Center. This is an additional target added by NTS to the Agency Safety Plan.											
Other: Facilities	4	N/A	1.6	N/A	0			N/A			
*As defined by	*As defined by the 49 CFR Part 673, Public Transportation Agency Safety Plan (PTASP)										

SAFETY

On March 15, 2016, the Federal Highway Administration (FHWA) published the final rule on the Highway Safety Improvement Program (HSIP). The rule required State Departments of Transportation to set targets for Safety Performance by August 31st, 2017, for calendar year 2018, and Metropolitan Planning Organizations (MPOs) to set regional targets 180 days after that. The NRPC, in its role as MPO for the Nashua Area, initially adopted statewide targets for 2018 on December 20, 2017. The Safety Targets are re-set each year and must be approved by the MPO by the end of February for submission to NHDOT. In 2019 the MPO transitioned to the adoption of regional targets developed from crash data for the NRPC area.

Safety is a serious concern within the Region with 60% of responses to a 2023 NRPC Regional Transportation Survey question – "What are the most significant transportation challenges facing the Nashua Region?" - related to safety along the region's road network. The NRPC, in its role as MPO for the Nashua region, initially adopted the statewide targets for 2018. Each year since then, safety targets are reset and must be approved by the MPO by the end of February for submission to NHDOT. In 2019 the MPO transitioned to the adoption of regional targets developed from crash data for the NRPC area. Our regional targets were adopted on December 21, 2022.

The FHWA published a final rule pertaining to the Highway Safety Improvement Program (HSIP) requiring targets for Safety Performance which include the following measures.

- 1. *Number of Fatalities*: The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.
- 2. **Rate of Fatalities**: The ratio of total number of fatalities to the number of Vehicle Miles Traveled (VMT) per one hundred million miles traveled within a single calendar year.
- 3. *Number of Serious Injuries*: The total number of persons suffering at least one serious injury in a motor vehicle crash within a single calendar year.
- 4. *Rate of Serious Injuries*: The ratio of total number of serious injuries to the number of VMT per one hundred million miles traveled within a single calendar year.
- 5. *Number of Non-Motorized Fatalities and Non-motorized Serious Injuries*: The combined total number of non-motorized fatalities and non-motorized serious injuries involving a vehicle during a calendar year.

Data for the establishment of these measures is provided from three sources:

- **Fatality Analysis Reporting System (FARS)**: FARS Annual Report File or Final data is utilized to provide information on fatal crashes in the state.
- **State Motor Vehicle Crash Database**: Data collected and maintained by the NH Department of Safety is utilized to determine the number of serious injury crashes in the state. Crashes can be aggregated at the municipal, regional, state, or highway level.
- *Highway Performance Monitoring System (HPMS)*: State VMT data is collected by NHDOT and aggregated into a dataset for the state. VMT data can be calculated for regions and communities.

Target Development

States establish Highway Safety Improvement Program (HSIP) targets and report them for the upcoming calendar year in the HSIP annual report that is submitted to FHWA by August 31st each year. Targets are applicable to all public roads, regardless of functional classification or ownership. The targets established for number and rate of fatalities, and number of serious injuries must be identical to those established for the National Highway Transportation Safety Agency (NHTSA) Highway Safety Grant program in the annual Highway Safety Plan. The state has the option to also establish any number of urbanized area targets and a non-urbanized area target for the purposes of evaluating and reporting measures however those sub-state targets are not included in the significant progress determination that will be made by FHWA.

In New Hampshire, the process used to develop the required safety measures included in the annual Highway Safety Plan forms the basis for the establishment of the 5 FHWA mandated targets by NHDOT and the MPO's. This involved coordination and consultation between the departments of Safety, Transportation, and the 4 MPO's in the state. Currently available fatality, serious injury, and volume data were analyzed to establish 2018-2022 conditions in terms of total fatalities, fatality rates, total serious injuries, serious injury rates, as well as total non-motorized fatalities and serious injuries. Five-year rolling averages were developed from these values and utilized to compute projected values for 2023.

Target Adoption

The Nashua MPO has voted to support the State of New Hampshire HSIP Targets in the mandated areas for the performance period. In doing so, the MPO agrees to:

- Work with the State of New Hampshire and safety stakeholders to address areas of concern for fatalities or serious injuries within the metropolitan planning area.
- Coordinate with the State of New Hampshire and include the safety performance measures and HSIP targets for all public roads in the metropolitan area within the MTP.
- Integrate into the metropolitan transportation planning process, the safety goals, objectives, performance measures, and targets described in other State of New Hampshire safety transportation plans and processes such as applicable portions of the HSIP, including the SHSP.
- Include a description in the TIP of the anticipated effect of the TIP toward achieving HSIP targets within the MTP and linking investment priorities in the TIP to those safety targets.

State and Regional Target Summary

The following tables show the data supporting the targets for the five required measures. This data and targets will be continuously updated.

5-Year Moving Averages Used for Establishing Trends													2023
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Target	Target
Fatality Total	11.2	10.2	10.8	12.6	12.4	12.6	12.6	11.8	11.8	11.2	10.8	11.2	10.0
Fatality Rate	0.689	0.635	0.674	0.786	0.774	0.779	0.771	0.711	0.701	0.674	0.653	0.735	0.593
Serious Injury Total	74.2	75.6	73.2	69.4	68.2	68.6	63.6	59.6	59.4	56.2	50.2	54.8	45.7
Serious Injury Rate	4.59	4.71	4.57	4.34	4.26	4.23	3.88	3.59	3.54	3.40	3.05	3.270	2.753
Non-Motorized Fatal + Serious Injuries	6.2	5.4	6.8	7.2	8.2	7.8	8.6	7.4	7.8	6.8	6.8	6.8	5.8

Table 4: Five Required Measures for PM2 - 2011 to 2023

State and Regional Target Detail

Number of Fatalities

The Federal Fatal Analysis Reporting System (FARS) provides the data necessary for identifying the total number of traffic crash fatalities in New Hampshire and for the NRPC region. Five-year rolling averages are computed to provide a better understanding of the overall data over time while smoothing years with significant increases or decreases, as well as to provide a mechanism for regression to the mean for a random variable such as fatalities.

	State of NH		NRPC Region			
Year	Fatalities	5-yr Ave	Fatalities	5-yr Ave		
2008	138		13			
2009	110		4			
2010	128		13			
2011	90		9			
2012	108	114.8	12	10.2		
2013	135	114.2	16	10.8		
2014	95	111.2	13	12.6		
2015	114	108.4	12	12.4		
2016	136	117.6	10	12.6		
2017	102	116.4	12	12.6		
2018	147	118.8	12	11.8		
2019	101	120.0	13	11.8		
2020	104	118.0	9	11.2		
2021	118	114.2	8	10.8		
2022	137	121.4	11	10.6		

Table 5: Fatalities - Statewide and NRPC Region 2008 to 2022

Rate of Fatalities

The Federal Fatal Analysis Reporting System (FARS) maintained by the National Highway Traffic Safety Administration (NHTSA) provides the data necessary for identifying the total number of traffic crash fatalities in New Hampshire and the NRPC region specifically. This information is combined with data from the Highway Performance Monitoring System (HPMS) which provides annual VMT at the State and community level. Combining the total number of fatalities in a particular year with the aggregated volume of travel in the state during that same year provides a fatality rate per 100 million VMT. This data is further aggregated into 5-year averages to reduce the impacts of the high variability in the number of fatalities from year to year and to provide some indicators of longer-term trends.

	Sta	ate of NH	NRPC Region			
Year	Fatality Rate	5-yr Average	Fatality Rate	5-yr Average		
2008	1.058		0.804			
2009	0.848		0.249			
2010	0.980		0.802			
2011	0.708		0.571			
2012	0.838	0.887	0.751	0.689		
2013	1.046	0.884	1	0.635		
2014	0.732	0.861	0.808	0.675		
2015	0.871	0.839	0.739	0.786		
2016	1.009	0.900	0.598	0.774		
2017	0.746	0.881	0.707	0.771		
2018	1.067	0.885	0.702	0.711		
2019	0.729	0.884	0.757	0.701		
2020	0.870	0.884	0.607	0.674		
2021	0.898	0.862	0.491	0.653		
2022	1.005	0.914	0.651	0.735		

Table 6: Rate of Fatalities Per 100 million VMT - Statewide and NRPC Region 2008 to 2022

Number of Serious Injuries

Serious injuries are defined currently as those that are designated as "A" or "4 Incapacitating" on the crash report form used by the NH Department of Safety. This includes injuries that involve severe lacerations, broken or distorted limbs, skull fracture, crushed chest, internal injuries, unconscious when taken from the accident scene, or unable to leave the accident scene without assistance. The State Crash Records database maintained by the NH Department of Safety provides the data necessary for identifying the total number of serious injuries from traffic crashes in NH and the MPO region specifically. Data can be analyzed at the state, regional, municipal, and corridor level.

	Sta	ate of NH	NRP	C Region
Year	Serious Injuries	5-yr Ave	Serious Injuries	5-yr Ave
2011	462		99	
2012	623		90	
2013	489		78	
2014	451		61	
2015	459	496.8	76	80.8
2016	477	499.8	103	81.6
2017	191	413.4	29	69.4
2018	478	411.2	43	62.4
2019	485	418	56	61.4
2020	504	4427	48	55.8
2021	482	428	51	45.4
2022	626	515	68	53.2

Table 7: Serious Injuries - Statewide and NRPC Region 2011 to 2022

Rate of Serious Injuries

The Rate of Serious Injuries is calculated by applying an estimate of annual travel in the state to the serious injury totals for the same year. The State Crash Records database maintained by the NH Department of Safety provides the data necessary for identifying the total number of serious injuries from traffic crashes in NH and the MPO region specifically. This information is combined with data from the Highway Performance Monitoring System (HPMS) which provides annual Vehicle Miles of Travel (VMT) at the State and municipal level to produce a rate of serious injuries per 100 million VMT. This value is further aggregated into 5-year averages to identify longer-term trends and reduce the impacts of the variability of the data.

	St	ate of NH	NRPC Region		
Year	Rate of Serious Injuries	5-year Average	Rate of Serious Injuries	5-year Average	
2011	3.632		6.277		
2012	4.832		5.629		
2013	3.790		4.875		
2014	3.477		3.793		
2015	3.505	3.847	4.681	5.051	
2016	3.537	3.828	6.164	5.028	
2017	2.997	3.4612	3.124	4.5274	
2018	3.270	3.3572	2.634	4.0792	
2019	3.500	3.3618	3.143	3.9492	
2020	4.850	3.6308	3.236	3.6602	
2021	3.670	3.6574	3.132	3.0538	
2022	4.591	3.9762	4.022	3.2333	

Table 8: Rate of Serious Injuries/100 million VMT Statewide and NRPC Region 2011 to 2022

Number of Non-Motorized Fatalities and Serious Injuries

This performance measure utilizes data from both NHTSA's FARS database and the State Crash Records Database which is maintained by the NH Department of Safety. Each dataset is queried for nonmotorized vehicle crashes and the results are tabulated below. This data can be analyzed at the state, regional, municipal, and corridor level.

	State of N	on		
Year	Non-Motorized Fatalities & Serious Injuries	5-year Average	Non-Motorized Fatalities & Serious Injuries	5-year Average
2007	65		12	
2008	48		4	
2009	44		5	
2010	41		5	
2011	52	50.0	8	6.8
2012	58	48.6	9	6.2
2013	56	50.2	9	7.2
2014	52	51.8	6	7.6
2015	64	56.4	10	8.6
2016	41	54.2	6	7.8
2017	62	55.0	12	8.6
2018	39	51.6	3	7.4
2019	37	48.6	8	7.8
2020	34	42.6	4	6.8
2021	39	41.6	5	6.8
2022	32	36.2	6	5.2

Table 9: Non-Motorized Injuries - Statewide and NRPC Region 2011 to 2022

Crash Modification Factors for Projects Impact Analysis

Crash Modification Factors (CMF) have been developed through research conducted by FHWA to compute the expected reductions in the number of accidents and accident severity after implementing countermeasures and other improvements at a specific location. It is defined as the ratio of expected crash frequency with improvement over that without improvement. A CMF ratio less than one indicates an expected reduction in crashes or crash type because of the proposed action; greater than one indicates an increase. There are instances where the CMF projects an increase in total accidents, but a reduction in injury accidents. An example might be a new traffic signal, which might increase minor rear-end collisions, but reduce serious high-speed crashes at a previously stop-controlled intersection.

INFRASTRUCTURE CONDITION

In 2012 Congress passed the surface transportation legislation known as MAP-21, which introduced the requirement that states and MPOs use performance measures to work towards specific goals and targets. Subsequent transportation legislation, the FAST Act, modified the time frames for these requirements. A series of final rules by FHWA and FTA provided further definition to the required performance targets.

It should be noted that although Performance Measures and Targets are mandated by federal law for States and MPOs, there is no penalty or mandated action that would be triggered should future data indicate targets are not being met. However, prolonged periods of not meeting targets could result in states being required to target highway funds to remedy deficient performance.

The Pavement & Bridge Condition (PM2) targets include the following federally required performance measures:

- Percentage of pavements on the Interstate System in Good condition (none in NRPC region).
- Percentage of pavements on the Interstate System in Poor condition (none in NRPC region).
- Percentage of pavements on the non-Interstate National Highway System in Good condition.
- Percentage of pavements on the non-Interstate National Highway System in Poor condition.
- Percentage of National Highway System bridges classified as in good condition.
- Percentage of National Highway System bridges classified as in Poor condition.

MPOs have the option of adopting statewide targets as detailed by NHDOT in the State Performance Report. The applicable targets for the NRPC region are shown below, with data developed by NHDOT shown in yellow that provides the basis for setting these targets. For each performance measure NHDOT has provided a cushion to allow some slippage in performance and still meet the target.

		Baseline	2-Year	4-Year	State of Good
IRI Targets	Road Type	Conditions	Target	Target	Repair
Pavement Condition	Non-Interstate NHS: Good	39.4%	35.0%	35.0%	35.0%
	Non-Interstate NHS: Poor	3.6%	7.0%	5.0%	5.0%
Bridge Condition	NHS: Good	58.4%	57.0%	39.4%	39.4%
	NHS: Poor	4.3%	5.0%	5.0%	5.0%

Table 10: NHDOT Baseline Conditions and Targets for Pavement and Bridges

NHDOT has some flexibility and may use the simple IRI measure for the first reporting period to allow them time to collect any additional data needed for a more thorough analysis. MPOs are required to use the combined factors even for the initial performance period. In the past there was a discrepancy between the pavement condition metrics being used between MPOs and the NHDOT. Since then, both groups have adopted the same methodology and there is compatibility between the State and NRPC pavement targets.

The pavement measures are defined as the overall roadway condition based on several factors: the International Roughness Index (IRI), cracking, and rutting. Each of these three distresses are measured independently and graded on a Poor/Fair/Good scale based on specific values. For this broad reporting of pavement condition a road segment is considered in good condition if it scores good for all three types of distresses. A road segment is considered *Poor* if it scores poorly on two or more types of distresses. The rest of the road segments are considered *Fair*.

The PM2 conditions for the non-interstate NHS network statewide and for the NRPC region are shown below.

Non-Interstate NHS - NHDOT											
	2015		2016		2017		2020		2021		
	mi.	2015 %	mi.	2016 %	mi.	2017 %	mi.	2020 %	mi	2021 %	
Fair	1,331	78%	1,225	71%	1,014	53%	898	44.0%			
Good	372	22%	472	27%	849	44%	1098	54.0%	No (avai	No data	
Poor	13	1%	25	1%	52	3%	38	2.0%	avai	able	
Total	1,716		1,722		1,915		2034				
Non-Int	erstate NH	IS – NRPC									
Fair	162	74%	140	63%	124	46%	107	36%	117	40.0%	
Good	55	25%	74	33%	136	50%	179	60%	169	57.05	
Poor	3	1%	8	4%	12	4%	10	3%	9	3.0%	
Total	220		222		272		296		295		

Table 11: HPMS Pavement Data Mandated in PM2

Table 12: HPMS Bridge Data Mandated in PM2

Bridges	Bridges - NHDOT									
	2019 sf	2019 %	2020 sf	2020 %	2021 sf	2021 %	2022 sf	2022 %		
Fair	664925	58.0%	662472	58.0%	658752	57.0%	650078	56.0%		
Good	404075	35.0%	409498	36.0%	421946	36.0%	433948	38.0%		
Poor	79375	7.0%	78378	6.0%	76698	7.0%	75142	6.0%		
Total	1148375		1150349		1157396		1159168			
Bridges	– NRPC									
Fair	47771	81.0%	47771	81.0%	46099	76.0%	44055	73.0%		
Good	10333	18.0%	10369	18.0%	13503	23.0%	15542	26.0%		
Poor	791	1.0%	805	1.0%	805	1.0%	805	1.0%		
Total	58894		58945		60407		60402			

Note: all measurements for bridge area are in square feet in 1000's.

TRAVEL TIME RELIABILITY

For the Travel Time Reliability Performance Measure, there is a uniform measure defined as the ratio of the 80th percentile travel time to the 50th percentile. A ratio not exceeding 1.5 is defined as constituting "reliability". The statewide Level of Travel Time Reliability (LOTTR) of 88% was identified in the Statewide Performance Report and a recent data analysis indicates reliability has exceeded 90% in the past two years. The State has selected a target of 85%-person miles on the NHS being reliable and the non-interstate TTR has improved from 90.9% in 2017 to 92.9% in 2019. In the NRPC region, LOTTR increased from 92.2% to 93.1% over this period. Although there was a dramatic increase in TTR in 2020 both statewide and in the region, this was an aberration caused by the COVID-induced decline in travel.

The Nashua MPO has formally adopted the statewide 85% target for the travel time reliability target.



Figure 1: Non-interstate NHS Travel Time Reliability for NH

ENVIRONMENT AND AIR QUALITY

AIR QUALITY

The transportation sector impacts the natural environment in several ways, most prominently through greenhouse gas emissions associated with motorized transport. The loss of open space has a direct and indirect consequence of transportation investments and stormwater impairments due to impervious surface cover. The transportation sector is the most significant source of carbon emissions in New Hampshire, accounting for 47% of all greenhouse gas emissions in 2019. A significant amount of transport emissions is associated with personal automobile use.

National Ambient Air Quality Standards

The United States Clean Air Act, last amended in 1990, requires the Environmental Protection Agency to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health. The EPA currently sets standards for six different pollutants including carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution, and sulfur dioxide. Currently, the Nashua Region and all of New Hampshire meet EPA standards for all transportation-related emissions (ozone, carbon monoxide, and particulate matter) regulated under the NAAQS and are therefore classified as Attainment areas.

New Hampshire Ozone Status

For over 30 years, New Hampshire has been working to improve the quality of the air with the focus being to reduce the amount of ozone that forms during the summer months. The Nashua Regional Planning Commission in its role as the Metropolitan Planning Organization has partnered with NHDOT and the NH Department of Environmental Services (NHDES) to reduce mobile source emissions and meet the ozone standards set by the US Environmental Protection Agency (EPA). Over the last three decades, two ozone standards have been in effect in New Hampshire: the 1997 8-hour standard of eighty parts per billion (ppb) and the more stringent 2008 8-hour standard of 75 ppb.

Portions of southern New Hampshire did not meet the 1997 80 ppb standard, and what was defined as the "Boston-Manchester-Portsmouth (SE) NH area" was designated non-attainment. As required by the Clean Air Act (CAA), NRPC worked to identify transportation projects that would reduce congestion and support non-motorized modes of transportation. These efforts, combined with federal programs such as federal vehicle emission standards and fuel standards, were successful in reducing emissions in NH. By 2008, New Hampshire's ozone levels were below both the 1997 standard and the 2008 standard of 75 ppb.

In May 2012, EPA took three actions concerning New Hampshire's status under both ozone standards. First, EPA declared New Hampshire to be "unclassifiable/attainment" with respect to the 2008, 75 ppb standard. Second, EPA revoked the 1997 standard for transportation conformity purposes only. Third, EPA proposed approval of New Hampshire's redesignation request to attainment under the 1997 standard which became effective March 4, 2013.

On July 20, 2013, all of New Hampshire became unclassifiable/attainment for the 2008 8-Hour Ozone National Ambient Air Quality Standard (the 2008 ozone standard) and on April 6, 2015, the 1997 8-Hour Ozone National Ambient Air Quality Standard (the 1997 ozone standard) was revoked for all purposes, including transportation conformity, in the Boston-Manchester-Portsmouth (SE) NH area.

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA ("South Coast II,"* 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019. Therefore, per the *South Coast II decision*, **NRPC and the other New Hampshire MPOs must conduct air quality conformity for TIP and concurrent MTP updates.**

Transportation projects which are exempt from analysis in the Air Quality Conformity Determination are assigned specific Clean Air Act Codes (CAAC). These include construction projects that do not involve capacity expansion or new facilities. New highway projects or capacity expansion of existing highways are considered non-exempt, and their impacts are evaluated. The air quality conformity determination for this MTP is included later in this document.

Nashua Carbon Monoxide Status

The City of Nashua was designated a non-attainment area for Carbon Monoxide (CO) in 1980 by the EPA. Unlike ozone, CO pollution is prevalent throughout the year and typically concentrated in urban areas with congested intersections and arterial roadways. NRPC has worked with the City of Nashua, NHDOT and NHDES to reduce mobile source emissions and meet the CO standards set by EPA. Over the last three decades, the intersection improvements, increased transit service and other transportation demand strategies have worked in conjunction with reduced tail pipe emissions to decrease the number of exceedances of the CO standard. By 2001 EPA designated Nashua "in attainment" with a Maintenance Plan requiring continued monitoring and air quality analyses to ensure the CO standard was not violated by proposed projects. On March 10, 2014, EPA approved a Limited Maintenance Plan for the City of Nashua, relinquishing the NRPC of additional air quality analyses for projects proposed in the TIP and MTP. The 20-year maintenance period for the Nashua and Manchester CO maintenance areas expired on January 29, 2021. The Nashua MPO is therefore no longer required to demonstrate transportation conformity for the CO maintenance area.

Air Quality - Looking Ahead

In addition to the requirement to perform air quality conformity determinations there continue to be air quality regulations in effect for transportation planning purposes. Provisions are in place to prevent degradation of the improved air quality. The anti-backsliding provisions require that that NH continue vehicle inspection maintenance (I/M) programs, reasonably available control technology (RACT), and clean fuels programs. Anti-backsliding provisions of particular importance to MPOs include transportation control measures strategies to reduce vehicle emissions through transit use and Intelligent Transportation System (ITS) applications and technologies to offset growth in emissions from increased vehicle miles travelled. Therefore, the MPO must continue to implement strategies and projects that will continue to reduce transportation-related emissions.

NRPC will continue to demonstrate transportation air quality conformity for the 1997 ozone NAAQS for MPO TIP's and MTP's by showing that the relevant requirements in Table 1 in 40 CFR 93.109 continue to be met. This will be accomplished through continued participation in the NH Interagency Consultation process, where non-exempt transportation projects will be identified.
Transportation and Climate Change

<u>Burning fossil fuels</u> like gasoline and diesel releases carbon dioxide, a greenhouse gas, into the atmosphere. The buildup of carbon dioxide (CO2) and other greenhouse gases like methane (CH4), nitrous oxide (N2O), and hydrofluorocarbons (HFCs) is causing the Earth's atmosphere to warm, resulting in changes to the climate we are already starting to see currently.

Greenhouse gas (GHG) emissions from transportation account for about 47% of total greenhouse gas emissions in New Hampshire, making it the largest contributor of GHG emissions by far. Between 1990 and 2021, GHG emissions in the transportation sector increased more in absolute terms than any other sector.



Data Source: NH Department of Environmental Services

Carbon Dioxide is not currently regulated by the EPA under the NAAQS, even though CO2 is the primary greenhouse gas emitted through human activity, accounting for 82% of all GHG emissions in the U. S.

Carbon dioxide is the primary greenhouse gas emitted through human activities. CO2 accounts for 82% of all U.S. greenhouse gas emissions from human activities.

WATER QUALITY

Stormwater is water precipitation and snowmelt which does not infiltrate the ground but instead flows through drainage systems and is discharged into water bodies. As stormwater flows toward and into storm drains, it encounters surface pollutants like motor oil, fertilizer, and other pollutants which contaminate

the water before it enters a water body. In NH, stormwater is the single greatest contributor to surface water pollution, accounting for 83 percent of all surface water quality impairments in the state.

Stormwater management is important both because of what stormwater carries and how fast it moves. Water has tremendous power and can cause erosion, property loss, roadway damage, riverbank instability, and other safety concerns when moving quickly. The transportation sector is a major contributor to stormwater speed and stormwater pollution. Stormwater encounters a host of pollutants as it flows over asphalt and road surfaces toward water bodies.

The EPA's NH Small Municipal Separate Storm Sewer System (MS4) General Permit, reissued in 2017 and last modified in 2020, applies to several communities in the Nashua Region. Municipalities that fall within urbanized areas (as defined by the 2010 Census) must obtain a federal MS4 permit to discharge stormwater into water bodies. The permit requires municipal action in addressing six areas related to stormwater:

- 1. public education and outreach.
- 2. public involvement and participation.
- 3. illicit discharge detection and elimination.
- 4. construction site stormwater runoff control.
- 5. stormwater management in new development and redevelopment.
- 6. and good housekeeping and pollution prevention for municipal operations.

The MS4 permit requirements apply to the Nashua Regional municipalities of Amherst, Hollis, Hudson, Litchfield, Merrimack, Milford, Nashua, Pelham, and Wilton.

OPEN SPACE

The construction of transportation facilities often involves the disturbance of open spaces. This can and should be mitigated through land use policies that encourage growth near to transportation corridors.

Only one single major transportation project has occurred in the region over the last 15 years that required the disturbance of open space. Construction of Raymond Wieczorek Drive, a limited-access 4-lane roadway linking the FE Everett Turnpike to Manchester Boston Regional Airport, most of this project occurred outside the region within the municipalities of Bedford, Manchester, and Londonderry. However, the project did require the taking of some land in Merrimack to provide exit ramps for the new highway for US Route 3.

ENVIRONMENTAL JUSTICE

NRPC receives federal monies through the USDOT and FHWA and as a result must consider and address the effects of all our programs, policies, and activities on "minority populations and low-income populations." The FHWA has incorporated environmental justice as part of their mission by involving the potentially affected public in developing transportation projects that fit harmoniously into the communities without any undue harm through displacement or sacrificing safety or mobility.

POVERTY

The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the dollar value of the appropriate

threshold, then that family and every individual in that household are considered "in poverty". The 2023 poverty level annual income for an individual in the USA is \$14,580 and \$30,000 for a family of four.

Over the last decade, most communities in the region have seen lower percentages of families and individuals living below the poverty level. This is consistent with county, state, and national trends. Nashua contains 64% of the region's population below the poverty line and has a poverty rate of 8%. Mason and Mont Vernon also have higher than average regional poverty rates although the nominal figures are small due to the communities' low populations. Overall, the region has a poverty rate of 5.21%.

	Total Pop.	Below poverty	Poverty Rate	White Alone	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	Hispanic or Latino origin of any race
Amherst	11680	502	4.30%	4.5%	-	-	0.0%	-	0.0%	0.0%	22.9%
Brookline	5591	11	0.20%	0.2%	0	-	0.0%	-	-	0.0%	0.0%
Hollis	8323	110	1.32%	1.2%	0.8%	0.0%	0.5%	-	0.0%	3.3%	11.5%
Hudson	25126	941	3.75%	3.9%	0.6%	-	0.0%	-	5.5%	0.0%	0.1%
Litchfield	8437	14	0.17%	0.2%	-	0.0%	0.0%	-	-	0.0%	0.0%
Lyndeborough	1640	39	2.38%	2.7%	0.0%	-	-	-	-	0.0%	0.0%
Mason	1472	48	3.26%	3.0%	-	-	0.0%	-	-	8.2%	0.0%
Merrimack	26551	1044	3.93%	3.9%	27.1%	-	0.0%	0.0%	1.1%	1.6%	11.8%
Milford	15887	793	4.99%	5.1%	22.0%	0.0%	2.2%	-	19.6%	3.1%	8.1%
Mont Vernon	2580	65	2.52%	2.6%	0.0%	0.0%	-	-	-	0.0%	0.0%
Nashua	89238	7112	7.97%	7.7%	19.1%	5.6%	6.0%	-	12.7%	6.7%	14.4%
Pelham	14017	311	2.22%	2.4%	0.0%	0.0%	2.6%	-	0.0%	0.0%	0.0%
Wilton	3888	181	4.66%	5.1%	-	-	0.0%	-	0.0%	0.0%	0.0%
REGION	214430	11171	5.21%	5.0%	16.8%	3.6%	4.4%	0.0%	8.9%	4.6%	12.5%

Table 13: Poverty Rates by Municipality

Source: American Community Survey 2021 5-Year Estimates (Table S1701)

Map 2: Poverty Level Populations



MINORITY POPULATIONS

For the purposes of the US Census, minorities are defined as people who are NOT a single-race, non-Hispanic white. For example, according to this definition, Hispanic whites are considered a minority. The general concentration of the minority population in the region can be found in the City of Nashua. In many of Nashua's neighborhoods the percentage of the minority population can be as high as 10% to 40% of the total tract population. Outside of Nashua, the region is relatively homogenous with concentrations of minorities as a percentage of population between 0% to 10%.

	NOT HISPANIC OR LATINO								
	Total Pop	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	Of any race
Amherst	11753	10609	71	7	204	2	71	416	373
Brookline	5639	5013	32	5	116	4	35	284	150
Hollis	8342	7332	45	8	353	2	27	335	240
Hudson	25394	22125	313	27	713	10	113	942	1151
Litchfield	8478	7760	53	14	74	0	35	278	264
Lyndeborough	1702	1551	2	5	8	0	15	77	44
Mason	1448	1330	0	0	6	0	10	55	47
Merrimack	26632	23547	245	35	595	8	168	1043	991
Milford	16131	14222	225	18	239	4	83	747	593
Mont Vernon	2584	2302	18	3	31	0	18	121	91
Nashua	91322	64225	2383	130	7112	29	817	3939	12687
Pelham	14222	12656	114	13	328	0	61	483	567
Wilton	3896	3565	9	0	16	3	20	181	102
REGION	217543	176237	3510	265	9795	62	1473	8901	17300
PCT OF TOTAL		81.01%	1.61%	0.12%	4.50%	0.03%	0.68%	4.09%	7.95%
Source: 2020 [ecennial	Consus (Ta	hle n9)						

Table 14: Minority Population by Municipality

Map 3: Minority Populations



Environmental Justice Zones by Census Tract

An Environmental Justice Zone (EJ) is any census block group where 20% or more individuals live in poverty and or 30% or more of the population is a minority. In our region, all the EJ zones are concentrated in Nashua. These tracts relate to the neighborhoods shown in Map 3: Environmental Justice Zones on the next page. Three EJ zones qualify under both the percent of minority population and the percent living in poverty. Those EJ zones are listed in Table 15: Environmental Justice Zones qualifying under both Minority and Poverty criteria.

	% Minority	% Living in
EJ Census Tract	Population	Poverty
105	39.2	24.2
107	33.9	27.0
108.2	50.1	21.6

Table 15: Environmental Justice Zones qualifying under both criteria.



Map 4: Environmental Justice Zones

CONGESTION MANAGEMENT PROCESS

The Congestion Management Process (CMP) has been a mandate of Transportation Management Areas (TMA) since the enactment of the 2005 surface transportation act (SAFETEA-LU), which states:

"The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 through the use of travel demand reduction and operational management strategies."[23 CFR § 450.32]

A congestion management process (CMP) is a systematic and regionally accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet State and local needs. A CMP is required in metropolitan areas with population exceeding 200,000, known as Transportation Management Areas (TMAs). The Nashua Urbanized Area (UZA) exceeded this threshold following the 2010 Census. The initial CMP was conducted in that year and corridor updates have been done periodically since the commencement of the comprehensive CMP update in 2019. Federal requirements state that in all TMAs, the CMP shall be developed and implemented as an integrated part of the metropolitan transportation planning process; however, Federal regulations are not prescriptive regarding the methods and approaches that must be used to implement a CMP.

The CMP uses an objectives-driven, performance-based approach to planning for congestion management. Using congestion management objectives and performance measures, the CMP provides a mechanism for ensuring that investment decisions are made with a clear focus on desired outcomes. This approach involves screening strategies using objective criteria and relying on system performance data, analysis, and evaluation.

Regional Goals and Objectives

The most recent update to the MPO CMP was completed in June 2022 and includes the following Goals and Objectives:

Goal 1: Reduce congestion and improve efficiency of the transportation network.

Objectives

- Maintain travel time reliability (TTR) above 90% on NRPC National Highway System facilities and raise the TTR performance target to this level with the next Metropolitan Transportation Plan update in 2022.
- Maintain volume-to-capacity (V/C) ratios to achieve level of service (LOS) C or better in the urban area where operational conditions are now found to exist. Achieve reductions in v/c and improvement in LOS where roadways operate at D or lower.
- In rural portions of the NRPC region, seek to maintain LOS at B for arterial highways.
- Work toward reduction of single-occupancy vehicle travel.
- Slowing the rate of increase, or achieving reductions in, vehicle miles of travel (VMT) and vehicle hours of travel (VHT).

- Identify highway segments that can achieve reduced congestion through changes in geometry or capacity increases.
- Improve traveler information that will enable the selection of alternative routes to avoid bottlenecked highway segments.

Goal 2: Increase mobility for alternative modes.

Objectives

- Facilitate bicycle and pedestrian modes through implementation of recommended projects in the NRPC 2021 Bicycle and Pedestrian Plan.
- Increase mode share on the Nashua Transit System.
- Fill accessibility gaps, including the first and last mile connections to transit.
- Encourage use of intercity transportation modes on bus and rail modes.

Goal 3: Improve safety performance on the transportation network.

Objectives

- Achieve improvements in annual safety performance measures for the regional highway system.
- Improve ability to measure crash rates along specific segments of the transportation network.
- Identify high risk highway segments and intersections.
- Reduction of vehicle crashes, with particular emphasis on those involving pedestrians and nonmotorized modes.
- Provide adequate paved shoulders for bicyclists or dedicated paths parallel to roadways.
- Improvement in Bicycle Level of Traffic Stress (BLTS) ratings along highway corridors, with priority to those exceeding 3.0.
- Maintain the transportation system in a state of good repair.

Congestion Management Process Toolbox

The NRPC CMP includes many components and strategies that go beyond traditional highway widening to include technology, transit, demand management, access management, and non-motorized transport improvements.

- Highway Physical Improvements
 - Increase number of lanes along arterial segment.
 - Increase lane width.
 - Add turn lanes at intersections & other geometric improvements.
 - Interchange re-configuration.
 - Safety improvements to reduce incidence of crashes.
- Transit Strategies
 - Increase service frequency of existing fixed routes.
 - Expansion of service area for fixed routes.
 - Expansion of existing park-and-ride lots.
 - New park-and-ride lot construction.
 - Employer-based micro-transit services.

- Passenger rail extension or alternative shuttle service to rail.
- Reduce fare costs through employer transit pass programs, etc.
- Transit amenities shelters, seating, etc.
- Bicycle/Pedestrian Improvements
 - New sidewalks, bicycle lanes, trails
 - Bicycle amenities such as bike racks
 - o Pedestrian-Oriented Development
 - o Bicycle and Pedestrian Safety Improvements
 - Exclusive non-motorized rights-of-way
- Transportation System Management & Operations
 - o Optimization of Individual Traffic Signals
 - Traffic Signal Coordination
 - Highway Information Systems, such as variable message boards to alert motorists
 - o Incident management systems
 - All-Electronic Tolling
- Transportation Demand Management
 - Telecommuting
 - Flexible work hours to shift to off-peak or compress work week.
 - Substitute teleconferencing for in-person meetings
 - Regional ridesharing program
- Access Management
 - Left Turn Restrictions
 - Consolidation/Relocation of Driveways
 - Minimum intersection spacing
 - Frontage roads to connect development and divert traffic from the arterial roadway.

Regional Congestion Management Process Highway Network

The following is a list of Congestion Management Reports (CMR) conducted by NRPC in recent years. A sample CMR is provided as an appendix to the MTP. NRPC has evaluated all state-numbered highways and other important arterials in the region for potential inclusion in the CMP highway network. Those which have been found through the analysis of the National Performance Monitoring Research Data Set (NPMRDS) to have at least some level of measurable congestion on some segments are included in the CMP network for consideration of mitigating strategies. NH 111A in Nashua is not included because NPMRDS data are not available.

- F.E. Everett Turnpike, Nashua-Merrimack
- NH 101, Wilton-Milford-Amherst
- NH 101A, Milford-Amherst-Hollis-Merrimack-Nashua
- US 3, Merrimack-Nashua
- NH 3A, Hudson-Litchfield and Sagamore Bridge Road, Nashua-Hudson
- NH 102, Hudson

- NH 111, Hollis-Nashua-Hudson
- NH 130, Nashua
- NH 38, Pelham
- NH 128, Pelham
- NH 111A, Pelham
- NH 13, Mont Vernon-Milford
- NH 122, Amherst-Hollis
- Main Street, Nashua
- Daniel Webster Highway, Nashua
- Greeley Street/Continental Blvd, Merrimack

The completion of the 2022 CMP document included a major advance in data sources over prior CMPs through the availability of the NPMRDS for the calculation of congested period average speeds and travel time indices. While the raw data set is available free of charge for the NHS network, the NH MPOs have partnered to purchase the expanded data set covering non-NHS roads, as well as enhanced analytics tools that enable quicker processing of data. NRPC is committed to continuing to participate in the purchase of the dataset. NRPC will also continually update other performance measures including v/c ratios, level of service, bicycle level-of-traffic stress, crash rates, and transit congestion measures. Summaries of congestion data are provided in the Existing Conditions section of this MTP.



Lowell Road (NH 3A) in Hudson - one of the region's more congested roadways

PUBLIC INVOLVEMENT PROCESS

Purpose

Public involvement is an integral part of the transportation process which helps ensure that decisions are made in consideration of and of benefit to public needs and preferences. A core function of the MPO is to provide a forum for effective regional decision-making when it comes to matters concerning transportation. Therefore, the purpose of PIP is to ensure that the concerns and issues of everyone with a stake in transportation decisions are identified, evaluated, and responded to in a thoughtful, thorough and timely manner. Typical transportation matters include, but are not limited to, transportation policies, allocation of transportation resources and the prioritization of regional projects.

In accordance with <u>23 CFR 450.316</u>, federal regulations state that every MPO must develop, adopt and implement formalized procedures for effective public involvement, participation, and consultation to be used during the development or updating of a Metropolitan Transportation Plan (MTP) or Transportation Improvement Program (TIP). The regulation also stipulates that a public involvement process shall seek out traditionally underserved populations. The Fixing America's Surface Transportation (FAST) Act also emphasizes public involvement as the hallmark of the planning process. Similarly, the State of New Hampshire has several laws that require various types of public involvement concerning the planning process and access to government information (<u>RSA 91-A</u>).

In addition, the Nashua Transit System, which is the FTA Section 5307 (c) applicant, has consulted with the MPO and concurs that the public involvement process adopted by the MPO for the development of the TIP satisfies the public hearing requirements that pertain to the development of the Program of Projects for regular Section 5307, Urbanized Area Formula Program, grant applications, including the provision of public notice and the time established for public review and comment.

Public Involvement Process Goals and Objectives

GOAL 1: Enhance public outreach.

Objectives

- Incorporate public outreach early in the process, properly account for time and resources required.
- Identify and seek input from a wide variety of individuals, groups, and organizations including traditionally underrepresented populations.
- Tailor outreach strategies that engage individuals, groups, and organizations of low-income, minorities, limited-English-proficiency (LEP) populations and the disabled.
- Adjust outreach strategies for effectiveness as needed based on public feedback.

GOAL 2: Improve public involvement.

Objectives

- Encourage public involvement early in the planning process to guide plan development.
- Clearly convey how those wanting to understand and participate in the process can be involved.
- Utilize community leaders and organizations to leverage higher levels of public involvement.
- Adjust involvement strategies for effectiveness as needed based on public feedback.

GOAL 3: Improve the processing of public input.

Objectives

• Establish a process for properly collecting, storing, and disseminating public input.

- Uniformly evaluate public input as possible but allow for adaptability and case-by-case basis evaluations as needed.
- Incorporate both quantitative and qualitative evaluation methods and measures.
- Respond to public input in a consistent and timely manner.

GOAL 4: Appropriately implement, evaluate, and develop public involvement program.

Objectives

- Provide the framework for a standardized implementation schedule which guides future public outreach and involvement.
- Establish evaluation measurements to reflect the program performance.
- Conduct regularly scheduled evaluations to monitor program effectiveness and assess public feedback.
- Utilize evaluation results to further and enhance program development.
- Synchronize the MPO's PIP with other statewide and regional public involvement processes.
- To satisfy the Nashua Transit System public participation for the program of projects.

Title VI Policy Statement

The Nashua Regional Planning Commission (NRPC) Metropolitan Planning Organization (MPO) has in place a Program based on Title VI of the Civil Rights Act of 1964 (42 U.S. Code Section 2000d) and U.S. Department of Transportation Regulation 49 CFR Part 21 "Nondiscrimination in Federally Assisted Programs of the Department of Transportation". The Program is based on Federal Transit Administration Circular FTA C 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients," (October 1, 2012).

Title VI Objectives

The objectives of the program are as follows:

- 1. To ensure that the level and quality of transportation service is provided without regard to race, color, or national origin.
- 2. To promote the full and fair participation of all affected populations in transportation decisionmaking.
- 3. To prevent the denial, reduction or delay in benefits related to programs and activities that benefit traditionally underserved populations; and,
- 4. To ensure meaningful access to programs and activities by persons with limited English proficiency.

Requirements

The NRPC for its Title VI Program maintains certain reporting requirements and provides NHDOT, FHWA, and FTA the following information regarding these reporting requirements. In addition to the general requirements required of all recipients of Federal aid, Metropolitan Planning Organizations must respond to additional requirements related to planning of federally funded transportation projects, and program administration.

- 1. Requirement to Provide Title VI Assurances
- 2. Requirement to Prepare and Submit a Title VI Program
- 3. Requirement to Notify Beneficiaries of Protection Under Title VI
- 4. Requirement to Develop Title VI Complaint Procedures and Complaint Form
- 5. Requirement to Record and Report Title VI Investigations, Complaints, and Lawsuits
- 6. Requirement to Promote Inclusive Public Participation
- 7. Language Assistance Plan Requirement to Provide Meaningful Access to LEP Persons
- 8. Minority Representation on Planning and Advisory Bodies
- 9. Provide Assistance to Subrecipients
- 10. Monitoring Subrecipients
- 11. Determination of Site or Location of Facilities
- 12. Requirement to Provide Additional Information Upon Request

Finally, this document specifically includes the following procedures for the preparation and adoption of this MTP update:

- Publish a Notice of Intent to update the MTP.
- Make the draft MTP available on the NRPC website and paper copies available for review at the NRPC office.

- Public notice of comment period and Public Hearing through local newspaper, the NRPC website, social media, and electronic mailing to interested parties list.
- Public informational meetings at TTAC.
- Up to a 30-day public comment period.
- Public Hearing at the NRPC MPO Commission meeting.

Online Transportation Survey

The NRPC conducted an online transportation survey during the Summer and Fall 2023 to solicit input from the public on transportation challenges, priorities, desired improvements, and potential additional revenue sources. The summary of these responses is incorporated into the Future Needs Analysis of this MTP. Other respondent data regarding trip purposes, modes, and other transportation user characteristics were also collected and reported in the Existing Conditions section of this report. The survey was promoted through social media outlets, email, and municipal websites. It yielded 346 responses and, although not administered as a scientific survey, it resulted in a greater degree of public feedback than past efforts which entailed receiving public input through conducting open houses, charettes, etc. Being an online survey, it was open to all, and 90% of respondents were residents of the NRPC region. In addition, an interactive online map was created to allow the public to comment on specific issues, concerns, or suggested improvements. The results of the survey can be found <u>here</u>. To view the interactive map, click <u>here</u>.

Communications with Municipalities and Stakeholders

In addition to the public survey effort conducted this year to solicit opinions on regional priorities and transportation workshops held in recent years, the NRPC maintains its public dialogue through communication and coordination with municipal governing bodies, planning boards, municipal staff through monthly meetings of the Transportation Technical Advisory Committee (TTAC). Additionally, as part of the MTP preparation process, NRPC met with each community to discuss existing and future transportation improvement needs as well as probable imminent and potential land development proposals within their community. Projects which are located entirely within a communicated a second time with several towns for clarification on project status for this MTP update. All project additions were done via the public solicitation process undertaken in 2023 for MTP projects, CMAQ submissions in 2022, and TAP submissions in 2021.

The following are some of the other stakeholders that NRPC has worked with on a continuing or an ad hoc basis:

- The Greater Nashua Regional Coordination Council for Community Transportation (RCC 7) seeks to provide improved, cost-effective, coordinated services to persons with disabilities, the elderly, and individuals with lower incomes.
- The Nashua Transit System, through attendance at most staff meetings.
- The Merrimack Town Center Committee, which has developed a plan for trails and sidewalks in the town center.

- The Souhegan Valley Transportation Collaborative (SVTC), a grassroots organization of area citizens concerned about transportation options in the Souhegan Valley.
- Milford-Brox Environmental Citizens are dedicated to preserving an ecologically sensitive area of Milford.
- Conservation Commissions throughout the region coordinate trail development and mapping.
- Complete Streets Advisory Committee serves to develop and promote a safe transportation network that serves all users including pedestrians, bicyclists, and motorists of all ages and abilities in the region.
- MPO Policy Committee is the decision-making body for all MPO Policy decisions and receives recommendations from the TTAC and the Executive Committee before taking formal action on transportation issues.
- TTAC is charged under the NHDOT planning process to provide the NRPC with technical guidance regarding transportation policy and projects in the region. The committee ensures that NRPC decisions are consistent with community goals and objectives, incorporate sound planning principles, and are open and accessible to input from the public.
- Public Advisory Committee for the NH Capitol Corridor & Transit Alternatives Analysis
- Nashua Downtown Circulation Forum
- CommuteSmart NH is a partnership between NH's 9 RPCs and specific transit agencies (partners), working in collaboration with rideshare/ride match providers, state agencies, municipalities, businesses, and public health organizations. CommuteSmart NH is dedicated to encouraging and assisting people to choose sustainable transportation options in place of driving single occupancy vehicles.

EXISTING CONDITIONS

DEMOGRAPHICS

POPULATION

The 2020 Census recorded 217,543 residents in the Nashua Region. Between 2010 and 2020, the Nashua Region's population growth rate was 5.7%, an increase of 11,778 residents. This is higher than both the county's population growth rate of 5.5% and the statewide population growth rate of 4.6%. Though all communities in the Nashua Region grew between 2010 and 2020, growth rates varied considerably between communities. Brookline had the highest growth rate at 13%, well over double the regional rate of growth, followed by Pelham at 10.3% and Hollis at 8.6%. Lyndeborough (1.1%), Litchfield (2.5%), and Hudson (3.8%) had the lowest percentage growth rates.

Nashua, the region's largest community and the state's second largest city, experienced the greatest numerical population gain adding 4,828 net residents, far exceeding all other communities, and reaching an all-time population high of over 91,000. Pelham, Merrimack, and Milford each added more than 1,000 residents. On the opposite end, the more rural communities of Mont Vernon, Mason, and Lyndeborough added the fewest residents, totaling only 260 across all three towns.

These population trends have implications for and ramifications on transportation planning and investment decisions. Slowing population growth enables policymakers to focus attention on a backlog of transportation needs that have gone unaddressed through the decades. For example, the opportunity exists to shift priorities from capacity increases throughout the transportation network to maintenance and improvement of the region's infrastructure. A great deal of transportation infrastructure was constructed between the 1960's and late 1980's to serve rapid population growth. Much of this infrastructure is now in need of substantial maintenance, rehabilitation, and reconstruction.

The NRPC region and NH are aging at a faster rate than is occurring nationwide. Since 1990 the share of the region's population under forty-five declined, while older cohorts have grown significantly. This trend was particularly pronounced among those aged 20 to 44, which declined from 45% of the population to 31%. Those in the 45 to 64 range increased in share from 18% to 31%.

Seniors 65 and older now constitute 13% of the population; only Brookline has less than a 10% share in this category. As seniors age, their motor skills, reflexes, and vision may be impacted and the ability to operate an automobile may be diminished. Measured by miles traveled, seniors 70 years and older are more likely to be involved in fatal crashes than all but the youngest group eligible to drive. The likelihood for serious crashes is particularly pronounced among those age 85 and above. This is the age group most rapidly accelerating and is projected to more than triple by the year 2045.

Municipality	2010	2020	Numeric Change	Percent Change
Amherst	11,201	11,753	552	4.9%
Brookline	4,991	5,639	648	13.0%
Hollis	7,684	8,342	658	8.6%
Hudson	24,467	25,394	927	3.8%
Litchfield	8,271	8,478	207	2.5%
Lyndeborough	1,683	1,702	19	1.1%
Mason	1,382	1,448	66	4.8%
Merrimack	25,494	26,632	1,138	4.5%
Milford	15,115	16,131	1,016	6.7%
Mont Vernon	2,409	2,584	175	7.3%
Nashua	86,494	91,322	4,828	5.6%
Pelham	12,897	14,222	1,325	10.3%
Wilton	3,677	3,896	219	6.0%
NRPC Total	205,765	217,543	11,778	5.7%
Hillsborough				
County	400,721	422,937	22,216	5.5%
New Hampshire	1,316,470	1,377,529	61,059	4.6%

Table 16: Population of NRPC Communities, 2010 to 2020

Source: Source: U.S. Decennial Census 2010 and 2020 (Table P1)

As can be seen in the graph below, there were significant changes in the population age composition between 2010 and 2020. The two oldest age groups – "55-64 Years" and "65+ Years" both grew significantly, by 53.1% and 33.8%, respectively, for an increase of 20,101 persons. Early career age groups – "20-24 years" and "25-34 years", grew moderately by 12.1% and 15.4%, respectively, totaling 4,961 persons. On the other end, the youngest age group "0-19 Years" decreased by -11.0%, a net decline of 6,137 people. Similarly, the mid-to-late career age groups "35-44 Years" and "45-54 Years" shrunk by 18.8% and 11.3%, respectively, a decrease of a total of 10,108 persons. The number of families with children is declining, which may reflect both declining birth rates as well as a lack of affordable housing options for younger families. The aging of the population has significant implications for the Region's transportation needs.



Figure 3. Regional Population Change by Age between 2010 and 2020

Source: American Community Survey 5-Year Estimates 2006-2010 and 2016-2020 (Table S0101)

Between 2010 and 2020, "Households with one or more people 65 and over" in the region increased by 54.2% (8,649 households), while "Householder living alone" increased by 20.0% (3,470 households). On the other end, "Household with one or more people under 18" decreased by 10.3% (-2,884 households). These trends reflect an aging population and lower birth rates, and result in smaller households.

Median household incomes in most NRPC communities are higher than the state and county median incomes. This is especially true in the higher-income towns of Brookline, Amherst, Hollis, and Mont Vernon. On the other end of the spectrum, Milford, Nashua, and Wilton were below both the county average and statewide average. In general, owners' median household incomes were significantly higher than that of renters. For Renter Households, the median household income in Wilton is far below state and regional averages at \$27,222 and is the lowest in the Nashua Region. Because the overall number of renters in Wilton is small, this suggests a concentration of low-income renters, likely in the downtown area. Pelham (\$35,045) and Hudson (\$40,893) also have median renter household incomes below state and county medians. In all communities, the income disparity between renter and owner households is considerable, though that disparity is far wider in some communities such as Wilton and much

less pronounced in Nashua, Merrimack and Milford which have larger numbers of higher-end rental housing.

Municipalities	All Households	Owners	Renters
Amherst	\$136,006	\$145,021	\$51,104
Brookline	\$142,033	\$144,737	\$65,536
Hollis	\$131,745	\$138,034	\$55,875
Hudson	\$110,227	\$116,771	\$40,893
Litchfield	\$112,386	\$119,858	\$70,833
Lyndeborough	\$98,125	\$101,000	\$68,125
Mason	\$102,647	\$106,042	\$75,536
Merrimack	\$108,422	\$112,403	\$52,350
Milford	\$74,285	\$103,365	\$48,048
Mont Vernon	\$125,551	\$126,581	\$72,000
Nashua	\$73,785	\$98,689	\$50,025
Pelham	\$108,223	\$117,014	\$35,045
Wilton	\$76,462	\$92,404	\$27,222
Hillsborough County	\$82,099	\$106,773	\$48,056
New Hampshire	\$77,923	\$94,989	\$45,468

Table 17: Household Income by Community & Tenure

Source: American Community Survey 5-Year Estimates 2016-2020 (Table B25119)

EMPLOYMENT AND COMMUTING

USDOT initiated an effort in 1969 to collect detailed data on personal travel. The 1969 survey was the first Nationwide Personal Transportation Survey (NPTS). The survey was conducted again in 1977, 1983, 1990, and 1995. In 2001, the survey was expanded by integrating the Federal Highway Administration (FHWA) managed NPTS and the Bureau of Transportation Statistics-sponsored American Travel Survey (ATS), and the survey was re-named the National Household Travel Survey (NHTS).

The 2017 NHTS asked respondents how they 'usually' commute to work. It can be seen in the table that nationally around 4% of the population walk or bike to work.

Single-occupancy driving continues to be the dominant mode of commuting in the region, with a 78% mode share. Shared ride accounts for just 6.5% of all work trips and transit just 1%. Walking and bicycle commuting account for a negligible 1.4% of trips. About 12% work from home. Nearly 40% reported travel time to work of 30 minutes or greater, with 11% commuting 60 minutes or more.

Town/City	Total Commuters	Drive alone	Carpool	Public transportation	Walk	Taxi, Motorcycle, Bike, or Other	Work from home
Amherst	5924	4003	350	0	14	182	1375
Brookline	3262	2649	64	9	7	24	509
Hollis	4329	3219	214	29	6	0	861
Hudson	15237	12549	807	145	20	134	1582
Litchfield	4243	3303	152	0	69	14	705
Lyndeborough	880	718	55	0	7	2	98
Mason	789	680	26	0	0	10	73
Merrimack	14415	11468	686	52	87	281	1841
Milford	8560	7106	458	11	131	47	807
Mont Vernon	1411	1045	45	10	19	10	282
Nashua	49352	37586	4491	1020	1001	396	4858
Pelham	7868	6455	209	50	63	35	1056
Wilton	2090	1758	138	0	29	13	152
TOTAL	118360	92539	7695	1326	1453	1148	14199
MODE SHARE		78.2%	6.5%	1.1%	1.2%	1.0%	12.0%

Table 18: Mode of Transportation to Work

SOURCE American Community Survey 5-Year Estimates 2021 (Table B08101)

Changes in employment levels have had a significant impact on the transportation system. Between 2010 and 2020, total employment in the Nashua labor market area grew from 91,049 to 94,789, a net increase of 3,740 jobs or 4.1%. Merrimack experienced by far the largest increase at 2,063 jobs or 14.0%, followed by Hudson at 1,108 jobs or 10.8%. Wilton experienced the highest numeric and percent decline in employment at 431 jobs or -31.9%. Though job growth in the region between 2010 and 2020 was significant, jobs increased at a lower rate than the overall population growth rate of 5.6%. Since the region did not experience population growth based on natural increase, this suggests that new residents are moving to the region for reasons other than employment and are either commuting jobs to outside of the region, working remotely, or are retired. As can be seen on the following pages, commuting times in the Nashua Region are significant and growing.

Figure 4. Median Commute Time in 2020, by Municipality



Figure 5. Commute Times in 2020, by Municipality



The regional median commute time is 29.1 minutes. Among NRPC municipalities, Nashua has the shortest commute time and Mason has the longest. These observations appear reasonable given

Nashua is the regional job center and regional transportation hub while Mason is a community farther away from Nashua and is not on a major highway. Other similar communities also have longer commute times including Brookline, Lyndeborough, Mont Vernon, and Pelham. It is striking to note that only 10% of the region's workers commute for ten minutes or less, 41% commute for thirty minutes or more and 12% have a commute time of 60 minutes or longer. As can be seen in the figure below, the percentage of workers commuting out of the region is also growing.







Figure 7. Regional Commuter by Home Origin and Work Destination in 2014 and 2019

MTP Survey Respondent Travel Characteristics

Additional data on travel characteristics were obtained through the MTP survey. Although not a scientific sample, the 346 responses are enough to provide a sufficient profile of regional travel.

- 92% drive their own vehicles for non-work trips, 1% take NTS, and 4% bike or walk.
- 91% drive alone to work, less than 1% carpool, 1% take the Lowell train to Boston, 2% take NTS or Boston Express.
- 40% rarely use NTS, 49% never use NTS, and 10% frequently use NTS.
- 55% of commuters rarely or never telecommute, 13% up to a few times a month, 23% once a week or more, and 8% daily.
- While 4% of respondents bike or walk to work and 69% of respondents bike or walk for recreation on a weekly basis.
- If passenger rail were provided from Nashua to Boston; 14% of respondents would occasionally or frequently use this service and 78% would use this service for leisure or recreational trips.
- 27% said they were highly likely or likely to purchase an electric vehicle, 52% unlikely, and 18% were not sure.
- 43% have never used ride services such as Uber and Lyft, 2% have use them regularly, and 14% occasionally.
- 38% of respondents use these services for restaurants or other social events, 14% use for access to transit, and 45% for other reasons.

REGIONAL ROAD NETWORK

Automobile travel is the dominant form of transportation in the NRPC region with an extensive road and highway network. The region's principal north-south transportation routes include the F E Everett Turnpike, US3, NH3A, NH38, NH128, NH122, NH13, NH31, and the Daniel Webster Highway. Principal east-west transportation routes include NH101, NH101A, NH130, and NH111. Current and previous traffic count information for all the roads and highways detailed below are available <u>Here</u>.

NORTH-SOUTH ROUTES

F E Everett Turnpike

The FE Everett Turnpike is the primary north/south arterial in the region. The Turnpike runs from the Massachusetts (MA) state line northward, through Nashua and Merrimack, and exits the region at the Merrimack/Bedford border. It connects the greater Boston area with the Nashua region and provides access to the central and northern areas of NH. Construction of the F E Everett Turnpike began in 1953. By 1966, the turnpike extended 45 miles between the MA border and Concord. Interchanges have been added and improved over the years; the most recent interchange, which provides access to the Manchester Regional Airport, opened to traffic in 2011 just north of our region in Bedford.

