



**NASHUA REGIONAL
PLANNING COMMISSION
METROPOLITAN PLANNING
ORGANIZATION**

Fiscal Year 2022 – 2023

**Unified Planning
Work Program**

REVISED DRAFT

(excluding projects on the NHS and Tribal Transportation Program, Federal Land Transportation Program and Federal Lands Access Program) and the programming of Surface Transportation Block Grant program funds and related set-aside funds for Transportation Alternatives. In addition, the Nashua MPO must maintain a Congestion Management Process to ensure that funding is available for projects proposed to increase capacity.

The UPWP was developed by the Nashua Regional Planning Commission and MPO as a joint responsibility with the Nashua Transit System (NTS) and NHDOT. Full cooperation was maintained with the municipalities, recognizing the key role of local elected officials in establishing funding priorities within the urban area and with state transportation planning and implementing agencies.

The lead responsibility for developing the UPWP lies with the NRPC, which has three major responsibilities: 1) NRPC is the designated MPO for the Nashua Metropolitan Planning Area, by letter of the Governor of New Hampshire and is responsible as the lead transportation planning organization for the Nashua Urbanized Area; 2) NRPC is the official area-wide planning agency for the City of Nashua and twelve surrounding New Hampshire towns; 3) NRPC is the designated Metropolitan Clearinghouse for this same area, under the provisions of the State of New Hampshire's Intergovernmental Review Process, using the Office of Energy and Planning as the Single Point of Contact for review of the federally funded projects in the Nashua area. **This integration of comprehensive transportation and area-wide planning and intergovernmental review responsibilities in the UPWP ensures that the work program is well structured and coordinated.**

Transportation Planning Goals, Factors and Emphasis Areas

The NRPC MPO's transportation planning priorities are guided by regional, state and national factors. With an effort placed on consistency and conciseness, the following long-range **Metropolitan Transportation Plan goals** were developed with public input and community guidance. The goals support and advance the development of a transportation system that contributes to the region's mobility, quality of life, system sustainability, and continued project implementation.

Mobility

1. Improve the availability of transportation options for people and goods.
2. Support travel efficiency measures and system enhancements targeted at congestion reduction and management.
3. Assure all communities are provided access to the regional transportation system and planning process.