The Turnpike is limited access median-divided, and the number of travel lanes varies from 3 in each direction from the MA state line northward to approximately Exit 11 in Merrimack where it currently narrows to 2 lanes in each direction.

Daniel Webster Highway

The Daniel Webster Highway (DWH) provides an alternative arterial north/south corridor to the FE Turnpike in Nashua and Merrimack, extending from the MA state line through Nashua to the Henri Burque Highway where it rejoins US3. It then continues through Merrimack where it exits the region at the Bedford town line. The portion of the DWH in South Nashua that runs from the MA state line to Exit 3 of the FE Everett Turnpike serves a vital transportation function as the main thoroughfare for the South Nashua Commercial District that attracts consumers in both southern NH and MA. Its location on the state border encourages shoppers to enjoy NH's sales tax-free environment.

NH3A

NH3A serves as the major north/south thoroughfare in the NRPC Region east of the Merrimack River. The portion of the corridor in Hudson comprises Lowell Rd and River Rd, which serves local and regional transportation roles.

The route also parallels US3 at this juncture and the Merrimack River, thereby connecting Litchfield with Tyngsborough, MA. It is an alternative commuting route for those working within southern NH and Boston metro area. It is also an important road for freight transportation and local attractions, including the Walmart, various shopping plazas, and Hudson Center.

NH38

NH38 runs generally northeasterly through Pelham between the MA state line and the Salem town line. The route provides access to MA and I-93.

NH128

NH128 also runs north/south through Pelham and provides access to Lowell, MA. NH128 also provides an alternative route to Manchester, NH.

NH122

NH122 provides a north/south corridor west of Nashua from the MA state line through Hollis and Amherst

NH13

NH13 provides a north/south corridor from the MA state line in Brookline through Milford and Mont Vernon. It provides an important economic connection between MA, employment, and retail centers in Nashua and Milford. It also provides an important link between Milford and the rural areas to the north and west.

East-West Routes

NH101A

NH101A is part of the National Highway System (NHS) and is a primary east/west corridor west of the Merrimack River. It extends east from Milford to downtown Nashua where it terminates at the intersection of Main Street, providing access to the downtown business district, South Nashua, and MA via the Daniel Webster Highway. Until the 1970s, NH101A was a two-lane rural highway, but as the communities west of Nashua grew, so did traffic volumes. In the mid-70s, the road was widened to 5-lanes from the Nashua/Merrimack town line westerly to just over the Amherst town line, and between 1987 and 1990, the rest of the roadway was widened to its intersection with the NH101 Bypass in Milford.

NH101

NH101 is part of the NHS and is a primary east/west corridor in southern NH, connecting the NRPC Region to Keene in the western part of the state and the Seacoast to the east. In the western end of the

region, NH101 connects Wilton, Milford, and Amherst; it also connects the western end of the NRPC region to Nashua via an interchange with NH101A.

NH102

NH102 provides a critical east/west connection between the NRPC region to the west and the Seacoast region to the east. NH102 serves as an alternative east/west corridor to NH111 within the region.

NH130

NH130 extends westerly from Nashua, providing access to Hollis and Brookline where it intersects with NH13.

NH111

NH111 is an east/west arterial roadway that traverses through the communities of Hollis, Nashua, and Hudson in this region. It extends from the southeastern corner of Hollis, through downtown Nashua, over the Merrimack River and into Hudson before exiting the region at the Hudson-Windham town line and eventually connecting with I-93 via Exit 3 in Windham, NH.

Route 111 is a major and critical transportation corridor, providing commuters with access to the FE Everett Turnpike and downtown Nashua. The corridor also accommodates retail and commercial services along various portions of its route.

The roadway crosses over the Merrimack River into Hudson via Taylor Falls Bridge where it intersects with NH3A and NH102. This segment represents a major regional traffic choke point as it is the only river crossing for several miles in either direction.

Crossing the Merrimack River

There are only two crossings of the Merrimack River within the Region. The northern-most crossing, between downtown Nashua and Hudson Center, is comprised of two one-way bridges:

- Taylor Falls Bridge crosses the river in the easterly direction and the Veterans Memorial Bridge crosses in the westerly direction. Both bridges carry two lanes of traffic and are consistently plagued by serious intersection capacity problems on both sides of the Merrimack River. The traffic volume on the Taylor Falls Bridge at the Nashua-Hudson town line was 32,150 (AWDT, 2022) and the rate of change in traffic volume was between 5% and 10% over the last 5 years and even during the COVID-19 pandemic.
- Sagamore Bridge is the second and southernmost crossing of the Merrimack River in the region. The bridge was expanded as part of the Circumferential Highway project and connects the FE Everett Turnpike and Daniel Webster Highway with NH3A in Hudson. This is a high-capacity bridge with 4 lanes of traffic in each direction. The bridge is a major commuting route for residents east of the Merrimack River seeking to access the Turnpike. Adjacent to the Sagamore Bridge is the only dedicated bicycle pedestrian crossing of the Merrimack in the region. The traffic volume on the bridge at the Nashua-Hudson town line was 44,610 (AWDT, 2022) and the rate of change in traffic volume was between 5% and 10% over the last 5 years and even during the COVID-19 pandemic.
- In November 2011, the Manchester Airport Access Road opened. This road provides another crossing of the Merrimack River just north of our region. While the primary purpose of the road is to provide direct access to Manchester-Boston Airport from the FE Everett Turnpike, it also

improves access to Litchfield. Past analyses have suggested that the highway is located too far north to significantly reduce traffic crossing at the Taylor Falls/Veterans Memorial Bridge or the Sagamore Bridge.

NHDOT Highway Tier System

NHDOT has a roadway classification system that groups the state's roads and highways into tiers established under NHRSA 229:5. The system is focused on managing the state's road network as efficiently as possible. While every road is critical to the people and businesses that regularly use it. Each road also serves numerous categories of users and provides different levels of mobility. Grouping based on similarities such as connectivity, regional significance, and winter maintenance provides a framework for analysis of condition, performance, investment levels, operation, and maintenance levels.

<u>Class I, Trunk Line Highways</u>, consist of all existing or proposed highways on the primary state highway system, excepting all portions of such highways within the compact sections of cities and towns. The state assumes full control and pays costs of construction, reconstruction, and maintenance of its sections; the portions in compact areas are controlled by the cities and towns under Class IV highways.

<u>Class II, State Aid Highways</u>, consist of all existing or proposed highways on the secondary state highway system, excepting portions of such highways within the compact sections of cities and towns, which are classified as Class IV highways. All sections improved to the satisfaction of the commissioner are maintained and reconstructed by the State.

All unimproved sections, where no state and local funds have been expended, must be maintained by the city or town in which they are located until improved to the satisfaction of the Commissioner of Transportation.

All bridges improved to state standards on Class II highways are maintained by the State. All other bridges on the Class II system shall be maintained by the city or town until such improvement is made. Bridge Aid funds may be utilized to affect such improvements.

<u>Class III, Recreational Roads</u>, consist of all such roads leading to, and within, state reservations designated by the Legislature. The state highway department assumes full control of reconstruction and maintenance of such roads.

Class III-a, Boating Access Highway, shall consist of new boating access highways from any existing highway to any public water in this state. All Class III-a highways shall be limited access facilities as defined in RSA 230:44. Class III-a highways shall be subject to the layout, design, construction, and maintenance provisions of RSA 230:45-47 and all other provisions relative to limited access facilities, except that the Executive Director of the Fish and Game Department shall have the same authority for Class III-a highways that is delegated to the Commissioner of the Department of Transportation for limited access facilities. No access shall be granted to an abutter for any Class III-a highway. A Class III-a highway may be laid out subject to gates and bars or restricted to the accommodation of persons on foot, or certain vehicles, or both, if Federal funds are not used.

<u>Class IV. Town and City Streets</u>, consist of all highways within the compact sections of cities and towns. Extensions of Class I (excluding turnpikes and interstate portions) and Class II highways through these areas are included in this classification. Municipalities with compacts are listed in RSA 229:5.

<u>Class V, Rural Highways</u>, consist of all other traveled highways which the city or town has the duty to maintain regularly.

<u>Class VI, Unmaintained Highways</u>, consist of all other existing public ways, including highways discontinued as open highways, and made subject to gates and bars, and highways not maintained and repaired in suitable condition for travel thereon for five (5) successive years or more. However, if a city or town accepts from the state a Class V highway established to provide a property owner or property owners with highway access to such property because of a taking under RSA 230:14, then notwithstanding RSA 229:5, VII, such a highway shall not lapse to Class VI status due to failure of the city or town to maintain and repair it for five (5) successive years, and the municipality's duty of maintenance shall not terminate, except with the written consent of the property owner or property owners.

Scenic Roads are special town designations of Class IV, V and VI highways where cutting or removal of a tree, or disturbance of a stonewall must go through the hearing process and written approval of local officials. (See RSA 231:157).

Traffic Volumes and Trends

Motor vehicle traffic volume counts are collected by NRPC in cooperation with NHDOT to support the Highway Performance Monitoring System (HPMS). HPMS is a nationwide database detailing the condition and use of local, state, and federal roads.

Traffic count locations are determined by the NHDOT to fulfill reporting requirements under the HPMS. There are approximately 385 HPMS locations in the region, counted on a rotating basis. Staff collects data at approximately 130 locations during the warmer months.

NRPC collects additional local traffic data at the request of town officials. These local efforts support specific local municipal projects such as traffic circulation studies, intersection analyses, and signalization projects. Finally, vehicle speed and classification data are collected for planning purposes by NRPC staff. NRPC maintains a database of over 1,000 historical traffic counts.

In addition to the count mentioned above, NHDOT maintains 62 permanent traffic count locations. These locations count traffic 24/7 year-round. This data supports all aspects of highway planning, design, operations, maintenance, and all phases of the HPMS. Additionally, these locations are strategically located to reflect real changes in traffic volume and overall growth in traffic on a subregional basis. Their strategic locations provide sufficient and accurate data to determine true average annual traffic growth rates.

The following table lists traffic counts and growth trends along key corridors in the region for both a 10year period (2009 to 2019) and a 20-years period (1999 to 2019). Please note that the years that are associated or effected by the COVID-19 pandemic were intentionally excluded from this analysis.

Table 19: Existing Traffic Volumes and Trends

20-Year Growth Rates	10-Year Growth Rates
1999 to 2019	2009 to 2019%

Hudson - Circumferential Highway at Nashua TL (Sagamore Bridge)	1.84%	1.27%
Merrimack - US 3 North of Bedford Road	0.72%	2.18%
Milford - NH 101A At Amherst TL	0.07%	0.10%
Nashua - NH 111 At Hudson TL	-0.89%	-0.65%
Nashua - FEET At the Canal Bridge Exits 5-6	1.48%	0.79%
Regional Average Annual Growth Rate	0.64%	0.74%
Southeastern section of NH	0.67%	0.97%
Overall Statewide Average Annual Growth Rate	0.43%	0.77%

Please note that the years that are associated or effected by the COVID-19 pandemic were excluded from this analysis.

ROADWAY CONGESTION

NRPC maintains a Congestion Management Process that was discussed in the Planning Emphasis Areas section. The following are summary reports obtained from iterative travel time runs that show peak period travel speeds along roadway segments and Travel Time Reliability (TTR) ratios. For studies conducted via travel time runs, TTR provides a ratio of actual travel time to expected time (driving at the speed limit). Ratios greater than 1 indicate congestion forcing speeds under the limit; a TTR greater than 1.5 is indicative of unacceptable levels of delay.

NRPC is now migrating from the travel time run methodology to use of probe data, which will enable much larger sample sizes to be collected and, consequently, more valid travel times and reliability indicators.

		AM Peak			PM Peak		
Southbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Exit 13 to Exit 12	1.90	3.03	37.6	1.73	1.97	58.0	1.13
Exit 12 to Exit 11	3.80	4.23	53.9	1.21	4.10	55.6	1.17
Exit 11 to Exit 10	1.00	0.98	61.0	1.07	0.98	61.0	1.06
Exit 10 to Exit 8	1.70	1.57	65.1	0.99	1.57	65.1	0.96
Exit 8 to Exit 7	0.90	0.97	55.9	0.95	0.97	55.9	1.02
Exit 7 to Exit 5	1.90	1.75	65.1	0.77	1.75	65.1	0.77
Exit 5 to Exit 4	1.50	1.53	58.7	0.92	1.60	56.3	0.96
Exit 4 to Exit 1	1.60	1.68	57.0	0.98	1.73	55.4	1.01
Exit 1 to Mass SL	1.70	1.65	61.8	0.91	1.57	65.1	0.84
Northbound							
Exit 12 to Exit 13	1.90	1.75	65.1	0.88	1.75	65.1	0.92
Exit 11 to Exit 12	3.80	3.50	65.1	0.94	5.05	45.1	1.44
Exit 10 to Exit 11	1.30	1.20	65.0	1.00	2.85	27.4	2.38
Exit 8 to Exit 10	1.80	1.65	65.5	0.95	2.63	41.0	1.60
Exit 7 to Exit 8	0.90	1.00	54.0	1.05	0.98	54.9	0.96
Exit 5 to Exit 7	2.40	2.35	61.3	0.91	2.53	56.8	0.99
Exit 4 to Exit 5	1.80	1.68	64.2	0.86	1.67	64.8	0.86
Exit 2 to Exit 4	1.60	1.45	66.2	0.85	1.48	64.7	0.88
MA State to Exit 2	1.00	0.93	64.3	0.84	0.97	62.1	0.87

Table 20: FE Everett Turnpike Congestion Report

Table 21: NH 101A & Canal/Bridge Streets Congestion Report

		AM Peak			PM Peak		
Eastbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Bypass west end to Milford Oval	2.86	5.30	32.4	1.08	5.78	29.7	1.18
Milford Oval to Bypass West End	1.94	3.88	30.0	1.04	4.32	27.0	1.16
Bypass West End to NH122	0.60	1.63	22.0	1.59	1.23	29.2	1.20
NH122 to Continental Blvd	3.55	6.47	32.9	1.19	7.12	29.9	1.32
Continental Blvd to Thornton Rd	1.43	3.23	26.5	1.51	3.80	22.6	1.77
Thornton Rd to Somerset Pkwy	0.85	1.53	33.3	1.20	1.70	30.0	1.33
Somerset Pkwy to Tnpk Exit 7	1.06	2.13	29.8	1.00	2.85	22.3	1.34
Tnpk Exit 7 to NH 130 Broad St	0.70	2.52	16.7	1.74	2.83	14.8	1.97
NH 130 to Main St.	0.70	2.37	17.7	1.79	2.58	16.3	1.95
Main St. to Canal St.	0.20	0.98	12.2	2.39	1.42	8.5	3.43
Canal St. to Taylor Falls Bridge	1.00	2.70	22.2	1.30	3.60	16.7	1.73
Westbound							
Taylor Falls Bridge to Main St.	1.20	3.67	19.6	1.54	5.10	14.1	2.14

Main St. to Library Hill	0.10	0.75	8.0	3.48	0.77	7.8	3.55
Library Hill to NH 130 Broad St	0.70	1.43	29.3	1.08	1.32	31.9	1.00
NH 130 to Tnpk Exit 7	0.70	1.32	31.9	0.92	1.43	29.3	0.99
Exit 7 to Somerset Pkwy	1.06	2.78	22.9	1.31	2.98	21.3	1.41
Somerset Pkwy to Thornton Rd	0.85	1.77	28.9	1.39	2.27	22.5	1.78
Thornton Rd to Continental Blvd	1.43	3.38	25.4	1.58	4.67	18.4	2.17
Continental Blvd to NH122	3.55	6.07	35.1	1.12	7.93	26.8	1.47
NH122 to Bypass West End	0.60	1.18	30.4	1.15	1.18	30.4	1.15
Bypass west end to Milford Oval	1.94	3.78	30.8	1.02	4.57	25.5	1.22
Milford Oval to Bypass West End	2.86	5.15	33.3	1.05	6.08	28.2	1.24

Table 22: NH 101 Congestion Report

		AM Peak			PM Peak		
Eastbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Temple line to NH31 North	5.18	6.23	49.9	0.92	6.33	49.1	0.93
NH31 North to Bypass start	2.06	3.07	40.3	1.29	3.23	38.2	1.35
Bypass start to NH13	3.56	4.52	47.3	1.14	4.80	44.5	1.21
NH13 to NH101a exit	1.78	2.55	41.9	1.31	2.20	48.5	1.13
NH101a to Baboosic Lake Rd	2.97	3.22	55.4	0.90	3.12	57.2	0.88
Baboosic Lk Rd to H Greeley Rd	2.22	2.72	49.0	1.02	2.62	50.9	0.98
H Greeley Rd to Joppa Hill Rd	2.32	2.87	48.6	1.03	2.87	48.6	1.03
Westbound							
Joppa Hill Rd to H Greeley Rd	2.32	2.85	48.8	1.02	2.80	49.7	1.01
H Greeley Rd to Baboosic Lk Rd	2.22	2.62	50.9	0.98	2.62	50.9	0.98
Baboosic Lake Rd to NH101a	2.97	3.22	55.4	0.90	3.10	57.5	0.87
NH101a exit to NH13	1.89	1.88	60.2	0.91	1.85	61.3	0.89
NH13 to Bypass end	3.56	4.55	46.9	1.15	5.08	42.0	1.29
Bypass end to NH31 North	2.06	3.18	38.8	1.34	3.30	37.5	1.38
NH31 North to Temple line	5.18	6.23	49.9	0.92	6.47	48.1	0.95

Table 23: NH 111 Congestion Report

		AM Peak			PM Peak		
Eastbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Mass line to Westgate	3.39	5.25	38.7	1.00	5.02	40.5	0.95
Westgate to Tpk Exit 5	1.29	3.35	23.1	1.52	3.68	21.0	1.66
Tpk Exit 5 to Main St	1.66	3.82	26.1	1.15	4.22	23.6	1.27
Main St to NH102	1.32	4.35	18.2	1.65	7.12	11.1	2.69
NH102 to Central St	1.85	4.68	23.7	1.27	7.15	15.5	1.93
Central St to Windham line	2.72	3.65	44.7	0.99	3.95	41.3	1.07

Westbound							
Windham line to Burnham Rd	2.72	4.07	40.1	1.10	4.88	33.4	1.32
Burnham Rd to NH102	1.86	4.35	25.7	1.17	4.50	24.8	1.21
NH102 to Main St	1.32	4.83	16.4	1.83	5.58	14.2	2.11
Main St to Tnpk Exit 5	1.66	4.18	23.8	1.26	4.50	22.1	1.35
Tnpk Exit 5 to Westgate	1.29	2.83	27.3	1.28	2.95	26.2	1.33
Westgate to Mass line	3.39	5.18	39.2	0.99	5.65	36.0	1.08

Table 24: US 3 Daniel Webster Highway Congestion Report

		AM Peak			PM Peak		
Southbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Bedford TL to Bedford Rd.	2.20	3.52	37.5	0.96	4.23	31.2	1.16
Bedford Rd. to Baboosic Lake Rd	1.70	3.50	29.1	1.05	4.07	25.1	1.22
Baboosic Lake Rd to Greeley St	2.00	3.62	33.2	0.92	4.18	28.7	1.06
Greeley St to Industrial Dr	1.30	2.03	38.4	1.06	2.17	36.0	1.13
Industrial Dr to H Burque Hwy	2.70	4.03	40.2	1.01	4.50	36.0	1.13
Northbound							
Bedford Rd to Bedford TL	2.20	3.68	35.8	1.00	3.65	36.2	0.99
Baboosic Lake Rd to Bedford Rd	1.70	3.42	29.9	1.02	3.70	27.6	1.11
Greeley St to Baboosic Lake Rd	2.00	4.00	30.0	1.01	7.92	15.2	2.01
Industrial Blvd to Greeley St	1.30	2.08	37.4	1.08	3.77	20.7	1.96
H Burque Hwy to Industrial Blvd	2.70	3.97	40.8	1.00	3.83	42.3	0.96

Table 25: Main Street Nashua Congestion Report

		AM Peak			PM Peak		
Southbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Amherst St to Factory St	0.29	2.25	7.7	3.27	1.43	12.1	2.07
Factory St to Hollis St	0.27	1.07	15.2	1.68	2.10	7.7	3.30
Hollis St to Lake St	0.37	1.82	12.2	2.06	1.47	15.1	1.66
Lake St to South Main St	1.00	2.53	23.7	1.24	2.58	23.2	1.26
Northbound							
Factory St to Amherst St	0.29	2.03	8.6	2.96	2.33	7.5	3.39
Hollis St to Factory St	0.27	1.58	10.2	2.48	1.17	13.9	1.83
Lake St to Hollis St	0.37	2.07	10.7	2.34	1.85	12.0	2.11
South Main St. to Lake St	1.00	2.85	21.1	1.39	3.08	19.5	1.50

		AM Peak			PM Peak		
Northbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Massachusetts S/L to Dracut Rd	1.58	2.83	33.5	1.20	3.02	31.4	1.27
Dracut Rd to Sagamore Bridge	0.78	1.25	37.4	0.93	1.57	29.9	1.18
Sagamore Bridge to Wason Rd	0.15	0.80	11.3	2.69	0.85	10.6	2.83
Wason Rd to Pelham Rd	1.25	2.43	30.8	0.98	3.83	19.6	1.53
Pelham Rd to County Rd	0.22	0.45	29.3	1.00	0.47	28.3	1.06
County Rd to Central St	0.34	1.90	10.7	2.78	2.22	9.2	3.26
Central St to Ferry St	0.41	1.50	16.4	1.83	2.20	11.2	2.68
Southbound							
Central St to County Rd	0.34	1.73	11.8	2.54	1.63	12.5	2.40
County Rd to Pelham Rd	0.22	0.53	24.8	1.23	0.47	28.3	1.04
Pelham Rd to Wason Rd	1.25	3.35	22.4	1.34	2.98	25.1	1.19
Wason Rd to Sagamore Bridge	0.15	0.83	10.8	2.81	1.20	7.5	4.00
Sagamore Bridge to Dracut Rd	0.78	1.43	32.7	1.07	1.65	28.4	1.23
Dracut Rd to Massachusetts S/L	1.58	2.60	36.5	1.10	2.50	37.9	1.06

Table 26: NH 3A Hudson Congestion Management Report

Table 27: NH 102 Hudson Congestion Management Report

		AM Peak			PM Peak		
Eastbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Ferry St to Elm Ave (3A)	0.97	2.95	19.7	1.52	3.03	19.2	1.56
Elm Ave (3A) to Page Rd	2.63	4.17	37.9	1.05	3.97	39.8	1.01
Page Rd to Londonderry TL	1.11	2.05	32.5	1.23	1.90	35.1	1.14
Londonderry TL to NH128	2.91	3.77	46.4	1.14	4.38	39.8	1.33
NH128 to I-93	2.00	3.88	30.9	1.10	4.93	24.3	1.40
Westbound							
I-93 to NH128	2.00	4.45	27.0	1.26	4.98	24.1	1.41
NH128 to Londonderry TL	2.91	3.33	52.4	1.01	3.73	46.8	1.13
Londonderry TL to Page Rd	1.11	1.72	38.8	1.03	1.88	35.4	1.13
Page Rd to Elm Ave (3A)	2.63	6.37	24.8	1.62	4.05	39.0	1.03
Elm Ave (3A) to Ferry St	1.01	3.10	19.5	1.53	2.57	23.6	1.27

		AM Peak			PM Peak		
Eastbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
NH122 to Roundabout	4.34	7.10	36.7	1.02	7.50	34.7	1.08
Roundabout to Dublin Ave	0.69	2.42	17.0	1.76	1.33	30.8	0.97
Dublin Ave to Nashua Mall	0.65	1.52	25.6	1.18	1.33	29.1	1.03
Nashua Mall to Broad St Pkwy	0.46	1.45	19.0	1.57	2.03	13.6	2.21
Broad St Pkwy to Amherst St	0.46	1.93	14.3	2.10	2.92	9.5	3.17
Westbound							
Amherst St to Broad St Pkwy	0.46	1.05	26.3	1.14	1.22	22.7	1.33
Broad St Pkwy to Nashua Mall	0.46	1.97	14.0	2.14	2.67	10.3	2.90
Nashua Mall to Dublin Ave	0.64	1.00	38.4	0.77	1.65	23.3	1.28
Dublin Ave to Roundabout	0.68	2.30	17.7	1.69	1.28	31.8	0.95
Roundabout to NH122	4.34	7.20	36.2	1.04	6.90	37.7	0.99

Table 28: NH 130 Congestion Management Report

Table 29: NH 38 Congestion Management Report

		AM Peak			PM Peak		
Northbound	Length (miles)	TT (min)	Speed	TTR	TT (min)	Speed	TTR
Old Gage Hill Rd to Salem line	0.99	1.42	41.9	0.96	1.45	41.0	0.98
Main St to Old Gage Hill Rd	2.25	3.12	43.3	1.09	3.15	42.9	1.09
Willow St to Main St	1.07	1.95	32.9	1.06	2.10	30.6	1.14
Massachusetts line to Willow St	1.45	2.03	42.8	0.82	2.20	39.5	0.88
Southbound							
Salem line to Old Gage Hill Rd	0.99	1.30	45.7	0.87	1.38	42.9	0.93
Old Gage Hill Rd to Main St	2.25	3.38	39.9	1.18	3.43	39.3	1.19
Main St to Willow St	1.07	2.03	31.6	1.11	2.23	28.7	1.21
Willow St to Massachusetts line	1.45	2.17	40.1	0.87	2.15	40.5	0.86

FREIGHT MOVEMENT

The nation's transportation system consists of over 4,000,000 miles of roads and highways, about 140,000 miles of railroad tracks, nearly 25,000 miles of navigable waterways, and almost 2,800,000 miles of pipelines. The nation's transportation network moves nearly 19.6 billion tons of goods. USDOT anticipates an ever-increasing amount in air and multimodal freight activity.

The FAST Act of 2015 required several provisions to improve the condition and performance of the national freight network and to support investment in freight-related surface transportation projects. The legislation established a national policy of maintaining and improving the condition and performance of the National Multimodal Freight Network to ensure that the Network provides a foundation for the USA to compete in the global economy. The FAST Act specifies goals associated with this national policy related to the condition, safety, security, efficiency, productivity, resiliency, and reliability of the Network, and to reduce the adverse environmental impacts of freight movement on the Network.

NHDOT forecasts that freight movement via trucks and highways is forecasted to increase by 80% over the next 20 years. This will result in increased wear and tear on roads and highways, truck-related traffic congestion, and create safety concerns in many locations. This provides an opportunity to invest in rail corridors and freight intermodal facilities to minimize bulk freight traveling long distances by highways. Additionally, businesses in the region are relying on "Just-in-Time" delivery for raw materials, supplies, components, and goods movements. This shows the need to improve reliability of shipping and be prepared for the increased demand for individual shipping. Unfortunately, much of the rail network in NH cannot support moderate to high-speed rail operations. This is an opportunity to invest in rail freight infrastructure to improve competitiveness of network in our region and marginally reducing dependency on truck freight.¹

Road Network

Freight movement within the NRPC region is mainly via large trucks on highways. Roads and highways within the region are generally wide enough to accommodate trucking vehicles with few exceptions where the road narrows.²

The primary north/south arterial in the NRPC region is the FE Everett Turnpike (US 3) connects with several other state highways, including Daniel Webster Highway, NH3A, NH102, NH38, NH128, NH 122, NH13, and other interstate highways outside of the region.

The primary east/west arterial serving the NRPC region is NH101A, which serves as both a travel and retail corridor with heavy development in Nashua, Merrimack, and Amherst. Other key state highways that connect with it include NH101, NH130, and NH111.

In the NRPC region, the FE Everett Turnpike (US3), NH101, NH101A, and portions of NH102, NH111, and NH3A are part of the National Highway System (NHS). NH 102, NH 111, and NH3A are Principal Arterials and were included by FHWA in the NHS as part of MAP-21 in 2013. Roadways that are located on a Federal-aid Highway or that are designated as being part of the NHS are eligible for federal funds.

¹ Best Practices in Freight Planning, Final Report June 2017; Prepared for Nashua Regional Planning Commission. Prepared by AECOM Technical Services, Inc.

² ibid
Freight Railroads

There are 2 freight railroad lines operating in the NRPC Region:

<u>New Hampshire Main Line</u> - The New Hampshire Main Line is 39 miles long and runs in our region through Nashua and Merrimack. CSX acquired the line from Pan AM Railways in 2022. The line is maintained to FRA Class 3 from Nashua to Manchester, Class 2 between Manchester and Bow, and Class 1 between Bow and Concord. According to the Federal Railroad Administration (FRA), the maximum allowable operating speeds are 10 mph on Class 1, 25 mph on Class 2, and 40 mph for Class 3 freight trains. There are 11 bridges and 23 grade crossings along the line. CSX, operating from the Massachusetts state line to Bow, delivers unit coal trains and local freight to Nashua, Merrimack, Manchester, and Concord.



The Hillsborough Branch in Milford

<u>Hillsborough Line</u> - The Hillsborough Branch from Nashua to Wilton is 12-mile long and is also owned and operated by CSX after the 2022 acquisition from Pan AM Railways. This section of the branch, known by PAR as the Hillsboro Running Track, passes over 8 bridges and 36 grade crossings and is categorized as FRA Excepted, which means that no passenger trains are permitted to operate along the line and there are limitations on hazardous material that can be transported over the line. According to the FRA, the maximum allowable operating speed on Excepted Track is 10 mph for freight trains. The Milford-Bennington railroad operates freight service along the Hillsborough Branch between the Granite State Concrete batching facility in west Milford and the Granite State Concrete quarry in Wilton. After years of disinvestment, CSX has begun replacing rails, ties and ballast on the branch line and is now providing scheduled freight service. Shippers on the Hillsboro branch include Granite State Concrete of Milford, Harrows Chemicals of Nashua, Hendrix Wire & Cable of Milford, and Granite State Concrete.

Intermodal Facilities in NH

According to the 2012 NH State Rail Plan, goods in New Hampshire are transferred between rail freight and trucks. Transfer of freight between modes requires intermodal connections. However, there are no intermodal facilities within the region nor in NH. There are three intermodal facilities located within 100 miles (Worcester, MA and Ayer, MA, and Auburn, ME). The direct intermodal service from these terminals is entirely to points outside of the Northeast and since most of the truck shipments from NH are to locations within the Northeast or within 250 miles, the potential for significant shipments to move via intermodal service is extremely limited.

Commodity Flow

The NH statewide rail system is grouped into four regions: North Country, Connecticut River Valley, Southern New Hampshire, and Seacoast. Freight rail lines in the Southern New Hampshire sector provide service to the NRPC region. According to the 2019 NH State Freight Plan, the Southern New Hampshire region currently receives three quarters of all freight shipped into New Hampshire by rail, based on weight. Goods movement in the region is primarily dominated by coal for electric generation at Bow. Clay, concrete, glass, and stone also comprise some of the freight moving into this area, based on weight. Other products shipped to this area include farm products, lumber and wood products, food, chemical products, and some nonmetallic minerals. Most of the freight rail movements into this area travel inbound to the region. The small amount of outbound freight rail traffic is categorized by shippers as miscellaneous freight.

Critical Urban Freight Corridors

NHDOT requested that all MPOs in the state recommend roadways within their regions as designated Critical Urban Freight Corridors (CUFCs) and Critical Rural Freight Corridors (CRFCs). Those selected by NHDOT will be incorporated into the National Highway Freight Network (NHFN) and be eligible for federal funding that specifically supports the roadway freight system.

NRPC has considered the following factors in developing its recommendations for nominating critical freight corridors:

- Truck volume reported by NHDOT along corridor segments.
- Corridor function for long-distance freight hauling.
- Corridors with ongoing improvement projects.
- Submitting total corridor mileage that is commensurate with an appropriate MPO share of the State's allocated 75 CUFC miles.

The total recommended CUFC mileage is 28.64; CRFC mileage totals 4.55.

The corridors recommended by NRPC staff for inclusion in the CUFC/CRFC network were reviewed by the NRPC Transportation Technical Advisory Committee (TTAC) at its June 13, 2018, meeting. The TTAC approved the list with one addition, continuing the designation of NH 101 as a CUFC from Wilton Rd. in Milford to NH 31 in Wilton. The TTAC concurred with staff that NH 101A should be designated as the highest priority CUFC. At its Commission meeting of June 20, 2018, the Nashua MPO reviewed the recommended plan and accepted the TTAC recommendation without a formal vote.

NH DOT Statewide Freight Plan

To receive funding under the National Highway Freight Program (23 U.S.C. 167), the FAST Act requires each State to develop a state freight plan, which must comprehensively address the State's freight planning activities and investments (both immediate and long-range). The 1st NHDOT Statewide Freight Plan was approved by FHWA on February 11, 2019. The purpose of the plan was to advance national and state policy goals and objectives. The freight system includes the various transportation systems including highway, rail, airport, and marine. The plan completes the requirements of the FAST Act to access available freight program funding for infrastructure improvements. The plan features various maps, graphics, and tables to enhance understanding of the supply chain and complex freight-related topics.

Best Practices for the Nashua Region

NRPC retained AECOM Technical Services to research regional and statewide conditions and to develop a set of recommendations for best practices in freight planning for the region. A review of existing plans and studies show that there is a lack of freight transportation data and information. Based on the existing conditions, review of best practices, and goals of national multimodal freight policies, the following recommendations were provided:

- 1. Establish a regional freight advisory committee consisting of public and private stakeholders.
- 2. Identify key trading partners, shippers/receivers, distributors, transportation service providers (trucking companies), and other key industrial components.
- Organize regional freight forums with public sector planning and economic development officials and private sector stakeholders, including several of the State's major shippers and receivers, motor carriers and railroads to discuss economic development opportunities, freight needs and deficiencies and potential improvement strategies as well as to learn about new and emerging issues.
- 4. Conduct an inventory of freight transportation system and infrastructure, including:
 - a. Major truck routes and truck utilization data
 - b. Active and abandoned freight railroads
 - c. Conditions of truck routes and freight railroads
 - d. Bridge capacity
 - e. Capacity and vertical clearance of freight railroads
 - f. At-grade railroad crossings
- 5. Identify intermodal connectors, which are short roadway segments that connect rail terminal facilities to the NHS.
- 6. Identify the types of services such as bulk services, intermodal services, and carload services offered by freight railroads.
- 7. Identify intermodal terminals in or near the region where goods are transferred from one mode to another.
- 8. Conduct a goods movement study for the region to:
 - a. Understand the types of commodities that are being moved inside, outside and through the region.
 - b. Identify transportation modes used to move these commodities.
 - c. Identify origins and destinations of freight in the region.

9. Explore Intelligent Transportation Systems (ITS) to improve safety, efficiency, reliability of freight transportation, and advanced technologies for truck productivity.

Additionally, the 2012 NH State Rail Plan and the 2019 NH Statewide Freight Plan identified several recommendations that are related to the freight railroads in the NRPC region. It is recommended that the NRPC region work with public agencies and private stakeholders to address or implement these recommendations:

- 1. Work with the Commonwealth of Massachusetts to raise the weight limits on MBTA-owned lines in Massachusetts that serve New Hampshire (the New Hampshire Main Line from North Chelmsford to Nashua).
- 2. Recognized that a proposed satellite intermodal facility in the NRPC region is expected to provide supplemental service to CSX at the Ayer, MA facility.
- 3. Support grant funding for improving the primary and secondary branch line segments of the CSX New Hampshire Main Line (from Nashua to Concord). Limited train speeds on this line due to current track conditions have resulted in reduced services to the Nashua, Manchester, and Concord areas. Additionally, this improvement would also support the viability of an intermodal container site in the NRPC region.
- 4. Initiate a program to provide financial support in partnership with shippers/railroads for infrastructure improvements that increase rail access.
- 5. Continue the policy of acquiring abandoned rail lines with potential for future use.
- 6. Ensure that state-owned abandoned rail rights-of-way are available for future railroad use.



BICYCLE AND PEDESTRIAN PLANNING

Vehicle and motorized travel dominate the regional transportation network, but pedestrian and bicycle infrastructure are improving. While motor vehicles provide an indispensable component of our road network, travel by foot, and bicycle are also essential elements. These modes of travel are efficient, affordable, healthy, and environmentally sound, and their increased usage will provide more transportation choices, a more complete local and regional transportation system, and contribute to more vibrant and attractive communities.



Multi-purpose trail in Nashua

There are, in fact, very walkable areas throughout the Region that provide a strong foundation and example for the expansion of pedestrian- and bicycle-friendly infrastructure. In Milford, 45 percent of the town's population lives within a half-mile of downtown, followed by Wilton (40 percent) and Nashua (37 percent). Sidewalk networks in all 3 areas are well developed. Across the whole of the region, 28 percent of residents and 27 percent of jobs are located within a half mile of downtowns or town centers.

A priority of the NRPC is to encourage a shift from motorized to more non-motorized travel. The idea is to substitute bicycling and walking for driving an automobile for personal errands, visiting friends, and commuting to work; whenever and wherever possible. Research has shown that where investment in pedestrian and bicycle facilities has occurred, rates of non-motorized travel are significantly higher than

the national average. It is therefore reasonable to assume that a percentage of personal trips now being conducted via a motor vehicle could be shifted to non-motorized modes, if proper facilities and encouragement were provided.

The 2021 NRPC Regional Pedestrian and Bicycle Plan builds off goals and objectives outlined in earlier bike and pedestrian plans and other regional planning efforts. These plans explain the benefits of a shift to bicycling and walking as well as identifying a regional strategy for increasing non-motorized travel in the region. The guiding principles of these planning efforts are as follows:

- Focus on local short-distance trips which are the trips most likely to be conducted on foot or on a bike.
- Provide municipal policymakers and community advocates with the tools for improving their local bicycle and pedestrian environments.
- Provide the framework for a regional bicycle network that includes major travel corridors through the region and sub-regional connections to local non-motorized networks.
- Provide pedestrian connections to public transit networks where possible.

Existing Sidewalks, Bike Lanes, & Trails

While there remain significant gaps and stress points in the local and regional pedestrian-bicycle network, communities around the region have undertaken efforts to improve bicycle and pedestrian amenities. There are numerous pedestrian and bicycle-related projects that are included in TIP, 10-year Plan, and in the MTP. Recent examples of this region's continuing progress are listed below.

Amherst - A Safe Routes to School planning project led to a focus on improving pedestrian conditions in areas surrounding the elementary schools and in the village center as well as near the middle school. More recently, a local committee is collaborating with town officials to develop a comprehensive bicycle and pedestrian plan for the community.

Brookline – the town uses its Sidewalk and Trails Connectivity Plan to guide additions to its quickly expanding sidewalk and trail system. Also, the Potanipo Rail Trail is an excellent example of a community where long-range planning, funding commitments, and an aggressive pursuit of grant funds have dramatically improved walkability over time.

Litchfield - Albuquerque Avenue gently winds on a north-south axis through the center of the community. Funding was secured in 2007 to construct a separated 8-foot-wide pedestrian path/bikeway along this 2-mile corridor. Albuquerque Avenue Bike-Pedestrian Path has since become a valuable and well used local asset. The community is working to connect surrounding neighborhoods to the bike-pedestrian path. There is also an effort to incorporate Complete Streets measures along Albuquerque Avenue.

Mason - the Mason Railroad Rail-Trail runs for nearly 7 miles from Townsend, MA to Greenville, NH. The trail follows a heavily wooded corridor through Russell State Forest and Coyne Wildlife Sanctuary.

Merrimack – the town established a sidewalk and trail plan for its town center, as well as a Safe Routes to School travel plan for its elementary school. A Transportation Alternatives Program grant has helped fund a path under the Daniel Webster Highway that will provide a connection between Watson Park on the east side with a trail system on the west side. The town is also actively seeking funding to complete sidewalks that will connect the town center with nearby neighborhoods. Additionally, NRPC completed a bicycle and pedestrian corridor plan for the Daniel Webster Highway corridor in 2018.



Milford - already a walkable community with many sidewalks and 2 bike/pedestrian bridges spanning the Souhegan River, recently completed a town-wide bicycle and pedestrian master plan that promises to provide improvements into the future.

Nashua – continues to improve sidewalks, expand its Riverwalk along the Nashua River to provide connections between the Heritage Rail Trail and surrounding neighborhoods to Main Street, Mine Falls Park, and an eastward extension near the City Library and the Temple Street neighborhood. The Everett Street pedestrian bridge across the Nashua River Canal dramatically increased the size of the non-motorized transportation network by connecting the Heritage Rail Trail and surrounding neighborhoods to Mine Falls Park.

Typical urban/suburban sidewalk

Wilton - the Riverwalk Project began in 2017 with Phase 1 opening a walkway along the Stony Brook River near the Police Station. Since then, a design charrette with Plan NH, a comprehensive Riverwalk study with NRPC, numerous public input workshops, and an online survey to gather residents' feedback have informed future Riverwalk design features. This has led to the Town securing funding for two pedestrian bridges in the downtown area; one that will span Stony Brook on the north side of downtown and the other that will span the Souhegan River on the south side of downtown.

NTS - Bike racks on all buses extend the "driving" range and increase access for bicyclists who depend on the combination of transit and biking to get to their destinations.

Bicycling and Walking Trends

The American Community Survey (2017 to 2021) suggests the combined rate of biking and walking to work in the region is about 2% as compared to the entire nation where about 3% bike or walk to work.



Figure 8: Regional Commute Mode Share³

Bicycle & Pedestrian Count Data

Biking and walking are advantageous as modes of transportation and recreation. However, a major challenge in supporting these modes is a lack of data. Without data about biking and walking it remains difficult to justify and target infrastructure investments, plan for future biking and walking growth, and confirm the benefits and usage of past bike-ped infrastructure improvements.

Without data, it also remains challenging to integrate bicycle and pedestrian travel into regional planning, decision making, and transportation modeling. The lack of data makes it easy to overlook and simply ignore the non-vehicle use of the Region's roadways.

Studies and research are progressing on the collection of bicycle and pedestrian data in a meaningful and consistent way across New Hampshire. A pilot program in 2015 defined counting protocols and scheduling of counts. Currently, NRPC maintains a permanent bike/ped counter along the Nashua River Rail Trail near the MA border. The data from this counter shows significant usage of the trail. NRPC also owns several portable automatic counters that are being used to develop baseline data throughout the region. NRPC continues to conduct a robust bicycle and pedestrian counting program.

³ Table ID: B08301 - Means of Transportation to Work - American Community Survey - Workers 16 years and over - 2017 to 2021 -

Bike/Ped Counter installation in Milford



Level of Bicycle and Pedestrian Traffic Stress

Bicyclists and pedestrians choose their routes based on their perceived level of traffic stress. The level of traffic stress on a road segment depends on characteristics that include traffic volume, vehicle speeds, road width, and other factors. A low level of traffic stress can be achieved in mixed traffic on local streets with low traffic speeds. As the number of lanes, traffic speed and traffic volume increase, providing a low level of stress requires progressively more protective measures – dedicated bike lanes, or sidewalks for walkers, and ultimately, physically separated bikeways.

To measure walkability and bikeability roadway segments are assigned a *Level of Traffic Stress* (LTS) for bicycling and a *Level of Walkability* (LoW) for walking. This methodology for LTS and LoW has been used in regions across the USA and recently Nashua. LTS is intended to analyze the comfort of bicyclists with varying experience levels depending on the physical characteristics of a street. The scores range from 1 (suitable for all bicyclists, including children) to 4 (suitable for only the most fearless and experienced rider), and are determined by a formula that incorporates bike lanes, shoulders, lane width, traffic speed, on-street parking, and other attributes. LTS 2 is the level that most adults can reasonably tolerate and acceptable for safe use. Increasing the miles of LTS 2 roadways is an objective of this plan.

For pedestrians, a separate formula is used that has some similarities to LTS, using attributes such as the presence of sidewalks, any buffer area between a sidewalk and the street, shoulder width, and traffic speed. Walkability scores also range from 1 to 4 but are meant to be more of a relative index than representative of specific levels of ability like the bicycle LTS system.

Once LTS and LoW scores have been determined surface treatments can be considered for roadway segments with low scores. Complete Streets design guidelines (described elsewhere in this document) can then be used to identify appropriate treatments. The <u>Regional Bicycle, Pedestrian, and Active</u> <u>Transportation Plan for the Greater Nashua Region</u> completed in September 2021 contains ratings done for all state highway corridors in *Appendix C – Bicycle Level of Traffic Stress – Corridor Level*

			Percent
		Total	of
	Description	Miles	Network
LTC 1	Lowest stress with minimal traffic - suitable for	~ 37	12%
	all bicyclists, including young children		
	Little traffic stress but requires more attention -	~ 77	24%
LTS 2	suitable for teens and adult bicyclists with		
	adequate skills		
1 TC 2	Moderate traffic stress - suitable for only	~ 146	47%
LI23	confident teens and adult bicyclists		
LTS 4	High traffic stress - suitable for the most traffic	~ 53	17%
	tolerant adult bicyclists		

Table 30: Bicycle Level of Traffic Stress (BLTS)

Table 31: Level of Walkability (LoW)

			Percent
		Total	of
	Description	Miles	Network
	Lowest stress where segments and crossings		
170.4	are highly comfortable, pedestrian-friendly, and		
	easily navigable by pedestrians of all ages and		
	abilities. This level is an ideal environment.		
	Little traffic stress and generally comfortable		
LTS 2	for many pedestrians. Parents may not feel		
	comfortable letting children walk alone.		
	Moderate traffic stress with an uncomfortable		
LTS 3	walking situation. Minimal crossings and		
	inadequate sidewalk facilities.		
	High traffic stress with barriers to walking.		
LTS 4	Crossings and sidewalks are very limited and		
	fail to safely accommodate pedestrians.		

REGIONAL TRANSIT SERVICE

NASHUA TRANSIT SYSTEM

Fixed Route Service

The Nashua Transit System (NTS) is the only fixed-route public transit provider operating within the NRPC region. NTS operates 10 fixed routes which run weekdays from 6:00AM to 6:00PM and 2-night routes from 6:45PM to 9:45PM.

On Saturday, NTS operates 8 fixed routes which run from 9:00AM – 5:00PM and 2-night routes from 5:45PM – 9:45PM. NTS does not operate on Sundays.

All routes offer one-hour service frequencies, except Routes 6 and 2, which serve the NH101A and Daniel Webster Highway corridors. Each offers 30-minute service frequencies due to heavy demand on those busy commercial corridors via their Routes 2A and 6A services. All routes offer connections to the Nashua Transit Center located at 30 Elm St.

Paratransit Service

NTS provides paratransit services for Seniors aged 65 and older in addition to Complementary Paratransit Service to Nashua residents located within ¾ miles of all fixed routes. Those wishing to utilize paratransit service must fill out an application to ensure applicants qualify for the program. NTS also contracts with Hudson and Merrimack to provide weekday paratransit service.

NTS Fleet

NTS operates a fleet of 12 buses and 10 paratransit vans, all of which are 100% ADA accessible. All NTS fixed route buses are equipped with front exterior bike racks allowing bicycle riders to utilize the service with minimal disruption. As the bus fleet is replaced, NTS will continue to purchase green vehicles that are powered by Compressed Natural Gas (CNG), Hybrid Electric, or Electric. NTS currently operates 10 CNG-fueled buses and 2 Hybrid Electric buses. The city utilizes a 600-gallon CNG fueling facility adjacent to the NTS Operations/Administration offices located at 11 Riverside Street. The CNG facility, which is open to the public, was expanded in 2014 and is one of the largest public CNG facilities in New England.

Transit Ridership Trends

An analysis of NTS ridership patterns indicates that ridership is:

- highest on routes servicing major commercial destinations and corridors, particularly along NH101A, the Daniel Webster Highway, and the retail centers located along Broad Street.
- Routes 2, 2A, 6, 6A which serve the NH101A, and Daniel Webster Highway corridors account for approximately 65% of all NTS ridership.
- Weekday service accounts for 83% of total system ridership.
- Saturday service accounts for 9% of total system ridership.
- Weekday evening service accounts for 8% of total system ridership.

The number of people getting on and off buses at specific bus stops is highest at the Nashua Transit Center where all routes converge, and transfers are most accessible. The Transit Center accounted for approximately 40% of all boardings in Fiscal year 23 (July 1, 2022– June 30, 2023). Other than the Nashua Transit Center, the Pheasant Lane Mall, Somerset Plaza, Nashua Mall, Royal Ridge Center, Rivier University, and Westside Plaza accounted for the highest ridership of all stops in the system. Additionally, NTS partners with Nashua Community College and Rivier University to offer a UPASS program that allows students to ride the bus free of charge.

Fixed Route Ridership spans the period from July 1, 2019, through June 30, 2023. Fixed Route Ridership depicts the fixed route boardings in FY19 as 444,100, which was the approximate fixed route ridership for many years prior to the pandemic. The lowest ridership in the table was in FY21 at 49% of the pre-pandemic ridership. Although the ridership started to increase post pandemic in FY22, a driver shortage impacted the number of bus routes NTS offered. The route cancellations and suspension impacted the upward ridership trend from May 2022 through June 2023. In August 2023, NTS began providing 100% of the daytime service, Monday through Saturday and 67% of the night service offered in FY19. The ridership in FY24 is currently trending 20% higher than in FY23; therefore, based upon the current trend, NTS anticipates the fixed route ridership at the end of FY24 will be 360,000 boardings.

Map 5: NTS Fixed Route Ridership



Nashua Transit System – 2022 System Surveys

The 2022 December Survey collected 91 total responses. Surveys were made available online and on paper at the NTS Transit Center and on board all NTS fixed route buses.

Respondent Background Data:

Data showed that 39% of respondents are aged 60 or over, while the lowest demographic is those under the age of 25. Many respondents, 49%, reported an annual gross income of under \$20,000, with the next highest represented groups making between \$20,000 and \$29,000, and \$30,000 and \$39,999 a year. Both segments were 15%. 66% of survey respondents do not hold a valid driver's license and only 14% use a mobility device (i.e., wheelchair or walker). 53% of survey takers are employed, the majority working Monday-Friday, and 85% of those employed take the NTS bus to get to work.

NTS Rider Data:

52% of respondents ride the NTS bus 5 or more days per week, with 22% riding 3 to 4 days per week. Responses show that the main reasons why people ride the bus are:

- It is the only transportation available (51%).
- It is the most affordable transit option (49%).
- it is convenient (40%).
- 100% of respondents stated that they walk to bus stops.
- A majority said that they are most likely to use the bus to go shopping (70%) or to work (53%).
- 69% of respondents want service extended to Hudson, 49% to Manchester-Boston Regional Airport, and 51% want to go to Merrimack.
- Most survey takers either strongly agree (43%) or agree (35%) that NTS service is convenient and reliable.
- On a scale of 1 to 5, 5 being best, 58% of respondents rated their average trip with NTS as a 5, whereas only 2% of respondents rated it as a 2 or lower.

Customer Feedback

Most survey participants (93%) said they enjoy the newly renovated bathrooms, waiting area, and surrounding plaza at the NTS Transit Center. Results were mixed for what medium they would prefer to receive notifications on, but results favored text or email alerts at 46% and alerts via Facebook at 34%.

Open-ended Feedback & Comments

Summarized below are the most common answers to the open-ended customer service questions NTS asked:

What do you enjoy the most about NTS services?

- Drivers
- Convenience

What could NTS do to make your experience better?

• Sunday bus service

- On-board Wi-Fi
- Reduced service cancellations

How could we improve the Transit Center?

• Later services hours and keep the waiting area open during all hours while the bus service is running.

Nashua Transit System – 2016 to 2025 Comprehensive Plan

The following information is from the current plan. The NTS Comprehensive Plan evaluated the condition and effectiveness of existing transit services and facilities and prioritized future service expansions and the corresponding capital requirements over the 2016-to-2025-time frame.

The NTS mission statement was identified during the development of the plan and is as follows:

To provide a level of public transportation that allows for a convenient, affordable, reliable, and environmentally friendly method of transportation servicing the needs of citizens through a dedicated, professional, and customer focused workforce.

Finally, the plan identified broad areas of priority action and specific implementation items organized by short, medium, and long-term timelines for the 10-year planning horizon. The priorities are as follows:

- Affordability Maintain cost-effective and affordable fares.
- Passenger Amenities Operate clean and well-maintained buses and facilities, while developing additional amenities such as bus shelters, lighting, and public art.
 Passenger's comfort as well as current technological amenities should be considered when procuring new vehicles.
- Safety and Security– Provide continuous staff training to ensure passenger and facility safety and security through driver training.
- Americans with Disabilities Act Compliance As fleet replacements occur and additional vehicles are purchased ensure that all are equipped with voice annunciation systems and interior LED signage for route and service information.
- Intermodal Access Assist commuters with improved access to both local and distant employment destinations through the development of an intermodal transportation network
- Transit Center and Transit Hubs Improve and expand the Transit Center. As transit expands consider the viability of locating transit hubs throughout the region. NTS plans on replacing and/or adding shelters along the fixed routes.
- Service Expansion Extend service hours on existing routes to improve convenience, and facilitate access to employment, education, and retail sites. Evaluate the feasibility of extending earlier service on Saturday mornings. Also evaluate the feasibility of establishing Sunday fixed route and demand response service.
- NRPC Region Increase regional mobility by improving transit access in the region with connections to other communities such as the towns of Hudson, Merrimack, and Milford as well as destinations like the Merrimack Premium Outlets.

 Beyond the NRPC Region - Improve regional mobility by providing transit connections to the Boston-Manchester Regional Airport, Manchester Transit Authority (MTA), and park and ride facilities to access destinations in Massachusetts via commuter bus service. Seasonal services to Hampton Beach are offered. As of October 2023, the MTA Route #22, Zip Line picks up and drops off passengers at the Nashua Transit Center located at 30 Elm St., Monday through Friday. This service is offered 5 times per day for weekdays and 4 times on Saturday, and travels to the Manchester-Boston Regional Airport.

Nashua Transit System – Transit Asset Management Plan

The Nashua Transit System finalized its Transit Asset Management (TAM) Plan in July 2018 and updated the plan in 2023. The Federal Transit Administration (FTA) describes transit asset management as a business model that prioritizes funding based on the condition of transit assets to achieve or maintain transit networks in a state of good repair. It involves a set of strategic and systematic processes and practices for managing the performance, risks, and costs of transit assets over their entire lifecycle for the purpose of providing safe, cost-effective, and reliable public transportation. Through asset management, transit agencies can more effectively use available funds to improve the physical condition and performance of their system. This, in turn, may result in increased ridership. Benefits associated with transit asset management include:

- Better customer service due to improved on-time performance, vehicle and facility cleanliness, and a focus on customer-centered goals, and metrics.
- Improved productivity, reduced safety risks, and reduced costs from more effectively using condition-based approaches and using predictive and preventive maintenance strategies to reduce costs while improving service delivery; and
- Data-driven decision making that:
 - incorporates lifecycle cost, risk, and performance trade-offs into operations and capital programming.
 - improves visibility for budgeting maintenance work and for understanding other costs or financial risks due to major component and/or other replacement needs; and,
 - provides better understanding of the relationship between investments and outcomes (condition, safety, operations) and can lead to more accurate estimates of system needs to meet a target condition and replacement timeline.

Future Public Transportation Ridership

The future of public transportation ridership in the short to medium term is likely to depend on population growth, additional affordable housing along the fixed route corridor, and the public funding commitment to support public transit. A choice rider may find riding public transit attractive based on; the cost of operating a vehicle; the price of parking; implementation of fuel taxes; tolls; mileage-based user fees; and highway congestion. Long term, ridership may likely depend on the introduction of autonomous vehicle technology, although its timing is uncertain.

COMMUNITY TRANSPORTATION

Regional Coordination Council

The Greater Nashua Regional Coordination Council for Community Transportation (RCC) Region 7 works to provide improved, cost effective, coordinated transportation services to those who lack transportation, including persons with disabilities, the elderly, and individuals with lower incomes.

The New Hampshire State Legislature created the State Coordinating Council for Community Transportation (SCC) in 2007 to foster and guide the coordination of community transportation on the regional level. The Nashua Regional Planning Commission (NRPC) initiated development of the Nashua RCC based on recommendations from the 2006 Locally Coordinated Transportation Plan. In January of 2007, a committee of stakeholders from across the region was formed to guide the RCC development process. Bylaws, a Memorandum of Understanding (MOU), a work plan, and a member list were developed, and in 2008 the SCC officially recognized the committee as the Nashua RCC, the first group to be recognized in the state

Now, New Hampshire is divided into 8 Community Transportation Regions. Each region has an associated Regional Coordination Council (RCC), which is composed of local transportation providers, human service agencies, funding agencies and organizations, consumers, and regional planning commission staff.

The RCCs work to develop information that is helpful to transportation service users, to identify opportunities for coordination between service providers, to advocate for improved service availability and innovative strategies to meet current needs, to identify alternative funding sources, and to advise the SCC as to the state of coordination in the region.

The Nashua RCC supports community transportation in a variety of ways:

- NRPC continues to serve as the lead agency for the RCC in securing federal funding through the NHDOT.
- The RCC continues to support the collaboration between the Nashua Transit System (NTS) and the Souhegan Valley Transportation Collaborative (SVTC) to provide handicapped accessible "dial-a-ride" style service to residents in Amherst, Brookline, Hollis, Milford, Mont Vernon and Wilton. 5310 (RCC) funding is used to purchase dispatch, driver and vehicles services from NTS with SVTC providing the locally required matching funds primarily through municipal appropriations.
- The RCC supports the continued revitalization of The Caregivers volunteer driver program in the Greater Nashua area. 5310 (RCC) funding is used to support the engagement of new volunteer drivers to serve this program provided through Catholic Charities NH.
- The RCC seeks to identify new, alternative solutions for the gaps in service that exist within the region where transportation options do not exist or are insufficient to meet community needs.
- The RCC Transportation Directory includes a printable list of transportation services in the region and an online interactive directory.
- The Locally Coordinated Transportation Plan was updated in 2020. Federal law requires that projects selected for funding under the Enhanced Mobility for Individuals and Individuals with Disabilities (Section 5310) Program be included in a locally developed, coordinated public transit-human services transportation plan, and that the plan be developed and approved through a process that included participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human services providers

and other members of the public utilizing transportation services. These coordinated plans identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, provide strategies for meeting these needs, and prioritize transportation services for funding and implementation.

• The RCC continues to monitor statewide activities through regular attendance at SCC meetings and actively supports the implementation of the NH Statewide Mobility Management Network initiated by the SCC and NHDOT.

Mobility Management Services

The RCC continues to support and enhance regional and inter-regional mobility management services. Mobility management is an innovative passenger-centered transportation strategy for managing and delivering coordinated community transportation services that focuses on meeting individual consumer needs and on addressing changing community needs by collaboratively developing and coordinating community transportation services to achieve an efficient, sustainable transportation service delivery system across various geographic areas.

Efforts to develop and implement a formal statewide network of full-time mobility mangers date back to 2019. At that time some regions and some transit agencies were providing mobility management services. As envisioned by the SCC and NHDOT, the NH Statewide Mobility Management Network is a transportation strategy to achieve an integrated system of safe, reliable, and sustainable transportation options that allow residents to maintain independence and participate in work and community life no matter their age or ability.

The NH Statewide Mobility Management Network includes funding to support a mobility manager in each of the community transportation regions. As outlined in the New Hampshire Statewide Mobility Management Network: A Blueprint for Implementation (Adopted 2-3-22), the guiding principles for mobility managers are:

- Mobility management is a transportation strategy that prioritizes customer needs, and the meeting of these needs through the coordinated use of a variety of providers.
- Mobility management is an evolving concept that aims to improve specialized transportation, particularly for veterans, older adults, people with disabilities, and individuals with lower incomes.
- Mobility management looks beyond a single transportation service or solution to a "family of services" philosophy that can offer a wide range of services and options to meet an equally wide array of community demographics and needs.
- Mobility Management begins with a community vision in which the entire transportation network including public transit, private operators, cycling and walking, and volunteer drivers work together with customers, planners, and stakeholders to deliver coordinated transportation options that best meet a community's needs.
- Mobility management requires a customized approach, meaning no two programs are exactly alike, even though they share a core philosophy, desired outcomes and require partnerships across the spectrum.

Souhegan Valley Transportation Collaborative

The Souhegan Valley Transportation Collaborative (SVTC) is a grassroots organization of community representatives and other stakeholders concerned about transportation options in the Souhegan Valley. In 2008, SVTC implemented the Souhegan Valley Rides "dial-a-ride" style service in collaboration with

the Nashua Transit System (NTS). Initially covering four towns, the service has grown to include six communities - Amherst, Brookline, Hollis, Milford, Mont Vernon, and Wilton. All participating communities are guaranteed representation on the SVTC Board of Directors and a voice in guiding the development of this regional transportation service. SVTC's efforts represent proactive planning to provide community transit services that meet a current need and help our hometowns establish the groundwork to meet future needs. The Souhegan Valley Rides service operates Monday through Friday between the hours of 8am and 6pm. Rides are available within the six towns and to and from Nashua. The handicapped accessible buses, the drivers, and the call center operations are contracted from the NTS.



INTERCITY TRANSIT

Manchester Transit Authority

The Manchester Transit Authority operates its Nashua Express service on weekdays and Saturdays between downtown Manchester, the Nashua Transit Center (Downtown Nashua) and the Manchester-Boston Regional Airport. There are 5 round trips on weekdays and 4 on Saturdays. This service provides a connection to access to the NTS network.

Lowell Regional Transit Authority

The Lowell Regional Transit Authority provides fixed route transit service to Ayotte's Market in Hudson located just over the state line from Tyngsborough. The market primarily serves as the turnaround point for LRTA's Route 10 Dracut/Tyngsborough service. LRTA offers 12 round trips on Route 10 on weekdays and 10 on Saturdays linking Ayotte's with the Robert B. Kennedy Bus Transfer Station located at the Gallagher Intermodal Center, providing MBTA commuter rail service to Boston. The Kennedy Transfer Center serves as the transfer point for all LRTA local bus routes and several intercity bus routes operated by other providers. LRTA also offers a seasonal Pheasant Lane Mall route during the holiday shopping season on Saturdays only. The bus does not actually cross the state line as much of the mall parking lot is in Massachusetts.

Boston Express

Boston Express is a public-private bus service linking Nashua to Boston. The service is operated by a private company but funded publicly. Departures leave from the F. E. Everett Exit 8 park-and-ride facility in Nashua towards Boston - South Station and Logan International Airport, two of New England's largest

transportation terminals. The bus also stops at Exit 90 park-and-ride facility in Tyngsborough MA. Lot counts indicate that vehicles with NH license plates make up approximately 70 percent of users. Boston Express offers 12 arrivals/departures on weekdays and 9 arrivals/departures on weekends.

EMERGING TRANSPORTATION TRENDS AND TECHNOLOGY

There are many uncertainties for the future of transportation and mobility that come with many unanswered questions. Widespread public ownership of the automobile produced a myriad of challenges from funding infrastructure projects and drafting safety standards for autonomous vehicles, to incorporating active modes of travel, and thinking beyond the realm of the actual roadway. The need to explore investment strategies that will improve safety, enhance mobility, provide reliable travel times, and expand alternative transportation options, are crucial when planning.

Today, companies all over the world are developing technologies that are transforming the ways people travel and in turn will affect land use patterns, productivity levels, and human behavior. While many of these emerging technologies are promising to improve transportation for future generations, the actual impact they will have on our individual lives and on our communities is difficult to foresee at this point. Popular topics among the planning field regarding future mobility are geared toward curbside management, shared mobility, and mobility as a service. These topics further explore how communities might manage shared public spaces, like public streets, varying transportation modes, and the future of mobility options.

Despite the uncertainty and ambiguity of future transportation trends, the NRPC recognizes the need to plan for and integrate emerging technologies into this MTP and our future transportation system. The following are a few of the emerging technologies that are gaining traction in the future of transportation. Many seek to improve efficiency, productivity, safety, equity, and sustainability efforts.

Electric Vehicles

Electric vehicles (EVs) are emerging as part of the modern mainstream transportation landscape and are anticipated to become increasingly common and widespread. As newer consumer models become more efficient and affordable, EV technology spreads to commercial truck, bus, and utility vehicle fleets. The term EV, as defined by the New Hampshire Department of Environmental Services (NHDES), "refers to a vehicle propelled solely by an electric motor with a battery as the motor's energy storage device." The NHDES website notes that "there are presently two forms of EV:

- "Battery Electric Vehicle or BEV," which uses an electric motor to propel the vehicle, powered by battery packs that are recharged directly from a source of electricity (Nissan Leaf, e.g.).
- "Plug-In Electric Hybrid Vehicle or PHEV," which can be driven by an electric motor and internal combustion engine (Ford C-Max Energi, e.g.) or can be driven only by its electric motor with an internal combustion engine and generator to recharge the battery (Chevy Volt, e.g.).

An EV uses an external electricity source to recharge the battery by connecting it to an electrical supply through a connector system that is designed specifically for this purpose (plugging in)."

There are three types or levels of EV charging stations:

- Level 1 chargers use a 120 V AC plug and can be plugged into a standard outlet. Unlike other chargers, Level 1 chargers do not require the installation of any additional equipment. These chargers typically deliver two to five miles of range per hour of charging and are most often used at home. Level 1 chargers are the least expensive option, but they also take the most time to charge a vehicle battery. EV owners can use a level 1 charger to charge their vehicles at home overnight by plugging into a typical garage outlet.
- Level 2 chargers use a 240 V (for residential) or 208 V (for commercial) plug. Unlike Level 1 chargers, they cannot be plugged into a standard wall outlet and are usually installed by a professional electrician. Level 2 EV chargers deliver 10 to 60 miles of range per hour of charging and can fully charge an electric car battery in as little as two hours. Level 2 chargers can be installed at home and are ideal options for public facilities, parking lots and businesses.
- Level 3 or DC Fast Chargers (also known as CHAdeMO EV charging stations) can offer 60 to 100
 miles of range for an electric car in just 20 minutes of charging. However, they are typically only
 used in commercial and industrial applications and require highly specialized, high-powered
 equipment to install and maintain. Further, not all electric cars can be charged with the use of
 DC Fast Chargers.



The primary drivers behind the growth of EVs are the reductions in air pollution and greenhouse gas emissions that can be realized when the electricity used is obtained from cleaner burning fuels such as natural gas or more importantly, renewable energy sources such as solar, wind, or hydro power. Given the potential benefits of EV adoption, state, federal and local governments together with environmental advocacy organizations and private industry are actively encouraging and incentivizing the deployment of EVs. As of September 2018, there were an estimated 22,000 public charging stations in the US and Canada classified as level 2 and DC fast charging (*The VERGE* Oct 3, 2018). Growth of the EV sector, however, is dependent of the development of a reliable network of conveniently located EV charging infrastructure at private homes, public facilities, and commercial settings such as shopping centers, office buildings and other sites where vehicle owners are likely to remain for one or more hours. At the local government level, ideal sites include town halls, police and fire stations, schools, public works garages and other publicly owned facilities.

The point at which the adoption of EV technology becomes widespread remains uncertain, however communities can take proactive steps to encourage local infrastructure development to ensure that they are *EV ready*. To become EV ready, communities should consider creating plans to deploy strategically placed EV charging stations at both public and private commercial sites. The plans should consider key regulatory areas such as zoning, site plan regulations, parking requirements and the creation of opportunities for both the public and private sector charging station development.

ITS technologies

Intelligent Transportation Systems (ITS) technologies enable various technological mediums to communicate information to and between roadway users and transportation infrastructure. This includes vehicle-to-vehicle and vehicle-to-roadside wireless communications (connected vehicle technology). These efforts provide real-time information for roadway users and traffic operations alike. ITS aims to improve traffic safety, relieve traffic congestion, reduce air pollution, increase energy efficiency, among other objectives. ITS technology currently exists in several forms including changeable message roadway signing and advanced traffic signal systems.

Adaptive Traffic Control Systems

Poor traffic signal timing contributes to traffic congestion and delays. Most conventional signals use preprogrammed, daily signal timing schedules. Adaptive and linked signal control technology adjusts the timing of red, yellow, and green lights to accommodate changing traffic patterns and ease traffic congestion. The main benefits of adaptive signal control technology over conventional signal systems are that it can:

- Continuously distribute green light time equitably for all traffic movements.
- Improve travel time reliability by progressively moving vehicles through green lights.
- Reduce congestion by creating smoother flow.
- Prolong the effectiveness of traffic signal timing.

Connected/Autonomous Vehicles

Automated vehicles are vehicles that use devices and technology to take over a portion or potentially all the decision making related to the driving task (aka Autonomous Vehicles, Self-Driving Vehicles, Driverless Cars, or Robotic Cars). The U.S. Department of Transportation's National Highway Traffic Safety Administration (NHTSA) has adopted the Society of Automotive Engineers (SAE), six levels of automation definition as illustrated in the figure below.



Source: Society of Automotive Engineers' (SAE) 6 Levels of Automation

Potential CAV Safety Benefits

Driver behavior and driver error are believed to be contributing factors in more than 90% of crashes nationwide. CAVs mitigate human error issues and are expected to substantially reduce crashes. By eliminating human error, transportation planners would be able to better focus safety improvement resources in areas with true infrastructure deficiencies.

Potential CAV Capacity Benefits

- FHWA research suggests that, in the long-term, CAVs could safely travel at closer headways (platoon), which could increase traditional volume/capacity ratios.
- CAVs could utilize real-time traffic data that allows for efficient optimization across the entire transportation network. FHWA research suggests that, in the long-term, CAVs could safely travel at closer headways (platoon), which could increase traditional volume/capacity ratios.
- CAVs could utilize real-time traffic data that allows for efficient optimization across the entire transportation network.
- Due to the prevalence of Zero Occupant Vehicle (ZOV) circulation and dead-head trips, VMT, VHT, and delay are likely to increase when CAVs begin to gain market share. Reductions in delay are only likely to be realized when CAV technology is fully integrated and ubiquitous (e.g., close to 100% utilization).

Potential CAV Special Mobility Benefits

- CAVs could facilitate independent living by improving mobility for elderly, disabled, and visually impaired populations.
- The need for human assistance and accessible vehicles will still exist.
- Deploying CAV technology is expected to be more cost effective than demand response human service transportation, particularly in rural areas.

Potential CAV Environmental Benefits

- Vehicles will accelerate and decelerate more efficiently aerodynamic drafting (platooning) resulting in improved traffic flow dynamics.
- Fewer unnecessary stops.
- Many CAVs are likely to be Zero Emission Vehicles.
- May reduce the need to consume land with large parking areas.

Potential Environmental Drawbacks

- Zero-occupant Vehicles will increase VMT and VHT (in the medium-term)
- Convenience of CAVs could increase the proliferation of suburban sprawl land use patterns.
- Faster driving speeds

It should also be noted that the current car ownership model will likely change as fully automated vehicles become more widely available. Though the extent of such changes is unknowable at this time, the high cost of fully automated vehicles coupled with likely early adoption of the technology by ride-hailing services such as Uber and Lyft, suggest that shared autonomous vehicle models, whether through ride-hailing or subscription-based services, may come to dominate the automobile market.

Curbside Management - Curb space availability and management are becoming more important with the growth of the following services:

- online shopping and associated deliveries, curbside pickups, and drop-offs.
- ride-share services like Uber, Lyft, e-bikes, and e-scooters.
- overall shared public spaces with local businesses.

Planning for the rise in rideshare services and e-commerce related deceives also has implications for the design and layout of commercial sites and multi-family developments.

E-Commerce

Commercial and personal deliveries are on the rise with the overwhelming growth of e-commerce and because of the COVID pandemic. Consumer behavior is changing the way goods are delivered and purchased, affecting brick-and-mortar stores and consumer travel patterns. Growing automated technologies are exploring the development and deployment of robot-like delivery services. Some companies are exploring various forms of robots to offer front-door and last-mile package deliveries, while other companies are exploring the use of drones. Regardless of the delivery method,

transportation for the growing deliveries spurred by e-commerce will require innovative strategies to keep up with consumer demands.

Shared Mobility - Shared mobility today ranges from e-bikes and e-scooters to rideshare services like Uber and Lyft. Shared mobility allows people the flexibility to travel without personal ownership of a vehicle, whether at home or while traveling to new places. These shared mobility services are often contentious topics with the use of public right-of-way and how to manage those spaces. While these transport modes may be a trend for today, it is uncertain how sustainable they will be in the years to come.

GPS-Related Technologies - Global Positioning System (GPS) technology is based on governmentowned satellites that allow for highly accurate positional information at any location on Earth. GPS mapping applications are now nearly universal in passenger vehicles, trucks, trains, and aircraft as a directional aid that typically provides visual and audible directions to any designated location. Also, GPS technology has also facilitated several applications that provide directional guidance for users by providing specialized services like detour guidance for congestion, accidents, and road closures. Examples of GPS-related technologies include Google Maps, Waze, and many others. Such applications are likely to become even more numerous and provide enhanced services throughout the planning period, thereby helping to reduce congestion.

GPS is a critical component in the growth of micro-transit services and ridesharing applications like Uber and Lyft. Micro-transit is an app-driven demand response, zonal-based transit service currently used in fixed route first-and-last mile solutions and where fixed route transit service may not be viable.

Linked Communication/Automation technology

Advances in communication and automation technology result in new mobility options, ranging from automated and connected transport, electric vehicles, ridesharing, and micro-mobility, to flying cars and space travel. These changes may be disruptive and transformational, with impacts to safety, vehicle ownership, travel capacity, vehicle miles traveled, land-use, transportation design, future investment demands, supply chain logistics, economy, and the workforce.

New and emerging technologies have already had an impact on the region's transportation system since the last MTP update. For example:

- smartphone technology has enabled Uber and other ridesharing applications to operate more smoothly throughout the region.
- NTS riders can now get real-time service alerts on their smartphones.
- Adaptive and linked traffic signal technology has improved traffic flow and operation in and around Nashua.
- Global Positioning System (GPS) technologies are now widely available in cars, trucks, and mobile devices enabling drivers to reach their destinations and deal more easily with detours and other unexpected conditions.

These developments could enable connected vehicles to travel much closer together, reducing driver distractions, accidents, and injuries while also increasing existing roadway capacity.

These technologies are changing so rapidly that it is impossible to predict their impact over a 25-year planning horizon. As an alternative to making predictions, this MTP and the NRPC recognize the

important influence of emerging mobility/technology on the multi-modal transportation system and will include planning studies, collaboration efforts, research, or other activities in their Unified Planning Work Program (UPWP). These studies will evaluate the region's preparedness to adapt and adopt new technologies combined with recommendations on how local governments can better integrate emerging mobility/technology into their land use, planning, and budget decisions.

FUTURE NEEDS ANALYSIS

POPULATION AND EMPLOYMENT FORECASTS

The analysis of future transportation needs depends heavily on the traffic forecasts produced by our TransCAD traffic model. The future analysis year of 2050 provides a 25-year planning horizon from the base year. Developing these traffic forecasts was based on a lengthy process of developing estimates of future population and employment forecasts, first by community and then allocated into each Traffic Analysis Zone (TAZ).

NRPC used in-person interviews with local officials in most communities. From those interviews NRPC compiled a list of known and potential areas of residential development through 2050. These new households were then added to the appropriate TAZ and current Census/ACS ratios were used to split the totals for various subcategories, such as:

- Household size
- Vehicles available
- Labor force
- Occupation

This data was measured against the results of NRPC's in-house population projections, which rely on a similar methodology used by what is now the NH State Office of Strategic Initiatives. In cases where potential developments did not generate enough population to reach the projected totals, further households were added to TAZs where vacant and properly zoned land was available. In cases where they generated more population than projected, NRPC did not include developments that were assumed as potential rather than known to be built. If known developments alone still surpassed projections, NRPC allowed them to be entered as model inputs.

For the rural towns with little assumed future growth, NRPC relied strictly on the population projections and manually adding new households to appropriate TAZs.

NH Employment Security publishes industry-specific employment projections at the planning region level for 10 years out, with the latest available dataset projecting to 2030. To reach NRPC's horizon year of 2050, these projections were extended out using a linear methodology and assumed to be proportionally distributed across all 13 communities. Methodology for assigning new employees to the TAZ level are like the above population projections, with known and assumed developments taking precedence and manual adjustments made up or down where possible to replicate the total projections.

Significant changes to age distribution are forecast 25 years into the future. While the under 20 and 20 to 44 age groups regionally will show little change as a percent of total population, the 45 to 64 group is expected to decline by 18% and the 65 and over group will more than double, with over 28,000 seniors added to the regional population. This changing demographic will have implications for the need for single-occupancy vehicle alternatives, including regular transit, special-purpose demand-responsive services, ride-hailing services, and autonomous vehicles, as they become mainstreamed into the transportation network in future years.

Population								Employm	ent	
					2015-	Pct.			Emp	Pct.
	2015	2025	2035	2045	2045	Incr	2015	2045	Growth	Incr
Amherst	11,247	11,660	11,661	11,536	289	3%	4,507	4,941	434	10%
Brookline	5,100	5,424	5,726	5,862	762	15%	487	707	220	45%
Hollis	7,733	7,804	8,089	8,585	852	11%	2,067	2,282	215	10%
Hudson	24,682	25,626	26,537	27,119	2,437	10%	10,191	18,873	8,682	85%
Litchfield	8,366	8,591	8,783	8,977	611	7%	915	1,316	401	44%
Lyndeborough	1,707	2,034	2,095	2,101	394	23%	98	119	21	21%
Mason	1,390	1,478	1,498	1,421	31	2%	181	200	19	10%
Merrimack	25,595	27,357	28,187	28,299	2,704	11%	17,202	19,243	2,041	12%
Milford	15,194	16,307	17,115	17,557	2,363	16%	6,097	7,234	1,137	19%
Mt. Vernon	2,620	2,710	2,746	2,705	85	3%	138	181	43	31%
Nashua	87,110	90,329	91,859	91,080	3,970	5%	51,192	56,093	4,901	10%
Pelham	13,113	13,929	14,422	14,808	1,695	13%	2,363	2,505	142	6%
Wilton	3,681	3,835	3,852	3,947	<u>266</u>	<u>7%</u>	<u>1,208</u>	<u>1,336</u>	<u>128</u>	<u>11%</u>
Region	207,538	217,084	222,570	223,997	16,459	8%	96,646	115,030	18,384	19%
10-yr incr.		4.6%	2.5%	0.6%						

Table 32: Population and Employment Projections to 2050

TRAFFIC MODEL FORECASTS

Travel Model Methodology

The NRPC maintains a regional travel demand forecasting model for the general purposes of transportation planning and air quality analysis. To maintain and run the model, NRPC uses TransCAD, a leading traffic modeling and GIS software package produced by the Caliper Corporation.

The NRPC model is a traditional 3 step model consisting of Trip Generation, Trip Distribution, and Highway Assignment.

In 2023, NRPC updated the model which now uses 2020 Census Block Group sub-divisions as the geography for the Transportation Analysis Zone (TAZ) system. There are 139 Census Block Groups in total, covering the 13 NRPC communities. These Block Groups are too large to serve as TAZs in this model. Consequently, the Block Groups were subdivided at a rate of 3-5 TAZs to one Block Group. The final count of internal TAZs is 569 with an additional 52 external stations, for a total TAZ count of 621. With a 13 community 2020 population of 217,500, this equates to an average TAZ population of 382. The previous model's highway network was used with the new TAZ structure.

In 2023, the trip generation process was revised to directly use the National Cooperative Highway Research Council Program (NCHRP), Report 365 trip generation rates for an urban area population in the 50,000 to 199,999 range. These NCHRP rates are pre-programmed into TransCAD and are directly used. Population and household data used in the trip generation process came directly from the 2020 Census. Employment data needed for the trip attraction equations came from Census LODES (Longitudinal Employer-Household Dynamics, Origin-Destination Employment Statistics) data (2004-2020). The 2020 Census data then served as the base year, and new forecast year population, household and employment characteristics were developed for 2030 and 2050. The State of New Hampshire, Employment and Security, Economic and Labor Market Information Bureau, was the source of the 2030 community employment projections by employment sector. The State of New Hampshire, Office of Planning and Development, had recently retained a consultant to develop community population projections to 2050 in 5-year increments. These were the source of the 2030 and 2050 population projections. Using population growth rates as a guide, the community employment projections for 2030 were extended out to 2050. Since the NCHRP trip rates use households (household occupation rates are applied to the population projections) as the trip generation variable, a continued decline in household size was assumed to project the 2030 and 2050 households. For the external stations, traffic growth was calculated based on 2030 and 2050 employment and population growth from the sources referenced above. Based on meetings with local NRPC communities, known land use changes in those communities were used to inform the 2030 and 2050 placement of the community growth predicted by these State sources.

Table 33: Population by Community									
Community	2020	2030	2050	2020-2030	2020-2050				
Amherst	11,753	12,625	13,075	7.4%	11.2%				
Brookline	5,639	6,017	6,212	6.7%	10.2%				
Hollis	8,342	8,940	9,249	7.2%	10.9%				
Hudson	25,394	27,313	28,302	7.6%	11.5%				
Litchfield	8,478	9,119	9,449	7.6%	11.5%				
Lyndeborough	1,702	1,831	1,897	7.6%	11.5%				
Mason	1,448	1,557	1,614	7.5%	11.5%				
Merrimack	26,632	28,581	29,585	7.3%	11.1%				
Milford	16,131	17,286	17,881	7.2%	10.8%				
Mont Vernon	2,584	2,779	2,880	7.5%	11.5%				
Nashua	91,322	98,159	101,683	7.5%	11.3%				
Pelham	14,222	15,233	15,754	7.1%	10.8%				
Wilton	3,896	4,190	4,342	7.5%	11.4%				
Totals	217,543	233,630	241,923	7.4%	11.2%				

The tables below show the community level population and employment data used in the model.

Page 101 of 218

Community	2020	2030	2050	2020-2030	2020-2050
Amherst	4,190	4,479	4,625	6.9%	10.4%
Brookline	799	860	897	7.7%	12.3%
Hollis	2,261	2,422	2,507	7.1%	10.9%
Hudson	10,777	11,581	11,741	7.5%	8.9%
Litchfield	1,091	1,228	1,282	12.6%	17.5%
Lyndeborough	80	84	83	4.2%	3.1%
Mason	210	233	255	11.0%	21.2%
Merrimack	17,440	18,731	19,506	7.4%	11.8%
Milford	7,111	7,576	7,789	6.5%	9.5%
Mont Vernon	167	176	177	5.3%	6.0%
Nashua	54,295	58,323	60,745	7.4%	11.9%
Pelham	2,562	2,711	2,755	5.8%	7.6%
Wilton	1,010	1,073	1,097	6.3%	8.6%
Totals	101,993	109,477	113,458	7.3%	11.2%

Table 34: Employment by Community

Additionally, the NCHRP Quick Response Freight Manual was used as the source of truck trip generation and distribution equations. Three truck types have been programmed into the model as follows: light truck (two axle and not more than 6 tires), medium truck (single unit but more than 6 tires), and heavy truck (articulated vehicles).

The highway network was revised to reflect the completion of highway improvement projects completed in or prior to 2020. Future year highway projects (post 2020) were also added into the model and the model GISDK (internal TransCAD programming language) script was modified to include a scenario management component. There are two types of future year projects categorized as "no build" and "build". Projects with financial obligations defined and with accompanying environmental and engineering documents are considered "no build" projects. These projects are committed and consequently are not under review in the LRTP. Projects under consideration or aspirational are considered "build" projects. For no build and build network analysis, the future year land use is the same. Consequently, the model runs reflected in this LRTP are:

- 2020 Base Year,
- 2030 No Build,
- 2030 Build,
- 2050 No Build, and
- 2050 Build.

Only major projects can be modeled since the model doesn't simulate intersections and thus turning lanes and intersection improvements are not considered. The projects included in the future year networks and their scenario status are shown below.

Project	Community	Location	Summary	No Build/Build
ID				
16100	Bedford-	Everett Turnpike	Open road tolling at mainline Bedford	No Build
	Merrimack		Plaza	
41754	Hudson	NH Route 3A	Construct third southbound lane south	No Build
			of Flagstone Drive.	
42108	Hudson	New road	2 lane highway NH3A to NH 111	Build
10136A	Nashua	NH Route 101A	Widen to 3 lanes in each direction.	No Build
13761	Nashua-	Everett Turnpike	Widening to 3 lanes in each direction	No Build
	Merrimack-		Exit 8 to I-293	
	Bedford			
42717	Nashua	Veterans	Extend Franklin Street to meet	No Build
		Memorial		
		Parkway		
MIL04	Milford	NH 101	Perry Road interchange	Build
NAS07	Nashua	Everett Turnpike	Southbound ramp at Exit 81	Build

Table 35: Build and No Build Future Year Highway Projects

The network was set up to run for the base year 2020, and forecasts years 2030 and 2050. Network roadway capacities in the model were modified to be consistent with 4 time periods that the model will be run for. These time periods represent an enhancement to the modeling process. The new time periods are as follows:

- AM peak period (6AM-9AM)
- Midday (9AM-3PM)
- PM peak period (3PM-6PM)
- Night (6PM-6AM)
- Daily = the sum of these 4 time periods.

The trip distribution process is calibrated to trip length frequency distributions in the 2020 Census data and origin-destination patterns in the LODES data.

Vehicle occupancy by time of day and trip purpose is computed using NCHRP Report 365 data.

Highway assignment for each of the 4 time periods is accomplished using TransCAD's multi-modal equilibrium highway assignment (MMA). The benefit of this assignment algorithm is that passenger car equivalents are assigned to each vehicle type (specifically the truck types) and all vehicles (autos, light-truck, medium-truck, and heavy-truck) are assigned simultaneously within each iteration of the equilibrium assignment.

The model results for the base year 2020, and two forecasts' years (2030 and 2050, with each forecast year covering a no build and build network scenario) are shown in the tables below. The first table shows a summary of the number of trips generated within the NRPC region. The growth in trips is slightly higher than the population and employment growth. This difference is largely due to a continued decline in household size reflecting that households are forming at a higher rate than population. Thus,

a higher share of the population is in the work force. The second table shows a summary of the community vehicle miles traveled (VMT) for each of the 3 model years, with no build and build scenarios. The model indicates that traffic growth in the region from 2020 to 2030 will be approximately 8.5%. Traffic growth from 2020 to 2050 will be approximately 12.7%.

Another metric used to evaluate the highway network is the vehicle hours of travel (VHT). Particularly in congested highway networks, VHT increases at a faster rate than the VMT. Dividing VMT by VHT yields an average travel speed.

When comparing the VMT, VHT, and average travel speed between the no build and build networks, the differences are small, almost negligible. With the average speed generally increasing in the build when compared to the no build. Also, the order of magnitude in the system speed data shows the speeds to be generally in the mid-30s (mph). These high speeds reflect the influence of the Everett Turnpike on the regional data, and reflect that in off peak periods, the system congestion is low.

Trip Purpose	2020	2030	2050	2020-2030	2020-2050
Home Based	287,121	313,695	331,668	9.3%	15.5%
Work					
Home Based	736,944	802,992	836,923	9.0%	13.6%
Non-Work					
Non-Home	375,720	407,433	423,315	8.4%	12.7%
Based					
Light Truck	195,514	212,156	216,077	8.5%	10.5%
Medium Truck	51,542	55,708	56,753	8.1%	10.1%
Heavy Truck	18,912	20,562	21,118	8.7%	11.7%
Totals	1,665,753	1,812,545	1,885,854	8.8%	13.2%

Table 36: Trip Totals by Trip Purpose

Table 37: Community No Build - VMT Summaries

Community	2020	2030 No Build	2050 No Build	2020-2030	2020-2050
Amherst	325,900	341,016	359,144	4.6%	10.2%
Brookline	70,218	74,570	78,881	6.2%	12.3%
Hollis	176,833	193,338	205,209	9.3%	16.0%
Hudson	509,059	556,099	571,936	9.2%	12.4%
Litchfield	108,088	109,563	119,895	1.4%	10.9%
Lyndeborough	17,790	19,195	20,583	7.9%	15.7%
Mason	17,824	19,064	20,531	7.0%	15.2%
Merrimack	1,244,683	1,376,096	1,456,197 10.6%		17.0%
Milford	292,017	305,458	317,064	4.6%	8.6%
Mont Vernon	23,249	24,859	26,836	6.9%	15.4%
Nashua	2,180,673	2,378,307	2,438,205	9.1%	11.8%
Pelham	341,392	356,932	369,332	4.6%	8.2%
Wilton	48,260	51,372	54,575	6.4%	13.1%
Totals	5,355,985	5,805,868	6,038,389	8.4%	12.7%

Community	2020	2030 Build	2050 Build	2020-2030	2020-2050
Amherst	325,900	340,911	359,125	4.6%	10.2%
Brookline	70,218	74,586	78,918	6.2%	12.4%
Hollis	176,833	193,326	205,137	9.3%	16.0%
Hudson	509,059	556,365	572,830	9.3%	12.5%
Litchfield	108,088	109,572	119,667	1.4%	10.7%
Lyndeborough	17,790	19,211	20,577	8.0%	15.7%
Mason	17,824	19,068	20,538	7.0%	15.2%
Merrimack	1,244,683	1,376,371	1,376,371 1,456,894		17.0%
Milford	292,017	305,200	316,675	4.5%	8.4%
Mont Vernon	23,249	24,858	26,832	6.9%	15.4%
Nashua	2,180,673	2,378,448	2,439,862	9.1%	11.9%
Pelham	341,392	362,116	365,610	6.1%	7.1%
Wilton	48,260	51,349	54,563	6.4%	13.1%
Totals	5,355,985	5,811,380	6,037,228	8.5%	12.7%

Table 38: Community Build - VMT Summaries

Table 39: Community No Build vs Build - VMT Summaries

					2030 Build	
	2030 No	2030	2050 No		vs	2050 Build
Community	Build	Build	Build	2050 Build	No Build	vs No Build
Amherst	341,016	340,911	359,144	359,125	-0.03%	-0.01%
Brookline	74,570	74,586	78,881	78,918	0.02%	0.05%
Hollis	193,338	193,326	205,209	205,137	-0.01%	-0.04%
Hudson	556,099	556,365	571,936	572,830	0.05%	0.16%
Litchfield	109,563	109,572	119,895	119,667	0.01%	-0.19%
Lyndeborough	19,195	19,211	20,583	20,577	0.09%	-0.03%
Mason	19,064	19,068	20,531	20,538	0.02%	0.03%
Merrimack	1,376,096	1,376,371	1,456,197	1,456,894	0.02%	0.05%
Milford	305,458	305,200	317,064	316,675	-0.08%	-0.12%
Mont Vernon	24,859	24,858	26,836	26,832	-0.01%	-0.02%
Nashua	2,378,307	2,378,448	2,438,205	2,439,862	0.01%	0.07%
Pelham	356,932	362,116	369,332	365,610	1.43%	-1.01%
Wilton	51,372	51,349	54,575	54,563	-0.04%	-0.02%
Totals	5,805,868	5,811,380	6,038,389	6,037,228	0.09%	-0.02%

Community	2020	2030 No Build	2050 No Build	2030 Build	2050 Build
Amherst	9,261	9,750	9,742	10,253	10,252
Brookline	1,933	2,058	2,059	2,178	2,180
Hollis	5,097	5,578	5,578	5,930	5,927
Hudson	16,540	17,555	17,557	18,185	18,086
Litchfield	2,802	2,857	2,857	3,138	3,131
Lyndeborough	531	573	574	615	615
Mason	533	571	571	615	615
Merrimack	26,948	28,858	28,872	30,546	30,607
Milford	8,203	8,601	8,586	8,943	8,921
Mont Vernon	690	738	738	796	796
Nashua	56,751	61,638	61,567	63,828	63,696
Pelham	11,724	12,209	12,494	12,749	12,663
Wilton	1,376	1,466	1,465	1,558	1,558
Totals	142,389	152,451	152,658	159,335	159,047

Table 40: Community - VHT Summaries

Table 41: Community Average Speed (mph)

Community	2020	2030 No Build	2050 No Build	2030 Build	2050 Build
Amherst	35.19	34.98	34.99	35.03	35.03
Brookline	36.32	36.23	36.23	36.21	36.21
Hollis	34.69	34.66	34.66	34.61	34.61
Hudson	30.78	31.68	31.69	31.45	31.67
Litchfield	38.58	38.35	38.35	38.21	38.22
Lyndeborough	33.48	33.48	33.48	33.47	33.47
Mason	33.44	33.41	33.41	33.40	33.40
Merrimack	46.19	47.69	47.67	47.67	47.60
Milford	35.60	35.52	35.55	35.45	35.50
Mont Vernon	33.71	33.70	33.70	33.70	33.70
Nashua	38.42	38.59	38.63	38.20	38.30
Pelham	29.12	29.24	28.98	28.97	28.87
Wilton	35.08	35.05	35.05	35.02	35.02
Totals	37.62	38.08	38.07	37.90	37.96

PUBLIC PERCEPTIONS AND PRIORITIES

The first task of the MTP update process was to undertake a regionwide online survey to identify travel characteristics, perceptions of traffic conditions along major highway corridors and more importantly, priorities among citizens and visitors to the region for transportation improvements. The public was also asked to identify which new revenue sources would be preferred for implementation of transportation projects.

The rankings shown in the following table appear to properly reflect congestion levels along highway locations; however, it should be noted that rankings are probably influenced by the frequency of use by area drivers. Daniel Webster Highway in South Nashua, for example, is likely used by the vast majority of NRPC residents, as it is a major regional shopping area. A location such as the Turnpike in the narrowed sections of Nashua and Merrimack experiences substantial delay during peak commuting periods, but this likely impacts a much smaller portion of regional travelers.

						Ave.
	1	2	3	4	5	Rank
DW Highway - South Nashua	3%	9%	23%	32%	33%	3.83
Spitbrook Road/Exit One (Nashua)	5%	12%	23%	32%	28%	3.67
FE Everett Turnpike Exit 8 to Bedford Tolls	6%	14%	24%	29%	26%	3.54
Canal/Bridge Street (Nashua)	4%	13%	29%	31%	22%	3.54
Amherst Street - Exit 7 to Main St. (Nashua)	4%	13%	31%	34%	19%	3.51
NH 101A - Northwest Blvd to Exit 7 (Nashua)	5%	15%	30%	31%	19%	3.41
Taylor Falls Bridge (Nashua/Hudson)	10%	16%	27%	22%	25%	3.37
NH 101A Amherst/Hollis/Merrimack	7%	18%	33%	26%	16%	3.26
Main Street (Nashua)	6%	16%	38%	30%	11%	3.26
NH 3A Lowell Road (Hudson)	9%	19%	34%	21%	16%	3.15
Broad Street/NH 130 (Nashua)	7%	20%	38%	26%	9%	3.10
Ferry Street/NH 111 (Hudson)	9%	23%	38%	20%	10%	3.00
Sagamore Bridge (Nashua/Hudson)	12%	21%	38%	18%	12%	2.98
East Hollis/NH 111 (Nashua)	10%	24%	36%	21%	9%	2.94
DW Highway - Merrimack	11%	25%	35%	21%	9%	2.92
NH 102 (Hudson)	11%	26%	36%	19%	8%	2.87
NH 101 Milford	13%	29%	31%	20%	8%	2.83
West Hollis/NH 111 (Nashua)	11%	30%	36%	17%	6%	2.77
NH 122 at NH 101A (Amherst)	19%	31%	36%	11%	3%	2.48
NH 38 (Pelham)	23%	31%	7%	7%	4%	2.39
NH 128 (Pelham)	23%	31%	8%	8%	4%	2.39
NH 13 (Milford)	28%	35%	6%	6%	2%	2.19

Table 42: Congestion Ranked by Highway Location (5 = most congested)

Respondents were asked to rate various categories of transportation improvements. Maintenance of the existing system, including pavements, bridge reconstruction and signal controls ranked at the top, followed by passenger rail, and expanded paratransit services for persons unable to use the fixed-route system. Ranked at the bottom were new roadway construction and bike lanes/paths (presumably because only a small portion of the public utilizes bicycles for travel along arterials).

....

Α						Ave.
	1	2	3	4	5	Rank
Maintaining existing streets & highways	43%	15%	14%	11%	16%	2.42
Repairing or replacing "Red List" bridges	37%	21%	13%	12%	18%	2.53
Improving traffic signal coordination	26%	19%	24%	18%	13%	2.72
Extend passenger rail to	38%	16%	8%	10%	28%	2.74
Nashua/Manchester						
Expand paratransit service for	20%	23%	30%	15%	12%	2.78
seniors/disabled						
Increasing capacity of highways	20%	23%	27%	17%	13%	2.79
Sidewalks & other pedestrian	18%	25%	27%	17%	13%	2.82
improvements						
Extend Nashua Transit to other	19%	23%	25%	16%	17%	2.88
communities						
Bike lanes & paths	21%	18%	24%	18%	19%	2.95
New roadway construction	13%	20%	34%	18%	15%	3.02

Table 43: Importance of Transportation Projects (1 = most important)

Recognizing that transportation projects involve substantial outlays of funds; the public was asked to identify additional revenue sources they would support. Only an increase in the state gasoline tax received greater than 50% support. Increasing the federal gas tax and turnpike tolls also received a degree of support among respondents. Introduction of "mileage taxes" or increasing property taxes to fund transportation improvements were particularly unpopular funding alternatives.

	Support	Neutral	Oppose
Increase the federal gasoline tax	44%	20%	36%
Increase the state gasoline tax	52%	15%	33%
Increase NH Turnpike toll rates	42%	26%	33%
New tolls on federal highways such as I-93	34%	20%	46%
Introducing a new federal "mileage tax"	17%	18%	64%
Introducing a new state "mileage tax"	18%	17%	65%
Increasing automobile vehicle registration fees	30%	23%	47%
Registration surcharge for electric/hybrid vehicles	34%	18%	48%
Increase property taxes for transportation projects	12%	13%	75%

Table 44: Support for Additional Transportation Revenue Sources

As the MPO works to identify future transportation priorities, survey respondents were asked to rate the importance of major projects from the 2019-2045 MTP. The top ranking went to the passenger rail extension, followed by turnpike widening and construction of a southbound off-ramp at Exit 36 to South
Nashua. Major improvements on NH 101, including widening it to two-lanes per direction and construction of a new interchange to Perry Rd. in Milford, were ranked least important.

						Ave.
	1	2	3	4	5	Rank
Nashua/Manchester Commuter Rail extension to	49%	15%	8%	6%	22%	2.35
Boston						
FE Everett Turnpike widening - Exit 8 to Bedford Tolls	24%	24%	23%	15%	14%	2.69
Construct Rte. 3 Exit 36 southbound interchange	28%	21%	20%	14%	17%	2.69
Third Merrimack River Bridge Rte. 102 to DW Hwy.	18%	23%	27%	17%	16%	2.89
Expand Nashua Transit to Milford/Merrimack/Hudson	21%	20%	24%	15%	19%	2.90
101A Widening (select locations Milford to Nashua)	15%	26%	27%	17%	15%	2.90
Hudson Parkway - NH 3A to NH 111 in Hudson	15%	19%	32%	17%	18%	3.03
Remove FE Everett Turnpike ramp tolls at Exit 11	17%	21%	25%	16%	21%	3.05
NH 101 Widening to four lanes - Wilton to Bedford	13%	17%	23%	22%	24%	3.27
NH 101 interchange to Perry Road Underpass (Milford)	11%	15%	24%	22%	28%	3.41

Table 45: Importance of Transportation Plan Major Investment Projects (1 = most important)

TRANSPORTATION PROJECTS AND PROGRAMS

TEN YEAR PLAN PROJECTS

The first group of projects contained within the MTP are those included in the State of New Hampshire Ten Year Plan (TYP). The biennial update of the TYP results in the development and implementation of a plan allowing New Hampshire to fully participate in federally supported transportation improvement projects as well as to outline projects and programs funded with State transportation dollars.

In advance of the TYP update cycle, the NRPC conducts a project solicitation process to add/delete/ modify projects in its MTP. Following the update of the MTP project list, projects which are planned for submission to the TYP are evaluated based on performance criteria and ranked by the TTAC. Project costs are developed by local professional engineers or submitted to NHDOT for review by their engineering staff. The draft plan that is produced by the NHDOT with input from the regions (as noted, the NRPC as a TMA has sub-allocation authority, which ensures that local priorities will be programmed up to the sub-allocation total for the biennial period). The draft is put before the public through a series of public hearings held by the Governor's Advisory Commission on Intermodal Transportation (GACIT). The Plan then moves on to the Governor who provides recommendations which are then sent on to the N.H. Legislature. The Governor's version is then sent to the Legislature and the final version becomes law when signed by the Governor.

BRIDGE PROJECTS

The following bridge projects have been programmed in the TYP and address the deficiency ratings identified in the Existing Conditions section of this report.

<u>Municipality</u>	Bridge Location	Project Type
Amherst	Horace Greeley Rd. over Pulpit Brook	Replacement
Amherst	Mont Vernon Rd. over Caesars Brook	Replacement
Amherst	Thornton Ferry Rd. over Beaver Brook	Replacement
Amherst	NH122 over NH 101	Bridge Deck
Brookline	Bond St. over Nissitissit River	Rehabilitation
Lyndeborough	NH Railroad Bridge over Glass Factory Rd.	Rehabilitation
Merrimack	US 3 over Baboosic Brook	Replacement
Merrimack	Bedford Rd over Baboosic Brook	Replacement
Milford	Hartshorn Rd. over Hartshorn Brook	Replacement
Pelham	Main St. over Beaver Brook	Replacement
Pelham	Willow St. over Beaver Brook	Replacement
Pelham	Old Bridge St. over Beaver Brook	Rehabilitation
Wilton	Old County Farm Rd. over Blood Brook	Replacement
Wilton	Stagecoach Rd. over Burton Pond	Replacement

Table 46: Bridge Replacements/Rehabilitation

INTERSECTION IMPROVEMENTS

NH 13/Old Milford Rd. (Brookline)

The project will construct a southbound left turn lane on NH 13 at the intersection with Old Milford Rd. The five-year (2013-2017) crash history shows 6 accidents at this location, with 2 involving injuries. A 44% CRF is applied to this improvement for potential accident reduction. Although congestion reduction is not a priority, as the intersection operates at LOS B, there is minor queuing on Old Milford Road that would be lessened by improving gaps in the major approach volumes.

NH 13/South Main St. (Brookline)

A Road Safety Audit (RSA) was initiated due to New Hampshire Department of Transportation's (NHDOT) selection of an application submitted from the Town of Brookline in cooperation with NRPC. Justification for the RSA application included the NRPC Route 13 Access Management study and the reality that from 1990-2010, Brookline was the fastest growing town in the state and the only town to more than double in population. The intersection of NH Route 13 and South Main Street is the busiest intersection in town and is also adjacent to the busiest business in town. There had been 52 motor vehicle crashes in a 10-year period that resulted in 13 injuries (2 serious) in the vicinity of this intersection prior to the RSA study. The purpose of the RSA was to address safety concerns at this busy intersection. As a result of the study, intersection safety improvements are scheduled for FY2029 in the NHDOT Ten Year Plan.

NH 13/Ruonalla Rd. (Brookline)

This project will reconstruct/realign the skewed intersection of Ruonalla Rd. and NH13. The project is included in the FY2023-32 NH Ten Year Transportation Plan and scheduled for construction in FY2032.

NH 3A/Sagamore Bridge Rd. (Hudson)

This CMAQ-funded project consists of constructing a third southbound right-turn lane on NH 3A from its intersection with Wason Rd/Flagstone Drive to the westbound ramp of the Sagamore Bridge.

Existing southbound traffic on NH 3A at this location is 20,000 per day, with a v/c ratio of 1.11, indicating over-capacity conditions. Without construction of an additional lane, a traffic level of 21,500 is forecasted for 2045, operating at v/c 1.20. With construction of the third lane, traffic will marginally increase to 22,000, but the additional lane capacity will reduce the v/c to 0.81.

NRPC performed an intersection impact analysis for the project at NH 3A/Wason Road for the CMAQ application. The most congested peak hour occurs in the morning period; the project is estimated to reduce vehicle delay at the intersection by 22% (2,130 minutes) for the one-hour period. The project would reduce ozone precursors: VOC are reduced by 2.23 kg per day and NOx by 0.77 kg per day.

Along the project impact area between the NH 3A/Wason Rd. and 3A/Sagamore Bridge Rd. intersections there have been 120 crashes over five years; 18 involved injuries, there was one fatality and 2 involved non-motorized travelers (pedestrians/bicyclists). The CRF for adding a right turn lane is a 14% reduction.

NH3A/Corning Rd. (Litchfield)

This project will reconstruct/realign the skewed intersection of Corning Rd. and NH3A. The project is included in the Draft FY2025-34 NH Ten Year Transportation Plan and scheduled for construction in FY2034.

US 3 Daniel Webster Hwy./Wire Rd. (Merrimack)

Wire Rd. intersects with US 3 at a 25-degree skew, impacting sight distance for traffic approaching from the north on DW Highway. The project seeks to accomplish multiple goals: 1) Realign the intersection to a regular T-intersection geometry with signalization or construct a roundabout; 2) coordinate signal operations with existing signals along US 3 at Front Street, Baboosic Lake Rd., and Connell's Plaza; and 3) continue the sidewalk along US 3 from its current location from Baboosic Lake Rd/Merrimack Library to the Wire Rd. intersection.

This project has been combined with the bridge replacement over Baboosic Brook (BR. # 118/135) project and is scheduled for constructions in FY2025.

Naticook Rd./Camp Sargent Rd. (Merrimack)

This project will reconstruct/realign the skewed intersection of Naticook Rd. and Camp Sargent Rd. The project is included in the Draft FY2025-34 NH Ten Year Transportation Plan and scheduled for preliminary engineering in FY2036.

Main/Canal/Lowell Streets (Nashua)

This project will address safety and traffic flow issues at the intersection of Main St., Lowell St., and Franklin St. The project is included int the FY2023-36 TIP, and construction is scheduled to begin in FY2026.

Walnut St./Chestnut St./Central St. (Nashua)

This project will address safety and traffic flow issues at the intersection of Walnut St, Chestnut St, and Central St. The project is included int the FY2023-36 TIP, and construction is scheduled to begin in FY2025.

East Hollis St and Bridge Street Intersection Reconfiguration (Nashua)

The Taylor Falls Bridge Area has historically been in the top tier of highly congested areas in the Nashua Area. Limited Merrimack River crossings in the region focus a great deal of east-west traffic to this area and the junction of Bridge Street and East Hollis Street on the Nashua side results in significant delay for drivers eastbound from Bridge Street to Ferry Street and westbound from Bridge Street to East Hollis Street. An improvement project was added to the TYP, and a study conducted to select a preferred improvement alternative. The project addresses the following identified needs:

- Daily traffic congestion, queues, and delay
- Lack of bicycle and pedestrian accommodations
- Merging vehicles creates safety concerns.
- Limited access to Crown St. and new development
- The current configuration is not a welcoming gateway into Nashua.

Identified goals of the project are to:

- Improve mobility of all users
- Improve access.
- Facilitate land use.
- Not adversely impact traffic.
- Provide aesthetically pleasing gateway.

Several alternatives were considered, with the apparent preferred alternative shown in the following figure. It utilizes two signals of three and four phases respectively to control traffic. Direct access to Riverside Landing is provided. Delay for traffic that now does not pass through the existing intersection (Hudson traffic to Bridge St. and East Hollis St. traffic to Hudson) will be increased but delay will be lessened for vehicles that use the existing intersection.

Nonmotorized access is enhanced by providing sidewalks and bike lanes to all areas of the intersection. A tradeoff for providing sufficient lanes to channel traffic through this busy area is that pedestrians will have to traverse five travel lanes for crossing over. Two large areas of green space have been created.

There have been 58 accidents in the project area, 6 involving injuries; however, no pedestrian/bicycle accidents were recorded. It is not evident that a CRF should be applied to all vehicle activity, since the project entails replacing signals with a pair of signals; installation of bike lanes would warrant a 14% reduction factor for vehicle/bike crashes.

The project has positive benefits to Environmental Justice (EJ) zones, being in a tract with poverty households constituting greater than 20% of the total and minority populations equal to 15%-20% of the total. Pedestrian access to groups with lesser access to private automobiles will be substantially enhanced.



East Hollis Street/Bridge Street Intersection Reconfiguration

Route 128 Intersections (Pelham)

A CMAQ project approved in 2017 provides for construction of roundabouts at two intersections near each other: NH 128/Sherburne Road and NH 128/NH 111A. The former operates at LOS F, with PM queuing on NH 111A necessitating the use of a police officer to direct traffic at Sherburne Road. Lack of available gaps for traffic attempting to enter NH128 creates a significant safety hazard.

These projects are scheduled to be constructed in FY2024 and 2025.

CORRIDOR AND SUBAREA CIRCULATION IMPROVEMENTS

NH 111 East Hollis Street Intersection Improvements – Main St. to C St. (Nashua)

East Hollis Street serves as a downtown arterial that services regional east-west traffic, linking the F.E. Everett Turnpike and the Nashua core area with Hudson and points east. The roadway is utilized locally to access residential and commercial locations. Vehicular traffic is impeded by several factors including inconsistent cross-section, poor pavement conditions, inconsistent pavement markings/signage and inadequate shoulders and sidewalks in many locations. Pedestrian and bicyclist safety are a primary concern of the improvement program.

The project currently proposes eleven-foot travel lanes to provide adequate width without encouraging excessive operating speeds. Options for using either wide shoulders for bicycle use or narrow shoulders coupled with wider sidewalk/bikeways will be considered. Streetscape improvements include consistent lighting and landscaping.

The project evolved from the 2004 East Hollis Area Study which included an in-depth public outreach effort. A Steering Committee comprised of a cross-section of interests in the district evaluated analysis and alternatives at each stage of the process.

The project has positive EJ benefits, as the entire length of East Hollis Street is in census tracts for which minorities and individuals in poverty are in the 15%-20% range or greater than 20% of total population. Pedestrian access to groups with lesser access to private automobiles will be substantially enhanced.

This project is scheduled for Preliminary Engineering and Right of Way acquisition in the FY 2023-26 TIP, and Construction in FY2027 of the Draft FY2025-34 NH Ten Year Plan.

West Gateway Improvements (Nashua)

This project entails the reconfiguration of the West Gateway of downtown Nashua, including the Walnut Street Oval and one-way street pair of Factory and West Pearl Streets to improve traffic flow, reduce speeds and improve pedestrian access. The reconfiguration would transform the oval into a city block configuration. Improving pedestrian access and safety is a major objective. The oval width and continuous fast speed operation create a physical and psychological barrier between the downtown and Mill yard areas.

Over a 5-year period there have been 79 accidents within the project area (total 1.07 miles). Of these, 10 have involved personal injury; 2 involved pedestrians/bicyclists. Depending on final design there may be several CRFs applied; an 18% generalized traffic calming countermeasure factor should provide a conservative estimate of expected safety improvement.

The project is not intended to address congestion issues. Although the intersection of Factory and Chestnut Streets has been identified as operating at LOS F, the oval area operates overall without delay; a project goal is to reduce speeds to achieve higher vehicular and pedestrian safety.

The project has positive mobility benefits to Environmental Justice (EJ) zones, being located in a census tract with poverty households constituting greater than 20% of the total and minority populations 15%-20% of the total. Pedestrian access to groups with lesser access to private automobiles will be substantially enhanced.

INTELLIGENT TRANSPORTATION SYSTEMS PROJECTS

F.E.E. Turnpike Open Road Tolling (Bedford-Merrimack)

The NHDOT will be implementing All Electronic Open Road Tolling at the Bedford toll plaza, which will remove toll barriers and install new electronic systems which will enable toll collection with vehicles maintaining regular highway speeds. The system is now in place at the Hooksett and Hampton toll plazas. This project will have a substantial impact on congestion and will improve the safety of toll collection on the turnpike. The project is scheduled for construction in FY2023.

F.E.E. Turnpike ITS Deployment (Nashua to Concord)

The NHDOT has programmed the implementation of intelligent transportation systems (ITS) on the Everett Turnpike. The project entails the design, planning and installation of dynamic message signs, closed-circuit video cameras, roadway detectors, and wireless communications linking the ITS components to NHDOT's Transportation Management Center. These systems streamline incident response and management, improve safety in work zones, facilitate greater fuel efficiency for drivers and create "smart roads" that could potentially guide future autonomous vehicles. Safety will be enhanced by increased awareness of work zones and improved emergency response time.

PEDESTRIAN AND BICYCLE PROJECTS

Route 130 (Brookline)

Sidewalk construction along Rte. 130, South Main St., and Mason Rd with pedestrian bridge over the Nissitissit River and sidewalk to the beach.

Pedestrian Bridge over Souhegan River (Merrimack)

This project will rehabilitate or replace the pedestrian bridge over the Souhegan River near West Chamberlain Road in the vicinity of the FEE Turnpike. The project is scheduled for construction in FY2032.

Swing Pedestrian Bridge (Milford)

The project is comprised of removal/repaying of 60 feet of each approach to the 200-foot pedestrian bridge and other rehabilitation efforts on Bridge St. over the Souhegan River. This project is scheduled for construction in FY2025.

Daniel Webster Hwy Pedestrian Improvements (Nashua)

The project's focus is to provide pedestrian safety improvements, including the addition of crosswalks with pedestrian crossing signals, median respite areas and tip downs for ADA accessibility. The roadway is a highly congested mixed-use corridor; the residential component has been trending higher, resulting in higher numbers of pedestrian trips to commercial activity centers.

The project has positive mobility benefits to Environmental Justice (EJ) zones, being in a tract with poverty households constituting greater than 20% of the total and minority populations 15%-20% of the total. Pedestrian access to groups with lesser access to private automobiles will be substantially enhanced.

Heritage Rail Trail East (Nashua)

The Heritage Rail Trail East Project will extend the bike and pedestrian from the Heritage Rail Trail West's terminus at Main Street in downtown Nashua and continue the trail to the East Hollis Street/Denton Street intersection.

The project has positive mobility benefits to Environmental Justice (EJ) zones, being in a tract with poverty households constituting greater than 20% of the total and minority populations 15%-20% of the total. Pedestrian access to groups with lesser access to private automobiles will be substantially enhanced.



Heritage Rail Trail East

CAPACITY IMPROVEMENTS

NH 101A Widening (Nashua, Merrimack)

The NH 101A improvement program being implemented by the NHDOT resulted from the NH 101A Corridor Master Plan and Improvements Program (December 2002), which proposed various capacity improvements to reduce congestion, increase speeds to efficient levels, and decrease vehicle miles by reducing the diversion of traffic to parallel routes.

In Nashua, the highway is being widened to three travel lanes per direction from Somerset Parkway and to Celina Avenue. The project will include pedestrian, bike, and transit improvements. Preliminary Engineering (FY2024) and Right of Way acquisition (FY2026) are scheduled in the FT2023-36 TIP, and construction is scheduled in the Draft FY2025-34 NH Ten Year Plan in FY2027.

In Merrimack there are three NH 101A travel lanes westbound from Continental Boulevard to Boston Post Rd. and two lanes eastbound. The Continental Boulevard intersection with 101A will be improved; a second lane for right turns onto 101A and a new right-turn lane from 101A westbound to Continental Blvd. will be constructed. Non-motorized travel will also be enhanced with sidewalks, bike lanes, and a signalized crosswalk across 101A at the Continental Boulevard intersection. Traffic calming measures will also be implemented with the reconfiguration of Boston Post Road and Craftsman Lane, and a public right-of-way through the parking lot at the Merrimack Valley Baptist Church will be discontinued.

This project is scheduled for construction in 2023 in the FY2023-26 TIP.

F.E.E. Turnpike Widening

During the 1990's the F.E.E. Turnpike was widened in Nashua to a minimum of three lanes in each direction from the Massachusetts state line to Exit 7 at NH 101A, with the most travelled segment between Exits 5 and 6 having five lanes per direction.

The current project will widen the remaining 2-lane segments between Exit 8 (Nashua) Exits 10, 11, 12 (Merrimack) to I-293 in Bedford. The current project has advanced to construction which will widen the following segments to 3 lanes:

- Southern Segment: Between Exits 8 and 10 in Nashua and Merrimack
- Middle Segment: From Exit 11 to the existing 3-lane section south of Exit 13 (Wieczorek Drive to Manchester Airport) in Merrimack.
- Northern Segment: From north of Wieczorek Drive to the I-293 interchange (segment outside of the NRPC region).

The project will also address bridges within the widening segments that have not been substantively improved since their construction during the 1950's. Although not on the Red List, they would require rehabilitation soon absent the widening program. They include:

- FEET northbound & southbound over Pennichuck Brook (Nashua/Merrimack)
- Baboosic Lake Road over FEET (Merrimack)
- Wire Rd over FEET (Merrimack)
- FEET northbound and southbound over Baboosic Brook (Merrimack)

This project is currently under construction and will be ongoing from FY2024 through FY2031.