Quality of Life

4. Preserve and enhance the natural environment, improve air quality, and promote active lifestyles.
5. Encourage livable communities which support sustainability and economic vitality.

UPWP Work Task	FAST Act Planning Factors									
	1	2	3	4	5	6	7	8	9	10
100 - MPO Administration and Training										
Task 101: Invoices and Accounting							•			
Task 102: MPO/TMA Program Administration	•	•	•	•	•	•	•	•	•	•
Task 103: Training	•	•	•	•	•	•	•	•	•	•
Task 104: Indirect Cost Adjustments	Not Applicable									
200 - Policy and Planning										
Task 201: Ten Year Plan	•	•	•	•	•	•	•	•	•	•
Task 202: Planning and Environmental Linkages	•	•	•	•	•	•	•	•	•	•
Task 203: Transportation Planners Collaborative					•	•	•	•		
Task 204: Interagency Consultation Process					•	•	•	•		
Task 205: Transportation Improvement Program	•	•	•	•	•	•	•	•	•	•
Task 206: Congestion Management Process	•	•		•	•	•	•		•	•
Task 207: Intelligent Transportation System	•	•	•	•	•	•	•	•	•	•
Task 208: Metropolitan Transportation Plan	•	•	•	•	•	•	•	•	•	•
Task 209: Transportation Air Quality Conformity	•				•	•				•
Task 210: State Long Range Transportation Plan	•	•	•	•	•	•	•	•	•	•
Task 211: Bicycle and Pedestrian Planning	•	•	•	•	•	•	•	•	•	•
Task 212: Freight Planning	•	•	•	•	•	•	•	•	•	
300 - Public Involvement and Coordination										
Task 301: Transportation Technical Advisory Committee	•	•	•	•	•	•	•	•	•	•
Task 302: Committee Meetings	•	•	•	•	•	•	•	•	•	•
Task 303: Public Participation Plan	•				•	•				
Task 304: Public Outreach	•	•	•	•	•	•	•	•	•	•
Task 305: MPO/TMA Policy Committee Meetings	•	•	•	•	•	•	•	•	•	•
400 - Plan Support (Data, Modeling, GIS)										
Task 401: Traffic Count Program	•	•		•	•	•	•	•	•	•
Task 402: SADES Inventory	•	•		•	•	•	•	•	•	•
Task 403: Geographic Information System	•	•	•	•	•	•	•	•	•	•
Task 404: Demographics	•	•	•	•	•	•	•	•	•	•
Task 405: Equipment and Supplies	•			•	•	•	•	•	•	
Task 406: Travel Demand Model	•			•	•	•	•	•	•	•
Task 407: Memberships, Subscriptions & Professional Costs	•	•	•	•	•	•	•	•	•	•
500 - Technical Assistance and Transit Support										
Task 501: Local and Regional Assistance	•	•	•	•	•	•	•	•	•	•
Task 502: Statewide Assistance	•	•	•	•	•	•	•	•	•	•
Task 503: Local Public Agency Program Support	•	•	•	•	•	•	•	•	•	•
Task 504: Special Projects	•	•	•	•	•	•	•	•	•	•
Task 505: Regional Coordinating Council (RCC)	•	•	•	•	•	•	•	•	•	•
Task 505: Regional Coordinating Council (RCC)	•	•	•	•	•	•	•	•	•	•
Task 506: Transit Assistance	•	•	•	•	•	•	•	•	•	•
Task 507: Transportation Demand Management	•	•	•	•	•	•	•	•	•	•
600 – Regional Volunteer Driver Program Feasibility Study										
Task 601:	•	•	•	•	•	•	•	•	•	•
Task 602:	•	•	•	•	•	•	•	•	•	•