NH 101 Corridor Improvements (Wilton/Milford/Amherst)

NH 101 corridor improvements have been programmed into the TYP based on findings of The New Hampshire Route 101 Corridor Plan (September 2002). The stated purpose of the plan was to improve safety and preserve the capacity of the roadway as land use patterns change along the corridor. The recommended plan was designed to result in a better operating, more visually appealing arterial, as well as reduced traffic diversion to local streets. The project has evolved to include two projects (Project #13692D and #13692E) that will provide safety improvements along the corridor at a smaller scale than

was originally envisioned. Preliminary engineering is currently ongoing. Project #13692D is scheduled for construction in FY 2024, and Project #13692E is scheduled for construction in FY 2025.

REHABILITATION/RECONSTRUCTION/OPERATIONAL IMROVEMENTS OF EXISTING FACILITIES

Railroad Safety Improvements

The CSX Corporation completed its acquisition of Pan AM Railways in June 2022. The acquisition includes the Hillsborough Branch that extends from Nashua to Wilton. CSX has since reconstructed most of the at-grade crossings in the region, including the Main Street crossing in Nashua.

RECONSTRUCTION & OPERATIONAL IMPROVEMENTS

NH 13/South Main Street Realignment, Brookline

The project entails the realignment of NH 13 and South Main Street to a perpendicular alignment between the two streets. A consolidation of the two access points for businesses across the street into a single access point opposite South Main Street to provide a four-way intersection is also under consideration. The addition of a traffic island will provide traffic calming and better define the entrance/exit points at the intersection. The Town also requests that the State lower the speed limit in the area from 50 to 35 mph. The project is intended to address safety, as right-turning vehicles from northbound NH 13 to South Main Street can take the obtuse angle at a high speed, posing a hazard particularly to vehicles exiting the business directly across the highway.

NH 130 (Broad Street), Nashua

Complete Streets improvements on NH 130 from Coburn Avenue to Coliseum Avenue in Nashua, as well as safety and shoulder improvements on Dublin Ave. It was added to the State's TYP in 2003 and appeared to be on tract for construction in the FY 2011 – 2014 TYP with construction in 2016; however, the project was subsequently deferred beyond 2013- 2022 TYP time frame and funds were de-obligated. This project is included in the outer years of the MTP for possible inclusion in future Ten Year Plan project solicitation rounds.

Bridge & Canal Complete Streets Improvements, Nashua

The project begins on Canal Street at Railroad Square near Main Street and continues east over the Canal Street bridge, where the street continues as Bridge Street, toward the Merrimack River bridges. The proposed improvements include pavement replacement, adjustments to curbs and reconstruction of sidewalks and handicapped ramps. New pavement markings will re-assign the street's use in terms of travelled way, parking, and bike lanes. Drainage problems will also be addressed.

The project facilitates pedestrian and bicycle travel for the surrounding neighborhood, which lies within an Environmental Justice zone.

PEDESTRIAN/BICYCLE PROJECTS

Multi-Modal Path, Amherst

The project utilizes abandoned B&M Railroad property as well as Town owned property to provide a future continuous non-motorized path over six miles in length running north to south in Amherst. The

Town has adopted the following phases for the project, with the first two planned for early implementation.

- Phase I To be implemented with municipal funds only, a 5,450-foot section beginning to the east of the NH 101/Baboosic Lake Rd. interchange, running south to the east of NH 101, continuing west on Thornton Ferry Rd, and turning south running to the west of Beaver Brook, terminating at Merrimack Rd.
- Phase 2 This 8,300-foot segment begins at Baboosic Lake Rd. just east of the NH 101 interchange and runs northeasterly along the B&M rail corridor terminating at Walnut Hill Rd. opposite Embankment Rd. (2018 TAP submission).
- Phase 3 The 4,400-foot section runs from the intersection of Thornton Ferry Rd/Courthouse Rd. and runs south to Mulberry Lane at Corduroy Rd.
- Phase 4 This 4,000-foot section continues south from Mulberry Rd. along Beaver Brook to Merrimack Rd., terminating west of Pine Acres Rd.
- Phase 5 The 6,750-foot section begins at Merrimack Rd to the west of Pine Acres Rd and continues southeasterly along Beaver Brook and subsequently Fairway Drive, terminating at the intersection of River Rd and Boston Post Rd.
- Phase 6 From River Rd. the southernmost 3,550-foot section continues along Boston Post Rd., terminating at Amherst Middle School.

Amherst- Baboosic Greenway

The Baboosic Greenway is in the northeast of the town of Amherst, situated generally parallel to NH 101 to the south. It spans 11,625 linear feet from the border with Bedford in a southwesterly manner, along the abandoned Manchester & Milford Branch rail bed to Walnut Hill Rd in Amherst, where it terminates at Ten Year Plan Project Amherst 42593. The primary purpose of the Baboosic Greenway stands to create a regional spine for a broader off-road trail network for the purposes of enhancing safety, increasing regional mobility, and expanding accessibility for persons who are unable to transport themselves by motor vehicle.

Merrimack - Town Center Sidewalks

The Town of Merrimack has submitted a TAP application for construction of sidewalks on Baboosic Lake Rd. from DW Highway to O'Gara Dr. (1,500 ft.) and on Woodbury Rd. from DW Hwy. to McElwain Street (1,200 ft.). The project connects a number of Town facilities and commercial establishments with the town center. The project will raise the nonmotorized Stress Analysis score from D- to A/B on Woodbury St. and from D/E- to A/B on Baboosic Lake Rd.

Milford - Non-Motorized Improvements

In direct response to the growing community demand for safe pedestrian routes of travel to town wide destination, recreational resources/facilities, schools and within existing and expanding neighborhoods, the Town of Milford developed the Milford Pedestrian, Bicycle, Trail & Recreation Plan in 2014. The Connectivity Plan mapped existing facilities and prioritized the location of future pedestrian and bicycle paths, trails, and corridors. Three specific projects have evolved for inclusion in the MTP, one of which is being submitted for funding in the current TAP application round.

Milford - Various Pedestrian Linkages

A future project would construct a 200-ft. pedestrian bridge over the Souhegan River from 135 Elm Street to 34 North River Rd. This connects to an existing nonmotorized network serving recreational programs. A 3,000 foot nonmotorized path/trail would be constructed connecting to the Keyes Memorial Park and MCAA fields. The project creates direct pedestrian linkages to the Souhegan River, existing trail system, the elementary school, a recreational center, and the downtown center.

Milford - Osgood Rd. & Melendy Rd. Sidewalks

The Town has identified as a future project the construction of a sidewalk and multi-use connection for pedestrians and non-motorized vehicles beginning at the intersection of West St./Osgood Rd. extending to Adams Field and Osgood Pond and ending at the Leisure Acres mobile home Park on Melendy Rd. (3,000 ft.). The project includes new sidewalks, striped lanes, detached pathways, and road crossings. The project serves a high-traffic facility that connects a municipal recreation area, the Osgood Pond natural area, a historic park and established residential neighborhoods.

Milford - Nashua St Sidewalks and Bicycle Lane

A future priority is the construction of a sidewalk and striped bicycle lanes on NH 101A Nashua Street between the Medlyn Monument and Walgreen Pharmacy (2,600 ft.).

Nashua - Kinsley Street Pedestrian and Bicycle Accessibility Improvements

The project would entail construction of new sidewalks on both sides of the entire length of Kinsley Street from the Everett Turnpike interchange to Main Street in downtown Nashua. New handicapped ramps will be provided, and bike lanes (striped pavement markings) will be added by reapportioning the road through reducing shoulders or on-street parking. With its high rate of speed Kinsley Street is a dangerous facility for bicycle and pedestrian travel.

Nashua - Lock & Whitney Streets

Lock and Whitney Streets are predominant routes to Mt. Pleasant Elementary School in Nashua's French Hill neighborhood. Walking is a primary mode to school in this densely populated area. The project will improve nonmotorized transportation in the neighborhood by widening existing sidewalks to a minimum of five feet to enable all mobility devices to comfortably use the sidewalks. Striped bike lanes will also be added to the streets. To accommodate both the sidewalk widening and bike lanes, both streets will be converted to one-way, with travel lanes narrowed and traffic calming at busy intersections to improve safety.

The project is in the most densely populated Census Tract (#105) in the City and has the third highest minority populate rate in the City at 38% and second highest poverty rate at 29%.

Hudson - NH 3A and NH 102 Non-Motorized Improvements

The Town of Hudson has included the completion of non-motorized gap sections on NH Routes 3A Lowell Rd. and 102 Derry Rd. The Phase 2 project on NH 102 would continue the pedestrian/bike lane from Towhee Dr. to Megan Dr. and Phase 3 from Phillips Dr. to the Hudson Mall. On NH 3A sidewalks would be continued from Birch St. to Pelham Rd. The projects have been in the MTP for a number of years; however, the Town has not moved toward implementation through a Transportation Alternatives Program application. The Board of Selectmen affirmed the projects as future goals, and it is recommended that the Town pursue TAP funding for one or more segments in the next application round.

HIGHWAY CAPACITY ENHANCING PROJECTS

Broad Street Parkway Interchange with Franklin Street

The Broad Street Parkway, completed in late 2015, provided an additional Nashua River crossing linking NH 130 Broad Street east of the Turnpike Exit 6 interchange with Pine Street in the vicinity of the Mill yard Technology Park. It currently carries about 9,600 vehicles per day, but has not reached its full potential to date due to lack of access to city streets between its origin and end points. A project which will be added to the State's TYP in the next round per agreement between the City of Nashua and the State is an interchange with Franklin Street, thereby providing access to roadways north of the Nashua River.

					NB		NB to	Bld
	_	2015 Ct 20	015 V/C	2045 NB	V/C	2045 Bld	Bld %	V/C
Broad St Pkwy	S. of Fairmount St	9,580	0.38	10,270	0.41	13,470	31%	0.54
Main St.	S. of Franklin St.	23,730	0.79	24,400	0.81	23,170	-5%	0.77
Franklin St.	E. of Charles St.	1,580	0.10	1,770	0.11	3,260	84%	0.20

Broad Street Parkway/Franklin St. Interchange Traffic Impact

FEE Turnpike Exit 5 Reconfiguration

The project addresses traffic and safety related issues for traffic exiting the turnpike at exit 5E onto the overhead West Hollis Street on-ramp to travel to the east toward downtown. This traffic competes with eastbound traffic from West Hollis and Main Dunstable Road. All eastbound traffic converges at a very short weave section on West Hollis Street between the turnpike southbound off ramp and the turnpike northbound on ramp and is further exacerbated by the conflict between turnpike off-ramp traffic to West Hollis Street and northbound turnpike on-ramp traffic. The 500-ft. weave section along West Hollis Street is too short for the conflicting traffic movements. Queues back up on the ramp during peak periods to the southbound turnpike collector-distributor roadway segment.

The proposed project would realign the Exit 5E Southbound off ramp with the traffic signal at the junction of Main Dunstable Road and the turnpike southbound on ramp. This approach would eliminate the exit from the southbound turnpike traffic onto West Hollis Street. Traffic would exit the turnpike onto Main Dunstable Road and turn right onto West Hollis Street from Main Dunstable Road where two right turn lanes exist.

Turnpike Exit 5 Reconfiguration, Nashua



US 3 Exit 91 (formerly Exit 36) 36 Interchange

Proposed is a southbound exit from the F.E.E. Turnpike to Daniel Webster Highway in the densely developed commercial and residential area of South Nashua. The existing configuration of the interchange provides for all movements except for southbound turnpike traffic. Drivers traveling to this area from points north via the Turnpike must exit at Spit Brook Rd. and traverse that congested roadway to access South Nashua. A joint study was conducted by NRPC and the Northern Middlesex Council of Governments to identify project benefits and estimated costs.

The Exit 91S off ramp is expected to significantly improve operating conditions along the major roads in the south Nashua area, by relieving traffic congestion and delay, reducing greenhouse gas emissions, improving travel times, and decreasing lost productivity. The project is expected to enhance the effectiveness of public transportation and support future passenger rail service. The southbound ramp and related improvements will provide more efficient access to services, area business establishments, local and regional job centers. The proposed improvements will also generate opportunities for sustainable growth and serve as a catalyst for future economic development and community investment. The bi-state aspect of the project provides exceptional opportunities for innovative financing, interstate cooperation and coordination, and public/private partnerships.

South Nashua in the vicinity of the project is an EJ target area, with a minority population exceeding 20%; however, the ramps would be built south of the state line in Massachusetts, away from the dense residential area in Nashua west of Daniel Webster Highway. Impacts to the South Nashua community would therefore be limited. There may be increases in ambient noise but will be mitigated should the

project go forward. Improved enhanced pedestrian and transit connections are recommended in conjunction with the project, which would benefit South Nashua's EJ population.



US 3 Exit 91 Off-Ramp to South Nashua

Exit 91 Southbound Off-Ramp Traffic Impact

							NB to	
			2015	2045	NB	2045	Build	Build
		2015 Ct	V/C	NB	V/C	Build	%	V/C
Spit Brook Rd	E. of Turnpike	27,690	0.88	27,750	0.88	24,900	-10%	0.79
DW Hwy.	S of Spit Brook Rd	30,690	0.78	29,420	0.74	22,540	-23%	0.57
Exit 36 SB Ramp						11,750		0.90

TRANSIT IMPROVEMENTS

Currently, approximately 58 percent of residents in the Nashua Region do not enjoy access to fixedroute transit, which does not extend beyond Nashua's boundaries. The three most promising candidates for extended transit service in the region are Hudson, Merrimack, and Milford. Hudson has been previously identified by NRPC's Transit Plan for the Nashua Region as having the highest overall need for transit service.

Various Transit Studies have identified the following potential transit routes:

 NH 101A between Nashua and Milford – Fixed route service between downtown Nashua and Milford, including service to employers on the west side of Milford. The project would address the need for fixed route bus service providing transportation for transit dependent populations living in Nashua, who are seeking manufacturing employment opportunities in the Town of Milford. This fixed route service would also provide transportation for Milford residents seeking to access employment, education, medical and shopping destinations both in-town, along NH 101A and in the City of Nashua. The project received funding during the FY2025-2028 round of Congestion Mitigation & Air Quality funding and was included by NHDOT in the draft FY2025-2034 NH Ten Year Plan in September 2023. The project was subsequently removed during the Governor's Advisory Committee for Intermodal Transportation (GACIT) process. Stakeholders are hopeful that the project will eventually be returned to the FY2025-34 Ten Year Plan.

- Continental Boulevard and Daniel Webster Highway, Merrimack Merrimack's largest employers are situated in the southern areas of the municipality zoned for industrial uses. The Anheuser-Busch Brewery, BAE Systems, Fidelity Investments, and the Merrimack Premium Outlets are located along Industrial Way or DW Highway in the southern quadrant of the town and employee a significant number of people. Additionally, the Outlets are a major regional destination for retail shopping. NTS does not serve any of these locations because there are no NTS routes along Continental Boulevard, Daniel Webster Highway (in Merrimack) or Industrial Way. However, these locations are all within approximately two miles of the Nashua city line and an area already served by NTS Route 1 along Manchester and Concord Streets.
- NH 3A in Hudson The extension of NTS Routes 6 and 6A into Hudson would serve several major destinations, including Wal-Mart, the Hudson Technology Park, and Market Basket. It would also service schools and residential areas, including Nottingham West Elementary School, the Presentation of Mary Catholic School and Convent, the Fox Hollow residential development and the densely populated neighborhoods surrounding Hudson's town center, then return to Nashua via the Taylor Falls Bridge.
- Nashua Shuttle to Lowell Gallagher Transit Terminal the implementation of passenger rail service is still uncertain. In the meantime, it may prove beneficial to initiate a Nashua to the Lowell Gallagher Transit Terminal shuttle as an interim service, with the possibility that it will also be the only long-term alternative if the obstacles that have blocked passenger rail for the past years are unable to be overcome in the future. A shuttle service is somewhat less convenient than a passenger rail extension to Nashua, as the shuttle would travel highways with a degree of congestion to reach Lowell Terminal, as opposed to boarding a train in south Nashua. Given the considerable difference in capital costs of implementation and operating deficits that must be funded annually, it is a service alternative that should be given strong consideration.
- Nashua Shuttle to Alewife MBTA Station A direct shuttle from Nashua to Alewife would provide a more convenient path for commuters who travel to MBTA Red Line stations in Cambridge and Mass General in Boston than passenger rail service to Boston via Lowell since it avoids the need to transfer to the Green Line at North Station followed by another transfer to the Red Line at Park Street Station for a back-tracking trip to the final destination. There may also be potential reverse commuter ridership.

There are two negatives associated with the Alewife shuttle. First, the shuttle has a long trip along the congested highway network in Massachusetts to reach the station. Variability in congestion from day to day would result in uncertain destination times at Alewife. Fortunately, the rapid transit system operates quite frequently during commute hours, and therefore missing a subway connection is not nearly as onerous as missing a less frequently scheduled passenger rail run.

The other disadvantage of this service is that it does not serve the secondary market of existing transit users who desire to travel between Nashua and Lowell. This tends to render the Alewife shuttle a less preferred alternative to the Lowell Terminal shuttle.

Nashua Shuttle to University of Massachusetts, Lowell – Because UML has a large Nashua area commuter population comprised of faculty and students, a shuttle service is likely to be highly successful, if it is largely subsidized by the University. The ridership analysis has indicated that charging a moderate fare reduces the ridership potential to a level that is not supportive of the service. Herein lies the main obstacle to implementation. Not only would UML have to allocate resources to fund the service, but it would also lose parking revenues from commuters who switch to transit. However, the shuttle concept is clearly in concert with the University's master plan goals of achieving environmental benefits through its policies and programs.

Should UML express interest in supporting a Nashua shuttle service, NRPC is available to conduct analysis that would enumerate the environmental and societal benefits, including reduced highway congestion, fuel conservation, and reduction of air emissions.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) is the application of strategies and policies to reduce travel demand or to redistribute from congested to lesser congested times of the day. It can be a cost-effective alternative to increasing capacity and has the potential to deliver better environmental outcomes, improved public health and stronger, more prosperous, communities. TDM techniques link with and support community movements for sustainable transport.

NRPC and other MPOs will be partnering with the State of New Hampshire over the next year to implement TDM programs through the I-93 Community Technical Assistance Program (CTAP). Specific regionally based TDM services to be provided to employers and communities include the following:

- Assist employers and employees in signing up for ride-matching services and provide follow-up services as needed.
- Conduct employer site assessments to develop and implement strategies on improving employer and employee transportation options.
- Provide geocoding, mapping, and survey services to assist employers to manage parking and traffic and connect employees to services.
- Provide trip planning assistance to employees.
- Assist employers with established preferred parking, transit pass, parking cash out, alternative/flex scheduling and tax benefit programs for employees.
- Assist employers and employees in establishing and growing vanpool programs.
- Conduct park and ride, bike/pedestrian counts to identify and track trends.
- Develop/support and promote emergency ride home programs.

NRPC intends to continue the efforts that are being initiated through the CTAP program to a regionwide ongoing program that encourages businesses and their employees to reduce their commute times and

costs through TDM measures that work for them. Particular emphasis will be on development of programs which can be implemented without significant costs to employers, require governmental agencies to maintain or attempt to modify the preferred travel desires of the majority of commuters, i.e., single-occupancy vehicles. The TDM emphasis areas include:

- Flex hours (begin and/or finish work outside of congested peak periods)
- Compressed work weeks (4 days/week or 9 days over two weeks)
- Telecommuting (work-at-home one day a week or more)

Any other programs that employers desire to implement will also receive the full support of NRPC in planning and execution.

ILLUSTRATIVE PROJECTS

An Illustrative project is defined by USDOT as "an additional transportation project that may (but is not required to) be included in a financial plan for a metropolitan transportation plan, TIP or STIP if reasonable additional resources were to become available." The NRPC MTP includes the following projects which have been identified as regional priorities, but which cannot be reasonably fitted into a fiscally constrained plan.

NH Capital Corridor Passenger Service

Connecting the Nashua and Manchester areas to the robust system of passenger rail and other transit alternatives that service the Boston Metro area has long been a regional priority though support at the state level has wavered. Nashua and Manchester are the largest cities in New England that are not served by passenger rail. The potential for extending passenger rail service from Lowell to Nashua and points north has been considered by the MPO going back to the original Passenger Rail Feasibility Study of 1988. That was followed by an Operational Alternatives study in 1990 and a Major Investment Study in 1999. These studies estimated ridership, operational schedules, capital costs and potential funding sources for service alternatives. Following completion of the MIS, the process of environmental assessment was begun, which was completed in 2004.

In December 2014 the NH Capitol Corridor & Transit Alternatives Analysis report was released, which evaluated several alternatives for passenger rail service. The Capitol Corridor Commuter Rail Extension Project would extend the Massachusetts Bay Transportation Authority (MBTA) Commuter Rail service 30 miles from Lowell, Massachusetts, to Manchester, New Hampshire. The proposed service would use approximately 10 miles of MBTA railway from Lowell, MA to the NH state line at Nashua, and 20 miles of MBTA trackage rights on the CSX Northern Branch northward into Manchester. The resulting service would provide a direct connection between Nashua and North Station in Boston with sixteen round trips on weekdays and half as many on weekends. The project recommends four stations, and a layover facility which is seen as an important inducement for the MBTA since the existing Lowell line currently has no layover facility.

Proposed station locations include:

- South Nashua Station at Pheasant Land Mall or the "Dow site"
- Nashua Crown Street Station near downtown Nashua

- Bedford/MHT Station service the Great Manchester-Boston Regional Airport
- Downtown Manchester Station
- Manchester Layover Facility

In 2021 NHDOT entered into an agreement with the consulting form AECOM to undertake the Project Development Phase of the initiative. The Project Development Phase is a necessary step before applying for federal funding to implement the project. Key steps included preliminary design engineering, State and Federal environmental review and development of the financial plan. For detailed information on the Project Development Phase and background on the Capital Corridor project in general, click on this Link.



Rendering of the proposed Crown Street Station near downtown Nashua

The Project Development Phase brought the design to 30% and included value engineering, which is a process to identify potential opportunities for cost savings while meeting design and operating requirements. In addition, the project team completed the financial plan, which was developed with input from regional, state, and local stakeholders in the public and private sectors. The goal of the financial plan is to help position the project to qualify for federal capital grant funding. Information was also gathered to develop and prepare an Environmental Assessment, in accordance with National Environmental Policy Act (NEPA) guidelines. The NEPA EA documentation includes evaluating potential project impacts and mitigation across a broad range of categories in the natural and built environment. Draft NEPA EA documents were recently completed. Unfortunately, the contract for the project ended in January of 2023 before the full study could be completed.

The needs that the project would address are summarized in the 2021 Project Purpose Fact Sheet:

- Provide an alternative to roadway congestion from projected population growth.
- Connect Southern New Hampshire's transportation network to existing modes.

- Invest in transportation infrastructure that provides additional travel options for passengers and goods.
- Improve transportation options to attract employers and employees to New Hampshire combined with improving employment options for New Hampshire residents.
- Improve transit connectivity to support attraction and retention of residents in the project area.
- Provide alternatives to passenger vehicle travel as aging workers and retirees become less willing or able to confront congestion on the regional roadway network.
- Invest in transit-oriented development in targeted areas adjacent to rail corridor infrastructure.
- Invest in multi-modal alternatives to passenger use to reduce emissions and fuel consumption.

The table below provides annual ridership estimates for the year 2040 under three different scenarios based on the potential impact of post pandemic commuting patterns. The South Nashua station is projected to have the highest ridership.

	Base Estimation	Low Impact	Medium Impact	High Impact
Manchester Station	271,538	217,230	214,424	159,135
Bedford/MHT Station	435,260	380,853	323,739	212,670
Nashua Crown Street Station	382,240	327,634	270,310	212,520
South Nashua Station	492,498	437,776	380,004	267,558

Projected Capital Corridor Ridership

Source: Nashua-Manchester 40818 (Capital Corridor) Financial Analysis Report, January 2023

Construction costs are estimated at just below \$600 million in 2022 dollars, approximately 55% of which is assumed to be federal dollars with 19% coming from the state, 16% from Massachusetts and 10% from Nashua and Manchester. It is estimated that passenger fares, parking revenues, and other nonpublic sources would cover all or most of operating costs once the system reaches operational maturity.

Construction Costs in 2022 dollars and in the Year of Expenditure (adjusted for inflation)

Millions of dollars	2022 \$	YOE \$
Hard Costs	\$ 407.5	\$ 533.8
Guideway and Track Elements	\$ 91.6	\$ 120.0
Stations (platforms only)	\$ 36.1	\$ 47.3
Layover Facility	\$ 13.5	\$ 17.7
Sitework and Special Conditions	\$ 60.4	\$ 79.1
Systems	\$ 90.2	\$ 118.2
Contingency	\$ 72.9	\$ 95.5
Vehicles	\$ 42.9	\$ 56.2

Soft Costs	\$ 189.7	\$ 248.5
Professional Services/Soft Costs	\$ 109.4	\$ 143.3
ROW and Trackage Rights	\$ 26.0	\$ 34.1
Contingency	\$ 54.3	\$ 71.1
Total Construction Costs	\$ 597.2	\$ 782.3
Source: Nashua-Manchester 40818 (Capital Corridor	Financial Analys	sis Report, Janu



Proposed Capital Corridor

Hudson Boulevard/Circumferential Highway

The Hudson Boulevard is a project that utilizes the southern alignment of the original Circumferential Highway concept, providing a two-lane controlled access highway with at-grade intersections between NH 3A and NH 111 in Hudson. Having been long identified as the alignment for a future roadway, the right-of-way has been protected from development over the years.



The project's primary purpose is to relieve traffic congestion in the center of Hudson along NH 111 and 3A, as well as reversing the trend of diversion of through traffic to local roads, including Wason Rd. and Bush Hill Rd. Increased safety is also a project objective, by removing traffic from several congested intersections and driveway curb cuts to a corridor with controlled access.

The current FY2023-2026 Statewide Transportation Improvement Plan (STIP) includes funding for preliminary engineering to develop a feasibility study that will consider the future viability of this project.

Northern Merrimack River Crossing

This project is the northernmost component of the proposed Circumferential Highway, a project long proposed but removed from the State's TYP years ago due to environmental and cost considerations. The only segment completed was the Exit 2 interchange from the Turnpike to DW Highway in Nashua and NH 3A in Hudson. The section between NH 3A and NH 111 continues as a locally funded project in the TYP. The remaining MTP illustrative project connects to the Turnpike at a new Exit 9 and extends across the river to NH 3A in southern Litchfield and NH 102 in Hudson.

The opening of the Raymond Wieczorek Drive in 2011 provided a bridge crossing from I-293 in southern Bedford. This bridge primarily improves access to Manchester-Boston Airport, as well as for travel to the north on the west side of the Merrimack River from NRPC communities east of the river. However, it does not have the impact of relieving traffic congestion on the Taylor Falls Bridge as would a bridge between Merrimack and Litchfield.

A project cost of \$295 million is estimated for implementation over the 2038-to-2050-time frame. The previous MTP assumed a 50/50 split between federal and turnpike revenues; however, under current funding assumptions, neither source will be able to provide the needed funding amounts within the current MTP time frame.

NH 101 Bypass Interchange to Perry Road, Milford

This project would construct a new full access interchange from NH 101 to the east of the Perry Road underpass, to provide access to under-developed town and privately-owned properties planned for commercial/industrial and mixed-use development in West Milford. The project does not substantively impact existing congestion or safety issues in the project area. However, development proceeding under the existing network would increase these concerns at the NH 101/Phelan Rd. intersection, along Old Wilton Rd. and its intersection with Perry Rd. The project would have positive economic impacts, provide additional connectivity within the town, and increase freight mobility.

NH 101 Capacity Improvements, Wilton-Milford-Amherst

The 2002 NH Route 101 Corridor Plan recommended that ultimately Route 101 should have four travel lanes (two in each direction) from Route 114 in Bedford to western Milford, with a landscaped median (not a barrier) to control left turns.

As stated earlier in this chapter this project has evolved to include two projects (Project #13692D and #13692E) that will provide safety improvements along the corridor at a smaller scale than was originally envisioned. Preliminary engineering is currently ongoing. Project #13692D is scheduled for construction in FY 2024, and Project #13692E is scheduled for construction in FY 2025. Whereas these projects address safety concerns to a significant degree, the safety improvements will not include a center median. There are stakeholders in the region who feel that ultimately NH101 should be divided by a safety barrier. For that reason, NRPC will continue to include the original vison for the corridor as an illustrative project for potential future development.

Souhegan Valley Rail Trail

The Souhegan Valley Rail Trail is a concept for an alternative non-motorized transportation corridor that parallels Route 101A through the municipalities of Nashua, Merrimack, Hollis, Amherst, Milford, and Wilton, New Hampshire. Route 101A is a highway with dense development of businesses and residences. A seldom used existing railroad corridor (CSX – Hillsborough Branch) parallels Route 101A for

the entire length and extends into downtown Nashua to an existing City-owned Park and Ride, with plans for a future passenger rail station. The concept is to incorporate a rail-with-trail along the RR Right of Way. Providing an alternative transportation corridor will provide a safe and convenient path for commuters, shoppers, and exercisers, with economic, socioeconomic, and health benefits to multiple communities in southern New Hampshire.

METROPOLITAN TRANSPORTATION PLAN PROJECT LISTING 2023 – 2050

- SNAPSHOT -

TEN YEAR PLAN PROJECTS

NASHUA MPO RECOMMENDED 2023 – 2050 PROJECTS

NASHUA MPO ILLUSTRATIVE PROJECTS

A DETAILED LISTING OF FISCALLY CONSTRAINED PROJECTS CAN BE FOUND IN APPENDIX A

NRPC FY 2023-2050 METROPOLITAN TRANSPORTATION PLAN (MTP) PROJECT LIST								
LOCAL PROJECTS								
Municipality	Facility	Scope	Total Project Cost	Construction Start (FY)	Plan Status			
Amherst	Thornton Ferry Rd	Bridge Replacement - Thornton Ferry Road over Beaver Brook #145/106	\$1,828,165	2024	TIP, TYP, MTP			
Amherst	Baboosic Greenway - North 2	Rail trail between Baboosic Lake Road and Walnut Hill Road along abandoned railroad ROW	\$766,559	2029	TIP, TYP, MTP			
Amherst	NH122 - Merrimack St	Intersection Improvements (roundabout) at NH122- Merrimack St. intersection and side path to Benning Rd.	\$2,788,303	2034	Pending FY 2025-34 TYP			
Amherst	Baboosic Greenway - North 3; NH122 (Amherst St)	Paved 8-foot-wide multimodal side path along the north side of Amherst St (NH 122)	\$1,221,600	2034	Pending CMAQ 2025- 28			
Amherst	Baboosic Greenway - North 1	Shared-use non-motorized trail from Bedford T/L to Walnut Hill Rd in Amherst approx. 11,600 ft.	\$1,869,000	2037	MTP			
Amherst	Baboosic Greenway - South 4	Shared use path along Boston Post Rd from River Rd to Stearns Rd. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$3,753,000	2037	MTP			
Amherst	Baboosic Greenway - South 1	Shared use path from Amherst St to Corduroy Rd (unsuccessful FY 2025-34 Ten Year Plan proposal)	\$1,007,000	2038	MTP			
Amherst	Baboosic Greenway - South 2	Shared use path from Corduroy Rd to Merrimack Rd. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$4,108,000	2039	MTP			
Amherst	Baboosic Greenway - South 3	Shared use path from Merrimack Rd to Boston Post Rd. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$961,000	2040	MTP			
Amherst	Baboosic Greenway - South 5	Shared use no motorized path (5,100 ft) b/t Boston Post Rd and Buck Meadow Conservation area. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$2,755,000	2040	MTP			
Brookline	Bond Street	Bridge rehabilitation - Bond Street over Nissitissit River #088/074	\$1,131,817	2025	TIP, TYP, MTP			
Brookline	NH 13	Construct southbound left turn lane onto Old Milford Rd	\$924,209	2026	TIP, TYP, MTP			
Brookline	NH13 - Main St	Address safety concerns at the NH 13 intersection with Main Street	\$3,097,393	2029	TYP, MTP			

Brookline	NH13	Reconstruction of NH 13/Ruonala Rd intersection	\$526,999	2032	TYP, MTP
Hudson	NH3A	Construct a third southbound right turn lane on NH 3A Lowell Rd	\$1,552,796	2023	TIP, TYP, MTP
Hudson	Circ HWY	Plan, Eng & Construct a roadway b/t NH3A & NH111, southern portion of Circ Highway	\$56,309,201	2050	TIP, TYP, MTP
Hudson	NH102 (Derry Rd)	Construct pedestrian improvements including 7,455 linear feet of sidewalk to eliminate gaps between Ledge & Alvirne Rds and install Rapid Flashing Beacons & improved drainage.	\$3,640,880	2034	Pending FY 2025-34 TYP
Hudson	NH3A (Lowell Rd)	Improved crosswalk equipment at intersection of Lowell Road and Central Street. Crosswalk beacons and curb bump-outs on Lowell Road at Winn Avenue and Roosevelt Avenue. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$322,000	2036	МТР
Hudson	NH111	Pedestrian improvements including sidewalks, crosswalks, curbing, drainage, & pedestrian trail from Taylor Falls Bridge to Benson Park. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$2,855,000	2041	МТР
Hudson	NH3A (Lowell Rd)	Continue Sidewalk on NH 3A, Lowell Rd from Birch St to Pelham Rd	\$380,000	2040	MTP
Hudson	NH3A (Lowell Rd)	Continue Sidewalk on NH 3A, Lowell Rd from Nottingham Sq to Executive Dr	\$765,000	2041	MTP
Litchfield	NH3A	NH3A - Corning Rd intersection realignment.	\$2,521,377	2034	Pending FY 2025-34 TYP
Litchfield	Pinecrest Road	Extend existing sidewalk to connect from Hildrith Drive to Albuquerque Ave multi-purpose path. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$1,118,000	2033	МТР
Litchfield	Albuquerque Ave.	Complete Streets improvements.	\$250,000	2033	MTP
Lyndeborough	NH Railroad	Address Red List bridge carrying NHRR over Glass Factory Road in the Town of Lyndeborough (108/070)	\$1,643,703	2028	TIP, TYP, MTP
Merrimack	NH 101A	Safety improvement at NH 101A / Continental Blvd & at Craftsman Lane / Boston Post Rd	\$9,149,321	2023	TIP, TYP, MTP

Merrimack	US 3	Bridge replacement - US 3 over Baboosic Brook #118/135 & Safety improvements to the US3/Wire Road intersection	\$8,527,473	2025	TIP, TYP, MTP
Merrimack	West Chamberlain Rd - Near FEE TPK	Rehab pedestrian bridge over Souhegan River (BRG #112/115) adjacent to FE TPK.	\$1,177,829	2032	TYP, MTP
Merrimack	US 3	Construct 3,600 linear feet of sidewalk from Souhegan River (Chamberlain Br.) to Merrimack 360 Plaza.	\$1,609,039	2032	TYP, MTP
Merrimack	US 3	Rehabilitate/Restore Historic US3 Bridge over Souhegan River (BR#116/120)	\$6,758,063	2032	Pending FY 2025-34 TYP
Merrimack	Naticook Rd - Camp Sargent Rd	Intersection alignment at Naticook Rd & Camp Sargent Rd	\$1,441,759	2036	Pending FY 2025-34 TYP
Merrimack	Baboosic Lake Rd	Continue Sidewalk on Baboosic Lake Rd from DW Hwy to O'Gara Dr	\$500,000	2035	МТР
Merrimack	US3 (DW Highway)	Congestion Mitigation for the northern portion of the US 3 corridor in Merrimack from Bedford Road to the Bedford town line. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$2,500,000	2035	МТР
Merrimack	FEE Turnpike	Add southbound on and southbound off ramps at Interchange 12	TBD	TBD	Illustrative
Merrimack Milford	FEE Turnpike Bridge Street	Add southbound on and southbound off ramps at Interchange 12 Rehabilitation of the Swing Bridge	TBD \$905,733	TBD 2025	Illustrative TIP, TYP, MTP
Merrimack Milford Milford	FEE Turnpike Bridge Street NH 101A & NH 13	Add southbound on and southbound off ramps at Interchange 12 Rehabilitation of the Swing Bridge Improvements to the oval area	TBD \$905,733 \$2,239,512	TBD 2025 2025	Illustrative TIP, TYP, MTP TIP, TYP, MTP
Merrimack Milford Milford Milford	FEE Turnpike Bridge Street NH 101A & NH 13 Hartshorn Rd	Add southbound on and southbound off ramps at Interchange 12 Rehabilitation of the Swing Bridge Improvements to the oval area Bridge replacement over Hartshorn Brook	TBD \$905,733 \$2,239,512 \$1,284,431	TBD 2025 2025 2025	Illustrative TIP, TYP, MTP TIP, TYP, MTP TYP, MTP
Merrimack Milford Milford Milford Milford	FEE Turnpike Bridge Street NH 101A & NH 13 Hartshorn Rd North River Rd.	Add southbound on and southbound off ramps at Interchange 12 Rehabilitation of the Swing Bridge Improvements to the oval area Bridge replacement over Hartshorn Brook Bridge replacement over Hartshorn Brook	TBD \$905,733 \$2,239,512 \$1,284,431 \$840,000	TBD 2025 2025 2032 2035	Illustrative TIP, TYP, MTP TIP, TYP, MTP TYP, MTP MTP
Merrimack Milford Milford Milford Milford Milford	FEE Turnpike Bridge Street NH 101A & NH 13 Hartshorn Rd North River Rd. Purgatory Rd.	Add southbound on and southbound off ramps at Interchange 12 Rehabilitation of the Swing Bridge Improvements to the oval area Bridge replacement over Hartshorn Brook Bridge replacement over Hartshorn Brook Bridge replacement of Purgatory Brook	TBD \$905,733 \$2,239,512 \$1,284,431 \$840,000 \$820,000	TBD 2025 2025 2032 2035 2034	Illustrative TIP, TYP, MTP TIP, TYP, MTP TYP, MTP MTP MTP
Merrimack Milford Milford Milford Milford Milford	FEE TurnpikeBridge StreetNH 101A & NH 13Hartshorn RdNorth River Rd.Purgatory Rd.Keyes Park	Add southbound on and southbound off ramps at Interchange 12 Rehabilitation of the Swing Bridge Improvements to the oval area Bridge replacement over Hartshorn Brook Bridge replacement over Hartshorn Brook Bridge replacement of Purgatory Brook Construct 200 ft. pedestrian bridge over the Souhegan River from 135 Elm St. to 34 N. River Rd. and 3000 ft. trail connecting to Keyes Memorial Park and MCAA fields	TBD \$905,733 \$2,239,512 \$1,284,431 \$840,000 \$820,000 \$1,120,000	TBD 2025 2025 2032 2035 2034 2037	Illustrative TIP, TYP, MTP TIP, TYP, MTP TYP, MTP MTP MTP
Merrimack Milford Milford Milford Milford Milford Milford	FEE Turnpike Bridge Street NH 101A & NH 13 Hartshorn Rd North River Rd. Purgatory Rd. Keyes Park NH13/South St.	Add southbound on and southbound off ramps at Interchange 12Rehabilitation of the Swing BridgeImprovements to the oval areaBridge replacement over Hartshorn BrookBridge replacement over Hartshorn BrookBridge replacement of Purgatory BrookConstruct 200 ft. pedestrian bridge over the Souhegan River from 135 Elm St. to 34 N. River Rd. and 3000 ft. trail connecting to Keyes Memorial Park and MCAA fieldsSidewalks from Clinton St. to Nathaniel Dr.	TBD \$905,733 \$2,239,512 \$1,284,431 \$840,000 \$820,000 \$1,120,000 \$2,000,000	TBD 2025 2025 2032 2035 2034 2037 2042	Illustrative TIP, TYP, MTP TIP, TYP, MTP TYP, MTP MTP MTP MTP
Merrimack Milford Milford Milford Milford Milford Milford Milford Milford	FEE Turnpike Bridge Street NH 101A & NH 13 Hartshorn Rd North River Rd. Purgatory Rd. Keyes Park NH13/South St. Amherst St.	Add southbound on and southbound off ramps at Interchange 12Rehabilitation of the Swing BridgeImprovements to the oval areaBridge replacement over Hartshorn BrookBridge replacement over Hartshorn BrookBridge replacement of Purgatory BrookConstruct 200 ft. pedestrian bridge over the Souhegan River from 135 Elm St. to 34 N. River Rd. and 3000 ft. trail connecting to Keyes Memorial Park and MCAA fieldsSidewalks from Clinton St. to Nathaniel Dr.Continue the Amherst St. side path into Milford.	TBD \$905,733 \$2,239,512 \$1,284,431 \$840,000 \$820,000 \$1,120,000 \$2,000,000 \$300,000	TBD 2025 2025 2032 2035 2034 2037 2042	Illustrative TIP, TYP, MTP TIP, TYP, MTP TYP, MTP MTP MTP MTP MTP

Nashua	Various Streets Downtown	Installation of Rectangular Rapid-Flashing Beacons (RRFB), crosswalk visibility enhancements	\$696,000	2023	TIP, TYP, MTP
Nashua	Cotton Mill Bridge ADA Ramp near Front St	To provide ADA Accessibility to the Cotton Mill Transfer Bridge.	\$1,001,413	2023	TIP, TYP, MTP
Nashua	NH 101A	Capacity, pedestrian, bike and transit improvements to NH 101A from Celina Ave to Somerset Parkway	\$35,748,727	2026	TIP, TYP, MTP
Nashua	East Hollis St.	Intersection improvements at East Hollis St and Bridge St from C St to the Hudson Town Line.	\$3,898,657	2026	TIP, TYP, MTP
Nashua	Walnut /Chestnut/ Central	Safety, capacity and multimodal access improvements to the Walnut St. Oval intersection	\$3,925,405	2025	TIP, TYP, MTP
Nashua	Heritage Rail Trail East	Construct the Heritage Rail Trail East	\$1,708,366	2025	TIP, TYP, MTP
Nashua	Main/Canal/Lowell	Intersection and Roadway Improvements, Canal St/Franklin St/Main St	\$1,704,412	2026	TIP, TYP, MTP
Nashua	East Hollis St.	Improvements along E. Hollis St from Main St east to C St. (limit of project 16314)	\$4,786,894	2026	TIP, TYP, MTP
Nashua	DW Highway	DW Highway pedestrian safety improvements	\$528,155	2027	TIP, TYP, MTP
Nashua	Lock St. Whitney St.	Upgrade sidewalks to ADA standards and create bicycle lanes on Lock Street and Whitney Street	\$1,147,530	2027	TIP, TYP, MTP
Nashua	Broad Street Parkway	Construct a new interchange along the Broad Street Parkway to connect to Franklin St and Front St	\$1,517,771	2028	TIP, TYP, MTP
Nashua	Spruce Street	Construct 10' multi-use path linking Nashua River Walk to Nashua Heritage Rail Trail.	\$1,512,385	2029	TIP, TYP, MTP
Nashua	F.E. Everett Turnpike	Realign Exit 5E southbound off-ramp and Turnpike southbound on-ramp	\$1,115,362	2030	TYP, MTP
Nashua	NH 111 Kinsley Street	Pedestrian and bicycle accessibility improvement project	\$2,039,800	2031	TYP, MTP
Nashua	Various locations	Direct Current Fast Charging (DCFC) stations (two units with 4 total charging ports) and 10 Level 2 EV charging stations in public, municipally owned parking garages and lots.	\$605,000	2033	CMAQ 2025- 28
Nashua	NH130	Complete Streets improvements from Coliseum Avenue to Coburn Avenue.	\$9,500,000	2036	MTP
Nashua	Coliseum Avenue	Revision Energy CMAQ application for EV charging infrastructure at Hannaford Grocery store.	\$1,552,660	2036	CMAQ 2025- 28
Nashua	NH130	Shoulder and safety Improvements from Coburn Avenue to Hollis Town Line	\$5,000,000	2037	MTP

Nashua	Passenger Rail	Construct Passenger rail station in south Nashua	\$8,547,000	2039	MTP
Nashua	West Hollis Street	Main Street to FEE Turnpike - Accommodation and safety for bicyclists and pedestrians, while maintaining or improving vehicular access and capacity for vehicles along the roadway.	\$5,000,000	2038	МТР
Nashua	West Hollis Street	Corridor improvements between Riverside Drive and the Hollis Town Line - accommodation and safety for bicyclists and pedestrians, while maintaining or improving vehicular access and capacity for vehicles along the roadway. (unsuccessful FY 2025-34 Ten Year Plan proposal).		2038	МТР
Nashua	FEE Turnpike	FEET Exit 91 Southbound off ramp to Middlesex Road in Tyngsborough, MA		2047	Illustrative
Pelham	Main Street	Main Street over Beaver Brook - bridge replacement #110/090 and culvert replacement #111/090	\$4,101,773	2024	TIP, TYP, MTP
Pelham	NH 128 & Sherburne Rd	Intersection improvements at the intersections of NH 128/Sherburne Rd	\$1,624,606	2024	TIP, TYP, MTP
Pelham	NH 128 & NH111A	Intersection Improvements (roundabout) at Mammoth (NH 128) and Marsh Rd (NH111A)	\$1,539,062	2025	TIP, TYP, MTP
Pelham	Old Bridge Street	Bridge rehabilitation - Old Bridge Street over Beaver Brook #109/081	\$1,896,181	2025	TIP, TYP, MTP
Pelham	Old Bridge Street	sidewalks on Old Bridge Street from Marsh Road to NH Route 38, with crossing of Beaver Brook. 1700 linear feet (LF) including a two span pedestrian bridge of approximately 210 LF. (unsuccessful FY 2025-34 Ten Year Plan proposal).	\$1,966,000	2042	MTP
Wilton	King Brook Rd	Bridge replacement over King Brook	\$1,239,921	2024	TIP, TYP, MTP
Wilton	Old County Farm Road	Bridge rehabilitation - Old County Farm Road over Blood Brook #060/118	\$1,374,440	2025	TIP, TYP, MTP
Wilton	NH31	Pedestrian Bridge over Stoney Brook to connect Forrest Rd and Burns Hill Rd	\$983,092	2034	TYP, MTP
Wilton	Main Street	Pedestrian Bridge over Souhegan River to connect Main Street and historic Colony Mill complex.	\$983,092	2035	Pending FY 2025-34 TYP
		REGIONAL PROJECTS			

Municipality	Facility	Scope	Total Project Cost	Construction Start (FY)	Plan Status
Bedford - Merrimack	F.E. Everett Turnpike	Improvement to Bedford Mainline Toll Plaza to Institute Open Road or All Electronic Tolling	\$13,455,021	2023	TIP, TYP, MTP
Nashua-Hudson	NH 111/101A	Rehabilitation of Taylors Falls Bridge and Veterans Memorial Bridge owned by Nashua & Hudson	\$2,700,000	2023	TIP, TYP, MTP
Nash-Merri-Bedford	F.E. Everett Turnpike	F.E.E. Turnpike widening of 2-lane sections from Exit 8 Nashua to I-293 Bedford	\$26,383,889	2023	TIP, TYP, MTP
Nash-Merri-Bedford	F.E. Everett Turnpike	FE Everett Turnpike widening of a 2-lane section from Exit 8 Nashua to Exit 10 Merrimack	\$35,355,552	2024	TIP, TYP, MTP
Nash-Merri-Bedford	F.E. Everett Turnpike	Replace Wire Road and Baboosic Lake Road Bridges over the FE Everett Turnpike (Merrimack).	\$23,747,060	2025	TIP, TYP, MTP
Nash-Merri-Bedford	F.E. Everett Turnpike	FE Everett Turnpike widening in Merrimack of a 2-lane section from Exit 11 to south of Exit 13.	\$141,600,111	2025	TIP, TYP, MTP
Nash-Merri-Bedford	F.E. Everett Turnpike	FE Everett Turnpike widening in Merrimack of a 2-lane section from Bedford Rd to south of Exit 13.	\$19,272,752	2023	TIP, TYP, MTP
Wilt-Milf-Amherst- Bed	NH101	Traffic and safety improvements consistent with the intent of the 2002 corridor study	\$9,917,942	2023	TIP, TYP, MTP
Wilt-Milf-Amherst- Bed	NH101	Traffic and safety improvements based on the 2002 corridor study	\$7,460,500	2026	TIP, TYP, MTP
Wilton-Nashua	CSX RR - Hillsborough Branch	Souhegan Valley Rail Trail - Construct 16 mile paved nonmotorized path along NH 101A rail line corridor	TBD	TBD	Illustrative
		PUBLIC TRANSPORTATION PROJECTS	-		-
Municipality	Facility	Scope	Total Project Cost	Construction Start (FY)	Plan Status
Nashua- Program	Nashua Transit System	NTS FTA 5307 formula funds for capital planning, capital preventative maintenance, capital investments (including fleet replacement/rehabilitation/purchases), ADA operations and operating assistance	\$14,106,311	2023	TIP, TYP, MTP
Nashua- Program	Nashua Transit System	NTS FTA 5310 Formula Funds for fleet replacement/rehabilitation/purchases, passenger enhancements, mobility management and purchase of transit service to support enhanced mobility of seniors & individuals with disabilities	\$1,180,506	2023	TIP, TYP, MTP

Nashua- Program	Nashua Transit System	NTS FTA 5339 Formula Funds for Capital Projects, including fleet replacement/rehabilitation/purchases, passenger amenities and construction/rehabilitation of bus-related facilities	\$699,279	2023	TIP, TYP, MTP		
Nashua - Boston	Boston Express	Boston Express - Operating expenses for FE Everett Turnpike Commuter Service	\$1,621,240	2023	TIP, TYP, MTP		
Nashua-Milford	Nashua Transit System	Expand transit service westward along Route 101 A from Nashua to Milford, NH	\$1,200,000	2025	CMAQ 25-28		
UNDEFINED FUTURE TRANSPORTATION PROJECTS							
Municipality	Facility	Scope	Total Project Cost	Construction Start (FY)	Plan Status		
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2042	MTP		
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2043	MTP		
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2044	MTP		
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2045	МТР		
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2046	МТР		

Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2047	МТР
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2048	МТР
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2049	МТР
Various	Various	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bridge, congestion, travel time reliability, & freight. Additionally, multi-modal and transit projects.	\$10,000,000	2050	МТР

FINANCIAL PLAN AND FISCAL CONSTRAINT

A critical element of the NRPC MTP is that it must be *financially constrained*. Financially constrained or fiscal constraint means that the Metropolitan Transportation Plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained. For the TIP and the STIP, financial constraint/fiscal constraint applies to each program year. Additionally, projects in air quality nonattainment and maintenance areas can be included in the first two years of the TIP and STIP only if funds are "available" or "committed." (23 CFR 450.104). The four-year TIP and Ten-Year Plan are fiscally constrained by NHDOT through state coordination; they form the basis for estimates of financial resources in the MTP.

FEDERAL TRANSPORTATION FUNDING REQUIREMENTS

For the purposes of implementing the provisions of the <u>Infrastructure Investment and Jobs Act</u> (IIJA), also known as the Bipartisan Infrastructure Law (BIL), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued revised planning regulations governing the development of Metropolitan (long range) Transportation Plans and Transportation Improvement Plans (TIPS). The regulations are designed to ensure that metropolitan transportation planning and programming are adequate and that the areas are eligible for Federal highway and transit funds. The planning regulations require that the Plan include a financial plan "that demonstrates how the adopted transportation plan can be implemented" and provides supporting regulations in 23 CFR Part 450.324(g)(11):

- For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain the Federal-aid highways (as defined by <u>23 U.S.C.</u> <u>101(a)(5)</u>) and public transportation (as defined by title 49 U.S.C. Chapter 53).
- ii. For the purpose of developing the metropolitan transportation plan, the MPO(s), public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under <u>§</u> 450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.
- iii. The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified. The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.
- iv. In developing the financial plan, the MPO shall consider all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect "year of expenditure dollars," based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

- v. For the outer years of the metropolitan transportation plan (*i.e.*, beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, if the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.
- vi. For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP.
- vii. For illustrative purposes, the financial plan may include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.
- viii. In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (*i.e.*, by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.

FISCAL CONSTRAINT ASSUMPTIONS

Agencies participating in the monthly New Hampshire Interagency Consultation process (MPOs, NHDOT, NHDES, EPA, FHWA, and FTA) collaboratively developed general planning assumptions for use in fiscal constraint analyses. The members of the interagency consultation process include MPOs, NHDOT, NHDES, EPA, FHWA, and FTA.

The fiscal years 2023 to 2032 of the NRPC MTP comprise the FY2023-2026 Transportation Improvement Plan (TIP) and FY 2023-2032 State Ten Year Transportation Improvement Plan (TYP). Those plans are both constrained based on the assumptions developed during the Interagency Consultation process mentioned earlier. The assumptions are the basis for ensuring that the long-range phase of the MTP (projects after 2032) is also reasonably constrained. Funding availability and other challenges are difficult to predict beyond ten years in the future, so a conservative approach is used for estimating the cost of projects in the years 2033-2050.

- Revenues expected to be available for transportation improvement projects were estimated utilizing data from the NRPC 2023-2026 TIP adopted in March 2023, as well as the financial plan from the 2023-2032 State TYP approved by the Legislature and signed by the Governor in July 2022. The data for those documents was provided by NHDOT and provided the total funding estimates for FHWA and FTA apportioned funds, State funding sources, and local (and other) resources for projects in the region.
- For the period including FY2033 FY 2050, the average of FY2023 FY2032 is used. This is a conservative assumption, as it would be expected there would be some level of increase in federal funds over the long term.
- It is assumed that the NRPC region's share of statewide FHWA funding reflects the federally funded program of projects in the region detailed in the 2023-2032 Ten Year Transportation Improvement Plan. The regional share of statewide programs is estimated at 12.35% based on the 50% population and 50% lane-miles of federal-aid eligible roadway.
- The fiscal constraint analysis also tracks State revenue sources that support the NRPC region's transportation capital improvement needs, the largest source of which is Turnpike Improvement

Program. The NRPC region includes a portion of New Hampshire's Central Turnpike which includes a segment of the F. E. Everitt Turnpike. The NHDOT addresses capital improvement needs on the turnpike system through the State Turnpike Improvement Program rather than using federal-aid funding. It is assumed that the NRPC region's share of State Turnpike Improvement Program funding reflects the program of turnpike projects in the region detailed in the NHDOT FY 2023 – FY 2032 Ten-Year Transportation Improvement Plan. From FY 2033 to the horizon year of FY 2045, it is assumed that the NRPC region will receive a maximum of 17.2% of State Turnpike Improvement Program funding based on the region's proportional share of the overall statewide turnpike system. Beyond 2032, funding is projected based on a trend analysis of federal revenues from 2023-2032.

- Most of the local revenues supporting federal-aid highway/bridge projects are match funding (generally 20% for local projects) for municipally managed projects. For the FY 2023-2032 period, the NRPC region's assumed local funding reflets that prescribed in the program of projects in the region detailed in the NHDOT FY 2023 – FY 2032 Ten-Year Transportation Improvement Plan. For the period including FY2033 – FY 2050, the average of FY2023 – FY2032 is used. This is a conservative assumption, as it would be expected there would be some level of increase in federal funds over the long term.
- Most of the state-managed federal-aid transportation projects funded in New Hampshire are matched by Turnpike Toll Credits. Toll Credits accrue because of the State of New Hampshire tolling of the turnpike system, and then utilizing those toll revenues to support projects on the turnpike system that would have otherwise been eligible for federal aid. Toll credits are not included in the fiscal constraint calculations, as toll credits are a non-cash form of match and do not directly offset project costs. Toll Credits will be utilized to meet the State matching requirements unless otherwise stated.
- All costs associated with projects are inflated to the year of construction at 2.8% per year and indirect costs (NHDOT overhead) are incorporated at 10% of total project cost.
- For all projects including federal funds and programmed by the NHDOT for FY 2023, 2024, 2025, and 2026, that the NHDOT has determined that the required funds by year and category will be available.
- New Hampshire DOT programs projects on a statewide basis according to the relative priority of
 projects listed in the Ten-Year Plan without regard to regional boundaries. This creates a
 situation where the amount of funding expended in the region on Programmatic and Statewide
 projects can vary substantially from year to year depending on the number of state high priority
 projects occurring in this region at the same time.
- Because NHDOT is required to demonstrate that programmed federal transportation funds are constrained statewide, the Nashua MPO can be confident that the regional portion of the STIP and Ten-Year Plan are fully programmed and constrained. There is therefore no budget surplus or deficit in the during the FY 2023-2032 TIP/TYP period. A more detailed analysis of actual individual project costs could result in a budget surplus (positive balance of funding) which would mean that unprogrammed funding is available.

HIGHWAY FUNDING SOURCES
The following funding sources are available for maintenance and improvements to road networks in the Nashua MPO region. NHDOT chooses the funding source that best matches project phases and schedules. Not all funding sources are used during any given fiscal year.

Existing Federal Highway Aid - Formula Funds

Congestion Mitigation and Air Quality (CMAQ)

The CMAQ program provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). Funding for this category is an 80 percent federal and 20 percent local match.

Highway Safety Improvement Program (HSIP)

The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

National Highway Performance Program (NHPP)

The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS. Funding for this category is an 80 percent federal and 20 percent local match.

National Highway System > 200k (NHS>200k)

NHS funds projects on the designated National Highway System. Funding for this category is an 80 percent federal and 20 percent local match.

Surface Transportation Block Grant Program - Flex (STBG-Flex)

This program provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Funding for this category is an 80 percent federal and 20 percent local match.

Surface Transportation Block Grant Program > 200k (STBG>200k)

This program provides flexible funding for authorized areas with a population greater than 200,000 people. The funding can be used for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. Funding for this category is an 80 percent federal and 20 percent local match.

Surface Transportation Program (STP)

This program funds projects chosen by states and localities for any road with a higher functional class than local or rural minor collectors. Funding for all STP categories is an 80 percent federal match and a 20 percent local match. There are several subcategories of STP funds, for example, "STP Any Area", "STP Non-Urban", and "STP Hazard Elimination." The State can transfer funds within these categories; therefore, for the purposes of general financial forecasting, all but STP Transportation Enhancements have been grouped into a single category.

Transportation Alternatives Program (TAP)

The TAP program provides funds for transportation projects to meet non-motorized needs in the State through the design and construction of bike lanes, sidewalks, and on and off-road Multi-Use paths (including abandoned rail corridors) for non-motorized forms of transportation. Funding for this category is an 80 percent federal and 20 percent local match.