The FHWA NH Division Office and FTA Region 1 Office have outlined **Planning Emphasis Areas (PEAs)** specific to New Hampshire that are designed to guide development of the 2022-2023 UPWPs. National PEAs were last released on May 27, 2016 and continue to influence the work tasks performed by the MPO.

New Hampshire PEAs:

1. MAP-21/FAST Act and Planning Final Rule – Compliance, Planning Performance Measures.
2. Urbanized Area Set-asides, Suballocation and Project Selection.
3. Congestion Management Process (CMP) Implementation.
4. Freight Planning.
5. Fiscal Constraint and Financial Planning.
6. Metropolitan and Statewide Travel Demand Model Maintenance.
7. Data Collection for HPMS and CMP Development, Maintenance and Monitoring.
8. Planning and Environment Linkages (PEL).
9. Climate Change and Stormwater Impacts, Resiliency.
10. Livability and Sustainability.
11. Project Monitoring.

National PEAs:

1. MAP-21/FAST Act Implementation – Transition to Performance Based Planning and Programming.
2. Regional Models of Cooperation – Ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination across Transit Agency, MPO and State Boundaries.
3. Ladders of Opportunity – Access to Essential Services.

The following matrix shows how the PEAs are reflected in the MPO work tasks:

UPWP Work Task	NH PEAs											Nat'l PEAs		
	1	2	3	4	5	6	7	8	9	10	11	1	2	3
100 - MPO Administration and Training														
Task 101: Invoices and Accounting														
Task 102: MPO/TMA Program Administration	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 103: Training	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 104: Indirect Cost Adjustments	Not Applicable													
200 - Policy and Planning														
Task 201: Ten Year Plan	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 202: Planning and Environmental Linkages	•	•	•	•		•		•	•	•	•	•	•	•
Task 203: Transportation Planners Collaborative	•			•	•			•	•	•	•	•	•	
Task 204: Interagency Consultation Process	•	•			•	•		•	•	•	•	•	•	
Task 205: Transportation Improvement Program	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 206: Congestion Management Process	•	•	•	•		•	•	•		•	•	•	•	
Task 207: Intelligent Transportation System	•	•	•	•		•	•		•	•	•	•	•	•
Task 208: Metropolitan Transportation Plan	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 209: Transportation Air Quality Conformity	•	•	•	•	•	•	•	•	•	•	•	•	•	
Task 210: State Long Range Transportation Plan	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 211: Bicycle and Pedestrian Planning	•	•	•	•				•	•	•	•	•	•	•
Task 212: Freight Planning	•	•	•	•		•	•	•	•	•	•	•	•	•
300 - Public Involvement and Coordination														
Task 301: Transportation Technical Advisory Committee	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 302: Committee Meetings	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 303: Public Participation Plan	•	•			•			•	•	•	•	•	•	•
Task 304: Public Outreach	•	•			•			•	•	•	•	•	•	•
Task 305: MPO/TMA Policy Committee Meetings	•	•	•	•	•	•	•	•	•	•	•	•	•	•
400 - Plan Support (Data, Modeling, GIS)														
Task 401: HPMS Traffic Counts	•	•	•	•		•	•	•	•	•	•	•	•	
Task 402: SADES Inventory	•	•						•	•	•		•		•
Task 403: Geographic Information System	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 404: Demographics	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 405: Equipment and Supplies	•	•	•	•		•	•	•	•	•	•	•		
Task 406: Travel Demand Model	•			•		•	•	•	•	•	•	•	•	•
Task 407: Memberships, Subscriptions and Professional Costs	•	•	•	•	•	•	•	•	•	•	•	•	•	•
500 - Technical Assistance and Transit Support														
Task 501: Local and Regional Assistance	•	•	•	•		•	•	•	•	•	•	•	•	•
Task 502: Statewide Assistance	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Task 503: Local Public Agency Program Support	•	•						•	•	•	•	•	•	•
Task 504: Special Projects								•	•	•	•	•	•	•
Task 505: Regional Coordinating Council (RCC)	•							•	•	•	•	•	•	•
Task 506: Transit Assistance	•	•	•					•	•	•	•	•	•	•
Task 507: Transportation Demand Management	•	•	•					•	•	•	•	•	•	•
600 – Nashua Interregional Transit Expansion Study														
Task 601: Public Outreach	•	•	•					•	•	•	•	•	•	•
Task 602: Operational Analysis & Feasibility Review	•	•	•					•	•	•	•	•	•	•

Current transportation planning regulations require efforts be made to involve users of public transportation in the planning process. NRPC has done this through on-board surveys and active coordination with the Nashua Transit System and Souhegan Valley Transportation Collaborative. Additionally, freight shippers must be incorporated into the process.

A specific work task associated with this UPWP is to improve coordination with the freight industry and develop and maintain a list of companies that will be utilized for the Transportation Improvement Program (TIP)/ Metropolitan Transportation Plan (MTP) development public involvement process.

Recently completed regional planning activities placed emphasis on the six **Livability Principles** developed by the US Environmental Protection Agency (EPA), Department of Housing and Urban Development (HUD) and Department of Transportation (USDOT). These principles support community-based planning decisions to consider:

1. More Transportation Choices:
 - Develop safe, reliable and affordable transportation choices to decrease household transportation costs, reduce energy consumption and dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.
2. Equitable, Affordable Housing:
 - Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.
3. Economic Competitiveness:
 - Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.
4. Support Existing Communities:
 - Provide analysis of strategies like transit oriented, mixed-use development, and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.
5. Coordinate Policies and Leverage Investment:
 - Provide information to communities that may allow Federal funding to remove barriers to collaboration and increase effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.
6. Value Communities and Neighborhoods:
 - Provide opportunity for communities to enhance the unique characteristics by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

The following matrix shows how the Livability Principles are reflected in the MPO work tasks:

UPWP Work Task	Livability Factors					
	1	2	3	4	5	6
100 - MPO Administration and Training						
Task 101: Invoices and Accounting						
Task 102: MPO/TMA Program Administration					•	
Task 103: Training	•	•	•	•	•	•
Task 104: Indirect Cost Adjustments	Not Applicable					
200 - Policy and Planning						
Task 201: Ten Year Plan	•		•	•	•	•
Task 202: Planning and Environmental Linkages	•	•	•	•	•	•
Task 203: Transportation Planners Collaborative					•	
Task 204: Interagency Consultation Process					•	
Task 205: Transportation Improvement Program	•		•	•	•	•
Task 206: Congestion Management Process	•		•		•	
Task 207: Intelligent Transportation System			•			
Task 208: Metropolitan Transportation Plan	•	•	•	•	•	•
Task 209: Transportation Air Quality Conformity	•	•		•	•	
Task 210: State Long Range Transportation Plan	•		•	•	•	•
Task 211: Bicycle and Pedestrian Planning	•	•	•	•	•	•
Task 212: Freight Planning			•	•	•	
300 - Public Involvement and Coordination						
Task 301: Transportation Technical Advisory Committee	•			•	•	•
Task 302: Committee Meetings	•	•	•	•	•	•
Task 303: Public Participation Plan				•	•	•
Task 304: Public Outreach				•	•	•
Task 305: MPO/TMA Policy Committee Meetings	•	•	•	•	•	•
400 - Plan Support (Data, Modeling, GIS)						
Task 401: HPMS Traffic Counts			•	•		
Task 402: SADES Inventory	•			•	•	•
Task 403: Geographic Information System	•	•	•	•	•	•
Task 404: Demographics	•	•	•	•	•	
Task 405: Equipment and Supplies				•		
Task 406: Travel Demand Model	•	•	•	•	•	
Task 407: Memberships, Subscriptions and Professional Costs	•	•	•	•	•	•
500 - Technical Assistance and Transit Support						
Task 501: Local and Regional Assistance	•	•	•	•	•	•
Task 502: Statewide Assistance	•	•	•	•	•	
Task 503: Local Public Agency Program Support				•	•	•
Task 504: Special Projects	•	•	•	•	•	•
Task 505: Regional Coordinating Council (RCC)	•	•	•	•	•	•
Task 506: Transit Assistance	•	•	•	•	•	•
Task 507: Transportation Demand Management	•	•	•	•	•	•
600 – Nashua Interregional Transit Feasibility Study						
Task 601: Public Outreach	•	•	•	•	•	•
Task 602: Operational Analysis & Feasibility Review	•	•	•	•	•	•

This work program contains five work categories developed jointly by FHWA, NHDOT, Nashua Transit System (NTS) and the MPO. Each work category lists specific tasks and a list of possible work products. While many work products are maintained on an ongoing basis, those with a shorter timeframe are annotated as to when progress can be anticipated. Each work category includes the anticipated budget required to substantially complete the listed tasks within the fiscal year. NRPC, with guidance and direction from the Transportation Technical Advisory Committee, the NRPC Executive Committee and full Commission, is the responsible party for all tasks identified within this UPWP, unless otherwise specified.

CATEGORY 100 - MPO ADMINISTRATION AND TRAINING

Purpose: This category facilitates the management and supporting administrative tasks that are necessary for the operation of the MPO and Transportation Planning Program. It includes general administrative tasks relevant to the fulfillment of the FY 2020-2021 MPO Unified Planning Work Program (UPWP). It ensures all work complies with federal and state regulations. This includes completion of timesheets and monthly work program reports, attendance at staff meetings, training and other administrative tasks. It includes coordination meetings between MPOs relative to the development and monitoring of Performance Measures.

Task 105, previously used for administrative functions pertaining to the development of Performance Targets, including participation in Partnering for Performance NH meetings (PPFNH), is not used for this UPWP. All tasks related to updates to Performance Targets and PFPNH coordination are transferred to Tasks 205-TIP and 208-MTP.

TASK 101 Invoices and Accounting

Reporting: NRPC will develop detailed invoices and monthly reports that describe transportation planning activities completed by staff. This task will include refinements to the financial accounting and reporting system and procedures, as necessary.

Financial Management and Audit: NRPC staff will conduct the day-to-day accounting needs of the MPO. This includes refinements to the MPO financial accounting and reporting system to better meet agency and reporting needs. NRPC staff will support work related to the preparation of financial audits in compliance with the OMB Super Circular.

Contract Administration: NRPC staff will administer the UPWP contract and any transportation related sub-contracts and agreements. This task will include meetings with NHDOT to discuss UPWP contracts, maintenance of the Disadvantaged Business Enterprise (DBE) program and goals, and Title VI implementation.

Task 101 – Anticipated Outcomes:

- Weekly timesheets with notes detailing UPWP timesheet charges, monthly invoices with progress reports.
- Prepare monthly UPWP Progress Reports and submit with UPWP Request for Reimbursement.

- Annual audit report and implementation of any management recommendations from auditors.

TASK 102 MPO/TMA Program Administration

UPWP Development & Amendments: This task provides for the development, implementation, and administration of the MPO 2024-2025 UPWP and amendment of the FY 2022-2023 UPWP as new planning needs and requirements are identified, and existing tasks require adjustments to budget.

UPWP Administration: This task is to provide for the general administrative tasks relevant to the fulfillment of the FY 2022-2023 UPWP and to ensure compliance with federal and state regulations. This includes monthly work program reports, the annual UPWP performance report, the UPWP mid contract review meeting, the NHDOT UPWP Midterm Review, attendance at bi-weekly transportation staff meetings and bi-weekly Project Management meetings and other transportation-related administrative tasks.

MPO Operations: This task allows NRPC staff to address changes and updates to the MPO Prospectus, NRPC By-laws, and to maintain the Transportation Technical Advisory Committee (TTAC) Membership. It also allows management to address the day to day operations of the MPO including staff supervision, review of time sheets and transportation program coordination at an agency level.

Implementation of Federal Performance Based Planning requirements will be conducted through various tasks identified in this UPWP, including MPO Program Administration. Collaboration and coordination with regional transit providers, the other NH MPOs, NHDOT, FHWA and FTA will continue through regularly scheduled meetings and workshops to review, refine, and evaluate mandated and supplemental measures; to assess progress towards meeting targets; and to incorporate measures into MPO plans and processes.

MPO Memorandum of Understanding Updates: An update to the MOU between NHDOT and NH MPO's may be required to incorporate changes to new UZA/TMA boundaries and smoothing process. Other elements such as updates to Performance Target requirements may also be addressed.

Task 102 – Anticipated Outcomes:

- Staff meetings and Management Team meetings to review UPWP budget and work task status.
- Development of Fiscal Year (FY) 2024 – 2025 UPWP (December 2022 – February 2023).
- Reports and amendments to FY 2022-2023 UPWP
- UPWP Midterm Review Report.
- UPWP Performance Report
- Prepare and adopt updates to the NRPC MPO Prospectus to incorporate changes made to the MPO structure. **Addresses Recommendation of the 2019 TMA PCR.**

TASK 103 Training

Training: This task entails attendance at transportation conferences and training for staff to improve and maintain transportation planning and policy, GIS, and other related skills. Specific tasks include, but are not limited to, the following:

- Transportation training events offered by FHWA, FTA, NHDOT, CTAA (Community Transportation Association of America), NTI (National Transit Institute), ITE (Institute of Transportation Engineers), UNH Technology Transfer Center and other relevant organizations.
- GIS training offered by commercial and nonprofit software vendors, academic institutions, and regional professional organizations, including by not limited to ESRI and its partners, NEURISA, NEARC, and UNH and its affiliates.
- TransCAD and Synchro software training, offered by private sector companies.
- Statistical and demographic data training offered by the U.S. Census Bureau, NHOEP and other relevant organizations.

Review of Transportation Materials and Documents: Staff will become familiar with transportation materials from a range of sources, including FHWA, FTA, NHDOT, NHDES to become familiar with guidance on implementing transportation planning programs.

Task 103 – Anticipated Outcomes:

- Improved staff skills to implement effective regional and transportation planning activities.
- Knowledge of CFRs, federal and state guidance, rulemakings, new reports, best practices research and other transportation-related planning materials.
- Transportation planning training course certifications.
- Summaries of information obtained at conferences, workshops, seminars.

TASK 104 Indirect Cost Adjustments

Indirect Cost Set Aside: Not applicable; NRPC will negotiate a predetermined rate.

CATEGORY 200 – POLICY AND PLANNING

Purpose: The metropolitan transportation planning process is a means to bring people, information, and ideas together to inform regional transportation decisions in a continuing, cooperative, and comprehensive performance-based manner (3C process). A core function of the MPO is to provide necessary technical and coordinating assistance to the public and agencies that are involved in the 3C process. To fulfill the requirements of this function the MPO established policy and procedures to:

- Encourage citizen involvement in the transportation planning process.
- Coordinate with partner agencies to ensure state and federal requirements are met.

This category will include all NRPC activities oriented to the development of the Region's Transportation Improvement Program, long range Metropolitan Transportation Plan and the State's Ten Year

Transportation Plan. A key objective of this category is to develop plans and policies for transportation modes and air quality, and to assist efforts to streamline environmental review.