Existing Federal Highway Aid - Non-Formula Funds

Bridge Funds Infrastructure Investment and Jobs Act (BRGBIL)

The program provides funding for bridge replacement and rehabilitation.

National Electric Vehicle Infrastructure (NEVI)

Provides funding for electric vehicle charging infrastructure projects.

Municipally Owned Bridge – Bipartisan Infrastructure Law (MOBIL)

This program funds for bridge rehabilitation and reconstruction. Funding is 100% federal with no local match required.

FHWA Congressionally Designated Projects (Earmark Projects)

Congressionally directed spending (CDS) allows Members of Congress to request that federal funds be set aside for specific projects in their states.

Toll Credits

Non-cash match to leverage federal funds.

Existing State Aid Funding Sources State Aid Bridge (SAB) SB367-4-Cents Turnpike Capital Other Sources

HIGHWAY/BRIDGE REVENUES AND PROJECT EXPENSES

The following table estimates the total FHWA funding that is available to the Nashua MPO region in FY2023-2050.

- Column 2 Total available FHWA funding (statewide) uses data from the following sources:
 - NHDOT Fiscal Constraint Report (FY2023-2026 STIP A0, A3).
 - o 2 FY2027 -2032 came from 12.8.2022 TIP NHDOT TIP Docket (FY2023-26 STIP).
 - For the period including FY2033 FY 2050, the average of FY2023 FY2032 is used. This is a conservative assumption, as it would be expected there would be some level of increase in federal funds over the long term.
- Column 3 <u>Funding allocated to statewide programs</u> uses data from the following source:
 12.8.2022 TIP NHDOT TIP (FY2023-26 STIP).
- Column 4 <u>NRPC share of statewide program funding</u> is the theoretical share of funding for Programmatic projects in the NRPC region.
 - Calculated as 12.35% of funds programmed for "Statewide" projects and programs.
- Column 5 Funding programmed for NRPC local projects uses data from the following sources:
 - FY2023-32 12.8.2022 TIP NHDOT TIP Docket (FY2023-26 STIP). FY 2033-50 comes from future project estimates.
- Column 6 <u>NRPC share of statewide + local projects</u>:
 - This is the total of the theoretical statewide share (column 4) plus the programmed total (column 5) of projects in the TIP and Ten-Year Plan.
 - Values beyond FY2032 are estimated.
- Column 7 <u>Total NRPC project expenses</u> this is the total cost of federally funded projects in the NRPC MPO region.
- Column 8 <u>TIP/TYP/MTP FY Balance this is the remaining balance of funding in each fiscal year.</u>
 - Given that NHDOT is required to demonstrate that programmed federal transportation funds are constrained statewide, the Nashua MPO can be confident that the regional portion of the STIP and Ten-Year Plan are fully programmed and constrained. There is therefore no budget surplus or deficit in the during the FY 2023-2032 TIP/TYP period.
 - For the period including FY2033 FY 2050, the average of FY2023 FY2032 is used. This is a conservative assumption, as it would be expected there would be some level of increase in federal funds over the long term. Despite a robust effort by the Nashua MPO to engage local communities to identify future projects, there remains an unused balance of funding in FY2033-50.

2023 – 2050 Metropolitan Transportation Plan Nashua MPO Recommended Fiscally Constrained Projects

	Overal Fiscal Constraint for Federal Funding in the Nashua MPO area FY2023-2050										
		Funding	NRPC share of	Funding							
	Total available	allocated to	statewide	programmed	NRPC share of	Total NRPC					
Fiscal	FHWA funding	statewide	program	for NRPC local	statewide +	project	TIP/TYP/MTP				
Year	(statewide) ^{1,2}	programs	funding⁴	projects	local projects [®]	expenses '	FY Balance [°]				
		2023-2026	TRANSPORTATI	ON IMPROVEM	ENT PROGRAM						
2023	\$220,614,338	\$113,362,793	\$14,000,305	\$21,583,035	\$35,583,340	\$35,583,340	-				
2024	\$232,056,159	\$120,791,511	\$14,917,752	\$6,425,843	\$21,343,595	\$21,343,595	-				
2025	\$237,447,281	\$118,196,821	\$14,597,307	\$21,097,035	\$35,694,343	\$35,694,343	-				
2026	\$242,946,227	\$106,124,709	\$13,106,402	\$16,735,008	\$29,841,410	\$29,841,410	-				
	-	-	2027-2032	TEN-YEAR PLAN		•	•				
2027	\$320,819,186	\$147,881,970	\$18,263,423	\$4,442,545	\$22,705,969	\$22,705,969	-				
2028	\$281,526,526	\$141,282,721	\$17,448,416	\$3,107,736	\$20,556,152	\$20,556,152	-				
2029	\$221,976,059	\$157,813,888	\$19,490,015	\$1,512,472	\$21,002,487	\$21,002,487	-				
2030	\$207,305,201	\$155,455,577	\$19,198,764	\$3,932,409	\$23,131,173	\$23,131,173	-				
2031	\$195,232,025	\$161,618,188	\$19,959,846	\$1,210,857	\$21,170,703	\$21,170,703	-				
2032	\$212,039,102	\$157,629,778	\$19,467,278	\$13,928,418	\$33,395,696	\$33,395,696	-				
		2033-204	45 METROPOLIT	AN TRANSPORT	TATION PLAN						
2033	\$237,196,210	\$138,015,796	\$17,044,951	\$7,572,400	\$29,293,732	\$24,617,351	\$4,676,381				
2034	\$237,196,210	\$138,015,796	\$17,044,951	\$8,486,056	\$29,293,732	\$25,531,007	\$3,762,725				
2035	\$237,196,210	\$138,015,796	\$17,044,951	\$6,717,900	\$29,293,732	\$23,762,851	\$5,530,881				
2036	\$237,196,210	\$138,015,796	\$17,044,951	\$10,838,800	\$29,293,732	\$27,883,751	\$1,409,981				
2037	\$237,196,210	\$138,015,796	\$17,044,951	\$9,164,120	\$29,293,732	\$26,209,071	\$3,084,661				
2038	\$237,196,210	\$138,015,796	\$17,044,951	\$8,459,520	\$29,293,732	\$25,504,471	\$3,789,261				
2039	\$237,196,210	\$138,015,796	\$17,044,951	\$6,684,480	\$29,293,732	\$23,729,431	\$5,564,301				
2040	\$237,196,210	\$138,015,796	\$17,044,951	\$1,654,400	\$29,293,732	\$18,699,351	\$10,594,381				
2041	\$237,196,210	\$138,015,796	\$17,044,951	\$2,165,600	\$29,293,732	\$19,210,551	\$10,083,181				
2042	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2043	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2044	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2045	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2046	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2047	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2048	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2049	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
2050	\$237,196,210	\$138,015,796	\$17,044,951	\$10,000,000	\$29,293,732	\$27,044,951	\$2,248,781				
	\$6,641,493,890	\$3,864,442,274	\$477,258,621	\$245,718,635	\$791,712,042	\$722,977,256	\$68,734,786				

1 - NHDOT Fiscal Constratint Report (FY2023-2026 STIP A0, A3)

2 - FY2027 -2032 came from 12.8.2022 NHDOT TIP Docket (FY2023-26 STIP)

3 - From 12.8.2022 TIP NHDOT TIP (FY2023-26 STIP)

4 - Calculated as 12.35% of funds programmed for "Statewide" projects and programs between 2023 and 2026

5 - FY2023-32 12.8.2022 TIP NHDOT TIP Docket (FY2023-26 STIP). FY 2033-50 come from future project estimates.

6 - Statewide theoretical share plus regional share

7 - TIP and Ten Year Plan years are assumed to be fully programmed and constrained, therefore costs = revenues

8 - Regional Allocation minus statewide/regional project total

ESTIMATED FEDERAL HIGHWAY FORMULA & NON-FORMULA FUNDING

2023-2026 Estimated Federal Highway Fo	ormula & N	lon-Form	ula Fundir	ng in NRPO	C Region
					Total
Funding Category	2023	2024	2025	2026	Resources
Carbon Reduction Program	\$-	\$-	\$-	\$-	\$-
Congestion Mitigation and Air Quality Program	\$ 1,128,548	\$ 1,273,297	\$ 1,210,587	\$ 632,215	\$ 3,612,432
Highway Safety Improvement Program (HSIP)	\$ 8,064,338	\$-	\$-	\$-	\$ 8,064,338
National Highway Freight	\$-	\$-	\$-	\$-	\$-
National Highway Performance	\$ 8,536,829	\$ 2,127,531	\$ 4,434,451	\$13,542,031	\$15,098,812
PROTECT Program	\$-	\$-	\$-	\$-	\$-
Recreational Trails	\$-	\$-	\$-	\$-	\$-
STBG-Areas Over 200K, State Flex, Off System Bridge	\$ 2,207,350	\$ 861,983	\$ 4,064,128	\$ 2,393,524	\$ 7,133,461
Transportation Alternatives Program	\$ 460,664	\$ 416,608	\$-	\$ 38,730	\$ 877,272
FED AID (miscelaneous Formula Funding)	\$ 420,000	\$-	\$-	\$ -	
Federal Highway Non-Formula Funds					
BRGBIL	\$-	\$-	\$ 4,645,760	\$-	
Bridge-T3-4-Rehab-Rcn	\$-	\$-	\$-	\$ 128,507	
MOBIL	\$-	\$ 1,505,657	\$ 2,631,819	\$-	
MOBRR	\$-	\$-	\$-	\$-	
FHWA Earmarks	\$ 724,186	\$ 180,767	\$ 4,110,290	\$-	
Total	\$ 21,541,915	\$ 6,365,843	\$ 21,097,035	\$ 16,735,008	\$34,786,314

ESTIMATED NON-FEDERAL REVENUE FOR NASHUA MPO PROJECTS

The following table is provided to estimate non-federal revenue sources for projects in the NRPC MPO region, including state and local funding. This table is not directly related to the federal fiscal constraint; however, a portion of these funds will be applied as local match. Toll credits, which are a non-cash match to leverage federal funds, are also shown. Fiscal Years 2023-2032 are based on the NHDOT Ten Year Plan programming and estimated for the remainder (FY2033-50) of the MTP time frame.

ESTIMATED NON-FEDERAL REVENUE FOR NASHUA MPO PROJECTS											
					Toll Credits						
Fiscal	Statewide	Turnpike	Other		(non-cash						
Year	Turnpike ¹	NRPC Region ²	State ³	Town ³	match) ³						
2023	\$50,989,222	\$13,056,000	\$565,213	\$1,092,766	\$394,308						
2024	\$75,349,376	\$40,638,896	\$2,760,895	\$597,441	\$2,726,927						
2025	\$53,542,842	\$44,667,989	\$0	\$3,595,587	\$763,770						
2026	\$44,736,283	\$36,722,147	\$0	\$1,134,670	\$1,136,856						
2027	\$24,569,433	\$24,569,433	\$0	\$1,521,692	\$134,920						
2028	\$29,394,953	\$25,406,626	\$400,737	\$205,937	\$333,427						
2029	\$21,984,437	\$0	\$0	\$132,851	\$258,554						
2030	\$22,799,318	\$0	\$0	\$1,321,131	\$31,181						
2031	\$28,307,395	\$0	\$0	\$85,651	\$32,053						
2032	\$21,498,055	\$0	\$0	\$1,108,797	\$32,950						
2033	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2034	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2035	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2036	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2037	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2038	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2039	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2040	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2041	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2042	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2043	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2044	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2045	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2046	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2047	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2048	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2049	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
2050	\$37,317,131	\$6,418,547	\$372,684	\$1,079,652	\$584,495						
	\$1,044,879,681 \$300,594,929 \$10,435,156 \$30,230,264 \$16,365,852										
1- Years 2023-32 are from 12.2.2022 TIP Update Excel Docket. Years 2033-50											
are the average of the first 10 years											
2-Years 2	2023-32 are from	n 12.2.2022 TIP ι	update docke	et. Years 2033	3-50 are						
calculated at 17.2% of total turnpike											
3-from 1	2.2.2022 TIP Up	date Docket									

HIGHWAY OPERATIONS AND MAINTENANCE

Regulations included in 23 CFR Part 450.218(m) state that "For purposes of transportation operations and maintenance, the STIP shall include financial information containing system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways [...]."

This means that the estimated costs of preserving, maintaining, and operating the region's transportation system must be included in the NRPC MPO TIP and Long-Range Transportation Plan. While some of these funds are captured in the "Statewide" projects included in the TIP, there are many that are not as they are conducted using state or local funds.

NHDOT's Fiscal Year 2023-2032 Ten Year Plan provides information regarding the funding available at the state level for the operation and maintenance of the transportation system. These funds come from the following sources:

- *Highway Fund:* This is the primary source of funding for the NHDOT Operating budget and is composed of revenue collected by the Department of Safety and includes the NH Road Toll (gas tax), Vehicle Registration Fees, and court fines for traffic violations. About 60% of gas tax revenues go to operating costs for NHDOT and NH Department of Safety.
- **Turnpike Funds:** New Hampshire has approximately 90 miles of toll supported roadways managed by the NHDOT. Funds from tolls, fines and administrative fees generated by the turnpike system can only be utilized on the Turnpike system. The system raises approximately \$143 million per year of which approximately \$55 million is dedicated towards operations and maintenance.
- General Funds: There is a small amount of State of New Hampshire general funds that goes towards
 operations and maintenance of the transportation system. Primarily these funds are utilized for
 airport operations support however matching funds for Federal Transit Administration (FTA) grants
 for transit projects and operations are also supported.
- **Federal Funds:** NHDOT receives revenues from various Federal Agencies on a reimbursable basis to carry out federal aid eligible infrastructure improvements and construction projects. Primarily funds are from the Federal Highway Administration but also moneys are received from the Federal Transit Administration (FTA), Federal Aviation Administration (FAA), and Federal Emergency Management Administration (FEMA).
- **Other Funds:** Other funds are derived from various minor sources. This includes revenues from the sale of fuel to municipalities, railroad licensing fees, permitting fees, emergency repair funds, and sale of surplus land.

The following table provides estimates of maintenance and operations needs for the Federal-aid highway system in the NRPC region and statewide for the period 2023 to 2026. The estimates are based on NHDOT figures from the FY 2023 – FY 2026 STIP Financial Constraint Summary, the FY2023-2032 Ten Year Plan, Operations and Maintenance costs from annual NH Turnpike System annual reports, the NHDOT Agency Efficiency Budget, local financial data from the NH Public finance Consortium, and an analysis of Federal-aid eligible roadways in the NRPC region.

• Columns 3 & 4 – <u>Statewide Hiway O & M</u> - uses data from the following sources:

- Column 3 Statewide Fed Highways Statewide data from 2023-2032 TYP: Page 13, "2023-2032 Ten Year Plan All Funding", and includes funding for pavement, bridges, & roadsides. Additional data came from the NHDOT Agency Efficiency Budget.
- Column 4 NRPC Allocation NRPC proportion of state highway miles: 12.35%.
- Columns 5 & 6 <u>Turnpike O & M</u> uses data from the following sources:
 - Column 5 Statewide Turnpike uses data from annual Turnpike reports.
 - Column 6 NRPC allocation NRPC share of Turnpike funds is 17.2%.
- Column 7 Total estimated O & M Funding Allocation for NRPC region.
- Columns 8 & 9 <u>Regional O & M Costs (needs)</u> uses data from the following sources:
 - Column 8 Based on local financial data from NH Public Finance Consortium (2014-2022). Local expenditures include reported costs for highways and streets, bridges, and administration.
 - Column 9 Average cost/lane mile multiplied by total lane miles. (NRPC lane miles = 751.5).
 - This represents the total O & M needs for the region.
- Column 10 <u>Total O & M funding minus O & M costs</u> a positive value means that O & M needs are being met with sufficient revenue.

F	EDERA	L, STATE, LOCA	AL RESOURCI	ES FOR NASI	HUA MPO O	1PO OPERATIONS & MAINTENANCE						
		State Hiwa	iy 0 & M	Turnpik	e O & M	Total O&M	Regional	O & M Costs				
						Funding		Total	Total O&M			
		Statewide				Allocation	0&M	regional O	funfing			
	Fiscal	Fed-Aid	NRPC	Statewide	NRPC	for NRPC	Cost per	& M Costs	minus O & M			
	Year	Hiways ¹	Allocation ²	Trpke ³	Allocation ⁴	Region	Lane Mi.⁵	(needs ⁶)	costs			
2023-	2023	\$269,680,000	33,305,480	7,918,429	1,361,970	34,667,450	\$22,398	\$16,831,985	\$17,835,465			
2023-	2024	\$204,500,000	25,255,750	8,140,145	1,400,105	26,655,855	\$22,801	\$17,134,961	\$9,520,894			
TD	2025	\$199,370,000	24,622,195	8,368,069	1,439,308	26,061,503	\$23,211	\$17,443,390	\$8,618,113			
11	2026	\$169,720,000	20,960,420	8,602,375	1,479,608	22,440,028	\$23,629	\$17,757,371	\$4,682,657			
	2027	\$195,970,000	24,202,295	8,843,241	1,521,037	25,723,332	\$24,055	\$18,077,004	\$7,646,329			
2027-	2028	\$199,800,000	24,675,300	9,090,852	1,563,627	26,238,927	\$24,488	\$18,402,390	\$7,836,537			
2027-	2029	\$224,150,000	27,682,525	9,345,396	1,607,408	29,289,933	\$24,928	\$18,733,633	\$10,556,300			
	2030	\$223,910,000	27,652,885	9,607,067	1,652,415	29,305,300	\$25,377	\$19,070,838	\$10,234,462			
	2031	\$232,090,000	28,663,115	9,876,065	1,698,683	30,361,798	\$25,834	\$19,414,113	\$10,947,685			
	2032	\$174,700,000	21,575,450	10,152,594	1,746,246	23,321,696	\$26,299	\$19,763,567	\$3,558,129			
	2033	\$209,389,000	25,859,542	10,436,867	1,795,141	27,654,683	\$26,772	\$20,119,312	\$7,535,371			
	2034	\$211,482,890	26,118,137	10,541,236	1,813,093	27,931,229	\$27,254	\$20,481,459	\$7,449,770			
	2035	\$213,597,719	26,379,318	11,029,514	1,897,076	28,276,395	\$27,745	\$20,850,125	\$7,426,269			
	2036	\$215,733,696	26,643,111	11,338,340	1,950,195	28,593,306	\$28,244	\$21,225,428	\$7,367,878			
	2037	\$217,891,033	26,909,543	11,655,814	2,004,800	28,914,343	\$28,752	\$21,607,485	\$7,306,857			
	2038	\$220,069,943	27,178,638	11,982,177	2,060,934	29,239,572	\$29,270	\$21,996,420	\$7,243,152			
	2039	\$222,270,643	27,450,424	12,317,678	2,118,641	29,569,065	\$29,797	\$22,392,356	\$7,176,709			
2032-	2040	\$224,493,349	27,724,929	12,662,573	2,177,963	29,902,891	\$30,333	\$22,795,418	\$7,107,473			
2052	2041	\$226,738,283	28,002,178	13,017,125	2,238,945	30,241,123	\$30,879	\$23,205,736	\$7,035,388			
	2042	\$229,005,666	28,282,200	13,381,604	2,301,636	30,583,836	\$31,435	\$23,623,439	\$6,960,397			
	2043	\$231,295,722	28,565,022	13,756,289	2,366,082	30,931,103	\$32,001	\$24,048,661	\$6,882,443			
	2044	\$233,608,679	28,850,672	14,141,465	2,432,332	31,283,004	\$32,577	\$24,481,537	\$6,801,467			
	2045	\$235,944,766	29,139,179	14,537,426	2,500,437	31,639,616	\$33,163	\$24,922,204	\$6,717,412			
	2046	\$238,304,214	29,430,570	14,944,474	2,570,450	32,001,020	\$33,760	\$25,370,804	\$6,630,216			
	2047	\$240,687,256	29,724,876	15,362,920	2,642,422	32,367,298	\$34,368	\$25,827,478	\$6,539,820			
	2048	\$243,094,129	30,022,125	15,793,081	2,716,410	32,738,535	\$34,987	\$26,292,373	\$6,446,162			
	2049	\$245,525,070	30,322,346	16,235,288	2,792,469	33,114,816	\$35,616	\$26,765,636	\$6,349,180			
	2050	\$247,980,321	30,625,570	16,689,876	2,870,659	33,496,228	\$36,257	\$27,247,417	\$6,248,811			

¹Statewide data from 2023-2032 TYP[:] Page 13, "2023-2032 Ten Year PlanAll Funding", and includes funding for pavement, bridges, & roadsides. Additional data came from the NHDOT Agency Efficeincy Budget. FY2033 is the average of FY2023-26. FY2033-50 grows at 1%/year.

²NRPC proportion of state highway miles: 12.35%

³O&M costs from annual Turnpike reports

⁴NRPC share of Turnpike funds is 17.2%

⁵Based on local financial data from NH Public Finance Consortium (2014-2022). Local expenditures include reported costs for highways and streets, bridges, and administration.

⁶Average cost/lane mile multiplied by total lane miles. (NRPC lane miles = 751.5)

TRANSIT OPERATIONS & MAINTENANCE/FISCAL CONSTRAINT ANALYSIS

For the highway financial analysis, development of fiscal constraint of federal-aid roadways and calculations of operations and maintenance needs were independent analyses. This is because fiscal constraint is a process to ensure that federal resources are adequate for all regional projects and programs, while O&M determines the amount of all resources (federal, state, local) that will be needed to conduct the maintenance requirements of the federal-aid roadway system.

The determination of transit fiscal constraint, conversely, is a process that first calculates O&M needs of the public transportation system, to identify the level of FTA operating assistance that will be required for each year. This amount is then carried over from the O&M Needs table to the fiscal constraint table, where the annual level of operating assistance is subtracted from the total FTA apportionment (FTA 5307, 5310, 5339) to determine the annual amounts available for capital expenditures. From the transit systems Transit Asset Management Plan, a long-range schedule of capital needs is plugged into the Metropolitan Transportation Plan fiscal constraint table. Where shortages of funding for capital projects are determined on a yearly basis, target dates and amounts for FTA 5339 discretionary grants are determined.

OPERATIONS & MAINTENANCE, FTA-FUNDED SERVICES													
		Operation	is & Mainter	nance Costs	Se	ervice Gene	rated Reven	ue		Available	e Operatio	ns Funding	
	Fiscal	Fixed	Demand	Total	Fixed	Demand	Other	Total	Funding				
	Year	Route ¹	Response ¹	Expenses	Route ⁴	Response	SVTC/Misc ²	Revenue	Needed	Local⁵	State⁵	FTA	Cumualtive
	2021	\$2,296,563	\$1,226,029	\$3,522,592	\$168,839	\$24,693	\$403,364	\$596,896	\$2,925,696	\$401,044	\$249,671		Balance
	2022	\$2,300,697	\$1,228,236	\$3,528,933	\$171,878	\$25,137	\$404,090	\$601,106	\$2,927,827	\$401,766	\$250,120		
2023-	2023	\$2,304,838	\$1,230,447	\$3,535,285	\$174,972	\$25,590	\$411,364	\$611,926	\$2,923,359	\$402,489	\$250,571	\$2,270,300	\$0
2026	2024	\$2,308,987	\$1,232,661	\$3,541,648	\$178,121	\$26,051	\$418,768	\$622,940	\$2,918,708	\$403,214	\$251,022	\$2,264,473	\$0
TP	2025	\$2,313,143	\$1,234,880	\$3,548,023	\$181,328	\$26,519	\$426,306	\$634,153	\$2,913,870	\$403,939	\$251,473	\$2,258,457	\$0
	2026	\$2,317,307	\$1,237,103	\$3,554,410	\$184,591	\$26,997	\$433,980	\$645,568	\$2,908,842	\$404,666	\$251,926	\$2,252,249	\$0
	2027	\$2,321,478	\$1,239,330	\$3,560,808	\$187,914	\$27,483	\$441,791	\$657,188	\$2,903,620	\$405,395	\$252,380	\$2,245,845	\$0
2027-	2028	\$2,325,656	\$1,241,561	\$3,567,217	\$191,297	\$27,977	\$449,743	\$669,017	\$2,898,200	\$406,125	\$252,834	\$2,239,241	\$0
2032	2029	\$2,329,843	\$1,243,795	\$3,573,638	\$194,740	\$28,481	\$457,839	\$681,060	\$2,892,578	\$406,856	\$253,289	\$2,232,434	\$0
Түр	2030	\$2,334,036	\$1,246,034	\$3,580,071	\$198,245	\$28,994	\$466,080	\$693,319	\$2,886,752	\$407,588	\$253,745	\$2,225,419	\$0
	2031	\$2,338,238	\$1,248,277	\$3,586,515	\$201,814	\$29,516	\$474,469	\$705,799	\$2,880,716	\$408,322	\$254,202	\$2,218,193	\$0
	2032	\$2,342,446	\$1,250,524	\$3,592,970	\$205,446	\$30,047	\$483,010	\$718,503	\$2,874,467	\$409,057	\$254,659	\$2,210,752	\$0
	2033	\$2,346,663	\$1,252,775	\$3,599,438	\$209,144	\$30,588	\$491,704	\$731,436	\$2,868,002	\$409,793	\$255,118	\$2,203,091	\$0
	2034	\$2,350,887	\$1,255,030	\$3,605,917	\$212,909	\$31,138	\$500,555	\$744,602	\$2,861,315	\$410,530	\$255,577	\$2,195,208	\$0
	2035	\$2,355,118	\$1,257,289	\$3,612,407	\$216,741	\$31,699	\$509,565	\$758,005	\$2,854,403	\$411,269	\$256,037	\$2,187,096	\$0
	2036	\$2,359,358	\$1,259,552	\$3,618,910	\$220,643	\$32,269	\$518,737	\$771,649	\$2,847,261	\$412,010	\$256,498	\$2,178,754	\$0
	2037	\$2,363,604	\$1,261,819	\$3,625,424	\$224,614	\$32,850	\$528,074	\$785,538	\$2,839,885	\$412,751	\$256,959	\$2,170,175	\$0
2033-	2038	\$2,367,859	\$1,264,091	\$3,631,950	\$228,657	\$33,442	\$537,579	\$799,678	\$2,832,271	\$413,494	\$257,422	\$2,161,355	\$0
2050	2039	\$2,372,121	\$1,266,366	\$3,638,487	\$232,773	\$34,043	\$547,256	\$814,072	\$2,824,415	\$414,239	\$257,885	\$2,152,291	\$0
MTP	2040	\$2,376,391	\$1,268,645	\$3,645,036	\$236,963	\$34,656	\$557,106	\$828,726	\$2,816,311	\$414,984	\$258,349	\$2,142,977	\$0
	2041	\$2,380,668	\$1,270,929	\$3,651,597	\$241,228	\$35,280	\$567,134	\$843,643	\$2,807,955	\$415,731	\$258,815	\$2,133,409	\$0
	2042	\$2,384,954	\$1,273,217	\$3,658,170	\$245,570	\$35,915	\$577,343	\$858,828	\$2,799,342	\$416,479	\$259,280	\$2,123,582	\$0
	2043	\$2,389,247	\$1,275,508	\$3,664,755	\$249,991	\$36,562	\$587,735	\$874,287	\$2,790,468	\$417,229	\$259,747	\$2,113,492	\$0
	2044	\$2,393,547	\$1,277,804	\$3,671,352	\$254,491	\$37,220	\$598,314	\$890,024	\$2,781,327	\$417,980	\$260,215	\$2,103,132	\$0
	2045	\$2,397,856	\$1,280,104	\$3,677,960	\$259,071	\$37,890	\$609,084	\$906,045	\$2,771,915	\$418,733	\$260,683	\$2,092,500	\$0
	2046	\$2,402,172	\$1,282,409	\$3,684,580	\$263,735	\$38,572	\$620,047	\$922,354	\$2,762,227	\$419,486	\$261,152	\$2,081,588	\$0
	2047	\$2,406,496	\$1,284,717	\$3,691,213	\$268,482	\$39,266	\$631,208	\$938,956	\$2,752,257	\$420,241	\$261,622	\$2,070,393	\$0
	2048	\$2,410,827	\$1,287,029	\$3,697,857	\$273,315	\$39,973	\$642,570	\$955,857	\$2,742,000	\$420,998	\$262,093	\$2,058,909	\$0
	2049	\$2,415,167	\$1,289,346	\$3,704,513	\$278,234	\$40,692	\$654,136	\$973,063	\$2,731,450	\$421,756	\$262,565	\$2,047,130	\$0
	2050	\$2,419,514	\$1,291,667	\$3,711,181	\$283,242	\$41,425	\$665,911	\$990,578	\$2,720,603	\$422,515	\$263,038	\$2,035,051	\$0
¹ National Transit Database - City of Nashua - 2021													
² NTD	- City o	of Nashua - '	'Fares & Dire	ectly genera	ted"								
³ Incre	ase by	1.8%/year											
⁴ incre	aseby	1.8%/year											
5NTS	. City o	f Nashua - "	Sources of (Operating Fu	inds "								

	FISCAL CONSTRAINT ANALYSIS FOR THE METROPOLITAN TRANSPORTATION PLAN FTA-FUNDED TRANSIT SERVICE														
			Feder	al Transit F	unds				E	xpenditues					
	Fiscal	FTA A	pportionme	nt:			FTA	FTA Balance	Cap Proj	Funding	Cumul Balance				
	Year	5307 ^{1, 2}	5310 ^{1,2}	5339 ^{1,2}	5339 Discr	FTA Total ³	Assistance	for Cap Proj	Expended	Balance ⁴	(5339)				
	2022						\$192,364			\$192,364	\$192,364				
2022	2023	\$1,711,263	\$229,135	\$135,730	\$357,000	\$2,433,128	\$2,076,128	\$357,700	\$357,700	\$165,336	\$27,028				
2025-	2024	\$1,745,489	\$233,718	\$138,444	\$0	\$2,117,650	\$2,117,650	\$0	\$0	\$0	\$27,028				
2020 TD	2025	\$1,780,398	\$238,392	\$141,213	\$0	\$2,160,003	\$2,160,003	\$0	\$0	\$0	\$27,028				
1P	2026	\$1,816,006	\$243,160	\$144,037	\$850,000	\$3,053,203	\$2,203,203	\$850,000	\$850,000	\$0	\$0				
	2027	\$1,852,327	\$248,023	\$146,918	\$0	\$2,247,267	\$2,247,267	\$0	\$0	\$0	\$0				
2027-	2028	\$1,889,373	\$252,983	\$149,856	\$850,000	\$3,142,212	\$2,292,212	\$850,000	\$850,000	\$0	\$0				
2027-	2029	\$1,927,161	\$258,043	\$152,854	\$150,000	\$2,488,057	\$2,338,057	\$150,000	\$150,000	\$0	\$0				
ZUSZ TVD	2030	\$1,965,704	\$263,204	\$155,910	\$0	\$2,384,818	\$2,384,818	\$0	\$0	\$0	\$0				
111	2031	\$1,965,704	\$263,204	\$155,910	\$0	\$2,384,818	\$2,384,818	\$0	\$0	\$0	\$0				
	2032 \$1,965,704 \$263,204 \$155,910 \$3,000,000 \$5,384,818 \$2,384,818 \$3,000,000 \$3,000,000 \$0 \$0														
	2033	\$2,001,086	\$267,942	\$158,717	\$3,000,000	\$5,427,745	\$2,427,745	\$3,000,000	\$3,000,000	\$0	\$0				
	2034	\$2,037,106	\$272,765	\$161,574	\$2,330,000	\$4,801,444	\$2,471,444	\$2,330,000	\$2,330,000	\$0	\$0				
	2035	\$2,073,774	\$277,674	\$164,482	\$0	\$2,515,930	\$2,515,930	\$0	\$0	\$0	\$0				
	2036	\$2,111,102	\$282,673	\$167,443	\$0	\$2,561,217	\$2,561,217	\$0	\$0	\$0	\$0				
	2037	\$2,149,101	\$287,761	\$170,457	\$0	\$2,607,319	\$2,607,319	\$0	\$0	\$0	\$0				
2031-	2038	\$2,187,785	\$292,940	\$173,525	\$0	\$2,654,250	\$2,654,250	\$0	\$0	\$0	\$0				
2050	2039	\$2,227,165	\$298,213	\$176,648	\$0	\$2,702,027	\$2,702,027	\$0	\$0	\$0	\$0				
MTP	2040	\$2,267,254	\$303,581	\$179,828	\$0	\$2,750,663	\$2,750,663	\$0	\$0	\$0	\$0				
	2041	\$2,308,065	\$309,046	\$183,065	\$0	\$2,800,175	\$2,800,175	\$0	\$0	\$0	\$0				
	2042	\$2,349,610	\$314,608	\$186,360	\$0	\$2,850,578	\$2,850,578	\$0	\$0	\$0	\$0				
	2043	\$2,391,903	\$320,271	\$189,715	\$0	\$2,901,889	\$2,901,889	\$0	\$0	\$0	\$0				
	2044	\$2,434,957	\$326,036	\$193,129	\$0	\$2,954,123	\$2,954,123	\$0	\$0	\$0	\$0				
	2045	\$2,478,787	\$331,905	\$196,606	\$0	\$3,007,297	\$3,007,297	\$0	\$0	\$0	\$0				
	2046	\$2,523,405	\$337,879	\$200,145	\$0	\$3,061,428	\$3,061,428	\$0	\$0	\$0	\$0				
	2047	\$2,568,826	\$343,961	\$203,747	\$0	\$3,116,534	\$3,116,534	\$0	\$0	\$0	\$0				
	2048	\$2,615,065	\$350,152	\$207,415	\$0	\$3,172,632	\$3,172,632	\$0	\$0	\$0	\$0				
	2049	\$2,662,136	\$356,455	\$211,148	\$0	\$3,229,739	\$3,229,739	\$0	\$0	\$0	\$0				
	2050	\$2,710,054	\$362,871	\$214,949	\$0	\$3,287,874	\$3,287,874	\$0	\$0	\$0	\$0				
		\$47,636,821	\$6,378,481	\$3,778,329	\$10,537,000	\$68,330,631	\$57,793,631	\$10,537,700	\$10,537,700	\$165,336	\$0				
1 - FY20	- FY2027 -2032 came from 12.8.2022 TIP NHDOT TIP Docket (FY2023-26 STIP)														
2 - FY20)33-50 in (crease by 1.8%/	year												
3 - Tota	- Total of 5307, 5310, 5339														
4 - FTA	Balance	for Cap Projects	minus Capit	al Projects ex	pended										

AIR QUALITY CONFORMITY DETERMINATION

New Hampshire Ozone Status

For over 20 years, New Hampshire has been working to improve the quality of the air with the focus being to reduce the amount of ozone that forms during the summer months. The Nashua Regional Planning Commission in its role as the Metropolitan Planning Organization has partnered with NHDOT and the NH Department of Environmental Services (NHDES) to reduce mobile source emissions and meet the ozone standards set by the US Environmental Protection Agency (EPA). Over the last two decades, two ozone standards have been in effect in New Hampshire: the 1997 8-hour standard of 80 parts per billion (ppb) and the more stringent 2008 8-hour standard of 75 ppb.

Portions of southern New Hampshire did not meet the 1997 80 ppb standard, and what was defined as the "Boston-Manchester-Portsmouth (SE) NH area" was designated non-attainment. As required by the Clean Air Act (CAA), NRPC worked to identify transportation projects that would reduce congestion and support non-motorized modes of transportation. These efforts, combined with federal programs such as federal vehicle emission standards and fuel standards, were successful in reducing emissions in NH. By 2008, New Hampshire's ozone levels were below both the 1997 standard and the 2008 standard of 75 ppb.

In May 2012, EPA took three actions concerning New Hampshire's status under both ozone standards. First, EPA declared New Hampshire to be "unclassifiable/attainment" with respect to the 2008, 75 ppb standard. Second, EPA revoked the 1997 standard for transportation conformity purposes only. Third, EPA proposed approval of New Hampshire's redesignation request to attainment under the 1997 standard which became effective March 4, 2013.

On July 20, 2013, all of New Hampshire became unclassifiable/attainment for the 2008 8-Hour Ozone National Ambient Air Quality Standard (the 2008 ozone standard) and on April 6, 2015, the 1997 8-Hour Ozone National Ambient Air Quality Standard (the 1997 ozone standard) was revoked for all purposes, including transportation conformity, in the Boston-Manchester-Portsmouth (SE) NH area.

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA ("South Coast II,"* 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. These conformity determinations are required in these areas after February 16, 2019. Therefore, per the *South Coast II decision*, this conformity determination is being made for the 1997 ozone NAAQS on the MTP and TIP.

This conformity determination was completed consistent with CAA requirements, existing associated regulations at 40 CFR Parts 51.390 and 93, and the *South Coast II* decision, according to EPA's *Transportation Conformity Guidance for the South Coast II Court Decision* issued on November 29, 2018.

The concept of transportation conformity was introduced in the Clean Air Act (CAA) of 1977, which included a provision to ensure that transportation investments conform to a state implementation plan (SIP) for meeting the Federal air quality standards. Conformity requirements were made substantially more rigorous in the CAA Amendments of 1990. The transportation conformity regulations that detail implementation of the CAA requirements was first issued in November 1993, and have been amended

several times. The regulations establish the criteria and procedures for transportation agencies to demonstrate that air pollutant emissions from metropolitan transportation plans, transportation improvement programs and projects are consistent with ("conform to") the State's air quality goals in the SIP. This document has been prepared for State and local officials who are involved in decision making on transportation investments.

Transportation conformity is required under CAA Section 176(c) to ensure that federally supported transportation activities are consistent with ("conform to") the purpose of a State's SIP. Transportation conformity establishes the framework for improving air quality to protect public health and the environment. Conformity to the purpose of the SIP means Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) funding and approvals are given to highway and transit activities that will not cause new air quality violations, worsen existing air quality violations, or delay timely attainment of the relevant air quality standard, or any interim milestone.



Figure 1: 1997 Ozone Nonattainment Area

Transportation Conformity Requirements

<u>Overview</u>

On November 29, 2018, EPA issued **Transportation Conformity Guidance for the South Coast II Court Decision** (EPA-420-B-18-050, November 2018) that addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked but were designated attainment for the 2008 ozone

NAAQS in EPA's original designations for this NAAQS (May 21, 2012). Since 2015, the NAAQS for ozone has been 0.07 parts per million.

The transportation conformity regulation at 40 CFR 93.109 sets forth the criteria and procedures for determining conformity. The conformity criteria for MTPs and TIPs include the latest planning assumptions (93.110), latest emissions model (93.111), consultation (93.112), transportation control measures (93.113(b) and (c), and emissions budget and/or interim emissions (93.118 and/or 93.119).

For the 1997 ozone NAAQS areas, transportation conformity for MTPs and TIPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of EPA's nonattainment designation for a NAAQS and until the effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the *South Coast II* court upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, budget, or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS for the Nashua MPO TIP can be demonstrated by showing the remaining requirements in Table 1 in 40 CFR 93.109 have been met. These requirements, which are laid out in Section 2.4 of EPA's guidance and addressed below, include:

- Latest Planning Assumptions (93.110)
- Consultation (93.112)
- Transportation Control Measures (93.113)
- Fiscal Constraint (93.108)

The following is a summary of how these requirements have been addressed.

Latest Planning Assumptions

In 2022, NRPC staff completed the conversion of the regional model from an Excel/TransCAD model, to a fully integrated 3 plus step TransCAD model. This 2022 update included the creation of a model having trip generation, trip distribution, vehicle occupancy/time of day, and highway assignment. Additionally, the highway assignment was modified to include a 4-time period assignment with the following time periods summing to a 24-hour volume: 6AM-9AM, 9AM to 3PM, 3PM-6PM, and 6PM-6AM. This is not a 4-step model as it does not have transit and walk modes, nor does it estimate these trips. Regional fixed route transit ridership is approximately 1500 boardings per day and this is negligible in terms of the total number of trips in the system. Additionally, the model was programmed to run with a dialog box user interface in the 2022 release of TransCAD version 9.

In 2023, following the completion of the 2022 update, NRPC staff completed a second major update. The focus of this update was to bring the regional Transportation Analysis Zones (TAZs) structure to be consistent with 2020 US Census geography. These new TAZs were created as sub-divisions of Census block groups. The 2020 Census data was used as the source of population, households by size, households by income, household auto ownership, and employment. These population and household characteristics came directly from the 2020 Census. The employment data came from the 2020 Census LODES (LEHD, Longitudinal Employer-Household Dynamics, Origin-Destination Employment Statistics) data. The model runs in the 2023 release of TransCAD version 9.

The 2020 Census data then served as the base year, and new forecast year population, household and employment characteristics were developed for 2030 and 2050. The State of New Hampshire, Employment and Security, Economic and Labor Market Information Bureau, was the source of the 2030 community employment projections. The State of New Hampshire, Office of Planning and Development, had recently retained a consultant to develop community population projections to 2050 in 5-year increments. These were the source of the 2030 and 2050 population projections. Using population growth rates as a guide, the community employment projections for 2030 were extended out to 2050. Based on meetings with local communities, known land use changes in those communities were used to inform the placement of the community growth predicted by these State sources.

Additionally, the trip generation equations in the model were updated to be consistent with the National Cooperative Highway Research Program (NCHRP) Report 365 based on an urban area population of 50,000 to 199,000. The gravity model trip distribution was also modified to reflect triplength frequency distributions provided in this report. The NCHRP Quick Response Freight Manual was then used to develop a truck model inclusive of trip generation, trip distribution, and highway assignment steps.

The original model's highway network and speed capacity lookup tables were used in this new model as those model features had already been calibrated to this region.

Consultation

The Nashua MPO engages in several consultation processes relevant to air quality conformity. The Partnering for Performance in New Hampshire (PFPNH) monthly meetings bring together the four NH MPO's, the FHWA and NHDOT/NHDES (for relevant topics) to discuss coordinated approaches to planning tasks. These include development of Performance Measures, use and analysis of NPMRDS speed data for congestion analysis, Air Quality Conformity issues, UPWP coordination, etc.

The MPOs engage in one Interagency Consultation per month with NHDOT, NHDES, FHWA and FTA to coordinate planning efforts and methodologies, including those pertinent to the Air Quality Conformity process.

Transportation Control Measures

New Hampshire does not have any Transportation Control Measures (TCM) included in the SIP. However, there is a motor vehicle inspection/maintenance (I/M) program in the State, which identifies vehicles that exceed or may exceed air pollution emission standards and requires such vehicles to be repaired. This program is an important part of the state's strategy to attain and maintain the National Ambient Air Quality Standard for ozone, even if it is not a SIP-identified TCM.

Section 182(c) of the federal Clean Air Act requires "enhanced" vehicle I/M programs in certain areas having a history of elevated concentrations of ground-level ozone, the chief component of smog. In addition, Section 184(b) of the CAA outlines I/M requirements for larger population centers of the member states of the Northeast Ozone Transport Region (OTR), which includes New Hampshire.

Based on monitored ozone values, portions of southern New Hampshire (all or parts of Hillsborough, Rockingham, Strafford, and Merrimack counties) have qualified in the past for shared I/M.

New Hampshire meets its I/M obligations through an Enhanced Safety Inspection (ESI), which is implemented statewide. The ESI has the following mandatory features:

- Visual anti-tampering inspection of vehicles less than 20 years old.
- A statewide On-Board Diagnostics (OBD II) Inspection Program for light-duty vehicles (less than 8500 lbs. GVWR) less than 20 years old; and
- A Diesel Opacity Testing Program for heavy-duty vehicles (greater than 10,000 lbs. GVWR).

Fiscal Constraint

Transportation Conformity requirements in 40 CFR 93.108 state that transportation plans and TIPs must be fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR part 450. The NRPC 2019-2045 Metropolitan Transportation Plan and 2023-2026 TIP are fiscally constrained. A comprehensive Financial Analysis conducted in Chapter VI of this TIP and in the MTP demonstrate fiscal constraint of both documents. A long-range analysis of transit funding and expenditures has been added to the MTP financial constraint, per corrective action of the 2019 Federal TMA/MPO Certification Review.

Nashua Carbon Monoxide Status

The City of Nashua was designated a non-attainment area for Carbon Monoxide (CO) in 1980 by the EPA. Unlike ozone, CO pollution is prevalent throughout the year and typically concentrated in urban areas with congested intersections and arterial roadways. NRPC has worked with the City of Nashua, NHDOT and NHDES to reduce mobile source emissions and meet the CO standards set by EPA. Over the last two plus decades, the intersection improvements, increased transit service and other transportation demand strategies have worked in conjunction with reduced tail pipe emissions to decrease the number of exceedances of the CO standard. By 2001 EPA designated Nashua "in attainment" with a Maintenance Plan requiring continued monitoring and air quality analyses to ensure the CO standard was not violated by proposed projects. On March 10, 2014, EPA approved a Limited Maintenance Plan for the City of Nashua, relinquishing the NRPC of additional air quality analyses for projects proposed in the TIP and MTP. The 20-year maintenance period for the Nashua and Manchester CO maintenance areas expired on January 29, 2021. The Nashua MPO is therefore no longer required to demonstrate transportation conformity for the CO maintenance area.

Projects which are exempt from analysis in the Air Quality Conformity Determination are assigned specific Clean Air Act Codes (CAAC). These include construction projects that do not involve capacity expansion or new facilities. New highway projects or capacity expansion of existing highways are considered non-exempt, and their impacts are evaluated.

Clean Air Act Status/Codes can be found in Appendix B

ENVIRONMENTAL CONCERNS OF PROJECTS & MITIGATION STRATEGIES

EVALUATING PROJECT IMPACTS AND PLANNING FOR ENVIRONMENTAL MITIGATION

The NRPC MTP identifies goals, objectives, strategies, policies, and specific improvement projects necessary to meet the current and future mobility and infrastructure needs of the region. However, the projects presented here in the MTP are intended to facilitate the safe and efficient movement of goods

and people, it is important to recognize that there are environmental impacts associated with all transportation improvement projects.

Consequently, federal regulations require that MTPs must consider the impacts of transportation projects on regional environmental resources and identify potential mitigation strategies. Specifically, 23 CFR 450.324 (f)(10) stipulates that the MTP must include "a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level."

While federal regulations do not require project-level analyses of mitigation activities in the MTP, the following discussion is intended to identify the types of environmental impacts associated with transportation projects in the NRPC region and the potential mitigation strategies that are most appropriate to address impacts. The purpose of environmental mitigation is to preserve, restore, or enhance the region's natural resources as necessary to offset the impacts of a transportation project. In this context, mitigation can refer to any of the following activities:

- 1. Avoiding Impacts: Modifying a project to avoid impacts to environmental resources.
- 2. Minimizing Impacts: Modifying a project as necessary to limit the scope, scale, and severity of impacts to environmental resources.
- 3. Rectifying Impacts: Mitigating an impact by restoring or rehabilitating the affected environmental resource.
- 4. Reducing Impacts: Mitigating an impact through the implementation of ongoing maintenance or operational best management practices.
- 5. Compensating for Impacts: Mitigating an impact by providing an offsetting substitute resource of equal or greater value.

Many of the improvement projects detailed in the NRPC MTP are expected to have minimal or even positive environmental impacts. For instance, the public transportation, bicycle, pedestrian, Intelligent Transportation System (ITS), and Transportation Demand Management (TDM) projects detailed in the plan are all intended to reduce single-occupant vehicle travel and improve air quality and minimize congestion. These projects all have a basis in the NRPC's Congestion Management Process (CMP) and are intended to maximize the existing capacity of the region's road network and minimize the need for highway capacity expansions.

However, several projects in the NRPC MTP do involve capacity expansions and will have environmental impacts, and mitigation for these projects will be needed to avoid or offset negative long-term environmental consequences. The following pages detail the most common environmental impacts associated with a transportation improvement project in the NRPC region and identifies potential actions to mitigate those impacts. This section also details the regulatory or coordinating agencies that aid in identifying project-specific mitigation strategies and locations when projects in the NRPC MTP advance from concept through to construction.

AGENCIES, TRANSPORTATION IMPACTS, AND MITIGATION STRATEGIES OF ENVIRONMENTAL RESOURCES

<u>Air Quality</u>

Regulatory or Coordinating Agencies:

- NH Department of Environmental Services (Air Resources Division)
- NH Department of Transportation (Bureau of Environment & other bureaus)
- Environmental Protection Agency

Potential Transportation Project Impacts

- Increased emissions from vehicles.
- Increased dust emissions during construction.

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 potentially to reduce delays.
- Implementation of municipal no idling ordinances.

Cultural and Historic Resources

Regulatory or Coordinating Agencies:

- NH Department of Natural and Cultural Resources Division of Historical Resources
- NH Department of Transportation Bureau of Environment
- Environmental Protection Agency

Potential Transportation Project Impacts:

- Direct loss of historical sites, structures, artifacts, or features.
- Direct loss of cultural resource sites, landscapes, or features.

Potential Mitigation Strategies:

- Utilization of context-sensitive project design and design exceptions to avoid/minimize cultural and historic resource impacts.
- Relocation and/or adaptive reuse of historic buildings or structures.
- Excavation and documentation of areas with high archaeological value/sensitivity.
- Preservation in places with archaeological resources.
- Implementation of Environmental Compliance Monitoring.

Conserved Lands:

Regulatory or Coordinating Agencies:

- Local Conservation Commissions
- Local and Regional Land Trusts
- NH Department of Natural and Cultural Resources Division of Forests and Lands
- NH Land and Community Heritage Investment Program (LCHIP)

Potential Transportation Project Impacts:

- Direct loss of conserved lands.
- Secondary diminishment of the ecological value of conserved lands via ensuing development and open space fragmentation.

Potential Mitigation Strategies:

- Utilization of context-sensitive project design and design exceptions to avoid and or minimize conserved land impacts.
- Requirement that replacement lands purchased and or provided via mitigation of equal or greater ecological value.
- Implementation of land use controls and zoning ordinances to manage the impact of development on conserved lands.

Endangered or Threatened Species:

- Regulatory or Coordinating Agencies
- Local Conservation Commissions
- NH Department of Transportation Bureau of Environment
- NH Fish and Game Department
- US Fish and Wildlife Service

Potential Transportation Project Impacts:

- Direct loss of endangered and or threatened species and habitat.
- Secondary diminishment of the ecological value of habitat via ensuing development and open space fragmentation.

Potential Mitigation Strategies:

- Utilization of context-sensitive project design and design exceptions to avoid and or minimize habitat impacts.
- Utilization of wildlife and aquatic passages within project design and construction.
- Requirement that replacement lands provided via mitigation be of equal or greater habitat value for the affected species.
- Minimization of construction impacts via time of year restrictions and construction phasing.
- Implementation of land use controls and zoning bylaws to manage the impact of development on habitat.
- Implementation of Scheduled and Regular Environmental Compliance Monitoring.

Floodplains

Regulatory or Coordinating Agencies:

- Municipal Floodplain Managers/Zoning Administrators
- NH Office of Strategic Initiatives
- Federal Emergency Management Agency
- U.S. Army Corps of Engineers

Potential Transportation Project Impacts:

• Direct impacts to floodplains would reduce flood storage capacity.

• Secondary diminishment of floodplains via future ensuing development.

Potential Mitigation Strategies:

- Utilization of context-sensitive project design and design exceptions to avoid and or minimize floodplain impacts.
- Utilization of floodplain management best practices including elevated structures to minimize the extent of direct impacts.
- Requirement that floodplain restoration activities occur in the same sub-watershed and at a minimum within the same watershed.
- Implementation of improved land use controls to manage and or eliminate the impact of development in floodplains.

Excess Noise and Quiet Environment:

Regulatory or Coordinating Agencies:

- NH Department of Transportation Bureau of Environment
- Federal Highway Administration

Potential Transportation Project Impacts:

- Increased noise from vehicles following project construction.
- Increased noise during project construction.

Potential Mitigation Strategies:

- Installation of sound barriers/attenuators where needed or warranted under the NHDOT "Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise."
- Minimization of noise-related construction impacts via time-of-day restrictions and construction phasing.
- Create and or retain vegetative buffers when and where effective and available.

Parks/Recreation Areas:

Regulatory or Coordinating Agencies:

- Municipal Park and Recreation Departments
- NH Department of Natural and Cultural Resources Division of Parks and Recreation

Potential Transportation Project Impacts:

- Direct loss of parks and recreation lands.
- Secondary diminishment of the recreational value of affected parklands via ensuing development.

Potential Mitigation Strategies:

- Utilization of context-sensitive project design and design exceptions to avoid and or minimize park and recreation land impacts.
- Requirement that replacement lands purchased or provided via mitigation strategy be located contiguous with the impact site.

• Implementation of improved municipal bylaws and land use ordinances to manage the impact of subsequent development on recreation lands.

Water Resources:

Regulatory or Coordinating Agencies:

- Local River Management Advisory Committees
- Watershed Councils/Associations
- NH Department of Environmental Services Water Division
- Environmental Protection Agency

Potential Transportation Project Impacts:

- Increased pollutant contamination due to excessive or rapid stormwater runoff.
- Increased salt/chloride loading from winter maintenance.
- Increased sedimentation during project construction.

Potential Mitigation Strategies:

- Mitigation of excess and rapid stormwater runoff through best management practices.
- Utilization of green stormwater infrastructure and infiltration management practices.
- Expansion of the NH Department of Environmental Services "Green Snow Pro" to educate salt applicators in best practices and improve efficiency in salt use.
- Implementation of project-specific sediment control plans during construction, including silt fencing.

Wetlands:

Regulatory or Coordinating Agencies:

- NH Department of Environmental Services Wetlands Bureau
- Environmental Protection Agency

Potential Transportation Project Impacts:

- Direct loss or corruption of wetlands from project construction.
- Increased pollutant contamination from stormwater runoff.
- Increased salt/chloride loading from winter maintenance.
- Secondary diminishment of adjacent wetlands via new development.

Potential Mitigation Strategies:

- Utilization of context-sensitive project design and design exceptions to avoid and or minimize wetland impacts.
- Creation of new wetlands or restoration of impaired wetlands.
- Protection of threatened wetlands through acquisition and permanent protection.
- Expansion of the NH Department of Environmental Services "Green Snow Pro" to educate salt applicators in best practices and improve efficiency in salt use.
- Implementation of improved municipal bylaws and local land use ordinances to manage and or eliminate the impact of development on wetlands.

Our MTP reflects 2 fundamental principles related to environmental mitigation.

- 1. When identifying and programming transportation improvement projects, the NRPC will consider actions that avoid, minimize, or mitigate potential environmental impacts.
- 2. NRPC will seek opportunities and occasions to restore previously damaged or diminished environmental resources throughout the transportation planning process.

To achieve these principles, it is essential for the NRPC to continue coordinating with partner, regulatory, and administrative agencies to develop and enhance high-quality spatial data detailing the location and attributes of natural resources. In recent years, the availability of spatial data covering the NRPC region has increased. However, gaps remain in the availability of some regional data and resources.

DATA SOURCES FOR IDENTIFYING PROJECT IMPACTS AND MITIGATION ACTIVITIES

The NRPC utilizes the data sources detailed below to identify potential environmental resource impacts for proposed transportation projects and plan mitigation recommendations.

NH GRANIT: The New Hampshire Geographically Referenced Analysis and Information Transfer System (GRANIT) is an online repository of GIS data for the use of local, regional, and statewide agencies. It is hosted by the University of New Hampshire Institute for the Study of Earth Oceans, and Space. NRPC relies on NH GRANIT for access to current transportation and environmental spatial data including public roads, trails, railroads, water resources, watersheds, wetlands, soils, conservation lands, and natural hazards.

NH Wildlife Action Plan: The NH Wildlife Action Plan is developed and maintained by the NH Fish and Game Department in coordination with the U.S. Fish and Wildlife Service and a network of local and regional partner agencies, universities, ecologists, and volunteers. The Plan provides data and methodologies for identifying the Species of Greatest Need, habitat type, habitat quality, and conservation focus areas. In 2020, the NH Fish and Game Department developed comprehensive update to three of the key datasets in the NH Wildlife Action Plan including Habitat Land Cover, Highest Ranked Habitat by Ecological Condition, and Aquatic Habitats.

NH Historic and Cultural Resource Inventory Data: The NH Department of Natural and Cultural Resources (Division of Historical Resources) serves as New Hampshire's State Historic Preservation Office. Through their "Review and Compliance" role, the Division of Historical Resources is available through a consultation process to advise on potential historic and cultural resource impacts during the planning phase of transportation improvement projects. In addition to requesting project review through the consultation process, the files maintained by the Division of Historical Resources are available for in-person research upon appointment. These files include cultural resource inventories, National and State Historic Register nominations, and archaeological records.

Local Natural Resource Inventories: A few municipal conservation commissions in the NRPC region have developed town-specific natural resource inventories. Generally, municipal natural resource inventories utilize publicly available datasets to catalogue and map the location of local natural and cultural resources as a basis for conservation planning. However, in some cases, additional local fieldwork is

conducted to build upon and refine the data available from public GIS datasets. The data provided from local natural resources inventories is a valuable supplement to the State and National data provided through repositories like NH GRANIT.

Municipal Master Plans: Each municipality in the region has a Master Plan. Each master plan is a forward-looking comprehensive policy, growth, and develop guide from a period. Each community master plan is prepared in accordance with New Hampshire RSA 674:1 through 674:4, is a policy statement intended to serve as a guide for future local bylaws, regulations, transportation improvements, environmental protections, and capital improvements. The following are phrases that typically appear in a community master plan that must be recognized and utilized within proposed transportation projects and mitigation strategies:

- Preserve character of the town.
- Maintain current land use patterns.
- Keep the town mostly agricultural and residential.
- Maintaining the history and character of the community.
- Seeking a balance of residential and commercial development.

NHDOT Policy and Procedural Guidelines for the Assessment and Abatement of Highway Traffic Noise: This document presents the results of a statewide noise barrier study for NHDOT. The feasibility and reasonableness of noise barriers throughout the state were evaluated to acoustical and costeffectiveness criteria. The study has provided NHDOT with:

- an estimate of the potential noise barrier material costs associated with a newly implemented Type II noise barrier program.
- identified municipalities that the DOT can coordinate with for enacting noise-compatible planning regulations.
- describes the methodology used to develop the screening-level noise barrier evaluation.

The document includes information for easy access when NHDOT responds to noise complaints from the public. Finally, it provides policy and procedural guidelines for the assessment and abatement of vehicle and traffic noise for near highway projects.