TASK 201 Ten Year Plan

Ten Year Plan Development: NRPC will use the Federal transportation planning process to feed the State's Ten-Year Transportation Improvement Plan (TYP). NRPC will work collaboratively with the NHDOT, FHWA and the other RPCs and MPOs to revise New Hampshire's transportation planning process so it better aligns with Federal processes and reflects regional priorities. On-call engineering services will be used as needed for cost estimation of projects. Staff will support NHDOT with the implementation of the State's TYP process, participate in the Governor's Advisory Commission on Intermodal Transportation (GACIT) hearings, and coordinate with NHDOT staff on state sponsored projects. These activities will take place concurrent with the maintenance of and updates to the MPO Transportation Improvement Program (TIP) and long-range Metropolitan Transportation Plan (MTP).

Task 201 – Anticipated Outcomes:

- Begin NH statewide transportation consultation process; GACIT Public Hearings for FY 2023-32 TYP (July – November 2021).
- Assist member communities in identifying eligible projects for the FY 2025-2034 TYP and developing project applications. Provide supporting data and analysis as needed. On-call professional engineering services will be used as needed for cost estimation. (May-Aug 2022).
- Project scoring and ranking (Sept-Nov 2022) and recommendations to NHDOT.
- NHDOT review of projects submitted for 2025-2034 TYP, revisions as necessary, finalize and obtain MPO endorsement (January-March 2023).
- Documentation of TYP process and outcomes for TTAC and MPO Policy Committee.

TASK 202 Planning and Environmental Linkages

This task includes all activities that pertain to the connection between land use, water and natural resources, economic development and infrastructure resiliency with the regional transportation system.

Climate Change, Livability and Sustainability: NRPC will work to identify and implement appropriate transportation and land use recommendations identified in the NRPC Regional Plan and NH Climate Action Plan. NRPC will work to address resilience to climate change and extreme weather, and present approaches/tools for assessing criticality and sensitivity of different assets in the context of assessing vulnerability to climate change and extreme weather events. This effort will also address the six livability principles developed by the US DOT, HUD and EPA.

Environmental Mitigation: NRPC will monitor environmental issues in support of the region's transportation planning effort. Specific activities may focus on transportation-related impacts on water quality, wetlands, habitat, hazard mitigation, and historic, cultural and archeological resources arising from the proposed or actual construction, operation, and or maintenance of the transportation system. NRPC will continue to include discussions of environmental mitigation **strategies** as new projects are

incorporated into MTP updates. NRPC will consult with NHDOT's Natural and Cultural Resource Committees as it addresses these work elements. **Addresses Corrective Action of the 2019 TMA PCR.**

Environmental Justice: NRPC monitors project development to ensure that there is no disproportionate negative impact on any minority or low-income population and identify project EJ benefits. Input on the development of the transportation system is actively solicited from minority and low income communities as warranted. NRPC will actively coordinate with other organizations that provide services to vulnerable populations. The NRPC Regional Plan and MTP provide updated data sets to improve performance against this metric. NRPC will conduct EJ spatial data analyses and outreach efforts to low-income, minority and Limited English Proficiency (LEP) populations, including translation of notices and documents as needed. **Addresses Recommendation of the 2019 TMA PCR**

Task 202 – Anticipated Outcomes:

- Develop metrics including zone-to-zone travel impedances to analyze environmental justice impacts of projects and develop strategies for inclusion in MTP updates. **Addresses Recommendation of the 2019 TMA PCR** Continued application of annually released American Community Survey (ACS) demographic data to develop updated EJ information.
- Staffing and technical assistance to the Nashua/Manchester Regional Stormwater Coalition, including preparation of stormwater datasets.
- Participation in local energy working groups related to alternative fuel and electric vehicles as needed/as requested.
- Updates to environmental mitigation on existing and proposed long range transportation projects as needed following TIP/MTP amendments and biennial updates.
- EJ spatial data analyses
- Translation services as needed.