CONSULTING PARTIES FOR IDENTIFYING PROJECT IMPACTS AND MITIGATION ACTIVITIES

As part of considering the impacts of transportation projects on regional environmental resources and identifying potential mitigation strategies, 23 CFR 450.324 (f)(10) stipulates that MPOs shall consult with "applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies."

Earlier in this section details of the agencies with regulatory authority over environmental resources in the NRPC region. However, that list of some agencies detailed does not fully encompass all the affected stakeholders. The NRPC will take additional actions to solicit information and comments from the list of agencies identified below and others not listed here when evaluating the impacts of transportation projects on environmental resources and identifying potential mitigation strategies.

List of Agencies for Coordination of Environmental Impact Mitigation:

Federal:

- Federal Emergency Management Agency
- Federal Highway Administration
- US Army Corps of Engineers
- US Environmental Protection Agency
- US Fish and Wildlife Service

State:

- NH Department of Environmental Services (Air Resources Division)
- NH Department of Environmental Services (Water Division)
- NH Department of Environmental Services (Wetlands Bureau)
- NH Department of Natural and Cultural Resources (Division of Forests and Lands)
- NH Department of Natural & Cultural Resources (Division of Historical Resources)
- NH Department of Natural & Cultural Resources (Division of Parks & Recreation)
- NH Department of Transportation (Bureau of Environment)
- NH Fish and Game Department
- NH Land and Community Heritage Investment Program
- NH Office of Strategic Initiatives

Regional:

- Greenway Associations
- Land Conservancy Alliances
- Local Advisory Committees
- Land Trusts
- Local River Management Advisory Committees
- Scenic Byway groups

Local:

- Land and Municipal Trusts
- Municipal Conservation Commissions
- Municipal Floodplain Managers
- Municipal Park/Recreation Departments
- MS4 Communities
- Municipal Stormwater Utilities
- Municipal Emergency Management officials

Non-Profit:

- Conservation Law Foundation
- Nature Conservancy
- Society for the Protection of New Hampshire Forests

TECHNICAL ASSISTANCE EFFORTS BENEFITTING ENVIRONMENTAL MITIGATION

As the region's Metropolitan Planning Organization, NRPC provides technical assistance to municipalities on the implementation of Federal transportation programs, including the Congestion Mitigation and Air Quality (CMAQ) program. Through this technical assistance, NRPC assists municipalities in identifying, scoping, and evaluating potential CMAQ projects. As part of the CMAQ project development process, the NRPC develops project-level air quality assessments to assist municipalities in scoping potential CMAQ projects in a way that maximizes emission reductions. Moreover, these project-level air quality analyses inform the statewide process to select, and fund proposed CMAQ projects, as the statewide process considers the scale of emissions reduction as a core project prioritization criterion.

Beyond metropolitan planning responsibilities, the NRPC also serves as 1 of 9 Regional Planning Commissions in New Hampshire and provides advisory technical assistance to its 13 municipalities on matters related to transportation and land use. There is an inextricable link between transportation and land use, and several of the environmental impacts and secondary impacts that result from the triggered development that often follows the construction of transportation improvement projects.

NRPC provides technical assistance to municipalities for improving and innovating local land use controls and zoning bylaws. In partnership with the New Hampshire Department of Environmental Services, NH Office of Strategic Initiatives, NH Municipal Association, and Regional Planning Commissions, the NRPC participated in the development of the Innovative Land Use Planning Techniques Handbook, which is a guide for municipalities on the innovative land use regulations authorized under NH state law including model ordinances.

While not all innovative land use controls will be applicable or appropriate for every community, the NRPC will continue to work with its 13 member municipalities on a case-by-case basis to provide technical assistance as necessary to ensure that local land use regulations can effectively address the secondary environmental resource impacts resulting from triggered development from transportation improvement projects.

Appendix A – Detailed Project List

2023 – 2050 NASHUA MPO SURFACE TRANSPORTATION PROJECTS IN THE NASHUA METROPOLITAN PLANNING AREA

AMHERST (40	0657)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Thornton Fe	erry Road							CAA Status:	E-19
Scope:	Bridge Repl #145/106	acement - Tho	rnton Ferry Roa	id over Beave	r Brook				RPCs:	NRPC
-	-	_	_	_			-	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$0	\$244,112	\$61,028	\$305,140		SB367-4-Cents, Town			
ROW	2024	\$0	\$13,894	\$3,474	\$17,368		SB367-4-Cents, Town			
CON	2024	\$1,505,657	\$0	\$0	\$1,505,657		MOBIL			
	TIP Total:	\$1,505,657	\$258,006	\$64,502	\$1,828,165		Total Project Cost:	\$1,828,165	Revised:	A1.M.7.23
AMHERST (42	2593)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gr	reenway North	2						CAA Status:	E-33
Scope:			Rail trail betwe railroad ROW	en Baboosic L	ake Road and Walr	ut Hill	Road along abandoned		RPCs:	NRPC
	-	-	_	-			_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$62,311	\$0	\$15,578	\$77,889		STBG-Flex, Towns			
ROW	2026	\$134,015	\$0	\$33,504	\$167,519		STBG-Flex, Towns			
CON	2029	\$416,921	\$0	\$104,230	\$521,151		STBG-Flex, Towns			
	TIP Total:	\$613,247	\$0	\$153,312	\$766,559		Total Project Cost:	\$766,559	Revised:	A3
AMHERST (42	2593)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	NH122								CAA Status:	E-53
Scope:			Intersection Im Accommodatio	provements (ons	@ NH122/Merrimad	ck Rd I	ncluding Bike & Pedestrian		RPCs:	NRPC
_	_	_	_	_			_	_		

Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2030	\$397,945	\$0	\$99 <i>,</i> 486	\$497,431		FedAid, Other			
ROW	2032	\$106,984	\$0	\$26,746	\$133,730		FedAid, Other			
CON	2034	\$1,725,714	\$0	\$431,428	\$2,157,142		FedAid, Other			
	TIP Total:	\$2,230,643	\$0	\$557 <i>,</i> 660	\$2,788,303		Total Project Cost:	\$766,559	Revised:	FY25-34 TYP
	-									-
AMHERST (F)	(25-34 TYP)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gr	reenway-North	3; NH122/Amł	nerst St					CAA Status:	E-33
Scope:			Construct a 3,0 Courthouse Rd	00 linear foot	, 8 feet wide, as	phalt side	path from NH101 to		RPCs:	NRPC
-	-	-	-	_	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2032	\$80,000	\$0	\$20,000	\$100,000		CMAQ, Town			
ROW	2033	\$80,000	\$0	\$20,000	\$100,000		CMAQ, Town			
CON	2034	\$800,000	\$0	\$200,000	\$1,000,000		CMAQ, Town			
	TIP Total:	\$960,000	\$0	\$240,000	\$1,200,000		Total Project Cost:		Revised:	FY25-34 TYP
Amherst (MT	P 2018)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gr	reenway North	-1						CAA Status:	E-33
Scope:			Shared-use nor approx 11,600	n-motorized tr ft.	ail from Bedford	d T/L to W	/alnut Hill Rd in Amherst		RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2036	\$56,000	\$0	\$70,000	\$350,000		Fed Aid, Other			
CON	2037	\$243,040	\$0	\$303,800	\$1,519,000		Fed Aid, Other			
	TIP Total:	\$299,040	\$0	\$373,800	\$1,869,000		Total Project Cost:	\$1,869,000	Revised:	FY23- 50MTP
Amherst (MT	P 2018)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gr	reenway South	-1						CAA Status:	E-33

Scope:			Shared-use nor BostonPost Rd	n-motorized tr (440ft)	ail (5,10 Ft)betwe	en NH12	22 (Amherst St) and Corduroy Rc	l, then to	RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2036	\$36,800	\$0	\$46,000	\$230,000		Fed Aid, Other			
ROW	2037	\$1,600	\$0	\$2 <i>,</i> 000	\$10,000		Fed Aid, Other			
CON	2038	\$122,720	\$0	\$153,400	\$767,000		Fed Aid, Other			
	TIP Total:	\$161,120	\$0	\$201,400	\$1,007,000		Total Project Cost:	\$1,007,000	Revised:	FY23- 50MTP
Amherst (MT	P 2018)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gro	eenway South	า -2						CAA Status:	E-33
Scope:			Shared-use nor Merr Rd ap. 5,1	n-motorized a .00 ft	long the abandon	ed Milfo	rd & Manch. Branch rail bed b/t	Corduroy rd. &	RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2037	\$134,400	\$0	\$168,000	\$840,000		Fed Aid, Other			
CON	2039	\$522,880	\$0	\$653,600	\$3,268,000		Fed Aid, Other			
	TIP Total:	\$657 <i>,</i> 280	\$0	\$821,600	\$4,108,000		Total Project Cost:	\$4,108,000	Revised:	FY23- 50MTP
Amherst (MT	P 2018)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gr	eenway South	า -3						CAA Status:	E-33
Scope:			Shared use pat Post Rd (1,840	h non-motoriz ft)	ed (4,670 ft) b/t	Merr Rd	& Fairway Dr then to Boston		RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2038	\$184,000	\$0	\$230,000	\$230,000		Fed Aid, Other			
ROW	2039	\$8,000	\$0	\$10,000	\$10,000		Fed Aid, Other			
CON	2040	\$576,800	\$0	\$721,000	\$721,000		Fed Aid, Other			
	TIP Total:	\$768,800	\$0	\$961,000	\$961,000		Total Project Cost:	\$961,000	Revised:	FY23- 50MTP

Amherst (MT	P 2018)							Managed By:	Muni/Local	
									Reg Signif:	No
Facility:	Baboosic Gr	reenway South	1 - 4						CAA Status:	E-33
Scope:	Shared-use Cross Rd.	non-motorize	d path (8,000 ft)	between Fair	way Dr &				RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2035	\$96,000	\$0	\$120,000	\$600,000		Fed Aid, Other			
ROW	2036	\$1,600	\$0	\$2 <i>,</i> 000	\$10,000		Fed Aid, Other			
CON	2037	\$502,880	\$0	\$628 <i>,</i> 600	\$3,143,000		Fed Aid, Other			
	TIP Total:	\$600,480	\$0	\$750,600	\$3,753,000		Total Project Cost:	\$3,753,000	Revised:	FY23- 50MTP
Amherst (MT	P 2018)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Baboosic Gr	reenway South	ı -5						CAA Status:	E-33
Scope:			Shared use no r Conservation a	motorized pat rea	st Rd and Buck Meadow		RPCs:	NRPC		
Phase	EV	Federal	State	Other	Total		Funding Sources			
DF	2038	\$68,800	ŚO	\$86,000	\$430,000		Fed Aid Other			
	2030	\$372,000	\$0 \$0	\$465,000	\$2 325 000		Fed Aid, Other			
CON		\$372,000	¢¢ ¢0	\$FE1 000	\$2,325,000		Total Broject Cost	\$2 7EE 000	Bovicodi	EV22
	TIP TOtal.	\$440,800	ŞU	\$551,000	şz,755,000		Total Project Cost.	şz,755,000	Reviseu.	50MTP
BEDFORD - M	IERRIMACK (1	16100)							Managed By:	NHDOT
									Reg Signif:	Yes
Facility:	F.E. Everett	Turnpike							CAA Status:	E-7
Scope:			Improvement t Tolling	o Bedford Ma	inline Toll Plaza to I	Institut	e Open Road or All Electronic		RPCs:	NRPC, SNHPC
-	_	-	-	_			-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$0	\$950,000	\$0	\$950,000		Turnpike Capital			
PE	2024	\$0	\$530,250	\$0	\$530,250		Turnpike Capital			
CON	2024	\$0	\$7,800,000	\$0	\$7,800,000		Turnpike Capital			

CON	2025	\$0	\$6,740,500	\$0	\$6,740,500		Turnpike Capital			
CON	2026	\$0	\$24,733	\$0	\$24,733		Turnpike Capital			
	TIP Total:	\$0	\$16,045,48 3	\$0	\$16,045,483		Total Project Cost:	\$17,184,861	Revised:	A3
BOSTON - MA	ANCHESTER (6	800930)							Managed By:	NHDOT
									Reg Signif:	No
Facility:	Boston Expr	ess							CAA Status:	E-21
Scope:			Boston Express Annual Project	- Operating e	expenses for FE Ex	verett Tu	rnpike Commuter Service.		RPCs:	NRPC, SNHPC
-	_	_	_	-	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
OTHER	2023	\$51,400	\$0	\$0	\$51,400		FTA-5307	Toll Credit	\$25,700	
OTHER	2024	\$52,839	\$0	\$0	\$52,839		FTA-5307	Toll Credit	\$26 <i>,</i> 420	
OTHER	2025	\$54,319	\$0	\$0	\$54,319		FTA-5307	Toll Credit	\$27,160	
OTHER	2026	\$55,840	\$0	\$0	\$55,840		FTA-5307	Toll Credit	\$27,920	
OTHER	2027	\$57,403	\$0	\$0	\$57,403		FTA-5307	Toll Credit	\$28,702	
OTHER	2028	\$59,010	\$0	\$0	\$59,010		FTA-5307	Toll Credit	\$29,505	
OTHER	2029	\$60,663	\$0	\$0	\$60,663		FTA-5307	Toll Credit	\$30,332	
OTHER	2030	\$62,361	\$0	\$0	\$62,361		FTA-5307	Toll Credit	\$31,181	
OTHER	2031	\$64,107	\$0	\$0	\$64,107		FTA-5307	Toll Credit	\$32,053	
OTHER	2032	\$65,901	\$0	\$0	\$65,901		FTA-5307	Toll Credit	\$32,950	
OTHER	2033	\$67,746	\$0	\$0	\$67,746		FTA-5307	Toll Credit	\$33,873	
OTHER	2034	\$69,642	\$0	\$0	\$69,642		FTA-5307	Toll Credit	\$34,821	
OTHER	2035	\$71,591	\$0	\$0	\$71,591		FTA-5307	Toll Credit	\$35,796	
OTHER	2036	\$73,595	\$0	\$0	\$73,595		FTA-5307	Toll Credit	\$36,797	
OTHER	2037	\$75,655	\$0	\$0	\$75,655		FTA-5307	Toll Credit	\$37,827	
OTHER	2038	\$77,773	\$0	\$0	\$77,773		FTA-5307	Toll Credit	\$38,886	
OTHER	2039	\$79,950	\$0	\$0	\$79,950		FTA-5307	Toll Credit	\$39,975	
OTHER	2040	\$82,187	\$0	\$0	\$82,187		FTA-5307	Toll Credit	\$41,094	
OTHER	2041	\$84,488	\$0	\$0	\$84,488		FTA-5307	Toll Credit	\$42,244	
OTHER	2042	\$86,853	\$0	\$0	\$86,853		FTA-5307	Toll Credit	\$43,426	
OTHER	2043	\$89,284	\$0	\$0	\$89,284		FTA-5307	Toll Credit	\$44,642	
OTHER	2044	\$91,783	\$0	\$0	\$91,783		FTA-5307	Toll Credit	\$45,891	
OTHER	2045	\$94,352	\$0	\$0	\$86,853		FTA-5307	Toll Credit	\$47,176	

OTHER	2046	\$96,993	\$0	\$0	\$89,284		FTA-5307	Toll Credit	\$48,496	
OTHER	2047	\$99,708	\$0	\$0	\$91,783		FTA-5307	Toll Credit	\$49,854	
OTHER	2048	\$102,499	\$0	\$0	\$94,352		FTA-5307	Toll Credit	\$51,249	
OTHER	2049	\$105,368	\$0	\$0	\$82,187		FTA-5307	Toll Credit	\$52,684	
OTHER	2050	\$108,317	\$0	\$0	\$91,783		FTA-5307	Toll Credit	\$54,159	
	MTP	\$2,141,624	\$0	\$0	\$2,070,629				\$1,070,812	
	Total:									
BROOKLINE ((40662)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	NH 13								CAA Status:	E-51
Scope:	Construct s	outhbound left	turn lane onto	Old					RPCs:	NRPC
	winterartia									
Phase	FY	Federal	State	Other	Total	-	- Funding Sources	-		
PE	2024	\$38,500	\$0	\$0	\$38,500		STBG-Flex	Toll Credit	\$7,700	
ROW	2024	\$58,123	\$0	\$0	\$58,123		STBG-Flex	Toll Credit	\$11,625	
CON	2026	\$717,586	\$0	\$0	\$717,586		STBG-Flex	Toll Credit	\$143,517	
	TIP Total:	\$814,209	\$0	\$0	\$814,209		Total Project Cost:	\$924,209	Revised:	A1.M.7.23
BROOKLINE ((41408)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	Bond								CAA Status:	E-19
•	Street				1000/074					
Scope:	Bridge reha	bilitation - Bon	d Street over N	lissitissit River	#088/074				RPCs:	NRPC
- Dia	-	- P - J	-	- 04b	-	-	-	-		
Phase	FY	Federal	State	Other	lotal		Funding Sources			
PE	2026	\$0	\$153,103	\$38,276	\$191,379		State-Aid Bridge, Town			
ROW	2026	\$0	\$894	\$223	\$1,117		State-Aid Bridge, Town			
CON	2026	\$0	\$310,410	\$77,602	\$388,012		State-Aid Bridge, Town			
CON	2028	\$0	\$400,737	\$100,184	\$500,921		State-Aid Bridge, Town	4		
	MTP	\$0	Ş865,143	Ş216,286	Ş1,081,429		Total Project Cost:	\$1,131,817		
	Total:		-							

BROOKLINE (42592)		(Project # will	change to 437	68 in the FY20)25-34TYP)				Managed By:	NHDOT
									Reg Signif:	No
Facility:	NH 13								CAA Status:	E-51
Scope:	Address saf	ety concerns at	the NH 13 inte	rsection with	Main Street				RPCs:	NRPC
_	-	_	_	-	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$100,093	\$0	\$0	\$100,093		STBG-Flex	Toll Credit	\$20,019	
ROW	2028	\$34,299	\$0	\$0	\$34,299		STBG-Flex	Toll Credit	\$6,860	
CON	2029	\$564,145	\$0	\$0	\$564,145		STBG-Flex	Toll Credit	\$112,829	
	MTP Total:	\$698,537	\$0	\$0	\$698,537		Total Project Cost:	\$698,537		
BROOKLINE (4	43539)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	NH 13								CAA Status:	E-6
Scope:	: Reconstruction of NH 13/Ruonala Rd intersection							RPCs:	NRPC	
-	-	-	-	-	-	_	_	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$150,000	\$0	\$0	\$150,000		STBG		-	
ROW	2030	\$25,000	\$0	\$0	\$25,000		STBG		-	
CON	2032	\$352,000	\$0	\$0	\$352,000		STBG			
	MTP Total:	\$527,000	\$0	\$0	\$527,000		Total Project Cost:	\$526,999		
HUDSON (417	754)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	NH 3A								CAA Status:	E-51
Scope:	Construct a	third southbou	nd right turn la	ne on NH 3A	Lowell Rd				RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$2,400	\$0	\$600	\$3,000		CMAQ, Town			
ROW	2023	\$800	\$0	\$200	\$1,000		CMAQ, Town			
CON	2023	\$1,000,000	\$0	\$250,000	\$1,250,000		CMAQ, Town			
	TIP Total:	\$1,003,200	\$0	\$250,800	\$1,254,000		Total Project Cost:	\$1,552,796	Revised:	A0

HUDSON (42108)								Managed By:	Muni/Local	
									Reg Signif:	Yes
Facility:	Circ Hwy								CAA Status:	N/E
Scope:		Plan, Eng & Co	nstruct a rodw	/ay b/t NH3A & NH	111, sc	uthern portion of Circ Hway		RPCs:	NRPC	
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$177,131	\$0	\$44,283	\$221,414		STBG Flex, Towns			
PE	2025	\$535,243	\$0	\$133,811	\$669,054		STBG Flex, Towns			
	TIP Total:	\$712,374	\$0	\$178,094	\$890,468		Total Project Cost:	\$890,468	Revised:	A0.M.6.23
HUDSON (44228)									Managed By:	Muni/Local
									Reg Signif:	No
Facility:	NH102								CAA Status:	E-33
Scope:	Scope: C		Construct Ped i Ledge & Alvirne	improvements e Rds.	s Inc. 7455LF sidew	alk to e	liminate gaps, RRFBs, Drain Impi	rovements	RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
Phase PE	FY 2030	Federal \$218,870	State \$0	Other \$54,717	Total \$273,587		Funding Sources Fed Aid, Other			
Phase PE ROW	FY 2030 2032	Federal \$218,870 \$53,492	State \$0 \$0	Other \$54,717 \$13,373	Total \$273,587 \$66,865		Funding Sources Fed Aid, Other Fed Aid, Other			
Phase PE ROW CON	FY 2030 2032 2034	Federal \$218,870 \$53,492 \$2,640,342	State \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086	Total \$273,587 \$66,865 \$3,300,428		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other			
Phase PE ROW CON	FY 2030 2032 2034 TIP Total:	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704	State \$0 \$0 \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised:	FY25-34 TYP
Phase PE ROW CON	FY 2030 2032 2034 TIP Total:	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704	State \$0 \$0 \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised:	FY25-34 TYP
Phase PE ROW CON HUDSON (MT	FY 2030 2032 2034 TIP Total:	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704	State \$0 \$0 \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By:	FY25-34 TYP Muni/Local
Phase PE ROW CON HUDSON (MT	FY 2030 2032 2034 TIP Total:	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704	State \$0 \$0 \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By: Reg Signif:	FY25-34 TYP Muni/Local No
Phase PE ROW CON HUDSON (MT	FY 2030 2032 2034 TIP Total: TP 2023)	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704	State \$0 \$0 \$0 \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By: Reg Signif: CAA Status:	FY25-34 TYP Muni/Local No E-33
Phase PE ROW CON HUDSON (MT Facility: Scope:	FY 2030 2032 2034 TIP Total: TP 2023)	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704 ry Street & Cer rom Bridge to	State \$0 \$0 \$0 \$0 htral St) Benson Park (ak	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY25-34 TYP Muni/Local No E-33 NRPC
Phase PE ROW CON HUDSON (MT Facility: Scope:	FY 2030 2032 2034 TIP Total: TP 2023) NH111 (Fern Sidewalks fr	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704 ry Street & Cer rom Bridge to	State \$0 \$0 \$0 \$0 ntral St) Benson Park (ak	Other \$54,717 \$13,373 \$660,086 \$728,176	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880 \$3,640,880 enson Park)		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY25-34 TYP Muni/Local No E-33 NRPC
Phase PE ROW CON HUDSON (MT Facility: Scope:	FY 2030 2032 2034 TIP Total: P 2023) NH111 (Ferr Sidewalks fr	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704 ry Street & Cer rom Bridge to Federal	State \$0 \$0 \$0 \$0 antral St) Benson Park (ak State	Other \$54,717 \$13,373 \$660,086 \$728,176 (a; Bridge to B	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880 \$3,640,880 enson Park) Total		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY25-34 TYP Muni/Local No E-33 NRPC
Phase PE ROW CON HUDSON (MT Facility: Scope: Phase PE	FY 2030 2032 2034 TIP Total: P 2023) NH111 (Ferr Sidewalks fr FY 2040	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704 ry Street & Cer rom Bridge to Federal \$200,000	State \$0 \$0 \$0 \$0 \$0 htral St) Benson Park (ak State \$0	Other \$54,717 \$13,373 \$660,086 \$728,176 (a; Bridge to B (b) (ca; Bridge to B (ca; Bridge to B)	Total \$273,587 \$66,865 \$3,300,428 \$3,640,880 \$3,640,880 enson Park) \$250,000		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost: Fed Aid, Other Fed Aid, Other Fed Aid, Other	\$3,640,880	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY25-34 TYP Muni/Local No E-33 NRPC
Phase PE ROW CON HUDSON (MT Facility: Scope: Phase PE ROW	FY 2030 2032 2034 TIP Total: NH111 (Ferr Sidewalks fr Sidewalks fr FY 2040 2041	Federal \$218,870 \$53,492 \$2,640,342 \$2,912,704 ry Street & Cer rom Bridge to Federal \$200,000 \$40,000	State \$0 \$0 \$0 \$0 \$0 antral St) Benson Park (ak State \$0 \$0 \$0	Other \$54,717 \$13,373 \$660,086 \$728,176 \$728,176 \$50,000 \$10,000	Total \$273,587 \$66,865 \$3,300,428 \$3,300,428 \$3,640,880 \$3,640,890		Funding Sources Fed Aid, Other Fed Aid, Other Fed Aid, Other Total Project Cost:	\$3,640,880	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY25-34 TYP Muni/Local No E-33 NRPC

	TIP Total:	\$2,284,000	\$0	\$571,000	\$2,855,000	Total Project Cost:	\$2,855,000	Revised:	FY23-
									SUIVITP
HUDSON (MTP 2023)								Managed By:	Muni/Local
								Reg Signif:	No
Facility: NH3A (Lowell Rd)							CAA Status:	E-33	
Scope:	Lowell Rd Sa	afe Crossings						RPCs:	NRPC
Phase	FY	Federal	State	Other	Total	Funding Sources			
PE	2036	\$40,000	\$0	\$10,000	\$50,000	Fed Aid, Other			
CON	2036	\$217,600	\$0	\$54 <i>,</i> 400	\$272,000	Fed Aid, Other			
	2042	\$257,600	\$0	\$64,400	\$322,000	Total Project Cost:	\$322,000	Revised:	FY23- 50MTP
HUDSON (MTP 2023)								Managed By:	Muni/Local
								Reg Signif:	No
Facility: NH3A (Lowell Rd)							CAA Status:	E-33	
Scope:	Scope: Continue Sidewalk on NH 3		BA, Lowell Rd fr	om Birch St to	Pelham Rd			RPCs:	NRPC
Phase	FY	Federal	State	Other	Total	Funding Sources			
PE	2039	\$40,000	\$0	\$10,000	\$50,000	Fed Aid, Other			
CON	2040	\$264,000	\$0	\$66,000	\$330,000	Fed Aid, Other			
	2042	\$304,000	\$0	\$76,000	\$380,000	Total Project Cost:	\$380,000	Revised:	FY23- 50MTP
HUDSON (MTP 2023)								Managed By:	Muni/Local
								Reg Signif:	No
Facility:	NH3A (Lowell Rd)							CAA Status:	E-33
Scope:	Continue Sidewalk on NH Executive Dr		3A, Lowell Rd fr	om Nottingha	m Sq to			RPCs:	NRPC
Phase	FY	Federal	State	Other	Total	Funding Sources			
PE	2041	\$52,000	\$0	\$13,000	\$65,000	Fed Aid, Other			
CON	2041	\$560,000	\$0	\$140,000	\$700,000	Fed Aid, Other			

	2042	\$612,000	\$0	\$153,000	\$765,000	Total Project Cost:	\$765,000	Revised:	FY23-	
									JUIVITP	
Litchfield (44229)								Managed By:	Muni/Local	
								Reg Signif:	No	
Facility: NH3A/Corning Rd		ing Rd						CAA Status:	E-53	
Scope:	Intersection safety improv		ements to NH3	A/Corning Rd	Intersection			RPCs:	NRPC	
Phase	FY	Federal	State	Other	Total	Funding Sources				
PE	2030	\$437,739	\$0	\$109,435	\$547,174	Fed Aid, Other				
ROW	2032	\$117,682	\$0	\$29,421	\$147,103	Fed Aid, Other				
CON	2034	\$1,461,680	\$0	\$365,420	\$1,827,100	Fed Aid, Other				
	TIP Total:	\$2,017,101	\$0	\$504,276	\$2,521,377	Total Project Cost:	\$2,521,377	Revised:	FY25-34 TYP	
Litchfield (MTP 2023)								Managed By:	Muni/Local	
								Reg Signif:	No	
Facility:	Pinecrest Ro	b						CAA Status:	E-33	
Scope:	Scope: Sidewalk extension from H Ave.		ildreth Dr. to A	lbuquerque				RPCs:	NRPC	
Phase	FY	Federal	State	Other	Total	Funding Sources				
PE	2033	\$120,000	\$0	\$30,000	\$150,000	Fed Aid, Other				
ROW	2033	\$8,000	\$0	\$2,000	\$10,000	Fed Aid, Other				
CON	2033	\$766,400	\$0	\$191,600	\$958,000	Fed Aid, Other				
	TIP Total:	\$894,400	\$0	\$223,600	\$1,118,000	Total Project Cost:	\$1,118,000	Revised:	FY23- 50MTP	
									/	
Litchfield (MTP 2023)								Managed By:	Muni/Local	
								Reg Signif:	No	
Facility:	Albuquerqu	e Avenue						CAA Status:	E-33	
Scope:	Complete S	treets Improve	ments					RPCs:	NRPC	
Phase	FY	Federal	State	Other	Total	Funding Sources				
DE	2022	ć 40.000	ćo	ć10.000	ć=0,000		Ead Aid Other			
-----------	-------------	-------------	------------------------------	-----------------	------------------	-------------	--	-------------	------------------	----------------
PE	2033	\$40,000	Ş0	\$10,000	\$50,000		Fed Ald, Other			
CON	2033	\$160,000	ŞŰ	\$40,000	\$200,000		Fed Aid, Other			
	TIP Total:	\$200,000	\$0	\$50,000	\$250,000		Total Project Cost:	\$250,000	Revised:	FY23- 50MTP
LYNDEBORO	UGH (41435)								Managed By:	NHDOT
									, Reg Signif:	Mo
Facility:	NH Railroad	1							CAA Status:	E-19
Scope:			Address Red Li: (108/070)	st bridge carry	ing NHRR over (Glass Facto	ory Road in the Town of Lyndebo	orough	RPCs:	NRPC
_	_	_	_	_	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2026	\$128,507	\$0	\$0	\$128,507		Bridg-T3-4-Rehab-Rcn			
PE	2027	\$126,287	\$0	\$0	\$126,287		Bridg-T3-4-Rehab-Rcn			
CON	2028	\$1,298,229	\$0	\$0	\$1,298,229		Bridg-T3-4-Rehab-Rcn			
	TIP Total:	\$1,553,023	\$0	\$0	\$1,553,023		Total Project Cost:	\$1,643,703	Revised:	A0.M.6.23
MERRIMACK	(10136D)								Managed Bv:	NHDOT
									, Reg Signif:	Yes
Facility:	NH 101A								CAA Status:	E-52
Scope:			Safety impr. at	NH 101A / Co	ntinental Blvd &	at Crafts	man Lane / Boston Post Rd		RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2023	\$5,775,000	\$0	\$1,200,00 0	\$6,975,000		National Hwy Perf, NonPar Other, NHS > 200k	Toll Credit	\$1,155,000	
CON	2025	\$359,321	\$0	\$0	\$359,221		STBG->200k	Toll Credit	\$71,864	
	TIP Total:	\$6,134,321	\$0	\$1,200,00 0	\$7,334,221		Total Project Cost:	\$9,149,321	Revised:	A1.M.7.23
MERRIMACK	(29174)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	US 3								CAA Status:	E-19

Scope:			Bridge replacer 3 Intersection	ment - US 3 ov	er Baboosic Broc	ok #118/	135 & Reconstruct Wire Rd/US		RPCs:	NRPC
	-	_	_	-	_	-	_	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2025	\$0	\$877,894	\$219,474	\$1,097,368		SB367-4-Cents, Town			
ROW	2025	\$0	\$53,924	\$13,481	\$67,405		SB367-4-Cents, Town			
CON	2025	\$4,645,760	\$1,244,400	\$1,472,54 0	\$7,362,700		BRGBIL, SB367-4-Cents, Town			
	TIP Total:	\$4,645,760	\$2,176,218	\$1,705,49 5	\$8,527,473		Total Project Cost:	\$8,527,473	Revised:	A0.M.8.23
MERRIMACK	(40300)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Pedestrian	Frail							CAA Status:	E-33
Scope:	Construct p feet	edestrian trail	in Merrimack fo	or approximat	ely 700 linear				RPCs:	NRPC
-	-	-	-	-	-	-	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2023	\$369,610	\$0	\$92,402	\$462,012		TAP, Town			
CON	2024	\$379,958	\$0	\$94,990	\$474,948		TAP, Town			
	MTP Total:	\$749,568	\$0	\$187,392	\$936,960		Total Project Cost:	\$1,170,941		
MERRIMACK	(43541)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	West Cham	berlain Rd							CAA Status:	E-33
Scope:	Replace pec #112/115	lestrian bridge	over Souhegan	River					RPCs:	NRPC
-	_ .	-	-	.	-	_	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$233,462	\$0	\$58,366	\$291,828		None, Other		-	
PE	2030	\$4,800	\$0	\$1,200	\$6,000		None, Other			
CON	2032	\$704,000	\$0	\$176,000	\$880,000		None, Other			
	MTP Total:	\$942,262	\$0	\$235,566	\$1,177,828		Total Project Cost:	\$1,177,829		

MERRIMACK	(43733)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	US 3 Daniel	Webster High	way						CAA Status:	E-33
Scope:			Construct 3,600 Plaza	0 linear feet o	f sidewalk from Sou	uhegan	River (Chamberlain Br.) to Merr	imack 360	RPCs:	NRPC
	-	_	-	-			-	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$47,534	\$0	\$11,884	\$59,418		ТА		_	
PE	2024	\$36,650	\$0	\$9,162	\$45,812		ТА		-	
PE	2026	\$38,730	\$0	\$9,683	\$48,413		ТА		_	
ROW	2031	\$48,722	\$0	\$12,180	\$60,902		ТА		-	
CON	2032	\$1,115,596	\$0	\$278,899	\$1,394,495		ТА			
	MTP Total:	\$1,287,232	\$0	\$321,808	\$1,609,040		Total Project Cost:	\$1,609,039		
MERRIMACK	(44230)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Naticook Rd	I/Camp Sargen	t Rd.						CAA Status:	E-53
Scope:			Intersection rea	alignment @ I	Naticook Lake & Ca	mp Sar	gent Rd. approx. 1,000LF		RPCs:	NRPC
-	_	-	-	_			_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2030	\$198,972	\$0	\$49,743	\$248,715		Fed Aid, Other		-	
	MTP Total:	\$198,972	\$0	\$49,743	\$248,715		Total Project Cost:	\$248,715	Revised:	FY25-34 TYP
MERRIMACK	(44339)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	US3								CAA Status:	E-19
Scope:	Rehabilitate (BR#116/12	/Restore Histo 0)	oric US3 Bridge	over Souhega	n River				RPCs:	NRPC
	_		-	_			-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2032	\$789,437		\$197,359	\$986,796		SAB		-	
ROW	2032	\$5,350		\$1,337	\$6,687		SAB		-	

CON	2032	\$4,467,664		\$1,116,91 6	\$5,584,580	Bridge-LPA-Rehab-Rcn			
	MTP Total:	\$5,262,451	\$0	\$1,315,61 2	\$6,578,063	Total Project Cost:	\$6,578,063	Revised:	FY25-34 TYP
MERRIMACK 2018)	(MTP							Managed By:	Muni/Local
								Reg Signif:	No
Facility:	Baboosic La	ike Rd and Wo	odbury Rd					CAA Status:	E-33
Scope:			Continue Sidew to McElwain St	valk on Baboo	sic Lake Rd from	n DW Hwy to O'Gara Dr and Woodbury Rd fi	rom DW Hwy	RPCs:	NRPC
_	-	-	-	_	-		-		
Phase	FY	Federal	State	Other	Total	Funding Sources			
PE	2035	\$80,000	\$0	\$20,000	\$100,000	STBG/TAP, Town		_	
ROW	2035	\$24,000	\$0	\$6,000	\$30,000	STBG/TAP, Town		_	
CON	2035	\$656,000	\$0	\$164,000	\$820,000	STBG/TAP, Town			
	MTP Total:	\$760,000	\$0	\$190,000	\$950,000	Total Project Cost:	\$950,000		
MERRIMACK 2023)	(MTP							Managed By:	Muni/Local
								Reg Signif:	No
Facility:	US3 (DW Hi	ighway)						CAA Status:	E-45
Scope:			Congestion Mit the Bedford to	igation for the wn line.	e northern porti	on of US 3 corridor in Merrimack from Bedf	ford Road to	RPCs:	NRPC
_	-	-	-	_	-		-		
Phase	FY	Federal	State	Other	Total	Funding Sources			
PE	2035	\$200,000	\$0	\$50,000	\$250,000	STBG/TAP, Town		-	
ROW	2035	\$200,000	\$0	\$50,000	\$250,000	STBG/TAP, Town		-	
CON	2035	\$1,600,000	\$0	\$400,000	\$2,000,000	STBG/TAP, Town			
	MTP Total:	\$2,000,000	\$0	\$500,000	\$2,500,000	Total Project Cost:	\$2,500,000		
MILFORD (41	587)							Managed By:	NHDOT
								Reg Signif:	No
Facility:	Bridge Stree	et						CAA Status:	E-19

Scope:	Rehabilitati	on of the Swing	g Bridge						RPCs:	NRPC
_	-	_	-	_	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$116,246	\$0	\$0	\$116,246		STBG > 200k	Toll Credit	\$23,249	
ROW	2025	\$5,704	\$0	\$0	\$5,704		STBG > 200k	Toll Credit	\$1,141	
CON	2025	\$723,284	\$0	\$0	\$723,284		STBG > 200k	Toll Credit	\$144,657	
	TIP Total:	\$845,234	\$0	\$0	\$845,234		Total Project Cost:	\$905,733	Revised:	A0.M.6.23
MILFORD (42470)									Managed By:	Muni/Local
									Reg Signif:	No
Facility:	NH 101A &	NH 13							CAA Status:	E-51
Scope:	Improveme	nts to the oval	area						RPCs:	NRPC
_	_	-	-	_	-	_	_	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$113,133	\$0	\$28,283	\$141,416		FHWA Earmarks, Town			
ROW	2024	\$67,634	\$0	\$16,909	\$84 <i>,</i> 543		FHWA Earmarks, Town			
CON	2025	\$1,473,966	\$0	\$368 <i>,</i> 492	\$1,842,458		FHWA Earmarks, Town			
	TIP Total:	\$1,654,733	\$0	\$413,684	\$2,068,417		Total Project Cost:	\$2,239,512	Revised:	A2.M.10.23
MILFORD (44	335)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Hartshorn R	ld							CAA Status:	E-19
Scope:	Replace Har	tshorn Rd Brid؛	ge over Hartsho	orn Brook (BR	#103/163)				RPCs:	NRPC
-	-	_	-	-	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2031	\$0	\$154,132	\$38,533	\$192,665		SAB			
ROW	2031	\$0	\$5,158	\$1,290	\$6,448		SAB			
CON	2031	\$868,254	\$0	\$217,064	\$1,085,318		MOBRR			
	TIP Total:	\$868,254	\$159,290	\$256,887	\$1,284,431		Total Project Cost:	\$1,284,431	Revised:	FY25-34 TYP
MILFORD (M	TP 2017)								Managed By:	NHDOT
									Reg Signif	No

Facility:	North River	Road							CAA Status:	E-19
Scope:	Bridge Repl	acement on No	orth River Rd. O	ver Hartshorn	Brook				RPCs:	NRPC
_	-	_	_	_	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2035	\$0	\$96,000	\$24,000	\$120,000		State-Aid Bridge, Town			
CON	2036	\$0	\$576,000	\$144,000	\$720,000		State-Aid Bridge, Town			
	MTP Total:	\$0	\$672,000	\$168,000	\$840,000		Total Project Cost:	\$840,000		
									-	-
MILFORD (M	ГР 2017)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	Purgatory R	۲d.							CAA Status:	E-19
Scope:	Bridge repla Brook	acement on Pu	rgatory Rd. ove	r Purgatory					RPCs:	NRPC
-	_	-	-	_	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2035	\$0	\$90,000	\$20,000	\$110,000		State-Aid Bridge, Town			
CON	2036	\$0	\$568,000	\$142,000	\$710,000		State-Aid Bridge, Town			
	MTP Total:	\$0	\$658,000	\$162,000	\$820,000		Total Project Cost:	\$820,000		
MILFORD (M	FP 2018)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Keyes Park	- Various Non-I	Motorized Linka	ages					CAA Status:	E-33
Scope:			Construct 200 f 3000 ft. trail	ft. pedestrian	bridge over the	Souhegan	River from 135 Elm St. to 34 N.	River Rd. and	RPCs:	NRPC
	Connecting	to Keyes Mem	orial Park and N	MCAA Fields						
-	-	-	-	-	-	_	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2037	\$128,000	\$0	\$32,000	\$160,000		STBG/TAP, Town		_	
ROW	2037	\$8,000	\$0	\$2,000	\$10,000		STBG/TAP, Town			
CON	2037	\$760,000	\$0	\$190,000	\$950,000		STBG/TAP, Town			
	MTP Total:	\$896,000	\$0	\$224,000	\$1,120,000		Total Project Cost:	\$1,120,000		

MILFORD (M	TP 2023)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	NH13/South	n St							CAA Status:	E-33
Scope:	Sidewalks fr	rom Clinton St.	to Nathaniel Dr	·.					RPCs:	NRPC
_	-	_	_	_	_	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2040	\$80,000	\$0	\$20,000	\$100,000		STBG/TAP, Town		_	
ROW	2041	\$80,000	\$0	\$20,000	\$100,000		STBG/TAP, Town		_	
CON	2042	\$1,440,000	\$0	\$360,000	\$1,800,000		STBG/TAP, Town			
	MTP Total:	\$1,600,000	\$0	\$400,000	\$2,000,000		Total Project Cost:	\$2,000,000		
MILFORD (M	TP 2023)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Amherst St								CAA Status:	E-33
Scope:	Continue th	e Amherst St.	sidepath into M	ilford.					RPCs:	NRPC
-	-	-	-	_	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2040	\$40,000	\$0	\$10,000	\$50,000		STBG/TAP, Town		-	
ROW	2041	\$40,000	\$0	\$10,000	\$50,000		STBG/TAP, Town			
CON	2042	\$160,000	\$0	\$40,000	\$200,000		STBG/TAP, Town			
	MTP Total:	\$240,000	\$0	\$60,000	\$300,000		Total Project Cost:	\$300,000		
NASHUA (10	136A)								Managed By:	NHDOT
									Reg Signif:	Yes
Facility:	NH 101A								CAA Status:	N/E
Scope:			Capacity, pedes Parkway	strian, bike, ar	nd transit improv	vements	to NH 101A from Celina Ave to So	omerset	RPCs:	NRPC
_	-	-	-	_	-	_	_	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$1,172,226	\$0	\$0	\$1,172,226		NHP	Toll Credit	\$234,445	
PE	2024	\$1,743,694	\$0	\$0	\$1,743,694		NHP	Toll Credit	\$348,739	

ROW	2026	\$7,829,006	\$0	\$0	\$7,829,006		NHP	Toll Credit	\$1,565,801	
	TIP Total:	\$10,744,92 6	\$0	\$0	\$10,744,926		Total Project Cost:	\$35,748,727	Revised:	A3
NASHUA (16	314)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	East Hollis S	itreet							CAA Status:	N/E
Scope:			Intersection Im	provements a	it East Hollis St a	nd Bridge	St from C St to the Hudson		RPCs:	NRPC
_	_			_		_	_	_		
Phase	FY	Federal	State	Other	Total	_	Funding Sources	-		
PE	2024	\$150,000	\$0	\$0	\$150,000		STBG > 200k	Toll Credit	\$30,000	
ROW	2024	\$223,837	\$0	\$0	\$223,837		National Hwy Performance	Toll Credit	\$44,767	
CON	2025	\$2,988,849	\$0	\$5 <i>,</i> 970	\$2,994,819		National Hwy Performance	Toll Credit	\$597,770	
	TIP Total:	\$3,362,686	\$0	\$5,970	\$3,368,656		Total Project Cost:	\$3,898,657	Revised:	A2.M.10.23
NASHUA (40	660)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	East Hollis S	it.							CAA Status:	N/E
Scope:			Improvements	Along E. Holli	s St From Main S	St East to (C St. (limit of project 16314)		RPCs:	NRPC
_	-	-	-	-	-	-	-	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$160,000	\$0	\$40,000	\$200,000		NHP, City			
PE	2025	\$181,010	\$0	\$45,253	\$226,263		NHP, City			
ROW	2025	\$180,927	\$0	\$45,232	\$226,159		NHP, City			
	TIP Total:	\$521,937	\$0	\$130,485	\$652,422		Total Project Cost:	\$4,786,894	Revised:	A3
NASHUA (41	585)								Managed By:	Town/Muni
									Reg Signif:	No
Facility:	Daniel Web	ster Highway							CAA Status:	E-33
Scope:	DW Highwa	y Pedestrian Sa	afety Improvem	nents					RPCs:	NRPC
_	_	_	_	_	_	_		_		

Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$60,000	\$0	\$15,000	\$75,000		STBG-Flex, Towns			
PE	2025	\$23,162	\$0	\$5,791	\$28,953		STBG-Flex, Towns			
ROW	2025	\$4,749	\$0	\$1,187	\$5 <i>,</i> 936		STBG-Flex, Towns			
CON	2027	\$334,613	\$0	\$83,645	\$418,258		STBG-Flex, Towns			
	TIP Total:	\$422,524	\$0	\$105,623	\$528,147		Total Project Cost:	\$528,155	Revised:	A1.M.7.23
NASHUA (41	586)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Walnut St/C	Chestnut St/Cer	ntral St						CAA Status:	E-51
Scope:		:	Safety, capacity intersection	and multimo	dal access impro	ovements	to the Walnut Street Oval		RPCs:	NRPC
_	_	_	_	-	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$200,000	\$0	\$50,000	\$250,000		STBG-Flex, City			
PE	2025	\$104,000	\$0	\$26,000	\$130,000		STBG-Flex, City			
ROW	2025	\$200,000	\$0	\$50,000	\$250,000		STBG-Flex, City			
CON	2025	\$2,636,324	\$0	\$659,081	\$3,295,405		FHWA Earmarks, STBG-			
	TID Total	62 140 224	ć0	670F 001	62 02F 40F		StateFlex, Town	62 02F 40F	Dovisody	AD N4 11 DD
	TIP TOLAI.	33,140,324	ŞU	3703,001	Ş3,923,403		Total Project Cost.	\$3,925,405	Reviseu.	AZ.IVI.11.25
NASHUA (41)	742)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Heritage Ra	il Trail East							CAA Status:	E-33
Scope:	Construct th	ne Heritage Rai	l Trail East						RPCs:	NRPC
-	-	-	-	-	_	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2024	\$61,697	\$0	\$15,424	\$77,121		CMAQ, City			
CON	2025	\$215,074	\$0	\$53,768	\$268,842		CMAQ, City			
CON	2027	\$1,089,922	\$0	\$272,481	\$1,362,403		CMAQ, City			
	TIP Total:	\$1,366,693	\$0	\$341,673	\$1,708,366		Total Project Cost:	\$1,708,366	Revised:	A2.M.10.23
NASHUA (42	516)								Managed By:	Muni/Local

									Reg Signif:	No
Facility:	Lock Street	and Whitney S	treet						CAA Status:	E-33
Scope:			Upgrade sidewa Whitney St	alks to ADA st	andards and cre	ate bicycl	e lanes on Lock St and		RPCs:	NRPC
	-		_	-		-	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$22,960	\$0	\$5,740	\$28,700		TAP, City			
ROW	2023	\$20,560	\$0	\$5,140	\$25,700		TAP, City			
CON	2027	\$411,492	\$0	\$102,873	\$514,365		TAP, City			
CON	2028	\$423,012	\$0	\$105,753	\$528,765		TAP, City			
	MTP Total:	\$878,024	\$0	\$219,506	\$1,097,530		Total Project Cost:	\$1,147,530		
NASHUA (425	594)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	F.E.Everett	Turnpike							CAA Status:	E-53
Scope:	Realign Exit ramp	5E southboun	d off-ramp and	Turnpike sout	hbound on-				RPCs:	NRPC
-	-	_	-	-	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2026	\$57,862	\$0	\$14,466	\$72,328		National Highway Perf, City			
CON	2030	\$834,427	\$0	\$208,609	\$1,043,036		National Highway Perf, City			
	TIP Total:	\$892,289	\$0	\$223 <i>,</i> 075	\$1,115,364		Total Project Cost:	\$1,115,362	Revised:	A0.M.6.23
NASHUA (425	595)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	NH 111 Kins	sley Street							CAA Status:	E-33
Scope:	Pedestrian a project	and bicycle acc	essibility impro	vement					RPCs:	NRPC
-	-		-	-		-		-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$145,590	\$0	\$36,398	\$181,988		STBG, City			
CON	2030	\$1,192,368	\$0	\$298,092	\$1,490,460		STBG, City			
CON	2031	\$293,882	\$0	\$73 <i>,</i> 470	\$367,352		STBG, City			

	MTP Total:	\$1,631,840	\$0	\$407,960	\$2,039,800		Total Project Cost:	\$2,039,800		
NASHUA (42	717)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	Broad Stree	t Parkway							CAA Status:	E-51
Scope:			Construct a nev St and Front St	v interchange	along the Broad	d Street Pa	arkway to connect to Franklin		RPCs:	NRPC
-	_	_	_	_	-	_	_	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2026	\$137,978	\$0	\$0	\$137,978		National Highway Perf, Toll	\$27,596		
ROW	2027	\$27,596	\$0	\$0	\$27,596		National Highway Perf, Toll	\$5,519		
CON	2028	\$1,352,196	\$0	\$0	\$1,352,196		National Highway Perf, Toll	\$270,439		
	TIP Total:	\$1,517,771	\$0	\$0	\$1,517,771		Total Project Cost:	\$1,517,771	Revised:	A0
NASHUA (42	882)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Main St/Car St	nal St/Lowell							CAA Status:	E-51
Scope:	Intersection St	n and Roadway	Improvements	, Canal St/Frai	nklin St/Main				RPCs:	NRPC
	-		-	-	-	-				
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$28,000	\$0	\$7,000	\$35,000		CMAQ, City			
PE	2024	\$80,000	\$0	\$20,000	\$100,000		CMAQ, City			
PE	2025	\$76,755	\$0	\$19,189	\$95,944		CMAQ, City			
ROW	2025	\$21,321	\$0	\$5,330	\$26,651		CMAQ, City			
CON	2026	\$568,215	\$0	\$142,054	\$710,269		CMAQ, City			
CON	2027	\$589,238	\$0	\$147,310	\$736,548		CMAQ, City			
	TIP Total:	\$1,363,529	\$0	\$340,883	\$1,704,412		Total Project Cost:	\$1,704,412	Revised:	A0.M.6.23
NASHUA (43	509)								Managed By:	Muni/Local
									Reg Signif:	No

Facility:	Various Stre Downtown	ets							CAA Status:	E-33
Scope:			Installation of I enhancements	Rectangular Ra	apid-Flashing Beac	ons (RR	FB), crosswalk visibility		RPCs:	NRPC
	at various st	reets along N	lain Street, Nasł	านล						
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$32,000	\$0	\$8,000	\$40,000		Other Fed, City, non-par			
ROW	2023	\$800	\$0	\$200	\$1,000		Other Fed, City, non-par			
CON	2023	\$387,200	\$0	\$227,800	\$615,000		Other Fed, City, non-par			
	TIP Total:	\$420,000	\$0	\$236,000	\$656,000		Total Project Cost:	\$696,000	Revised:	A0.M.5.23
NASHUA (435	542)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Nashua Trar	nsit System							CAA Status:	E-27
Scope:	Install bus sl amenities	helters, lightir	ng, benches, and	lother					RPCs:	NRPC
-	-	-	-	_			_	-		
Phase	FY	Federal	State	Other	Total		- Funding Sources	-		
- Phase PE	- FY 2027	Federal \$85,603	State \$0	Other \$21,401	Total \$107,004		- Funding Sources STBG, City	-		
Phase PE ROW	FY 2027 2030	- Federal \$85,603 \$6,159	State \$0 \$0	- Other \$21,401 \$1,540	Total \$107,004 \$7,699		Funding Sources STBG, City STBG, City	-		
Phase PE ROW CON	FY 2027 2030 2032	Federal \$85,603 \$6,159 \$396,000	State \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000	Total \$107,004 \$7,699 \$495,000		Funding Sources STBG, City STBG, City STBG, City	-		
Phase PE ROW CON	FY 2027 2030 2032 MTP Total:	Federal \$85,603 \$6,159 \$396,000 \$487,762	State \$0 \$0 \$0 \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000 \$121,941	Total \$107,004 \$7,699 \$495,000 \$609,703		Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	\$609,703	Revised:	FY23-32 TYP
Phase PE ROW CON	FY 2027 2030 2032 MTP Total:	Federal \$85,603 \$6,159 \$396,000 \$487,762	State \$0 \$0 \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000 \$121,941	Total \$107,004 \$7,699 \$495,000 \$609,703		Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	\$609,703	Revised:	FY23-32 TYP
Phase PE ROW CON	FY 2027 2030 2032 MTP Total:	Federal \$85,603 \$6,159 \$396,000 \$487,762	State \$0 \$0 \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000 \$121,941	Total \$107,004 \$7,699 \$495,000 \$609,703		Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	\$609,703	Revised: Managed By:	FY23-32 TYP Local/Muni
Phase PE ROW CON	FY 2027 2030 2032 MTP Total:	Federal \$85,603 \$6,159 \$396,000 \$487,762	State \$0 \$0 \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000 \$121,941	Total - \$107,004 - \$7,699 - \$495,000 - \$609,703 -		Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	\$609,703	Revised: Managed By: Reg Signif:	FY23-32 TYP Local/Muni No
PE PE ROW CON NASHUA (435	FY 2027 2030 2032 MTP Total: 545)	Federal \$85,603 \$6,159 \$396,000 \$487,762	State State S0	Other \$21,401 \$1,540 \$99,000 \$121,941	Total		- Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	\$609,703	Revised: Managed By: Reg Signif: CAA Status:	FY23-32 TYP Local/Muni No E-33
Phase PE ROW CON NASHUA (435 Facility: Scope:	FY 2027 2030 2032 MTP Total: 545) Bridge Stree	Federal \$85,603 \$6,159 \$396,000 \$487,762	State	Conternation of the second sec	Total \$107,004 \$7,699 \$495,000 \$609,703 a a a a a a a a a a a a a a a a a a a	nents, k	- Funding Sources STBG, City STBG, City Total Project Cost:	\$609,703	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY23-32 TYP Local/Muni No E-33 NRPC
Phase PE ROW CON NASHUA (435 Facility: Scope:	FY 2027 2030 2032 MTP Total: 545) Bridge Stree	Federal \$85,603 \$6,159 \$396,000 \$487,762	State \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000 \$121,941 ets project ent amps	Total \$107,004 \$77,699 \$495,000 \$200 \$200 \$200 \$200 \$200 \$200 \$200	nents, t	Funding Sources STBG, City STBG, City Total Project Cost:	- \$609,703	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY23-32 TYP Local/Muni No E-33 NRPC
- Phase PE ROW CON NASHUA (435 Facility: Scope:	FY 2027 2030 2032 MTP Total: 545) Bridge Stree	- Federal \$85,603 \$6,159 \$396,000 \$487,762 et and Canal St - - -	State \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	Other \$21,401 \$1,540 \$99,000 \$121,941 ets project ent amps	Total \$107,004 \$7,699 \$495,000 \$\$609,703 \$\$600,703 \$\$600,700 \$\$\$600,700 \$\$600,700 \$\$600,700 \$\$600,700 \$\$\$600,700 \$\$600,700 \$\$6	nents, k	Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	- \$609,703	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY23-32 TYP Local/Muni No E-33 NRPC
- Phase PE ROW CON CON NASHUA (435 Facility: Scope:	FY 2027 2030 2032 MTP Total: 545) Bridge Stree FY 2027	- Federal \$85,603 \$6,159 \$396,000 \$487,762 et and Canal St - Federal \$275,536	State	Other \$21,401 \$1,540 \$99,000 \$121,941 ets project ent amps Other \$68,884	Total \$107,004 \$7,699 \$495,000 \$5495,000 \$495,000 \$100 \$100 \$100 \$100 \$100 \$100 \$100	nents, b	Funding Sources STBG, City STBG, City STBG, City Total Project Cost: hike lanes, sidewalks & - Funding Sources STBG, City	- \$609,703 -	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY23-32 TYP Local/Muni No E-33 NRPC
- Phase PE ROW CON CON NASHUA (435 Facility: Scope: - Phase PE PE	FY 2027 2030 2032 MTP Total: 545) Bridge Stree FY 2027 2030	- Federal \$85,603 \$6,159 \$396,000 \$487,762 • • • • • • • • • • • • • • • • • • •	state	Cother \$21,401 \$1,540 \$99,000 \$121,941\$	Total \$107,004 \$7,699 \$495,000 \$495,000 \$495,000 \$495,000 \$495,000 \$495,000 \$400,000	nents, k	- Funding Sources STBG, City STBG, City STBG, City Total Project Cost:	- \$609,703	Revised: Managed By: Reg Signif: CAA Status: RPCs:	FY23-32 TYP Local/Muni No E-33 NRPC

	MTP Total:	\$1,882,136	\$0	\$470,534	\$2,352,670		Total Project Cost:	\$2,352,671	Revised:	FY23-32 TYP
NASHUA (437	727)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Spruce Stree	et/Rail with Tr	ail						CAA Status:	E-33
Scope:			Construct 10' n	nulti-use path	linking the Nashu	ia Riverv	valk to Nashua Heritage Trail		RPCs:	NRPC
	of a new pa	ved multi-use	path.							
_	_	-	_	-	_	_	-	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$41,120	\$0	\$10,280	\$51,400		STBG, City			
PE	2024	\$31,703	\$0	\$7,926	\$39,629		STBG, City			
PE	2025	\$32,591	\$0	\$8,148	\$40,739		STBG, City			
ROW	2026	\$26,803	\$0	\$6,701	\$33,504		STBG, City			
CON	2029	\$531,406	\$0	\$132,851	\$664,257		STBG, City			
CON	2030	\$546,285	\$0	\$136,571	\$682,856		STBG, City			
	MTP Total:	\$1,209,908	\$0	\$302,477	\$1,512,385		Total Project Cost:	\$1,512,385	Revised:	FY23-32 TYP
NASHUA (441	141)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Cotton Mill	Bridge ADA Ra	amp near Front	St					CAA Status:	E-33
Scope:	To provide A	ADA Accessibi	lity to the Cotto	n Mill Transfe	r Bridge.				RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2023	\$724,186	\$0	\$277,227	\$1,001,413		FHWA Earmarks, HSIP, Non- Par Other, Towns			
	TIP Total:	\$724,186	\$0	\$277,227	\$1,001,413		Total Project Cost:	\$1,001,413	Revised:	A1.M.8.23
NASHUA (435	545)								Managed By:	Local/Muni

									Reg Signif:	No
Facility:	Bridge Stree	et and Canal Str	reet						CAA Status:	E-33
Scope:			Complete Stree	ets project ent	ailing curb adjus	stments, k	oike lanes, sidewalks &		RPCs:	NRPC
			handicapped ra	amps						
-	-	-	-	-	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$275,536	\$0	\$68,884	\$344,420		STBG, City			
PE	2030	\$24,944	\$0	\$6,236	\$31,180		STBG, City			
CON	2032	\$1,581,656	\$0	\$395,414	\$1,977,070		STBG, City			
	МТР	\$1,882,136	\$0	\$470,534	\$2,352,670		Total Project Cost:	\$2,352,671	Revised:	
	Total:									
									Managad	
NASHUA (FY	25-34 119)								Rv.	Local/iviuni
									Reg Signif:	No
Facility:	Various								CAA Status:	E-52
Scope:	Intersection	n signal coordin	ation at 64 loca	ations in the					RPCs:	NRPC
	City									
- Phase	- FY	- Federal		- Other	- Total	-	- Funding Sources	-		
PF	2033	\$200,000	\$0	\$50,000	\$250,000		CMAO City			
ROW	2033	\$4,000	\$0 \$0	\$1,000	\$5,000		CMAQ, City			
CON	2034	\$1,996,000	\$0	\$499.000	\$2,495,000		CMAQ, City			
	MTD	\$2,350,000	¢¢ \$0	\$550,000	\$2,750,000		Total Project Cost:	\$2,750,000	Rovised	EV25-34
	Total:	<i>72,200,000</i>	ŲŪ	<i>,,,,,,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>72,730,000</i>		Total Troject cost.	<i>72,750,000</i>	Revised.	TYP
NASHUA (FY	25-34 ТҮР)								Managed Bv:	Local/Muni
									Reg Signif:	No
Facility:	EV Charging Properties	stations at Var	rious City Owne	ed					CAA Status:	E-45
Scope:	Install 4 Dire	ect Current Fas	t & 10 Model 2	EV at Various	Locations				RPCs:	NRPC
	_	_	_	_	_	_	-	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2033	\$32,000	\$0	\$8 <i>,</i> 000	\$40,000		CMAQ, City			
CON	2033	\$452,000	\$0	\$113,000	\$565,000		CMAQ, City			
	MTP Total:	\$484,000	\$0	\$121,000	\$605,000		Total Project Cost:	\$605,000	Revised:	FY25-34 TYP

NASHUA (FY2	(25-34 TYP)									Managed By:	Local/Muni
										Reg Signif:	No
Facility:	Nashua - Ha	nnaford EV p	roject							CAA Status:	E-45
Scope:			Install EV charg	ging Infrastruc	ture at the Hanr	nafo	rd's gr	ocery store on Coliseum Ave		RPCs:	NRPC
_	-	_	_	-	_	_		_	_		
Phase	FY	Federal	State	Other	Total			Funding Sources			
PE	2033	\$8,000	\$0	\$2,000	\$10,000			CMAQ, City			
CON	2033	\$1,544,000	\$0	\$386,000	\$1,930,000			CMAQ, City			
	MTP Total:	\$1,552,000	\$0	\$388,000	\$1,940,000			Total Project Cost:	\$1,940,000	Revised:	FY25-34 TYP
NASHUA (FY2	23-50 MTP)									Managed By:	Local/Muni
										Reg Signif:	No
Facility:	NH130									CAA Status:	E-33
Scope:	Complete S Avenue.	treets improve	ements from Co	liseum Avenu	e to Coburn					RPCs:	NRPC
-	-	-	-	-	-	-		-	-		
Phase	FY	Federal	State	Other	Total			Funding Sources			
PE	2034	\$200,000	\$0	\$50,000	\$250,000			STBG, CMAQ, City			
ROW	2035	\$200,000		\$50,000	\$250,000			STBG, CMAQ, City			
CON	2036	\$7,200,000	\$0	\$1,800,00 0	\$9,000,000			STBG, CMAQ, City			
	MTP Total:	\$7,600,000	\$0	\$1,900,00 0	\$9,500,000			Total Project Cost:	\$9,500,000	Revised:	FY23- 50MTP
NASHUA (FY2	23-50 MTP)									Managed By:	Local/Muni
										Reg Signif:	No
Facility:	West Hollis	St								CAA Status:	E-33
Scope:	Main St to FEE Turnpike - Accommodati capacity					safe	ety for	bike/ped, maintain or improve	motor vehicle	RPCs:	NRPC
-	-	-	-	-	-	-		-	-		
Phase	FY	Federal	State	Other	Total			Funding Sources			
PE	2036	\$200,000	\$0	\$50,000	\$250,000			STBG, CMAQ, City			
ROW	2037	\$200,000		\$50,000	\$250,000			STBG, CMAQ, City			

CON	2038	\$3,600,000	\$0	\$900,000	\$4,500,000		STBG, CMAQ, City			
	МТР	\$4,000,000	\$0	\$1,000,00	\$5,000,000		Total Project Cost:	\$5,000,000	Revised:	FY23-
	Total:			0						50MTP
NASHUA (FY2	3-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	West Hollis	St							CAA Status:	E-33
Scope:			Corridor impro	vements b/t F	liverside Dr & Ho	ollis T/L -	Accommodation & safety for bike	e/ped,&	RPCs:	NRPC
			maintain or im	prove motor v	ehicle capacity		1			
-	_		-		-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2037	\$200,000	\$0	\$50,000	\$250,000		STBG, CMAQ, City			
ROW	2038	\$200,000		\$50,000	\$250,000		STBG, CMAQ, City			
CON	2038	\$3,600,000	\$0	\$900,000	\$4,500,000		STBG, CMAQ, City			
	MTP	\$4,000,000	\$0	\$1,000,00	\$5,000,000		Total Project Cost:	\$5,000,000	Revised:	FY23-
	Total:			0						50MTP
									D d a una a se a l	
NASHUA (FY2	3-50 MTP)								Nanaged By:	Local/Iviuni
									Reg Signif:	No
Facility:	NH130								CAA Status:	E-33
Scope:	Shoulder an	id safety Impr	ovements from	Coburn Avenı	ie to Hollis Town				RPCs:	NRPC
	Line									
Phase	- FY	Federal	State	Other	Total	-	- Funding Sources	-		
PE	2035	\$200.000	\$0	\$50.000	\$250.000		STBG. CMAQ. City			
ROW	2036	\$200,000		\$50,000	\$250,000		STBG, CMAQ, City			
CON	2037	\$3,600,000	\$0	\$900,000	\$4,500,000		STBG, CMAQ, City			
	MTP	\$4.000.000	\$0	\$1.000.00	\$5.000.000		Total Project Cost:	\$5.000.000	Revised:	FY23-
	Total:	+ .,,	-	0	,.,,		·····	+-,,		50MTP
NASHUA (FY2	3-50 MTP)								Managed Bv:	Local/Muni
									Reg Signif:	No
Facility:	Passanger R	ail							CAA Status:	E-28
Scope:	Construct Pa	assenger rail s	tation in south	Nashua					RPCs:	NRPC
-	_	_	_	_	_	_	-	_		
					-		1			

Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2038	\$684,000	\$0	\$171,000	\$855,000		STBG, City			
ROW	2039	\$3,076,800		\$769,200	\$3,846,000		STBG, City			
CON	2039	\$3,076,800	\$0	\$769,200	\$3,846,000		STBG, City			
	MTP Total:	\$6,837,600	\$0	\$1,709,40 0	\$8,547,000		Total Project Cost:	\$8,547,000	Revised:	FY23- 50MTP
)							Managed	Muni/Local
NASHOA-HOI	55014 (42550))							By:	Widniy Local
									Reg Signif:	No
Facility:	RTE 111/10	1A							CAA Status:	E-19
Scope:			Bridge Rehabili & 109/068.	tation of two	bridges owned b	by both l	Nashua & Hudson. BR #110/068		RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$0	\$0	\$200,000	\$200,000		Non-Par, Other			
CON	2023	\$2,000,000	\$0	\$500,000	\$2,500,000		Other, STBG-State Flexible			
	TIP Total:	\$2,000,000	\$0	\$700,000	\$2,700,000		Total Project Cost:	\$2,700,000	Revised:	A1
	TIP Total:	\$2,000,000	\$0	\$700,000	\$2,700,000		Total Project Cost:	\$2,700,000	Revised:	A1
NASHUA REG	TIP Total: ION (43546)	\$2,000,000	\$0	\$700,000	\$2,700,000		Total Project Cost:	\$2,700,000	Revised: Managed By:	A1 Local/Muni
NASHUA REG	TIP Total: ION (43546)	\$2,000,000	\$0	\$700,000	\$2,700,000		Total Project Cost:	\$2,700,000	Revised: Managed By: Reg Signif:	A1 Local/Muni No
NASHUA REG Facility:	TIP Total: ION (43546) Various	\$2,000,000	\$0	\$700,000	\$2,700,000		Total Project Cost:	\$2,700,000	Revised: Managed By: Reg Signif: CAA Status:	A1 Local/Muni No E-52
NASHUA REG Facility: Scope:	TIP Total: ION (43546) Various	\$2,000,000	\$0 Regional Project Yellow Signals	\$700,000 ct to improve	\$2,700,000 Signal Coordina	tion, Ada	Total Project Cost:	\$2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A1 Local/Muni No E-52 NRPC
NASHUA REG Facility: Scope:	TIP Total: ION (43546) Various	\$2,000,000	\$0 Regional Project Yellow Signals	\$700,000 ct to improve	\$2,700,000 Signal Coordina	tion, Ada	aptive Signal Control, Flashing	\$2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A1 Local/Muni No E-52 NRPC
NASHUA REG Facility: Scope: - Phase	TIP Total: ION (43546) Various	\$2,000,000	\$0 Regional Proje Yellow Signals State	\$700,000 ct to improve Other	\$2,700,000 Signal Coordina Total	tion, Ada	aptive Signal Control, Flashing - Funding Sources	\$2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A1 Local/Muni No E-52 NRPC
NASHUA REG Facility: Scope: - Phase PE	TIP Total: ION (43546) Various	\$2,000,000 \$2,000,000 Federal \$202,496	\$0 Regional Project Yellow Signals State \$0	\$700,000 ct to improve 	\$2,700,000 Signal Coordina Total \$202,496	tion, Ada	Total Project Cost: Image: Control Project Cost: Image: C	\$2,700,000 _	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A1 Local/Muni No E-52 NRPC
NASHUA REG Facility: Scope: - Phase PE CON	TIP Total: ION (43546) Various Various 	\$2,000,000 \$2,000,000 Federal \$202,496 \$1,147,483	\$0 Regional Project Yellow Signals State \$0 \$0	\$700,000 ct to improve 	\$2,700,000 Signal Coordina Total \$202,496 \$1,147,483	tion, Ada	Total Project Cost: Co	\$2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A1 Local/Muni No E-52 NRPC
NASHUA REG Facility: Scope: - Phase PE CON	TIP Total: ION (43546) Various Various <u>FY</u> 2027 2032 MTP Total:	\$2,000,000 \$2,000,000 Federal \$202,496 \$1,147,483 \$1,349,979	\$0 Regional Proje Yellow Signals State \$0 \$0 \$0	\$700,000 ct to improve 	\$2,700,000 Signal Coordina Total \$202,496 \$1,147,483 \$1,349,979	tion, Ada	Total Project Cost: Image: Control Project Cost: Image: Control Project Cost: Image: Control Project Cost:	\$2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs: Revised:	A1 Local/Muni No E-52 NRPC FY23-32 TYP
NASHUA REG	TIP Total: ION (43546) Various Various FY 2027 2032 MTP Total:	\$2,000,000 \$2,000,000 Federal \$202,496 \$1,147,483 \$1,349,979	\$0 Regional Project Yellow Signals State \$0 \$0 \$0	\$700,000 ct to improve 	\$2,700,000 Signal Coordina Total \$202,496 \$1,147,483 \$1,349,979	tion, Ada	Total Project Cost: Image: Control Project Cost:	\$ 2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs: RPCs:	A1 Local/Muni No E-52 NRPC FY23-32 TYP
NASHUA REG	TIP Total: ION (43546) Various Various FY 2027 2032 MTP Total: ERRIMACK - B	\$2,000,000 \$2,000,000 Federal \$202,496 \$1,147,483 \$1,349,979 SEDFORD (137	\$0 Regional Project Yellow Signals State \$0 \$0 \$0 \$0 \$0 \$0	\$700,000 ct to improve 	\$2,700,000 Signal Coordina 5202,496 \$1,147,483 \$1,349,979	tion, Ada	Total Project Cost: Image: Control Project Cost:	\$ 2,700,000	Revised: Managed By: Reg Signif: CAA Status: RPCs: RPCs: Revised: Managed By:	A1 Local/Muni E-52 NRPC NRPC FY23-32 TYP NHDOT

Facility:	F.E. Everett	Turnpike							CAA Status:	N/E
Scope:			F.E.E. Turnpike	widening of 2	l-lane sections fr	om Exit 8	Nashua to I-293 Bedford		RPCs:	NRPC, SNHPC
_	-	-	_	_	-	_	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$0	\$2,938,859	\$0	\$2,938,859		Turnpike Capital			
PE	2024	\$0	\$3,500,000	\$0	\$3,500,000		Turnpike Capital			
PE	2025	\$0	\$3,111,000	\$0	\$3,111,000		Turnpike Capital			
PE	2026	\$0	\$2,150,738	\$0	\$2,150,738		Turnpike Capital			
ROW	2023	\$0	\$25 <i>,</i> 549	\$0	\$25,549		Turnpike Capital			
ROW	2024	\$0	\$2,000,000	\$0	\$2,000,000		Turnpike Capital			
ROW	2025	\$0	\$2,074,000	\$0	\$2,074,000		Turnpike Capital			
ROW	2026	\$0	\$2,150,738	\$0	\$2,150,738		Turnpike Capital			
	TIP Total:	\$0	\$17,950,88	\$0	\$17,950,884		Total Project Cost:	\$26,383,889	Revised:	A3
			4							
			S1A)						Managod	
NASHUA - IVI			JIA)						By:	NIDOT
									Reg Signif:	Yes
Facility:	F.E. Everett	Turnpike							CAA Status:	N/E
Scope:			FE Everett Turr Merrimack	pike widening	g of a 2-lane sec	tion from	Exit 8 Nashua to Exit 10		RPCs:	NRPC
_	-	_	_	-	_	-	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2024	\$0	\$3,500,000	\$0	\$3,500,000		Turnpike Capital			
CON	2025	\$0	\$10,370,00 0	\$0	\$10,370,000		Turnpike Capital			
CON	2026	\$0	\$12,366,74 4	\$0	\$12,366,744		Turnpike Capital			
	TIP Total:	\$0	\$26,236,74 4	\$0	\$26,236,744		Total Project Cost:	\$35,355,552	Revised:	A3
NASHUA - M	ERRIMACK - B	EDFORD (1376	51B)						Managed By:	NHDOT
									Reg Signif:	Yes
Facility:	F.E. Everett	Turnpike							CAA Status:	N/E

Scope:			Replace Wire R (Merrimack).	oad and Babc	oosic Lake Road	Bridges ov	er the FE Everett Turnpike		RPCs:	NRPC
-	-	_	-	-	-	-		-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2025	\$0	\$4,264,144	\$0	\$4,264,144		Turnpike Capital			
CON	2026	\$0	\$7,527,583	\$0	\$7,527,583		Turnpike Capital			
	TIP Total:	\$0	\$11,791,72 7	\$0	\$11,791,727		Total Project Cost:	\$23,747,060	Revised:	A1.M7.23
NASHUA - M	ERRIMACK - B	BEDFORD (1376	51C)						Managed By:	NHDOT
									Reg Signif:	Yes
Facility:	F.E. Everett	Turnpike							CAA Status:	N/E
Scope:			FE Everett Turn of Exit 13.	pike widening	g in Merrimack o	of a 2-lane	section from Exit 11 to south		RPCs:	NRPC
_	-	_	-	-	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2026	\$0	\$16,130,53 5	\$0	\$16,130,535		Turnpike Capital			
CON	2027	\$0	\$21,187,99 5	\$0	\$21,187,995					
CON	2028	\$0	\$34,692,55 5	\$0	\$34,692,555					
CON	2029	\$0	\$31,356,83 8	\$0	\$31,356,838					
CON	2030	\$0	\$18,653,64 9	\$0	\$18,653,649					
CON	2031	\$0	\$19,578,53 9	\$0	\$19,578,539					
	TIP Total:	\$0	\$141,600,1 11	\$0	\$141,600,11 1		Total Project Cost:	############ #	Revised:	A3
NASHUA - M	ERRIMACK - B	BEDFORD (1376	51E)						Managed By:	NHDOT
									Reg Signif:	Yes
Facility:	F.E. Everett	Turnpike							CAA Status:	N/E
Scope:			FE Everett Turn south of Exit 13	ipike widening 3.	g in Merrimack o	of a 2-lane	section from Bedford Rd to		RPCs:	NRPC
_	_	_	-	_	-	_	-	_		

Phase	FY	Federal	State	Other	Total		Funding Sources			
CON	2023	\$0	\$5,000,000	\$0	\$5,000,000		Turnpike Capital			
CON	2024	\$0	\$11,102,40 0	\$0	\$11,102,400		Turnpike Capital			
CON	2025	\$0	\$3,170,352	\$0	\$3,170,352		Turnpike Capital			
	TIP Total:	\$0	\$19,272,75 2	\$0	\$19,272,752		Total Project Cost:	\$19,272,752	Revised:	A0
Nashua-Milfo	ord (FY2025-3	4 TYP)							Managed By:	Muni/Local
									Reg Signif:	No
Facility:	Nashua Tra	nsit Service							CAA Status:	E-21
Scope:			Expand transit	service westw	vard along Route	101 A fro	om Nashua to Milford, NH		RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2025	\$64,000	\$0	\$80,000	\$400,000		CMAQ, Other			
ROW	2026	\$64,000	\$0	\$80,000	\$400,000		CMAQ, Other			
CON	2027	\$64,000	\$0	\$80,000	\$400,000		CMAQ, Other			
	TIP Total:	\$192,000	\$0	\$240,000	\$1,200,000		Total Project Cost:	\$1,200,000	Revised:	FY23- 50MTP
NASHUA REG	iion (43546)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	E-52
Scope:			Regional Proje Yellow Signals	ct to improve	Signal Coordinati	on, Adap	tive Signal Control, Flashing		RPCs:	NRPC
-	-	-	-	-	-	-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$202,496	\$0	\$0	\$202,496		None, Other			
CON	2032	\$1,147,483	\$0	\$0	\$1,147,483		None, Other			
	MTP Total:	\$1,349,979	\$0	\$0	\$1,349,979		Total Project Cost:	\$1,349,980	Revised:	FY23-32 TYP
NASHUA - PR	OGRAM (NTS	5307)							Managed	Muni/Local
		•							By:	

Facility:	Nashua Trai	nsit System							CAA Status:	E-21
Scope:			NTS FTA 5307 f investments (ir	ormula funds Icluding	for capital plan	ning, cap	ital preventative maintenance, ca	pital	RPCs:	NRPC
			fleet replaceme assistance	ent/rehabilita	tion/purchases)	ADA op	erations and operating			
-	-		-	-	-	_		-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
OTHER	2023	\$3,235,832	\$0	\$3,235,83 2	\$6,471,664		FTA 5307, City			
OTHER	2024	\$1,728,638	\$0	\$1,728,63 8	\$3,457,276		FTA 5307, City			
OTHER	2025	\$1,763,211	\$0	\$1,763,21 1	\$3,526,422		FTA 5307, City			
OTHER	2026	\$1,798,475	\$0	\$1,798,47 5	\$3,596,950		FTA 5307, City			
OTHER	2027	\$1,834,445	\$0	\$1,834,44 5	\$3,668,889		FTA 5307, City			
OTHER	2028	\$1,871,133	\$0	\$1,871,13 3	\$3,742,267		FTA 5307, City			
OTHER	2029	\$1,908,556	\$0	\$1,908,55 6	\$3,817,112		FTA 5307, City			
OTHER	2030	\$1,946,727	\$0	\$1,946,72 7	\$3,893,454		FTA 5307, City			
OTHER	2031	\$1,985,662	\$0	\$1,985,66 2	\$3,971,323		FTA 5307, City			
OTHER	2032	\$2,025,375	\$0	\$2,025,37 5	\$4,050,750		FTA 5307, City			
OTHER	2033	\$2,065,882	\$0	\$2,065,88 2	\$4,131,765		FTA 5307, City			
OTHER	2034	\$2,107,200	\$0	\$2,107,20 0	\$4,214,400		FTA 5307, City			
OTHER	2035	\$2,149,344	\$0	\$2,149,34 4	\$4,298,688		FTA 5307, City			
OTHER	2036	\$2,192,331	\$0	\$2,192,33 1	\$4,384,662		FTA 5307, City			
OTHER	2037	\$2,236,178	\$0	\$2,236,17 8	\$4,472,355		FTA 5307, City			
OTHER	2038	\$2,280,901	\$0	\$2,280,90 1	\$4,561,802		FTA 5307, City			
OTHER	2039	\$2,326,519	\$0	\$2,326,51 9	\$4,653,038		FTA 5307, City			

OTHER	2040	\$2,373,050	\$0	\$2,373,05 0	\$4,746,099		FTA 5307, City			
OTHER	2041	\$2,420,511	\$0	\$2,420,51 1	\$4,841,021		FTA 5307, City			
OTHER	2042	\$2,468,921	\$0	\$2,468,92 1	\$4,937,842		FTA 5307, City			
OTHER	2043	\$2,518,299	\$0	\$2,518,29 9	\$5,036,598		FTA 5307, City			
OTHER	2044	\$2,568,665	\$0	\$2,568,66 5	\$5,137,330		FTA 5307, City			
OTHER	2045	\$2,620,038	\$0	\$2,620,03 8	\$5,240,077		FTA 5307, City			
OTHER	2046	\$2,672,439	\$0	\$2,672,43 9	\$5,344,878		FTA 5307, City			
OTHER	2047	\$2,725,888	\$0	\$2,725,88 8	\$5,451,776		FTA 5307, City			
OTHER	2048	\$2,780,406	\$0	\$2,780,40 6	\$5,560,812		FTA 5307, City			
OTHER	2049	\$2,836,014	\$0	\$2,836,01 4	\$5,672,028		FTA 5307, City			
OTUER	2050	62 202 724	<u> </u>	40.000 -0	4					
OTHER	2050	\$2,892,734	ŞU	\$2,892,73 4	\$5,785,468		FTA 5307, City			
OTHER	MTP TIP Total:	\$2,892,734 \$64,333,37 4	\$0 \$0	\$2,892,73 4 \$64,333,3 74	\$5,785,468 \$128,666,74 9		Total Project Cost:	#######################################	Revised:	A0.M.6.23
OTHER	MTP TIP Total:	\$2,892,734 \$64,333,37 4	\$0 \$0	\$2,892,73 4 \$64,333,3 74	\$5,785,468 \$128,666,74 9		Total Project Cost:	######################################	Revised:	A0.M.6.23
NASHUA - PR	MTP TIP Total: OGRAM (NTS	\$2,892,734 \$64,333,37 4 55310)	\$0 \$0	\$2,892,73 4 \$64,333,3 74	\$5,785,468 \$128,666,74 9		Total Project Cost:	#######################################	Revised: Managed By:	A0.M.6.23 Muni/Local
NASHUA - PR	MTP TIP Total: OGRAM (NTS	\$2,892,734 \$64,333,37 4 55310)	\$0 \$0	\$2,892,73 4 \$64,333,3 74	\$5,785,468 \$128,666,74 9		Total Project Cost:	#######################################	Revised: Managed By: Reg Signif:	A0.M.6.23 Muni/Local No
NASHUA - PR	MTP TIP Total: OGRAM (NTS	\$2,892,734 \$64,333,37 4 55310) Insit System	\$0 \$0	\$2,892,73 4 \$64,333,3 74	\$5,785,468 \$128,666,74 9		Total Project Cost:	#######################################	Revised: Managed By: Reg Signif: CAA Status:	A0.M.6.23 Muni/Local No E-30
NASHUA - PR Facility: Scope:	MTP TIP Total: OGRAM (NTS Nashua Trai	\$2,892,734 \$64,333,37 4 55310) Insit System	ŞU \$0 NTS FTA 5310 F enhancements	\$2,892,73 4 \$64,333,3 74 Formula Funds , mobility	\$5,785,468 \$128,666,74 9 s for fleet replac	ement/re	FTA 5307, City Total Project Cost: habilitation/purchases, passenge	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC
NASHUA - PR Facility: Scope:	MTP TIP Total: OGRAM (NTS Nashua Trai	\$2,892,734 \$64,333,37 4 5310) Insit System	\$0 \$0 NTS FTA 5310 F enhancements Management a with disabilities	\$2,892,73 4 \$64,333,3 74 Formula Funds , mobility nd purchase of	\$5,785,468 \$128,666,74 9 s for fleet replac of transit service	ement/re to suppo	habilitation/purchases, passenge	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC
NASHUA - PR Facility: Scope:	DGRAM (NTS	\$2,892,734 \$64,333,37 4 5310) Insit System	\$0 \$0 NTS FTA 5310 F enhancements Management a with disabilities	\$2,892,73 4 \$64,333,3 74 Formula Funds , mobility nd purchase of 5	\$5,785,468 \$128,666,74 9 s for fleet replac of transit service	ement/re to suppo	Total Project Cost: habilitation/purchases, passenger rt enhanced mobility of seniors 8	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC
NASHUA - PR Facility: Scope: - Phase	DGRAM (NTS	\$2,892,734 \$64,333,37 4 55310) nsit System	\$0 \$0 NTS FTA 5310 F enhancements Management a with disabilities - State	\$2,892,73 4 \$64,333,3 74 Formula Funds , mobility nd purchase of 5 Cother	\$5,785,468 \$128,666,74 9 s for fleet replac of transit service - Total	ement/re to suppo	Total Project Cost: Total Project Cost: habilitation/purchases, passenge rt enhanced mobility of seniors & - Funding Sources	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC
NASHUA - PR Facility: Scope: Phase OTHER	MTP TIP Total: OGRAM (NTS Nashua Trai	\$2,892,734 \$64,333,37 4 5310) msit System Federal \$455,138	\$0 \$0 NTS FTA 5310 F enhancements Management a with disabilities - State \$0	\$2,892,73 4 \$64,333,3 74 Formula Funde , mobility nd purchase of 5 Other \$113,784	\$5,785,468 \$128,666,74 9 s for fleet replac of transit service - Total \$568,922	ement/re to suppo	rt enhanced mobility of seniors a Funding Sources FTA 5307, City	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC
OTHER NASHUA - PR Facility: Scope: - Phase OTHER OTHER	MTP TIP Total: OGRAM (NTS Nashua Trai	\$2,892,734 \$64,333,37 4 5310) Insit System Federal \$455,138 \$235,106	\$0 \$0 NTS FTA 5310 F enhancements Management a with disabilities - State \$0 \$0	\$2,892,73 4 \$64,333,3 74 Formula Funds , mobility nd purchase of 5 Other \$113,784 \$58,776	\$5,785,468 \$128,666,74 9 s for fleet replac of transit service - Total \$568,922 \$293,882	ement/re to suppo	Total Project Cost: Total Project Cost: habilitation/purchases, passenge rt enhanced mobility of seniors a Funding Sources FTA 5310, City FTA 5310, City	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC
NASHUA - PR Facility: Scope: Phase OTHER OTHER OTHER	MTP TIP Total: OGRAM (NTS Nashua Trai Nashua Zuza FY 2023 2024 2025	\$2,892,734 \$64,333,37 4 5310) Insit System Federal \$455,138 \$235,106 \$239,808	\$0 \$0 \$0 NTS FTA 5310 F enhancements Management a with disabilities - State \$0 \$0 \$0 \$0	\$2,892,73 4 \$64,333,3 74 5 ormula Funds , mobility nd purchase of 5 0ther \$113,784 \$58,776 \$59,952	\$5,785,468 \$128,666,74 9 s for fleet replac of transit service Total \$568,922 \$293,882 \$299,760	ement/re to suppo	Total Project Cost: Total Project Cost: habilitation/purchases, passenge rt enhanced mobility of seniors & Funding Sources FTA 5310, City FTA 5310, City FTA 5310, City	######################################	Revised: Managed By: Reg Signif: CAA Status: RPCs:	A0.M.6.23 Muni/Local No E-30 NRPC

OTHER	2027	\$249,496	\$0	\$62,374	\$311,870	FTA 5310, City		
OTHER	2028	\$254,486	\$0	\$63,622	\$318,108	FTA 5310, City		
OTHER	2029	\$259,576	\$0	\$64,894	\$324,470	FTA 5310, City		
OTHER	2030	\$264,767	\$0	\$66,192	\$330,959	FTA 5310, City		
OTHER	2031	\$270,063	\$0	\$67,516	\$337,578	FTA 5310, City		
OTHER	2032	\$275,464	\$0	\$68,866	\$344,330	FTA 5310, City		
OTHER	2033	\$280,973	\$0	\$70,243	\$351,216	FTA 5310, City		
OTHER	2034	\$286,593	\$0	\$71,648	\$358,241	FTA 5310, City		
OTHER	2035	\$292,324	\$0	\$73,081	\$365,406	FTA 5310, City		
OTHER	2036	\$298,171	\$0	\$74,543	\$372,714	FTA 5310, City		
OTHER	2037	\$304,134	\$0	\$76,034	\$380,168	FTA 5310, City		
OTHER	2038	\$310,217	\$0	\$77,554	\$387,771	FTA 5310, City		
OTHER	2039	\$316,421	\$0	\$79,105	\$395,527	FTA 5310, City		
OTHER	2040	\$322,750	\$0	\$80,687	\$403,437	FTA 5310, City		
OTHER	2041	\$329,205	\$0	\$82,301	\$411,506	FTA 5310, City		
OTHER	2042	\$335,789	\$0	\$83,947	\$419,736	FTA 5310, City		
OTHER	2043	\$342,505	\$0	\$85,626	\$428,131	FTA 5310, City		
OTHER	2044	\$349,355	\$0	\$87,339	\$436,693	FTA 5310, City		
OTHER	2045	\$356,342	\$0	\$89,085	\$445,427	FTA 5310, City		
OTHER	2046	\$363,469	\$0	\$90,867	\$454,336	FTA 5310, City		
OTHER	2047	\$370,738	\$0	\$92,685	\$463,423	FTA 5310, City		
OTHER	2048	\$378,153	\$0	\$94,538	\$472,691	FTA 5310, City		
OTHER	2049	\$385,716	\$0	\$96,429	\$482,145	FTA 5310, City		
OTHER	2050	\$393,430	\$0	\$98,358	\$491,788	FTA 5310, City		
	TIP Total:	\$8,764,791	\$0	\$2,191,19	\$10,955,988	Total Project Cost: \$10,955,988	Revised:	A0.M.6.23
NASHUA - PR	OGRAM (NTS	5339)					Managed By:	Muni/Local
							Reg Signif:	No
Facility:	Nashua Tra	nsit System					CAA Status:	E-31

Scope:			NTS FTA 5339 F replacement/re	cluding fleet		RPCs:	NRPC			
			passenger ame	nities and con	struction/rehab	ilitatior	of bus-related facilities			
-	_		_	_	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
OTHER	2023	\$323,513	\$0	\$80,878	\$404,391		FTA 5339, Other			
OTHER	2024	\$133,772	\$0	\$33,443	\$167,215		FTA 5339, Other			
OTHER	2025	\$136,447	\$0	\$34,112	\$170,559		FTA 5339, Other			
OTHER	2026	\$139,177	\$0	\$34,794	\$173,971		FTA 5339, Other			
OTHER	2027	\$141,960	\$0	\$35,490	\$177,450		FTA 5339, Other			
OTHER	2028	\$144,800	\$0	\$36,200	\$180,999		FTA 5339, Other			
OTHER	2029	\$147,696	\$0	\$36,924	\$184,619		FTA 5339, Other			
OTHER	2030	\$150,649	\$0	\$37,662	\$188,312		FTA 5339, Other			
OTHER	2031	\$153,662	\$0	\$38,416	\$192,078		FTA 5339, Other			
OTHER	2032	\$156,736	\$0	\$39,184	\$195,920		FTA 5339, Other			
OTHER	2033	\$159,870	\$0	\$39,968	\$199,838		FTA 5339, Other			
OTHER	2034	\$163,068	\$0	\$40,767	\$203,835		FTA 5339, Other			
OTHER	2035	\$166,329	\$0	\$41,582	\$207,911		FTA 5339, Other			
OTHER	2036	\$169,656	\$0	\$42,414	\$212,070		FTA 5339, Other			
OTHER	2037	\$173,049	\$0	\$43,262	\$216,311		FTA 5339, Other			
OTHER	2038	\$176,510	\$0	\$44,127	\$220,637		FTA 5339, Other			
OTHER	2039	\$180,040	\$0	\$45 <i>,</i> 010	\$225,050		FTA 5339, Other			
OTHER	2040	\$183,641	\$0	\$45,910	\$229,551		FTA 5339, Other			
OTHER	2041	\$187,314	\$0	\$46,828	\$234,142		FTA 5339, Other			
OTHER	2042	\$191,060	\$0	\$47,765	\$238,825		FTA 5339, Other			
OTHER	2043	\$194,881	\$0	\$48,720	\$243,601		FTA 5339, Other			
OTHER	2044	\$198,779	\$0	\$49,695	\$248,473		FTA 5339, Other			
OTHER	2045	\$202,754	\$0	\$50,689	\$253,443		FTA 5339, Other			
OTHER	2046	\$206,809	\$0	\$51,702	\$258,512		FTA 5339, Other			
OTHER	2047	\$210,946	\$0	\$52,736	\$263,682		FTA 5339, Other			
OTHER	2048	\$215,165	\$0	\$53,791	\$268,956		FTA 5339, Other			
OTHER	2049	\$219,468	\$0	\$54,867	\$274,335		FTA 5339, Other			
OTHER	2050	\$223,857	\$0	\$55,964	\$279,821		FTA 5339, Other			
	TIP Total:	\$5,051,607	\$0	\$1,262,90 1	\$6,314,508		Total Project Cost:	\$6,314,508	Revised:	A3

PELHAM (161	145)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	Main Street								CAA Status:	E-19
Scope:			Main Street ov replacement #2	er Beaver Bro 111/090	ok - bridge repla		RPCs:	NRPC		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$160,600	\$0	\$0	\$160,600		STBG Off-System Bridge	Toll Credit	\$32,120	
PE	2024	\$27,968	\$0	\$0	\$27,968		STBG Off-System Bridge	Toll Credit	\$5,594	
ROW	2023	\$46,750	\$0	\$0	\$46,750		STBG Off-System Bridge	Toll Credit	\$9 <i>,</i> 350	
CON	2025	\$2,076,074	\$0	\$0	\$2,076,074		STBG Off-System Bridge	Toll Credit	\$415,215	
CON	2026	\$1,515,120	\$0	\$0	\$1,515,120		STBG Off-System Bridge	Toll Credit	\$303,024	
	TIP Total:	\$3,826,512	\$0	\$0	\$3,826,512		Total Project Cost:	\$4,101,773	Revised:	A3
PELHAM (294	450)								Managed By:	NHDOT
									Reg Signif:	No
Facility:	Old Bridge S	Street							CAA Status:	E-19
Scope:	Bridge reha	bilitation - Old	Bridge Street o	ver Beaver Br	ook #109/081				RPCs:	NRPC
-	-		_	-	-	-		-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2025	\$0	\$264,651	\$66,163	\$330,814		SB367-4-Cents, Town			
ROW	2025	\$0	\$49,776	\$12,444	\$62,220		SB367-4-Cents, Town			
CON	2025	\$1,503,148	\$0	\$0	\$1,503,148		MOBIL			
	TIP Total:	\$1,503,148	\$314,427	\$78,607	\$1,896,182		Total Project Cost:	\$1,896,181	Revised:	A1.M.7.23
PELHAM (417	751)								Managed By:	Muni/Local
									Reg Signif:	No
Facility:	NH 128 & S	herburne Rd							CAA Status:	E-53
Scope:	Intersection Rd	n improvement	s at the interse	ctions of NH 1	.28/Sherburne				RPCs:	NRPC
-	_	_	_	_	_	_	_	-		

			.							
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$61,348	\$0	\$40,898	\$102,246		CMAQ, Town			
ROW	2023	\$6,000	\$0	\$4,000	\$10,000		CMAQ, Town			
CON	2024	\$1,071,600	\$0	\$267,900	\$1,339,500		CMAQ, Town			
	TIP Total:	\$1,138,948	\$0	\$312,798	\$1,451,746		Total Project Cost:	\$1,624,606	Revised:	A2.M.9.23
PELHAM (417	751A)								Managed	Muni/Local
									By:	
									Reg Signif:	No
Facility:	NH 128 & N	H111A							CAA Status:	E-53
Scope:			Intersection Im	provements (roundabout) at N	Mammoth	n (NH 128) and Marsh Rd		RPCs:	NRPC
			(NH111A)							
-	-	- Fadaval	-	- Other	- Total	-		-		
Phase	FT 2022	rederal	State	cao ooo	fotal					
PE	2023	\$30,000	\$0	\$20,000	\$50,000		CIMAQ, Town			
ROW	2024	\$60,000	\$0	\$40,000	\$100,000		CIMAQ, Town			
CON	2025	\$833,437	\$0	\$555,625	\$1,389,062		CMAQ, Iown			
	TIP Total:	\$923,437	\$0	\$615,625	\$1,539,062		Total Project Cost:	\$1,539,062	Revised:	A0.M.6.23
PELHAM (MT	P2023)								Managed	Muni/Local
									By:	
									Reg Signif:	No
Facility:	Old Bridge S	it							CAA Status:	E-33
Scope:	Sidewalk ex	tension from	NH111A to NH3	8 & Ped Bridg	e over Beaver				RPCs:	NRPC
	Brk.									
Dhace	EV	Fadaral	Ctoto	Other	Total		Funding Courses			
Phase	FT 2040	É41.600	State	cra 000	10tal		Funding Sources			
PE	2040	\$41,600	\$0	\$52,000	\$260,000		Fed Aid, Other			
ROW	2041	\$1,600	\$0	\$2,000	\$10,000		Fed Ald, Other			
CON	2042	\$2/1,360	\$0	\$339,200	\$1,696,000		Fed Aid, Other			
	TIP Total:	\$314,560	\$0	\$393,200	\$1,966,000		Total Project Cost:	\$1,966,000	Revised:	FY23-
										SUIVITP
	(67)								Managed	NHDOT
	0/1								Du	MIDOI
									BV:	
									By: Reg Signif:	No

Scope:	Bridge reha	bilitation - King	Brook Road ov	ver King Brook	# 974/060				RPCs:	NRPC
_	_	-	_	_	-	_	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$0	\$160,000	\$32,405	\$200,000		State-Aid Bridge, Town			
ROW	2023	\$0	\$4,000	\$1,205	\$5,000		State-Aid Bridge, Town			
CON	2023	\$0	\$378,244	\$6,722	\$472,805		State-Aid Bridge, Town			
CON	2024	\$0	\$449,693	\$112,423	\$562,116		State-Aid Bridge, Town			
	MTP Total:	\$0	\$991,937	\$152,754	\$1,239,921		Total Project Cost:	\$1,239,921		
WILTON (157	768)								Managed Bv:	NHDOT
									Reg Signif:	No
Facility:	Old County	Farm Road							CAA Status:	E-19
Scope:	Bridge Reha #060/118	bilitation - Old	County Farm R	oad over Bloc	od Brook				RPCs:	NRPC
-	-	-	-	_ .	-	_	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2025	\$0	\$188,319	\$47,080	\$235,399		SB367-4-Cents, Town			
ROW	2025	\$0	\$8,296	\$2,074	\$10,370		SB367-4-Cents, Town			
CON	2025	\$1,128,671	\$0	\$0	\$1,128,671		MOBIL			
	TIP Total:	\$1,128,671	\$196,615	\$49,154	\$1,374,440		Total Project Cost:	\$1,374,440	Revised:	A3
WILTON (435	540)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	NH 31								CAA Status:	E-33
Scope:	New pedest Riverwalk	rian bridge to o	connect Burns/	Forest Rds - W	/ilton				RPCs:	NRPC
-	-			-		-	-	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2027	\$128,584	\$0	\$32,146	\$160,730		None, Other			
ROW	2030	\$19,956	\$0	\$4,989	\$24,945		None, Other		-	
CON	2032	\$637,935	\$0	\$159,484	\$797,419		None, Other			
	MTP Total:	\$786,475	\$0	\$196,619	\$983,094		Total Project Cost:	\$983,092	Revised:	FY23-32 TYP

WILTON (FY2	05034 TYP)								Managed Bv:	Local/Muni
									Reg Signif:	No
Facility:	Pedestrian I	Bridge							CAA Status:	E-33
Scope:			Install Pedestri	an Bridge ove	r Souhegan Rive	r from l	Howard St to Riverside Way		RPCs:	NRPC
_	_	_	_	_	_	_	_	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2032	\$40,000	\$0	\$10,000	\$50,000		CMAQ, Other		_	
ROW	2033	\$40,000	\$0	\$10,000	\$50,000		CMAQ, Other		_	
CON	2034	\$624,000	\$0	\$156,000	\$780,000		CMAQ, Other			
	MTP Total:	\$704,000	\$0	\$176,000	\$880,000		Total Project Cost:	\$983,092	Revised:	FY25-34 TYP
WILTON - MII	LFORD - AMH	ERST - BEDFO	RD (13692D)						Managed By:	NHDOT
									Reg Signif:	No
Facility:	NH101								CAA Status:	E-51
Scope:			Ops and safety LOS)(~18.8m).	improvement	s consistent wit	h 2002	corridor study (improve poor		RPCs:	NRPC
_	-	_	_	-	_	_	_	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$698,603	\$0	\$0	\$698,603		National Hwy Performance	Toll Credit	\$139,721	
ROW	2023	\$11,000	\$0	\$0	\$11,000		National Hwy Performance	Toll Credit	\$2,200	
CON	2023	\$8,064,338	\$0	\$0	\$8,064,338		HSIP, Toll Credit	Toll Credit	\$1,612,868	
	TIP Total:	\$8,773,941	\$0	\$0	\$8,773,941		Total Project Cost:	\$9,653,942	Revised:	A3
WILTON - MII	FORD - AMH	ERST - BEDFO	RD (13692E)						Managed By:	NHDOT
									Reg Signif:	No
Facility:	NH101								CAA Status:	E-51
Scope:	Traffic and s	safety improve	ements based or	n the 2002 co	rridor study				RPCs:	NRPC
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2023	\$880,000	\$0	\$0	\$880,000		National Hwy Performance	Toll Credit	\$176,000	
PE	2025	\$570,350	\$0	\$0	\$570,350		National Hwy Performance	Toll Credit	\$114,070	
ROW	2025	\$513,315	\$0	\$0	\$513,315		National Hwy Performance	Toll Credit	\$102,663	
CON	2026	\$5,517,185	\$0	\$0	\$5,517,185		National Hwy Performance	Toll Credit	\$1,103,437	

	TIP Total:	\$7,480,850	\$0	\$0	\$7,480,850		Total Project Cost:	\$7,480,850	Revised:	A2.M.10.23
WILTON-MIL	FORD-AMHEF	RST (MTP 2021	.)						Managed By:	NHDOT
									Reg Signif:	Yes
Facility:	NH 101								CAA Status:	N/E
Scope:			Supplement fur on the 2002 co	nding for exist rridor study	ements based	RPCs:	NRPC			
Phase	FY	Federal	State	Other	Total		Funding Sources			
PE	2033	\$1,205,000	\$0	\$0	\$1,205,000		NHP, STBG		-	
ROW	2034	\$496,000	\$0	\$0	\$496,000		NHP, STBG		_	
CON	2033	\$2,917,000	\$0	\$0	\$2,917,000		NHP, STBG		-	
CON	2035	\$3,204,300	\$0	\$0	\$3,204,300		NHP, STBG		_	
CON	2036	\$2,944,400	\$0	\$0	\$2,944,400		NHP, STBG		_	
CON	2037	\$3,386,200	\$0	\$0	\$3,386,200		NHP, STBG			
Various (FY20	023-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion,	Performance	e (PM1, PM2, PM	l3) projec	ts to address safety, pavement, I	oride,	RPCs:	NRPC
-			Travel time reli	ability, & frei	ght. Additionally,	-				
Phase	FY	Federal	State	Other	Total		Funding Sources			
Various	2042	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20)23-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion,	Performance	e (PM1, PM2, PM	l3) projec	ts to address safety, pavement, I	oride,	RPCs:	NRPC
_			Travel time reli	ability, & frei	ght. Additionally,	multi-m	odal and transit projects.	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			

Various	2043	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20	023-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion.	Performance	e (PM1, PM2, PN	l3) projec	cts to address safety, pavement, I	bride,	RPCs:	NRPC
-			Travel time reli	ability, & frei	ght. Additionally,	multi-m	odal and transit projects.	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			
Various	2044	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20	023-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion.	Performance	e (PM1, PM2, PM	l3) projec	cts to address safety, pavement, l	bride,	RPCs:	NRPC
-			Travel time reli	ability, & frei	ght. Additionally	multi-m	odal and transit projects.	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
Various	2045	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20	023-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion,	Performance	e (PM1, PM2, PN	l3) projec	cts to address safety, pavement, l	bride,	RPCs:	NRPC
_			Travel time reli	ability, & frei	ght. Additionally,	multi-m	odal and transit projects.	_		
Phase	FY	Federal	State	Other	Total		Funding Sources			

Various	2042	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20)23-50 MTP)	<u>'</u>							Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion,	Performance	e (PM1, PM2, PN	13) projec	ts to address safety, pavement,	bride,	RPCs:	NRPC
_			Travel time reli	ability, & frei	ght. Additionally	, multi-m	odal and transit projects.	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
Various	2046	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20)23-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion,	Performance	e (PM1, PM2, PN	13) projec	ts to address safety, pavement,	bride,	RPCs:	NRPC
-			Travel time reli	ability, & frei	ght. Additionally	, multi-m	odal and transit projects.	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			
Various	2047	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-	
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP
Various (FY20	023-50 MTP)								Managed By:	Local/Muni
									Reg Signif:	No
Facility:	Various								CAA Status:	N/E
Scope:			Various System congestion,	Performance	e (PM1, PM2, PN	13) projec	ts to address safety, pavement,	bride,	RPCs:	NRPC
-			Travel time reli	ability, & frei	ght. Additionally	, multi-m	odal and transit projects.	-		
Phase	FY	Federal	State	Other	Total		Funding Sources			

Various	2048	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		-		
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP	
Various (FY20	023-50 MTP)								Managed By:	Local/Muni	
									Reg Signif:	No	
Facility:	Various								CAA Status:	N/E	
Scope:			Various Syste congestion,	Various System Performance (PM1, PM2, PM3) projects to address safety, pavement, bride, congestion,							
-			Travel time reli	ability, & freig	-						
Phase	FY	Federal	State	Other	Total		Funding Sources				
Various	2049	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Various		_		
	MTP Total:	\$8,000,000	\$0	\$2,000,00 0	\$10,000,000		Total Project Cost:	\$10,000,000	Revised:	FY25-34 TYP	
Various (FY2023-50 MTP)											
•)23-50 MTP)								Managed By:	Local/Muni	
•	023-50 MTP)								Managed By: Reg Signif:	Local/Muni No	
Facility:	23-50 MTP) Various								Managed By: Reg Signif: CAA Status:	Local/Muni No N/E	
Facility: Scope:	Various		Various Syste congestion,	m Performai	nce (PM1, PM2	2, PM3) p	rojects to address safety, pav	vement, bride,	Managed By: Reg Signif: CAA Status: RPCs:	Local/Muni No N/E NRPC	
Facility: Scope:	Various		Various Syste congestion, Travel time reli	m Performaı ability, & freig	nce (PM1, PM2 ght. Additionally	2, PM3) p , multi-ma	rojects to address safety, pav odal and transit projects.	rement, bride,	Managed By: Reg Signif: CAA Status: RPCs:	Local/Muni No N/E NRPC	
Facility: Scope: Phase	Various FY	Federal	Various Syste congestion, Travel time reli State	m Performaı ability, & freig Other	nce (PM1, PM2 ght. Additionally Total	2, PM3) p , multi-mo	rojects to address safety, pav odal and transit projects. Funding Sources	rement, bride, -	Managed By: Reg Signif: CAA Status: RPCs:	Local/Muni No N/E NRPC	
Facility: Scope: Phase Various	Various Various FY 2050	Federal \$8,000,000	Various Syste congestion, Travel time reli State \$0	m Performaı ability, & freig Other \$2,000,00 0	nce (PM1, PM2 ght. Additionally Total \$10,000,000	2, PM3) p , multi-mo	rojects to address safety, pav odal and transit projects. Funding Sources Various	rement, bride, -	Managed By: Reg Signif: CAA Status: RPCs:	Local/Muni No N/E NRPC	

APPENDIX B - CLEAN AIR ACT

PROJECTS EXEMPT FROM CONFORMITY

SAFETY

- E-1 Railroad/highway crossing.
- E-2 Hazard elimination program.
- E-3 Safer non-Federal Aid system roads.
- E-4 Shoulder improvements.
- E-5 Increasing sight distance.
- E-6 Safety improvement program.
- E-7 Traffic control devices and operating assistance other than signalization projects.
- E-8 Railroad/highway crossing warning devices.
- E-9 Guardrails, median barriers, crash cushions.
- E-10 Pavement resurfacing and/or rehabilitation.
- E-11 Pavement marking demonstration.
- E-12 Emergency relief (23 U.S.C. 125).
- E-13 Fencing.
- E-14 Skid treatments.
- E-15 Safety roadside rest areas.
- E-16 Adding medians.
- E-17 Truck climbing lanes outside the urbanized area.
- E-18 Lighting improvements.
- E-19 Widening narrow pavements or reconstructing bridges (no additional travel lanes).
- E-20 Emergency truck pullovers.

MASS TRANSIT

E-21 Operating assistance to transit agencies.

- E-22 Purchase of support vehicles.
- E-23 Rehabilitation of transit vehicles.{1}
- E-24 Purchase of office, shop, and operating equipment for existing facilities.
- E-25 Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)
- E-26 Construction or renovation of power, signal, communications systems.
- E-27 Construction of small passenger shelters and information kiosks.

E-28 Construction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage, maintenance facilities, stations, terminals, and ancillary structures).

E-29 Rehabilitation or reconstruction of track structures, track, and track bed in existing rights-of-way.

E-30 Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet.{1}

E-31 Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771.

AIR QUALITY

E-32 Continuation of ridesharing and van-pooling promotion activities at current levels.

E-33 Bicycle and pedestrian facilities.

OTHER

Specific activities which do not involve or lead directly to construction, such as:

- E-34 Planning and technical studies.
- E-35 Grants for training and research programs.
- E-36 Planning activities conducted pursuant to titles 23 and 49 U.S.C.
- E-37 Federal-aid systems revisions.

E-38 Engineering to assess social, economic, and environmental effects of the proposed action to alternatives to that action.

- E-39 Noise attenuation.
- E-40 Advance land acquisitions (23 CFR part 712 or 23 CFR part 771).
- E-41 Acquisition of scenic easements.
- E-42 Plantings, landscaping, etc.
- E-43 Sign removal.
- E-44 Directional and informational signs.
- E-45 Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities).

E-46 Repair of damage caused by natural disasters, civil unrest, or terrorist acts, exempt projects involving substantial functional, locational, or capacity changes.

E-0 Other specific activities which do not involve or lead directly to construction.

All Statewide or Programmatic exempt projects for the entire state.

ATT Project is in an attainment area and, therefore, not subject to conformity.

PROJECTS EXEMPT FROM REGIONAL EMISSIONS ANALYSES

E-51 Intersection channelization projects.

E-52 Intersection signalization projects at individual intersections.

E-53 Interchange reconfiguration projects.

E-54 Changes in vertical and horizontal alignment.

E-55 Truck size and weight inspection stations.

E-56 Bus terminals and transfer points.

NON-EXEMPT CODES

N/E Project is not exempt. LMP Limited Maintenance Plan. **Appendix C - Acronyms and Abbreviations**
List of Acronyms and Abbreviations

3Cs	Continuing, Comprehensive, and Cooperative Transportation Planning
ADA	Americans with Disabilities Act of 1990
AQA	Air Quality Analysis
BIL	Bipartisan Infrastructure Law
CAAA	Clean Air Act Amendments of 1990
CFR	Code of Federal Regulations
CON	Construction
CMAQ	Congestion Mitigation/Air Quality Program
СТРР	Census Transportation Planning Package
DBE/WBE	Disadvantaged Business Enterprises/Women's Business Enterprises
FAST Act	Fixing America's Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GACIT	Governor's Advisory Commission on Intermodal Transportation
GIS	Geographic Information System
HPMS	Highway Performance Monitoring System
HPR	Highway Planning and Research Funds
IIJA	Infrastructure Investment and Jobs Act
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
MAP-21	Moving Ahead for Progress in the 21 st Century Act (2012)
MVPC	Merrimack Valley Planning Commission
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTP	Metropolitan Transportation Plan
NHDES	New Hampshire Department of Environmental Services
NHDOT	New Hampshire Department of Transportation
NMCOG	Northern Middlesex Council of Governments
NRPC	Nashua Regional Planning Commission
NTS	Nashua Transit System
PE	Preliminary Engineering

2023 – 2050 Metropolitan Transportation Plan Nashua MPO Recommended Fiscally Constrained Projects

PL	Planning Funds Administered by FHWA
ROW	Right of Way
RPA	Regional Planning Agency
RPC	Regional Planning Commission or Rockingham Planning Commission
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – Legacy for Users (2005)
SIP	State Implementation Plan (for Air Quality Conformity)
SNHPC	Southern New Hampshire Planning Commission
SRPC	Strafford Regional Planning Commission
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
STBG	Surface Transportation Block Grant
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
TEA-21	Transportation Equity Act for the 21st Century (1998)
TIP	Transportation Improvement Program
ТМА	Transportation Management Area
TTAC	Transportation Technical Advisory Committee
UPWP	Unified Planning Work Program

APPENDIX D

METROPOLITAN TRANSPORTATION PLAN PUBLIC NOTICES & PUBLIC COMMENTS RECEIVED

NOTICE OF PUBLIC COMMENT PERIOD AND PUBLIC HEARING

The Nashua Regional Planning Commission is accepting public comment on the

Draft 2023 – 2050 Metropolitan Transportation Plan Update

The NRPC, as the designated Metropolitan Planning Organization (MPO) for the Nashua Region, is holding a public comment period on the draft ///Link to 2023-2050 Metropolitan Transportation Plan//. The document can be viewed by clicking the preceding link.

This process is being conducted in accordance with the Public Involvement Process for Transportation Planning (PIP) adopted by the Nashua MPO for the development of the TIP and MTP; the PIP meets Federal and State requirements and satisfies the FTA's Program of Projects requirements for public involvement activities and time established for public review and comment.

On July 20, 2013, all of New Hampshire became unclassifiable/attainment for the 2008 8-Hour Ozone National Ambient Air Quality Standard (NAAQS). On April 6, 2015, the 1997 8-Hour Ozone NAAQS was revoked for all purposes, including transportation conformity, thus preventing the Boston-Manchester-Portsmouth (SE) NH area from having to demonstrate transportation conformity of transportation plans.

Due to a decision of the U.S. Court of Appeals for the District of Columbia Circuit, as of February 16, 2019, transportation conformity for the 1997 ozone NAAQS will again apply in the Boston-Manchester-Portsmouth (SE) NH "Orphan Area" (South Coast Air Quality Management District v. EPA). Therefore, NRPC will be required to demonstrate conformity for the 1997 ozone NAAQS for any plans approved after February 16, 2019.

In addition, on March 10, 2014, the U.S. Environmental Protection Agency approved a limited maintenance plan to address Carbon Monoxide (CO) for the City of Nashua satisfying the need for future regional CO emission analyses. Also, all other transportation conformity requirements under 40 CFR 93.109(b) continue to apply, including project level conformity determinations based on carbon monoxide hot spot analyses under 40 CFR 93.116. The Metropolitan Transportation Plan and Transportation Improvement Plan meet all applicable conformity requirements under the conformity rule. The 20-year maintenance period for the Nashua and Manchester CO maintenance areas expired on January 29, 2021. The Nashua MPO is therefore no longer required to demonstrate transportation conformity for the CO maintenance area.

A thirty-day public comment period for these documents begins on November 20, 2023, and runs through December 20, 2023. Written comments may be submitted through Wednesday, December 20, 2023, via email to <u>nedc@nashuarpc.org</u> or via US mail to: Ned Connell, NRPC, 30 Temple Street, Suite 301, Nashua, NH 03060.

A Public Hearing will be held on Wednesday December 20, 2023, at 7:00 PM at the Nashua Regional Planning Commission, located at 30 Temple Street, Suite 310, Nashua. The public hearing also can be attended via Zoom at the following link: <u>https://nashuarpc.zoom.us/j/85101026233</u> Or join by telephone by dialing: (929) 205-6099

Following the public hearing, the Nashua MPO will consider adoption of the proposed FY 2023-2050 Metropolitan Transportation Plan Update.

Note: Nashua Transit System, which is the FTA Section 5307(c) applicant, has consulted with the MPO and concurs that the public involvement process adopted by the MPO for the development of the TIP satisfies the public hearing requirements that pertain to the development of the Program of Projects for regular Section 5307, Urbanized Area Formula Program, grant applications, including the provision for public notice and the time established for public review and comment.

AVISO DE PERÍODO DE COMENTARIOS Y AUDIENCIA PÚBLICOS

La Comisión de Planificación Regional de Nashua está aceptando comentarios públicos sobre la

Borrador del Plan de Transporte Metropolitano 2023 – 2050 Actualización

El NRPC, como la Organización de Planificación Metropolitana (MPO) designada para la Región de Nashua, está llevando a cabo un período de comentarios públicos sobre el borrador. draft ///Link to 2023-2050 Metropolitan Transportation Plan//. (Enlace al Plan de Transporte Metropolitano 2023-2050//). El documento se puede ver haciendo clic en el enlace anterior.