TASK 203 Transportation Planners Collaborative

Participation in the Collaborative: NRPC participates in the Transportation Planners Collaborative (TPC) process. This task will require NRPC staff to participate in quarterly onsite or remote meetings. In addition, NRPC staff will review meeting materials in advance of each meeting, and, if necessary, prepare written memos or presentations relevant to the meeting agenda. Staff may also be assigned to the TPC Steering Committee. During this contract period, the TPC will continue with collaborative efforts with NHDOT, FHWA and the other RPCs/MPOs to align New Hampshire's transportation planning process with Federal processes. Other collaborative efforts as determined by NHDOT.

Task 203 – Anticipated Outcomes:

- Participation in TPC group meetings
- Participation in sub-committees assigned to perform TPC tasks
- Review work of subcommittees, written memos or presentations relevant to the business of the TPC.

TASK 204 Interagency Consultation Process

Participation in the ICP: NRPC participates in the interagency consultation process. These monthly conference calls or onsite meetings disseminate information and coordinate activities and efforts between the MPOs, NHDOT, NHDES, FHWA, EPA and FTA. NRPC staff will review meeting materials in advance of each meeting, and, if necessary, prepare written memos or presentations relevant to the meeting agenda.

Task 204 – Anticipated Outcomes:

- Participation in the Interagency Consultation Process, participation in monthly meetings/calls
- Reports to the MPO on relevant topics as needed
- Written minutes, memos or presentations relevant to the meeting agenda as needed

TASK 205 Transportation Improvement Program

MPO TIP Preparation: Under this task NRPC will maintain and update the region’s FY 2021-2024 Transportation Improvement Program (TIP) through minor revisions/amendments and prepare the FY 2023 – 2026 TIP in cooperation with local, state and federal agencies. The TIP will include surface transportation projects funded with federal resources and other regionally significant projects. This process will include a public participation element, demonstrate fiscal constraint and achievement of performance targets, and include an Air Quality Conformity Determination. Public information meetings will be held during development of the TIP and a public hearing on the draft will be held, followed by MPO endorsement. All work will be completed in compliance with 23 CFR Part 450, Subpart C. In addition, the annual List of Obligated Projects will be produced each year in December.

During the first year of the work program (July 2021 – June 2022) work under this task entail the maintenance of the 2021 – 2024 Transportation Improvement Program (TIP). This will require reviewing and processing minor revisions and amendments to the document. NRPC staff will be required to monitor project status, communicate with NHDOT staff, and community representatives to ensure projects changes are accurately represented in the TIP. In addition, full amendments to the TIP will require staff to notice and hold a public hearing in advance of MPO approval

During the second year of the work program (July 2022 – June 2023) maintenance efforts of the existing 2021 – 2024 TIP will continue. However, more emphasis will be placed on the development of the draft 2023 – 2026 TIP. This will require staff to ensure that project priorities are correctly conveyed to NHDOT so that they may be incorporated into the draft STIP without change. In addition, NRPC staff will coordinate with NHDOT to ensure consistency between the region's priorities and NHDOT’s development of the Ten Year Plan. Upon completion of the state's Ten-Year Plan Process, NRPC will incorporate all of the region's projects from the Ten-Year Plan into the 2023 – 2026 TIP.

Project Monitoring: Effective project monitoring is critical to the planning process, maintaining fiscal constraint and to timely project delivery. In cooperation with NHDOT, NRPC will monitor project progress and make recommendations to optimize project phasing and implementation. The TIP will

incorporate collaboratively developed MPO performance measures and include a report describing the progress made towards meeting established targets.

Obligated Project List: NRPC will work cooperatively with NHDOT and transit providers to develop an annual listing of obligated projects, including investments in pedestrian walkways and bicycle transportation facilities, for which Federal funds have been obligated in the preceding year. The listing shall be published or otherwise made available by the cooperative effort of the State, transit operator, and metropolitan planning organization for public review. The listing shall be consistent with the funding categories identified in each metropolitan transportation improvement program (TIP). The annual listing will be completed at the end of the program year and may include visual components such as maps and charts to ensure the information is conveyed to a broad audience with varying levels of familiarity with the transportation planning process. The list will be posted on the NRPC web site.

Task 205 – Anticipated Outcomes:

- Documentation and processing of 2021 – 2024 TIP Minor Revisions and Amendments.
- Maintenance of the TIP project database.
- Execution of TMA Programming authority.
- Development of the Draft 2023-2026 NRPC MPO TIP (November 2022-February 2023).
- Development of TIP Performance Report.
- Development of the Obligated Project List (December 2021 & 2022).