Este proceso se está llevando a cabo de acuerdo con el Proceso de Participación Pública para la Planificación del Transporte (PIP, por sus siglas en inglés) adoptado por la MPO de Nashua para el desarrollo del TIP y el MTP; el PIP cumple con los requisitos federales y estatales y satisface los requisitos del Programa de Proyectos de la FTA para las actividades de participación pública y el tiempo establecido para la revisión y los comentarios públicos.

El 20 de julio de 2013, todo New Hampshire se convirtió en inclasificable/alcanzó el Estándar Nacional de Calidad del Aire Ambiental (NAAQS) de 8 horas de ozono de 2008. El 6 de abril de 2015, la NAAQS de 8 horas de ozono de 1997 fue revocada para todos los propósitos, incluida la conformidad del transporte, evitando así que el área de Boston-Manchester-Portsmouth (SE) NH tenga que demostrar la conformidad de los planes de transporte con el transporte.

Debido a una decisión del Tribunal de Apelaciones de los EE. UU. para el Circuito del Distrito de Columbia, a partir del 16 de febrero de 2019, la conformidad del transporte para el NAAQS de ozono de 1997 se aplicará nuevamente en el "Área Huérfana" de Boston-Manchester-Portsmouth (SE) NH (Distrito de Gestión de la Calidad del Aire de la Costa Sur v. EPA). Por lo tanto, NRPC deberá demostrar la conformidad con la NAAQS de ozono de 1997 para cualquier plan aprobado después del 16 de febrero de 2019.

Además, el 10 de marzo de 2014, la Agencia de Protección Ambiental de los Estados Unidos (EPA, por sus siglas en inglés) aprobó un plan de mantenimiento limitado para abordar el monóxido de carbono (CO) para la ciudad de Nashua, satisfaciendo la necesidad de futuros análisis regionales de emisiones de CO. Además, todos los demás requisitos de conformidad de transporte bajo 40 CFR 93.109(b) continúan aplicándose, incluidas las determinaciones de conformidad a nivel de proyecto basadas en análisis de puntos calientes de monóxido de carbono bajo 40 CFR 93.116. El Plan de Transporte Metropolitano y el Plan de Mejoramiento del Transporte cumplen con todos los requisitos de conformidad aplicables bajo la regla de conformidad. El período de mantenimiento de 20 años para las áreas de mantenimiento de Nashua y Manchester CO expiró el 29 de enero de 2021.

Por lo tanto, ya no se requiere que la MPO de Nashua demuestre la conformidad de transporte para el área de mantenimiento de CO.

Un período de comentarios públicos de treinta días para estos documentos comienza el 20 de noviembre de 2023 y se extiende hasta el 20 de diciembre de 2023. Los comentarios por escrito pueden enviarse hasta el miércoles 20 de diciembre de 2023, por correo electrónico nedc@nashuarpc.org o por correo postal de EE. UU. a: Ned Connell, NRPC, 30 Temple Street, Suite 301, Nashua, NH 03060.

Se llevará a cabo una audiencia pública el miércoles 20 de diciembre de 2023 a las 7:00 p. m. en la Comisión de Planificación Regional de Nashua, ubicada en 30 Temple Street, Suite 310, Nashua. A la audiencia pública también se puede asistir vía Zoom en el siguiente enlace link: https://nashuarpc.zoom.us/j/85101026233 O llame: (929) 205-6099

Después de la audiencia pública, la MPO de Nashua considerará la adopción de la propuesta de Actualización del Plan de Transporte Metropolitano para el año fiscal 2023-2050.

Nota: Nashua Transit Sistema, que es el solicitante de la Sección 5307(c) de la FTA, ha consultado con la MPO y está de acuerdo en que el proceso de participación pública adoptado por la MPO para el desarrollo del TIP satisface los requisitos de audiencia pública que pertenecen al desarrollo del Programa de Proyectos para la Sección 5307 regular, Programa de Fórmula de Área Urbanizada, solicitudes de subvención, incluida la disposición de notificación pública y el tiempo establecido para la revisión y los comentarios públicos. The following public comments were recieved and incorporated into the MTP as appropriate:

Federal Highway Administration

Via email on 11/22/2023

Hello Ned,

Good to see the comment period underway, thank you for getting the word out!

FYI, I've shared the message below from Kathy with others from the FHWA/FTA TMA Certification Review Team, so there may be some follow-up from them too, but in the meantime, I wanted to share some comments regarding the Draft MTP's Financial Plan/Financial Analysis documentation. I'm copying Matt and Paul, as they have had related and helpful discussions.

As you know, FHWA has encouraged NRPC to include a breakdown of FHWA and FTA funding by year as well as funding program category in the MTP's Financial Plan documentation. We're not sure that we see that in the Draft MTP, and we would still encourage this to be done for the final 2023-2050 MTP, at least for the 2023-2026 TIP years within the MTP - in a similar way that the NHDOT provides this information to demonstrate financial constraint of the STIP.

Also regarding the MTP's Financial Plan/Financial Analysis, we would observe that the zero balances for the Plan's 2023-2026 fiscal years may not be consistent with the NHDOT's 2023-2026 STIP financial constraint tables, which indicate substantial surpluses of programming capacity for Federal-aid Highway Formula and Match Funding in those years. FHWA would encourage the MPO to look into this, and if you've not done so already, consider using available regional child project level data to help calculate the MPO's share of programming for Statewide projects in the TIP, by year and funding source.

Please let me know if you have any questions, and stay tuned for potential further comment from FHWA/FTA as may be provided.

Thanks again,

Leigh

Federal Highway Administration

Via email on 12/20/2023

Good afternoon, Matt and Ned.

Leigh and I have looked over the draft fiscal constraint document you sent us and wish to provide FHWA's comments, while the comment period is still open.

Please see below, and if any clarification is needed, feel free to contact me.

Thank you.

Paul

Fiscal Constraint Assumptions

P.2

The Ten Year Plan (TYP) is a State document and it's development may use accepted assumptions. The Metropolitan Transportation Plan (MTP) and Transportation Improvement Plan (TIP) are federally required documents. The fiscal constraint shown in those documents (and the STIP) should begin with federal apportioned funding levels (this is the case) and, then demonstrate constraint through analysis of available funds and the estimated costs for projects listed, in the four TIP years. The MTP, as drafted relies on the assumption of fiscal constraint, derived from the State's TYP.

Suggestion:

As it relates to the MTP and TIP, FHWA suggests removing references to "assumptions" that originate through the TYP Process, relative to the TIP years. We also suggest using the region's estimated costs associated with those projects listed in the TIP, which inform the first four years of the MTP. Constraint is still achieved if a year shows that funds are not fully programmed. However, no balance should be negative, indicating an over-programming of funds.

P.3

Assumptions continued

The information included on page 3 provides clarity to the casual reader of the MTP.

The last bullet indicates that the Nashua MPO can be confident that the regional portion of the STIP (i.e. the TIP) and Ten-Year Plan are fully programmed and constrained. FHWA reiterates that the MTP should demonstrate fiscal constraint of the TIP years, of the Plan, through analysis of revenues reasonably expected to be available and actual project cost estimates. FHWA suggests that clarification be made, understanding that a positive balance, unprogrammed funding, may result from using actual cost estimates.

P.4/5

Highway Funding Sources

The brief introduction to this section says: "The following funding sources are available for maintenance and improvements to road networks in the Nashua MPO region."

Question: Are these funding sources those that are available to projects in the region that the RPC is currently aware of? As an example, HSIP funding is not included in this discussion.

P.5/6

Highway / Bridge Revenues and Project Expenses

NRPC does a nice job clarifying the meaning of the columns of the table found on page 7. The final bullet that discusses Column 8 explains that there is no balance throughout the TIP and TYP years of the MTP. This originates with the assumption that the state's TYP documentation is fiscally constrained and therefore, each year is completely programmed. This has been addressed in earlier comments.

I believe that footnote #7 was meant to say that costs = revenues. However it says costs – revenues. This appears to be a typo.

A footnote was added to the table on page 7 that clarifies column 8. Aside from the zero-balance shown between revenues and costs, footnote #7 is helpful.

P.8

Estimated Federal Highway Formula & Non-Formula Funding

NRPC added a helpful table on page 8 that shows the funding sources programmed throughout the TIP years. FHWA appreciates this detail. It assists in ensuring that fiscal constraint is observed by program.

Question: This document is in draft version and may be further edited, however are there truly no recreational trails funds programmed, as this table suggests?

P. 11

Federal, State, Local Resources for Nashua MPO Operations and Maintenance Table

Question: Column 9 seems to show the total revenue the region receives for O+M. There does not appear to be a cost associated with the region's O+M. Is the intent of the table to show that O+M needs are met with sufficient revenue?

Janet Langdell:

Page 52 - In first bullet, Coordinating should be Coordination; also the description incorrectly suggests a limited scope of interest for RCC7 – perhaps for now update it to – "The Greater Nashua Regional Coordination Council for Community Transportation (RCC7) seeks to provide improved, cost effective, coordinated transportation services to those who lack transportation." – and for future documents, the RCC7 should work to improve the "elevator statement" about

The following are some of the other stakeholders that NRPC has worked with on a continuing or an ad hoc basis:

- The Greater Nashua Regional Coordinating Council for Community Transportation (RCC 7) seeks to provide improved, cost-effective, coordinated services to persons with disabilities, the elderly, and individuals with lower incomes.
- The Nashua Transit System, through attendance at most staff meetings.
- The Merrimack Town Center Committee, which has developed a plan for trails and sidewalks in the town center.

Page 52 of 221

what it does.

On page 52 you refer to RCC7 as the "Greater Nashua Regional …." Looking for internal document consistency on page 89 etc and respect for the RCC7 branding efforts. So on PAGE 89 could we up date this to Greater Nashua.....



Looks like on Page 54 of 221 there is a major font/font size change at paragraph 3 probably due to a cut-n-paste



Page 89 Original -

Now, New Hampshire is divided into 9 Community Transportation Regions.

Suggested correction -

Currently, New Hampshire is divided into 8 Community Transportation Regions.

Page 89 Original -

The RCC continues to support the Souhegan Valley Transportation Collaborative (SVTC) in their request for 5310 Purchase of Services and Formula funds. SVTC uses these funds to purchase demand response paratransit service from the NTS and provide mobility management and planning assistance to its passengers and member communities.

Suggested correction and updates -

The RCC continues to support the collaboration between the Nashua Transit System (NTS) and the Souhegan Valley Transportation Collaborative (SVTC) to provide handicapped accessible "dial-a-ride" style service to residents in Amherst, Brookline, Hollis, Milford, Mont Vernon and Wilton. 5310 (RCC) funding is used to purchase dispatch, driver and vehicles services from NTS with SVTC providing the locally required matching funds primarily through municipal appropriations.

The RCC supports the continued revitalization of The Caregivers volunteer driver program in the Greater Nashua area. 5310 (RCC) funding is used to support the engagement of new volunteer drivers to serve this program provided through Catholic Charities NH.

The RCC seeks to identify new, alternative solutions for the gaps in service that exist within the region where transportation options do not exist or are insufficient to meet community needs.

Page 89 Original -

The RCC Transportation Directory is a list of transportation services in the region

Suggested change -

The RCC Transportation Directory includes a printable list of transportation services in the region and an online interactive directory.

Page 89 Original - There is a "missing in this section – it looks like you are quoting some section of some other plan

The Locally Coordinated Transportation Plan was updated in 2020. Federal transit law requires that projects selected for funding under the Enhanced Mobility for Individuals and Individuals with Disabilities (Section 5310) Program be "included in a locally developed, coordinated public transit-human services transportation plan, and that the plan be "developed and approved through a process that included participation by seniors, individuals with disabilities, representatives of public, private, and nonprofit transportation and human services providers and other members of the public utilizing transportation services. These coordinated plans identify the transportation needs of individuals with disabilities, older adults, and people with low incomes, provide strategies for meeting these needs, and prioritize transportation services for funding and implementation.

Page 89 Original -

The RCC continues to monitor statewide activities through regular attendance at SCC meetings

Suggested change -

The RCC continues to monitor statewide activities through regular attendance at SCC meetings and actively supports the implementation of the NH Statewide Mobility Management Network initiated by the SCC and NHDOT.

Page 90 Original – Move this section to or right after the RCC section? – header should be black bolded and underlined like the Regional Coordination Council as subsections of Community Transportation (?)

Mobility Management Services

The RCC will continue to support and enhance regional and inter-regional mobility management services. Mobility management is an innovative approach for managing and delivering coordinated transportation services to customers, including older adults, people with disabilities, and individuals with lower incomes. Mobility management focuses on meeting individual customer needs through a wide range of transportation options and service providers. It also focuses on coordinating these services and providers to achieve a more efficient transportation service delivery system. Mobility managers promote, broker, and serve as:

• Policy coordinators - They promote land use policies that favor transit-oriented development, public transportation, and pedestrian access.

• Operations service brokers - They broker transportation services among all customer groups, service providers, and funding agencies.

• Customer travel navigators - They serve as travel navigators with human service agencies and or workforce centers that coordinate the travel and trip planning needs of individuals who receive human service program assistance.

Suggested change -

Mobility Management Services

The RCC continues to support and enhance regional and inter-regional mobility management services. Mobility management is an innovative passenger-centered transportation strategy for managing and delivering coordinated community transportation services that focuses on meeting individual consumer needs and on addressing changing community needs by collaboratively developing and coordinating community transportation services to achieve an efficient, sustainable transportation service delivery system across various geographic areas.

Efforts to develop and implement a formal statewide network of full-time mobility mangers date back to 2019. At that time some regions and some transit agencies were providing mobility management services. As envisioned by the SCC and NHDOT, the NH Statewide Mobility Management Network is a transportation strategy to achieve an integrated system of safe, reliable, and sustainable transportation options that allow residents to maintain independence and participate in work and community life no matter their age or ability.

{The following section would be an optional inclusion}

The NH Statewide Mobility Management Network includes funding to support a mobility manger in each of the eight community transportation regions. As outlined in the New Hampshire Statewide Mobility Management Network: A Blueprint for Implementation (Adopted 2-3-22), the guiding principles for mobility managers are:

- 1. Mobility management is a transportation strategy that prioritizes customer needs, and the meeting of these needs through the coordinated use of a variety of providers.
- 2. Mobility management is an evolving concept that aims to improve specialized transportation, particularly for veterans, older adults, people with disabilities, and individuals with lower incomes.
- 3. Mobility management looks beyond a single transportation service or solution to a "family of services" philosophy that can offer a wide range of services and options to meet an equally wide array of community demographics and needs.
- 4. Mobility Management begins with a community vision in which the entire transportation network including public transit, private operators, cycling and walking, and volunteer drivers work together with customers, planners, and stakeholders to deliver coordinated transportation options that best meet a community's needs
- 5. Mobility management requires a customized approach, meaning no two programs are exactly alike, even though they share a core philosophy, desired outcomes and require partnerships across the spectrum.

Page 90 Original – No other service besides NTS is pulled out (i.e. the VDPs = Caregivers, CVTC, or Greater Salem Caregivers nor the Pelham Seniors Bus) so I am not clear on why SVR/SVTC is called out in this document – also 2nd paragraph is way out of date

Souhegan Valley Transportation Collaborative

The Souhegan Valley Transportation Collaborative (SVTC) operates Souhegan Valley Rides, a dial-aride demand response bus service in the western part of the region. Souhegan Valley Rides serves the towns of Amherst, Brookline, Hollis, Milford, Mont Vernon, and Wilton. The service operates Monday through Friday between the hours of 8am and 6pm. The buses, drivers, and call center operations for Souhegan Valley Rides are subcontracted from the NTS.

Milford residents comprise the largest share accounting for 73% of all rides. The service is sustained through fares, municipal appropriations, and federal funding. The service is popular; in Milford, the only town in which residents vote directly on funding of the service, 78% of voters approved spending for Souhegan Valley Rides in Milford.

Possibly delete this section and photo since the service is mentioned under the RCC section OR include correction/update as follows -

Souhegan Valley Transportation Collaborative

The Souhegan Valley Transportation Collaborative (SVTC) is a grassroots organization of community representatives and other stakeholders concerned about transportation options in the Souhegan

Valley. In 2008, SVTC implemented the Souhegan Valley Rides "dial-a-ride" style service in collaboration with the Nashua Transit System (NTS). Initially covering four towns, the service has grown to include six communities - Amherst, Brookline, Hollis, Milford, Mont Vernon, and Wilton. All participating communities are guaranteed representation on the SVTC Board of Directors and a voice in guiding the development of this regional transportation service. SVTC's efforts represent proactive planning to provide community transit services that meet a current need and help our hometowns establish the groundwork to meet future needs. The Souhegan Valley Rides service operates Monday through Friday between the hours of 8am and 6pm. Rides are available within the six towns and to and from Nashua. The handicapped accessible buses, the drivers, and the call center operations are contracted from the NTS.



Page 83 under Paratransit - "NTS also contracts with Hudson and Merrimack to provide weekday paratransit service."

Would it be more accurate to say – The Towns of Hudson and Merrimack contract with NTS to provide weekday paratransit service.

Paratransit Service NTS provides paratransit services for Seniors aged 65 and older in addition to Complementary Paratransit Service to Nashua residents located within ½ miles of all fixed routes. Those wishing to utilize paratransit service must fill out an application to ensure applicants qualify for the program. NTS also contracts with Hudson and Merrimack to provide weekday paratransit service.
<u>NTS Fleet</u> NTS operates a fleet of 12 buses and 10 paratransit vans, all of which are 100% ADA accessible. All NTS fixed route buses are equipped with front exterior bike racks allowing bicycle riders to utilize the service with minimal disruption. As the bus fleet is replaced, NTS will continue to purchase green vehicles that are powered by Compressed Natural Gas (CNG), Hybrid Electric, or Electric. NTS currently operates 10 CNG-fueled buses and 2 Hybrid Electric buses. The city
Page 83 of 221

Page 122 - Original- incorrect statement and not consistent with other NTS I earlier in the doc

Currently, approximately 58 percent of residents in the Nashua Region do not enjoy access to fixedroute transit, which does not extend beyond Nashua's boundaries. The three most promising candidates for extended transit service in the region are Hudson, Merrimack, and Milford. Hudson

has been previously identified by NRPC's Transit Plan for the Nashua Region as having the highest overall need for transit service.

Suggested correction -

Currently, approximately 58 percent of residents in the Nashua Region do not enjoy access to fixedroute transit. With the exception of the Route 2A service along Rte 101A to the Walmart Superstore in Amherst, NTS fixed route service does not extend beyond Nashua's boundaries. The three most promising candidates for extended transit service in the region are Hudson, Merrimack, and Milford. Hudson has been previously identified by NRPC's Transit Plan for the Nashua Region as having the highest overall need for transit service



Nashua Region Complete Streets Advisory Committee Meeting Notes - DRAFT 12/5/2023 NRPC Conference Room

Attendees:

Levent Akinci, City of Nashua	Tyrel Borowitz, NRPC (via Zoom)
Chris Buchanan, Town of Amherst (via Zoom)	Ned Connell, NRPC
Nelson Disco, Town of Merrimack	Emma Rearick, NRPC
Betsy Gamrat, Nashua (via Zoom)	
Rick Katzenberg, Town of Amherst (via Zoom)	
Beth Scaer (via Zoom)	

Call to Order and Introductions

N. Connell called the meeting to order at 12:03pm and attendees introduced themselves.

2023-2050 Long-Range Metropolitan Transportation Plan (MTP)

- N. Connell gave a PowerPoint presentation on the MTP process to date and asked for comments.
- R. Katzenberg: some page numbers are missing, should be more focus on health.
- B. Gamrat: should include emissions and noise, too.
- C. Buchanan:

1) the LTS is a flawed metric because it considers posted speed limit of vehicles and not actual speeds, which inflates bikeability and walkability

2) The biggest potential for Nashua is to work towards the Souhegan Valley Rail Trail (rail with trail), especially since CSX recently acquired the relevant rail.

- 3) Page 112, the Amherst multimodal path and Baboosic Greenway are the same project.
- 4) NH101A he proposes a sidepath instead of bike lanes.
- 5) Replace Amherst side path name with Baboosic Greenway.
- B. Gamrat (via chat): would like to see a reduction in lanes for motor vehicles on 101A.
- R. Katzenberg: This plan is aspirational how do we get money to pay for these projects?
- B. Gamrat: there should be a weight-based vehicle tax.

C. Buchanan: 101A is currently a stroad (neither street nor road). He would like to see it converted to a commercial boulevard, which would have to happen in phases. Two lanes are adequate, and NAACTO has good guidelines for converting stroads into effective infrastructure.

R. Katzenberg: At a minimum, synchronizing the traffic lights would help.

C. Buchanan: He doesn't support putting more money into a vehicle facility when the ultimate solution is to remove the conflict between local traffic and through traffic.

Complete streets guidelines

N. Connell shared that NRPC is working on complete street guidelines as a resource for the region's communities. He shared the Montgomery County Maryland guide as an example and asked for input.C. Buchanan: In about 2020 this group worked on very similar guidelines. Brian Groth from Hudson, Matt Waitkins from NRPC and he worked on the project.

E. Rearick: what happened to the guidelines?

C. Buchanan: Not sure. The guidelines were created according to systematic safety principles and vehicle speeds. Different treatments for different types of streets. Sidepaths should be prioritized for safety, especially for children. He does not recommend bike lanes because they are not safe.

B. Gamrat (via chat): Private owned vehicles are inherently unsustainable. We really need to rework everything to be public and active transit.

Bike and Ped Data Collection

N. Connell: NRPC has completed about 32 bike/ped traffic counts in the last year. He shared an example of a bike/ped traffic count report from the Heritage Trail in Nashua.

C. Buchanan: the town of Amherst has two permanent bike/ped counters and Vince Noga was the administrator who could access the data. Vince has since left NRPC.

T. Borowitz: he will connect with C. Buchanan to access the data.

T. Borowitz: NRPC has also acquired camera-based counters used for vehicle traffic counts and progress is being made for those to work for bicyclists and pedestrians. The camera-based counters will give more flexibility to count at sidewalks without posts located in between the sidewalk and the road.

Statewide, Regional, Local Updates

Statewide: N. Connell said that NHDOT is starting to work on a potential complete streets policy. E. Rearick: the final State Bike and Ped plan was finally released in August.

Local: N. Disco: groundbreaking finally happened on the Souhegan River Hiking Trail in Merrimack, 9 years after funding! A contractor is actively working there, and the project could be finished as soon as June.

L. Akinci: The Livable Nashua planning process is underway. Right now, they are working on draft actions for the plan and collecting public feedback. There are some potential items in it related to complete streets.

C. Buchanan: NHDOT has offered to move forward with the Baboosic Greenway segment North 02. The Amherst Board of Selectmen must vote to move forward on December 18. This segment is from Baboosic Road to Walnut Hill Road and would take four years to construct. They have also had several private land acquisitions or easement donations.

Other Business

There was no other business.

Adjourn:

The meeting was adjourned shortly after 1pm.

Next Meeting

March 5, 2024 12:00 pm.

NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
				This bridge		"not a good							
			Risks of cycling	should be one		idea" is an							
			in winter:	lane in each	reducing	inadequate							
				direction for	throughput for	explanation.							
		Crossing the	https://bikmo.co	motor vehicles	cars is not a	Cars are the							
		bridge is quite	m/uk/blog/are-	and one lane in	good idea.	least efficient							
		an experience on	you-aware-of-	each direction	Adding bike	way to transport							
		a bicycle. Some	the-hidden-risks-	for bikes,	capacity should	people. Bikes are							
Biking Comment		could be made	winter/	nedestrians	efficiency	efficient							
biking comment		could be made.	wincery	pedestrians.	enciency	encient.							
		Old trolly track											
		land that could											
		be used for new											
		bike path to											
		encircle Hudson											
		and Nashua. This											
Biking Comment		Benson's Park											
biking comment		Denson s r ark											
			From North										
			Nashua we										
			sometimes ride										
		Would be	through Mine										
		excellent to	Falls then Shore										
		Connect Nashua	Dr to 111. But										
		with downtown	hike-unfriendly										
		and/or Mine	111 for a bit to										
Biking Comment	Gilson Rd	Falls Park	get to Gilson Rd.										
_													
		Main street at											
		the very least											
		should have a											
		proper bike lane											
		in both											
		top of library hill											
		is especially											
Biking Comment		dangerous.											



NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Biking Comment		Is there a way to make biking on this stretch of DW Hwy safer? Add in a bike lane?	What if they made it bikes only? That would help with congestion as well.	Bicycles lanes must not interfere with or reduce vehicle traffic. Bicycle lanes shared with vehicle lanes are dangerous. In addition they reduce road way capacity	Danger of Bike Lanes: https://www.for bes.com/sites/di anafurchtgott- roth/2022/09/08 /bike-lanes-dont- make-cycling- safe/?sh=32f1ac4 ca8e9	Bike lane would be nice but a wide shoulder is mandatory. This stretch of DW is has NO SHOULDER and a granite curb. When the bikes take the travel lane it triggers the entitled * to road rage. There is an acceptable shoulder North of Exit 10 and South from Manchester st.							
Biking Comment		This light is often a dead red for cars and completely useless for bikes turning left.											
Biking Comment	FEET, Exit 5 Off Ramp to Simon St	When I bike to work this spot is especially dangerous. Is there any discussion about making the Everett Turnpike more bike friendly?	I'm pretty sure you're not supposed to be biking on the Everett Turnpike.	It's public property don't tell me what I can't do. My taxes pay for this.	Biking is not practical means of transport in winter. Driving is an important means for people to get to work https://www.wel ovecycling.com/ wide/2020/12/1 8/be-aware-of- these-winter- cycling-risks/	Biking is fine in the winter. It would be even better if the roads were cleared of wasteful motor vehicles.	motor vehicles are needed for deliveries and for commuting to work in four season New England Weather	Okay - cars can be used in the icky season. That's December 21-January 3rd					

NRPC 2023-2050 MTP	Crowd Source	Comments	Report									
What kind of												
comment are Street/Corrido												
you leaving? (Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Riking Commont	This is a dangerous pinch point where the shoulder disappears and cars are speeding. eliminate the striped yellow island in the middle of the road that created the problem											
bining comment	problem.											
	Concord St should have a protected bicycle	Bike lanes are dangerous https://www.for bes.com/sites/di anafurchtgott- roth/2022/09/08 /bike-lanes-dont- make-cycling- safe/?sh=32f1ac4	Bike lanes are dangerous because drivers are impatient, distracted, bored	the Physics involved are what make bicycles dangerous. Roads must carry trucks that deliver all of the goods and services needed for society. Trucks weigh many tons and have tires which provide a large high friction interface to roads. Bikes provide no such safety both in contact patch of the tires and in physical crumple zones needed to protect travelers. Bikes will always be unsafe compared to cars regardless of "driver	The request was for a protected bike lane which takes bikes off							

NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		The proposed											
		Circumferential											
		Highway aka											
		Hudson Blvd											
		land could be											
		stated for a											
		gorgeous rail											
		Hudsons center											
		(and sidewalks											
		from Nashua) to											
		south Hudson's											
		commercial											
		district. See											
		Hudson's latest											
		Master Plan for											
		more detail or											
		request a											
		proposed bike											
		path solution											
		from Hudson											
Biking Comment		town hall.											

NRPC 2023-	PC 2023-2050 MTP Crowd Source Comments Report												
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
					who says bike								
					lanes should not								
					reduce vehicle								
					traffic? Is an oil								
					vou to post that								
							Roads are built						
					What is your		for cars to						
					alternative for		facilitate guick						
					bikes? I agree		travel for						
					the sharrows are		residents. Cars						
					less than ideal		provide safe and						
					but least raise		comfortable						
					the awareness		freedom of	"Safe and					
					that bikes are		movement.	comfortable					
					allowed to be on		Busses integrate	freedom of					
			Discusion la com		the road as	Bicycles are	better than	movement"?					
			Bicycles lanes		some seem to	venicles and	bicycles with the	the leading					
			interfere with or	Danger of hiko	not	safe travel on all	rapid time	causes of			It is unwise to		
			reduce vehicle	lanes:	A green strine on	public roadways	efficient travel	disability and			push for hikes in		
			traffic. Bicycle	https://www.for	the road is not a	paone roddways.	Bikes should not	death in the US			car lanes and	Excellent point	
			lanes shared	bes.com/sites/di	proper bike lane	The danger is	be allowed in	That's a high			then be	Main Street	
			with vehicle	anafurchtgott-	any more than	from drivers to	travel lanes since	price to pay for	"Bikes should		surprised and	should be open	
			lanes are	roth/2022/09/08	the sharrows. It	bicycle riders.	that reduces the	'freedom' - the	not be allowed	separate bike	upset that there	to people and	
			dangerous. In	/bike-lanes-dont-	should be		roads ability to	'freedom' to pay	in travel lanes"	lanes but not at	are more car	emergency	
			addition they	make-cycling-	separated by	Cars and SUVs	move residents	for a car to get	totally agree, we	the expense of	bicycle	vehicles only.	
		Protected bicycle	reduce road way	safe/?sh=32f1ac4	raised pavement	waste space. Not	to their	to work to pay	need separate	car and truck	accidents.	Cars are too	
Biking Comment		lane on Main St	capacity	ca8e9	or bollads.	bikes.	destinations	for the car.	bike lanes.	transit	Common sense.	dangerous.	

										1			
NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		T I I. I. I.											
		The drive-thru											
		permit for this											
		Dunkin should											
		be revoked											
		immediately											
		before someone											
		is killed. There is											
		not enough											
		asphalt to											
		accommodate											
		the number of											
		people who											
		want to use the											
		drive-thru, so											
		they park on the											
		shoulder which											
		is the only space											
		pedestrians,											
		bicycles and											
		scooters can use.											
		It is negligence											
		to continue to											
		allow the drive-											
		thru to operate.											
		When the permit											
		was issued,											
		there were											
		fewer cars.											
	471 Amherst	Times have											
Biking Comment	Street - DD	changed.											

NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Biking Comment		There should be no parking on either side of the road here because it is unsafe for bikes and scooters to be forced to use the roadway with drivers	Bikes and scooters are unsafe and should not share the road with cars since this causes accidents and reduces the throughput of roads. Busses are a more appropriate solution. Where would the cars park?	Public parking is theft	cars are the cause of the accidents, not the bikes and pedestrians. stop victim blaming.	Cars are freedom They are the only safe way to travel	The freedom to pay for a car so you can go to work to pay for the car. You're working for the fossil fuel industry. Cars are one of the leading causes of death in the US. No freedom, no safety. Imprisoning yourself physically and financially.						
Biking Comment	101A / FE Tpk Exit 7	Ramps are dangerous for pedestrians and bikes. These need to be changed to stop signs and intersections with right angles.	Is this suggesting that traffic on Rt 101A should now stop even though an overpass exists to facilitate the efficient flow of traffic? That seems likely to create traffic backups for 4 wheeled vehicles on 101A.	Exactly Why does someone who drives a motor vehicle deserve priority over someone that does not?									

NRPC 2023-	2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
				Article on Bike									
				Safety:									
				"There are									
				clearly bicycling									
				safety and									
				popularity									
				"gaps" between									
				(and within)									
				Europe and									
				North America									
				[28]. In addition,									
				important safety									
				gan between									
				cyclists and									
				other transport									
				modes:									
				estimates from									
				both continents									
				suggest that									
				cyclists are seven									
				to 70 times more									
				likely to be									
				injured, per trip									
			Bicycles lanes	or per kilometer									
			must not	traveled, than									
			interfere with or	car occupants"									
			reduce vehicle										
			traffic. Bicycle	Reynolds, C.C.,									
			lanes shared	Harris, M.A.,	The earth is	the statistics you							
			with vehicle	Teschke, K. et al.	literally burning	mentioned							
			lanes are	The Impact of	due to fossil fuels	should be a							
		Protoctod bicyclo	addition they	infrastructure on	But lot's								
		lane on	reduce road way	hicycling injuries	complain about	improve the							
Biking Comment		Manchester St	capacity	and crashes: a	bicycles	situation.							
					,								
		This intersection											
		is very											
		dangerous for											
		bicycles,											
		scooters and											
		pedestrians,											
		particularly											
		when											
		approached											
	100 1-	from Nashua											
	102 and Ferry	with intent to											
BIKING COMMENT	Street - Hudson	turn left.											

NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of comment are you leaving?	Street/Corridor (Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		Bike improvements along the Amherst Street corridor - it is a key/critical corridor for any hope of a good cycling plan in		Bicycles lanes must not interfere with or reduce vehicle traffic. Bicycle lanes shared with vehicle lanes are dangerous. In addition they reduce road way	Danger of Bike Lanes: https://www.for bes.com/sites/di anafurchtgott- roth/2022/09/08 /bike-lanes-dont- make-cycling- safe/?sh=32f1ac4	It is interesting you spam this same comment against bike lanes in the places where we do not have bike lanes but badly need them. Good job on your analysis of our transportation	Cars do not scale. They are the most wasteful way to transport people. The majority of energy is spent moving the vehicle, not the person. The only efficient way to move people is public transportation and micro mobility like scooters, walking and	Busses are safer than bikes Why not recommend them? Bike share programs have been going bankrupt because bikes are not useful in winter and are	Bikes are fine in	l do not ride my bike in rain or snow. uncomfortable	That you don't ride a bike during the winter doesn't mean there should be no provisions for other people to use bicycles or scooters to travel safely along public	I ride all year	limited govt funding must be spent efficiently. Paying for bikes in winter is not
Biking Comment	Amherst Street	Nashua This is bad on a bike or walking. There's no buttons on one of the the islands.	Ditto	capacity	ca8e9	deficiencies.	bicycles.	dangerous	winter	and unsafe	routes.	round.	good use of \$\$\$
Biking Comment		Old trolly track land that could be used for new bike path to encircle Hudson and Nashua. This path goes behind the cemetery and onto Bensons Park											
Biking Comment		Manchester st is very narrow with no shoulder on a winding road where people often speed. it is very dangerous for bikes especially when cars try to pass on the blind curves.											

Sub Comment12
Yes - we should only build bike
nfrastructure in the summer

			-	_									
NRPC 2023	<u>-2050 MTP C</u>	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
	DW Highway	DW Highway											
	from FF Tnk Fxit	needs safe snace											
	3 to the MA	for nedestrians											
Riking Commont	bordor	and neeplo											
Diking Comment	Doruer							<u> </u>					
		No access for											
		those that use											
		mobility aids. No											
		sidewalk. No											
		ramps. They											
		must use a road											
Disability Access	101A/Townsend	with a 40mph											
Comment	w	speed limit.											
		Tolophono polo											
		relephone pole											
		right in the											
		middle of the											
		sidewalk -											
		cannot pass in											
		wheel chair or											
		with stroller.											
		Need to go into											
Disability Access	Meeting house	the roadway on	This is										
Comment	hill rd sidewalk	a steep hill.	embarassing										
		More											
		roundabouts											
		They are more											
		officient											
		enicient,											
		cheaper, and											
		100 times less											
		annoying than											
Driving Comment	t	traffic lights.											



NRPC 2023-	RPC 2023-2050 MTP Crowd Source Comments Report												
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
						"All available							
						lanes" are in use.							
				The ushieles are		It's still a parking							
				obstructions An		moro lanos							
				SLIV takes over		there will be							
				100 square feet.		more traffic. This							
				and there is		is called							
				usually only one		"Induced							
				person in it. A		Demand". It's							
				person without a		proven. You							
				car needs 9		could pave the							
				square feet,		entire city and							
				1/10 of the		people would							
		All Lanes of Main		space. The same		still be sitting in							
		St need to be		piece of asphalt	Commuters	traffic.							
		open to allow		can hold 10 cars	need to travel	Current the							
				or 100 people.	that road to	Except the							
		Obstructions and		City center	husinesses in	hicycles They'd							
		planters in		should be a	town. All	be moving right							
		roadway should	they are	destination. not	available lanes	along. Smiling.							
Driving Comment	Main St	be removed	removed now.	a throughway.	should be in use	Smug.							
						_							
		Lot of											
		pedestrians											
		along the lake,											
		boat launch,											
		neighborhood											
		with no											
		Reduce speed											
	Mason Rd @	limit up to											
Driving Comment	Potanipo Hill Rd	Cleveland Hill Rd.											



NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of				· ·									
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		This area is very dangerous. I have almost been struck by vehicles coming south on Rt 13, often at high rates of speed. Turning off of purgatory rd or Amherst rd are dangerous. Please clear the line of sight, or add lights or											
Driving Comment		flashing yellow.											
Driving Comment	Rt 13 @ S Main : St	This speed limit is wayyyy too fast for all of the cars coming in and out. 50mph is ridiculous. There are so many crashes here every single year!	Agreed! The 35mph zone should extend north and south!	35 MPH not needed near Bingham, but definitely needed by liquor store/South Main, by Chrysanthi's, and by Melendy Pond.	This whole intersection is a deathtrap	Speed limits are best set at 80th percentile of traffic	Speed limits should be set by the condition and state of the road, not based on impatient drivers						
Driving Comment	Nashua Street	The three lights on Nashua Street in front of the shopping plazas could be synchronized for better flow.											
Driving Comment		Foliage/plants make it very difficult to see west towards the High School and properly see traffic driving towards vou.											

NRPC 2023-	2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		The flashing yellow light on Rte. 113 needs to be a flashing red light. Traffic does not slow down to the posted 35mph limit and cars tailgate and honk and flash and aren't paying attention at all. Visibility at this intersection is poor with the hill on Mason Rd. Posting this also as a walking	Traffic on RT 13 should not be stopped by the	Drivers should be stopped to ensure the safety of pedestrians. Applying the brake for a moment while sitting in a metal box is part of									
Driving Comment	Rt 13 @ N	hazard. This speed limit is too fast for a preschool, multiple businesses, and the busy transfer station road (packed on Tues, Thurs, and Sat especially). 50mph means people are going 55-60 with cars going in and out all of the time. Too fast and dangerous. Extend the 35 mph zone from N Mason Rd down to the MA	light There are pedestrians and bikers on this	driving. 35 MPH definitely needed by Chrysanthi's and liquor store, not so much by	US DOT recommends setting the speed limit to the 85th percentile of free flowing	So if free flowing traffic exceeds the speed limit, the limit will be increased until it's 120mph. The 85% recommendation has been proven							

NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
			Maybe a shuttle service with a stop near the										
			Milford Oval that drops off at various sites in										
			Amherst and Nashua along										
		Should have a	101A eastbound										
		roundabout to	as far as Exit 7W										
		maintain a	with nonstop										
	Amherst St @	flow instead of	return to the										
Driving Comment	Mont Vernon	stop and go	Milford Oval.										
		This X shaped intersection is											
		terrible. It											
		should be a	This is a										
		crossing in blind	historical town										
Driving Comment	Center of Hollis	spots	square										
		h	A second all have b										
		neavy traffic	A roundabout										
		during morning	here. I know it is										
		commute,	complicated										
		causes backup	with the train										
		due to no right	crossing.										
Driving Comment		long enough	problem here										
2g comient													
		Synchronize the											
		corridor's many		Europe managed									
		signals to avoid	More huses	to synchronize									
		traffic - helps	More Suses.	early 70s, no									
		reduce	crosswalks.	reason at all that									
		congestion and	More sidewalks.	NH cannot do	They are								
Driving Comment	Amherst Street	emissions	Wider shoulders.	the same today.	synchronized	No changes then							
		Need lower			Free flouir								
		of Brookline's			implies no speed								
		busiest			limit. Drivers								
		establishments		Speed limits are	want to drive								
		with a lot of kids		best set to the	freely and never								
		and families	Voc. the visibility	85th percentile	slow down. The								
	Rt 13 @ Sundae	50mph zone. So	with curve and	traffic. Per US	proven								
Driving Comment	Drive	dangerous!	hill is challenging.	DOT	dangerous.								



NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of				· ·									
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		Light change											
		here is a mess,											
		changes too fast											
		often times											
		leaving cars											
		heading past											
		Boston Post											
		Road waiting for											
Driving Comment		2 light cycles.											
		Too many											
	Marana Dal	people drive too											
Driving Comment	Nason Rd	fast here.											
	Rt 13 onto Uld	T											
Driving Comment	IVIIITORA KA	Turn lane needed											
		This area poods											
		a street light											
		lt's nico to have											
		a turning lane											
		but nulling out											
	Francestown Tnk	of the Turnnike											
	Mont Vernon	at night is											
Driving Comment	NH at Route 13	dangerous.											
Briving connent		uungerous.											
		The Route 101											
		stretch from											
		Wilton line to											
		Bedford is											
		EXTREMELY											
		dangerous with											
		numerous											
		deaths each											
		year. Please											
		redesign											
		roadway with at											
		least jersey											
		barriers to avoid											
		head on											
		collisions where											
		the combined											
		speeds are 80-											
		120 mph!											
		Tailgating and	Just make it a no										
		tender benders	passing zone the										
	D1 404	are much less	whole way to										
Driving Comment	кt. 101	life-threatening	Bedford.										
		Left turn light											
		uniy allows 3-4											
Driving Comment		into plaza											
Univing Comment		nito pldZd											



NRPC 2023-	2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		Install											
		emergency stop											
		lights here for											
		emergency											
		vehicles pulling	How was this										
		onto Rt 13 from	not part of the										
		the Safety	intersection										
	Rt 13 @ Milford	Complex next	remodel a few										
Driving Comment	St	door	years ago?										
		There should be											
		a sign here and											
		on the Milford											
		end of the road											
		to clarify it is not											
		a through-road.											
		Cars get stuck											
		out there											
		TOILOWING GPS's											
Driving Comment	Hutchinson Hill	every year.											



NRPC 2023-	2050 MTP C	rowd Source	Comments	Report									
What kind of				•							-		
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		From the last											
		light on Main											
		Street, going											
		around the											
		corner at the											
		Amborst Stroot											
		Annerst Street											
		at the school											
		the lanes going											
		west are											
		ever naved the											
		road there only											
		did half of the											
		east bound lane.											
		the west bound											
		lane is awful											
		there are big											
		holes and dips in											
		the road by the											
		curb, sink holes,											
		man holes, you											
		name it. you											
		can't avoid it											
		unless nobody is											
		in the left hand											
		lane next to you.											
		so you van											
		swerve to go											
		around them,											
		The whole top of											
	From Franklin	amherst Street											
	Street,End of	needs to be											
	main Street onto	redone. We have											
	Amherst Street	enough man											
Driving Comment	up to the School.	hole covers, pot											
				I am at this									
				intersection									
				every day. the									
				problem occurs									
		Undrivable when		when Everett is									
		traffic from the		is blocked or DW									
		Everett furnpike		North backs up									
		meets DWH.		from merrimack.	C 1								
		Intersection	A	The light isn't	6 lanes? Induced								
		requires new	As a traffic	the problem	demand. As a								
	Create Ch.	traffic light	engineer I	aithough I	numan I								
	Greeley Street	management or	recommend they	wouldn't mind	recommend they								
		routos	lanes	much shorter	intersection								
Unving Comment	типріке	ioutes.	idiles.	cycles.	intersection.								

NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of	1												
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Electric Vehicle Infrastructure Comment	Region	EBikes are rapidly replacing cars. They are speed limited to 20-27mph - which is slower than most drivers are willing to travel. EBikes aren't allowed on sidewalks - the only solution is to provide space on the roads. This is a regional issue - every major corridor need to accommodate EBikes and eScooters.	always been true for non e bikes	Cars transport passengers at greater speed and comfort. They should not be throttled by ebikes. Ebikes belong with other bikes on bike only paths away from cars.	Cars are the least efficient way to move people. Most of the energy used moves the couch that is so pleasant to sit in as you drive climate change faster. Today's children will die of climate change, not old age.								
Electric Vehicle Infrastructure Comment	Kegion	Someone should buy an electric car and leave it here for me	Me, too!	I'm holding out for hydrogen fuel cell technology to take off, but thanks for the suggestion.	Electric cars are only to save the car makers, not the planet. Private vehicles are the least efficient transportation. The only solution is efficient public transportation and walking, biking and scooters. The earth is dying.								
Electric Vehicle Infrastructure Comment		Charging station location would be nice here											



NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		Main Street from											
		Kinsley to Lake is											
		too narrow to											
		safely											
		accommodate											
		the volume the											
		volume of traffic											
		and Bicycles.											
		Telephone/Powe											
		r poles installed											
		in the curb											
General Ideas		exacerbate this											
Comment		problem.											
General Ideas		Improve Safety											
Comment	Page RD/NH102	of Intersection											
		The trail to											
		Henry Hanger is											
		taking way too											
		long to											
		complete. It can											
		relieve the											
		dangerous hike											
		and nedestrian											
		traffic on 111											
		and improve											
General Ideas		access to the											
Comment		downtown											
comment		downtown.											
		Douglutionany											
		Revolutionary											
		Sile - Home and	For dotails on										
		Captain Colburn	this sites										
		which is now	https://hudsoisell										
		which is now	iancoformeror i										
		Conconvetion	blodovolonmost										
		Lond but should	home blas (2021)	,									
		be targeted as a	10me.blog/2021/										
		be targeted as a	site on										
		nistoric site with	site-on-										
Conoral Ideas		unkoon and	highway right of										
General Ideas		upkeep and	nignway-right-of-										
comment	1	signage.	way/										



NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
General Ideas	Wet Hollis/Kinsley	West Hollis and Kinsley Street need to be reconfigured back into two-	I disagree. they could use a "road diet" so they aren't a two lane drag strip. Raised or separated bike lane, travel lane, and parking lane	Both should remain one way, with a single lane for motor vehicles and a full lane for bicycles and	I disagree no reductions should be made to 4 wheel vehicle capacity. we need to be able to drive to work quickly and to get truck	Oh yes! Let's drive to work quickly and have crap we don't need delivered promptly. Avarice. The	Not recommended to reduce car	"Not recommended to reduce car and truck lanes" - no justification? Just a repetition of an outdated opinion Things are already changing. EBike sales are replacing car sales. People are					
Comment	Street	way streets.	would be ideal	scooters	deliveries quickly	earth is dving.	and truck lanes	sick of cars.					
General Ideas Comment	All towns.	It is interesting to see the whole picture here of the region that NRPC covers.											
General Ideas Comment		I made a map of all motor vehicle vs person incidents of the last few years. It is obvious to see where we need to do better to reduce injuries and death. https://www.goo gle.com/maps/d/ viewer?mid=1P7 YosPQsNybgERLd eSr2mJoI86rrDpA ≪=42.76137654 918425%2C- 71.48556506628 21&z=13											


NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		Fix the train											
		tracks at this											
		location - they											
		are really bad											
		and going to kill	May also pop		This was fixed a								
General Ideas	Main Street	some poor	some tires if this		couple weeks								
Comment	Nashua	bicyclist	gets worse	l agree	ago.								
		Airport should											
		be emergency											
		use only. The											
		noise pollution		The center of the									
		from private		city is not 'near									
		planes is harmful		an airport'.	General aviation	A convenience							
		and		Private planes	should not be	for a privileged							
		unnecessary. In		should be	banned!! The	few at the							
		addition they are	Buy a house near	banned. Every.	airport is not a	expense of							
General Ideas		terrible for the	an airport,	Single. One. Of.	disturbance, it is	everyone and							
Comment	Nashua Airport	environment.	expect noise.	Them.	a convenience	everything else							



NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
			https://www.tho										
			nups.//www.the										
			vironmont/2022/										
			nov/14/world										
			hobind on										
			olmost over										
			annost-every-										
			policy-required-										
			co-cut-carbon-										
			emissions-										
			research-finds										
			l don't										
		Wo'ro	understand why										
		roorronging the	humans are										
		dock chairs on	clinging to fossil										
		the Titanic by	fuels Why there										
		protonding thoro	is oven an NPPC										
		is any other	man that allows										
		solution than											
		ending the use	about asphalt										
		of fossil fuels in	about aspirait.										
		transportation	It's time to										
		We need to	change the way										
		change the way	we live										
		we live. Public	drastically.										
		transportation.											
		walking, biking.	NHDOT is still										
		scooters. People	widening the FE										
		lived for	turnpike - which										
		thousands of	doesn't reduce										
		years without	congestion and										
		cars, but now	everyone knows										
		they can't even	it.										
		buy a cup of											
General Ideas		coffee without	00000										
Comment	Everywhere	one. 💫	200										

NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
General Ideas Comment		Amherst Street from Broad to Main is too narrow to safely accommodate the volume of traffic and bicycles. Telephone/Powe r Poles in the curb make this situation even more dangerous	This should be reduced to a single lane in each direction for drivers with the remainder divided to be wider shoulders on both sides.	reducing 4 wheel traffic is not beneficial to residents who need to get to work or to get goods and services efficiently. bikes and scooters are not a solution to issues we face in NH	NH has many of the same transportation issues as the rest of the country and world. People have been forced into fossil fuel dependence by governments that do not provide alternatives. It is time to free people from cars. E-bikes are rapidly replacing many car trips, including commuting and cargo. Traffic flow will improve with fewer cars, even if there are fewer lanes. Cars are the problem, not the solution.								
Infrastructure		Hudson East-											
Infrastructure Comment		Road salt pollution - No curbs or drains in roadway which dump salt water from two large slopping road sides directly into the wetland New Bridge Crossing for											
Comment	NH3A	Litchfield											

Sub Comment12

NRPC 2023-	2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		With the new BJ's gas station, traffic backing up on DW Highway is dangerous. Something needs to be done to expand the turning lanes			Maybe think about the traffic impact before you build something like this - won't that intersection be great when Costco moves there bravo for								
Infrastructure	Daniel Webster	onto Adventure	Close the gas	Maybe think	thinking ahead								
Comment	Highway Nashua	Way.	station	next time?									
Infrastructure	Sagamore Bridge	NHDOT#41754 is still a terrible idea. So is the circumferential Highway.	This will bring more traffic. It's not a real solution to Hudson's traffic issue. This has been rejected by the voters of Hudson and the EPA in the past. Unabated development without studying the accumulated effect on all that traffic has been	Stop pushing this- it will not fix traffic in area. It opens missive areas of land to develepment increasing traffic the environmental issues are still here that stopped it back 20 years ago. This is nothing but a political wet dream. STOP PUSHING IT. Residents	For detailed research and information on this environmentally detrimental and politically driven project see the following page; https://hudsonall ianceforresponsi bledevelopment.								
Comment	- Fxit 2	Induced demand	a mistake	said no already	home blog/								
comment		induced demand.	a mistare.	salu no alleauy.	nome.blog/								



NRPC 2023	-2050 MTP C												
What kind of				· ·									
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
you leaving?	(Optional)	Comment 4-Way stop at this intersection is unnecessary and contributes to pollution (cars decelerating creating tire particulate and brake particulate, and cars accelerating creating tailpipe emissions) and general safety issues when nobody knows how to behave at a 4-way stop and who should have the right of way. Stop signs should be on Pinecrest, with no stop signs on	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Comment		Albuquerque	calms speeds	sign"									
Infrastructure Comment		Wouldn't it be awesome if we could work with the RR and have a trail from the Mass border to Manchester?											
Infrastructure		Build a											
Comment	Wason/Burns Hill	Roundabout											
Infrastructure Comment	Milford-Nashua railroad	Add non- vehicular corridor alongside the Milford-Nashua railroad											
Infrastructure Comment		Total redesign of these three intersections											

NRPC 2023-	2050 MTP C	rowd Source	Comments	Report										
What kind of														
comment are	Street/Corridor													
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11	Sub Comment12
		Congested and												
		confusing												
		intersection (at-												
		grade RR												
		crossings cause												
		buses to stop in												
Infrastructure		the middle of												
Comment		the intersection)												
		Wilton needs a												
		bus! Extend												
		service from												
		Walmart to the												
		Milford Market												
		Basket, then into		l agree										
		onto Burns Hill		is sorely needed										
		to Main Street,		for employees										
		back into Milford		getting to/from										
		via Elm St and	We need a bus	work, seniors										
		continuing back	from/to	who may not										
Transit Comment	101A, 101, 31	into Nashua.	Milford/Nashua	drive, etc.										
			What is micro											
			transit? Is this											
			referring to bike											
		Microtransit	shares? Is there											
		should be	an example of a											
		implemented in	microtransit											
		Nashua to	system in use											
Transit Course		improve	which is revenue											
Transit Comment		accessibility	neutral?											

NIDDC 2022		rowd Source	Commonte	Poport									
INTEC 2023		lowu source	comments	nepuli									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		We need a											
		handicap											
		accessible											
		transportation											
		from Morrimack											
		to Manchester											
		to access											
		medical											
		appointments. A											
		bus going											
		through Daniel											
		Webster Hwy											
		with one least											
		one stop at the											
		Elderly											
		Subsidized											
		Jubsiuizeu											
		wentworth											
		Place at 81											
		Coventry Court,											
		Merrimack. Any											
		stop on Daniel											
		Webster Hwy in											
		Merrimack going											
		to Manchester											
		from Nashua											
		would be need											
		for low income											
Transit Common	•	residents											
		residents.											
			There is a need										
			for a shuttle										
			from Nashua to										
		We need a bus	the Longwood										
		to/from	Medical area in										
Transit Comment	t	Nashua/Milford	Boston.										

NRPC 2023	-2050 MTP C	rowd Source	Comments	Report									
What kind of comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
				Public transportation is									
				a service, not a for profit									
			Trains never	intent is to support the									
			cover costs. Ridership has	greater good - to reduce the cost									
			across the country since	for more people by allowing									
			Covid. Not a good use of tax	them to get to work without									
			High Density development is	on private cars.									
		Pogional	pushed if a train station is built.	High density is good - it is a far									
Transit Comment	t	Passenger Rail Station	urban settings like Boston	use of land and resources.									
Transit Commont		Regional Passenger Rail											
		We need a shuttle from											
		Nashua to the Longwood											
Transit Comment	t	Boston.											
		There is a huge need to											
		transporation outside of Nashua that is											
Transit Comment	t	consistent and not grant based.											
		install a moving											
		sidewalk along Manchester											
Walking	Manchester	Street so that i do not need to											
Comment	Street	office											
Comment	NH102	sidewalks											

NRPC 2023-	-2050 MTP C	rowd Source	Comments	Report									
What kind of				·									
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		Traffic backs up											
		onto the bridge.											
		intersection or											
Walking		add a second left											
Comment	NH111	turn lane.											
		There needs to											
		be more signage											
		for cars and a	Recommend no										
Walking	Route 13 and	crosswalk for	flashing lights or										
Comment	Mason Rd	pedestrians.	fluorescent signs										
		Sidewalk in											
		horrible											
		condition or											
	Amherst Street	missing											
Walking	Nashua west of	completely in											
Comment	FEEI	places											
		Hard to walk to											
		this nark very											
		busy and no safe											
Walking		way to cross the											
Comment		street											
		This crosswalk											
Walking		needs											
Comment	Factory/Chestnut	improvement.											
		71											
		There is NO											
		CRUSSWALK											
		very dangerous											
Walking		trying to cross 6											
Comment		lanes of traffic.											
		Crosswalk											
		needed. There is											
		connecting											
		sidewalk on											
		either side of the	Recommend no										
Walking		road and no way	flashing lights or	Crosswalk with									
Comment	Main St near Elm	to cross	fluorescent signs	warning lighta									



NRPC 2023-	2023-2050 MTP Crowd Source Comments Report												
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		There is a drain catch basin here that is over a foot below the road. I nearly broke my ankle falling off the road into it jumping out of the way of the cars (that go too fast for pedestrians here). It's a hazard that											
		should be											
Walking	Mason Rd across	corrected. I was											
Comment	from river	almost killed!											
Walking Comment		There is a need for safer walking options leading from the Town Center to the shopping district on Route 38. There are very few sidewalks and walking on Willow Street, Old Bridge Street or Main Street is dangerous.											
Walking Comment	101A/Thornton	No sidewalk. Boulders. No crosswalk across Thornton.											



-													
NRPC 2023	-2050 MTP C	rowd Source	Comments	Report									
What kind of													
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Walking		Needs a	Let's put in 2 just	The flashing yellow light on Rte. 113 needs to be a flashing red light. Traffic does not slow down to the posted 35mph limit and cars tailgate and honk and flash and aren't paying attention at all. Visibility at this intersection is poor with the hill on Mason Rd. Posting this also as a driving									
Comment Walking Comment	Rt 13 Rt 13 @ Mason Rd	crosswalk here. Crossing this highway is dangerous. Slow down Rt 13 traffic and make a crosswalk or traffic light please	to be safe.	hazard.									
Walking Comment	Mason Rd @ beach, boat launch, parking lot	Crosswalk needed from parking lot to beach with lighted signage											
Walking Comment	South Main Stree	This area needs crosswalks with lights. Too dangerous and at night time, crosswalks are difficult to see.											



NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of comment are you leaving?	Street/Corridor (Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
Walking Comment		Needs completed cross walks as pedestrians need to cross Meetinghouse then Bond then 130 to get from West to East of Town	Recommend no flashing lights or fluorescent signs	Crosswalks with bollards									
Walking	Charlotte Ave	Children should be able to walk or bike to school safely. Cars are one of the leading causes of death for children. Directly - with crashes and being struck and indirectly through asthma and obesity. Schools should not have drop- off/nick-un lines											
Walking Comment	Main Street	Open Main Street to people. Ban all non- emergency motor vehicle traffic. Should be a	Cars and trucks are the life blood of society. Deliveries and commuters depend on them. Cars are freedom	\$10,000 a year to operate a car is a burden. Commuting to a job in a car to pay for the car means you're working to make fossil fuel executives rich as they continue to destroy the earth.									
Walking Comment	Milford St @ Frances Rd	crosswalk on milford st at the town fields here	Recommend no flashing lights or fluorescent signs										



NRPC 2023-2050 MTP Crowd Source Comments Report													
What kind of				· ·									
comment are	Street/Corridor												
you leaving?	(Optional)	Comment	Sub Comment1	Sub Comment2	Sub Comment3	Sub Comment 4	Sub Comment5	Sub Comment6	Sub Comment7	Sub Comment8	Sub Comment9	Sub Comment10	Sub Comment11
		There needs to											
		be signage and a											
		crosswalk for											
		people crossing											
		Mason Rd. From											
		the Covered											
		Bridge/Trail/Parki	i										
Walking		ng lot to											
Comment	Mason Rd	Potanipo lake.											
Walking Comment	Main, Amherst, Concord intersection	Pedestrian signal should be on every light change, not every full cycle.	Through put for vehicle traffic is important	Through putting up with cars. Wake up. The earth is dying. Google "climate change"									
		Bike / Ped lane											
Walking		bridge over											
Comment		Nashua River											
	1		1					1	1				
Walking		Need for safer											
Comment		walking options.											
		Pinecrest sidewalk should be continued to											
Walking		Albuquerque											
Comment	Pinecrest Rd	Ave.											