TASK 206 Congestion Management Process

Congestion Management Process Implementation: The Congestion Management Process (CMP) refers to a systematic approach, collaboratively developed and implemented throughout a large metropolitan region that provides for the safe and effective management and operation of new and existing transportation facilities through the use of demand reduction and operational management strategies. In its capacity as a TMA, the Nashua MPO must demonstrate compliance with CMP requirements. This will involve data collection tasks such as traffic counts, park-and-ride use, use of the National Road Performance Management Data Set (NPMRDS) and other sources for obtaining probe data. Data are analyzed and compiled into corridor level reports. The entire CMP process is documented in a regional report and summarized in each MTP update.

Task 206 – Anticipated Outcomes:

- Update CMP corridors peak period speeds using NPMRDS data; update travel time indices (TTI).
- Integrate safety data, performance measures and targets into the CMP. **Addresses Recommendation of the 2019 TMA PCR**
- Update of volume-capacity and level of service data.
- Incorporate 2021 CMP into MTP 2022 update.
- Monitoring of Nashua Transit on-time performance and develop performance measures.
- Revisions and updates to 2021 Congestion Management Plan as needed.

TASK 207 Intelligent Transportation Systems

Intelligent Transportation System (ITS) update and maintenance: NRPC is in the process of updating the Regional ITS Plan to be consistent with the Statewide ITS Architecture. ITS recommendations resulting from the CMP will be included in MTP updates to support operational improvements along CMP corridors in order to meet performance measures targets for congestion.

This task also includes research into and development of implementation alternatives for integrating emerging technologies, including connected and automated vehicles (CAVs), transportation network companies (TNC) and other technological advances.

Task 207 – Anticipated Outcomes:

- Regional Intelligent Transportation System Plan Update (June 2022)
- Documentation for research activities into emerging technologies
- MTP updates incorporating ITS recommendations
- Identification of opportunities for ITS implementation on the network and at the intersection level. **Addresses Recommendation of the 2019 TMA PCR**

TASK 208 Metropolitan Transportation Plan/Performance-Based Planning

Metropolitan Transportation Plan Update (MTP): Required full updates of The Metropolitan Transportation Plan (MTP) occur every four years, with the next submission to be completed and approved by the MPO in December 2022. The task also includes the regular update of all federal-mandated performance measures that support the MTP. NRPC participates in Partnering for Performance in NH (PFPNH), comprised of the four NH MPOS and federal and state agencies to address the incorporation of performance-based planning into the transportation planning program. The following measures are addressed:

- Highway Safety (PM1)
- Infrastructure (PM2)
- Travel Time Reliability (PM3)
- Transit Asset Management (TAM)
- Public Transit Agency Safety (PTASP)

All performance measures will be updated and approved by the MPO for the 2022 MTP Major Update and may be updated for interim Minor Updates, as new data become available.

Task 208 – Anticipated Outcomes:

- Continue to revise fiscal constraint methodology in coordination with other MPOs.
- Update of MTP goals to align with more emphasis on systems preservation . **Addresses Recommendation of the 2019 TMA PCR**

- Updated MTP project list and fiscal constraint analysis to maintain consistency with MPO TIP (each TIP amendment).
- Update the Metropolitan Transportation Plan for the 2022-2045 period to incorporate new and revised performance measures/targets, project priorities, new traffic forecasts and summaries of new planning studies (including CMP update, ITS Plan).
- Updates of MTP System Performance Report as targets are revised with new data.
- Updates of environmental mitigation measures as pertinent to new projects included in the MTP.
- Analyses and technical memos supporting the long-range needs of the region outlined in the MTP.
- Participation in monthly meetings of the Partnering for Performance in New Hampshire MPO group to evaluate measures and progress towards meeting statewide and MPO targets.
- Provide data, analysis and memos to the PFPNH group as needed.

TASK 209 Transportation Air Quality Conformity

Conformity Monitoring: This task includes work related to satisfying the requirements of the Clean Air Act Section 176(c), USC 93 and other policy documents from FHWA and EPA relating to air quality conformity. As of July 20, 2013, all of New Hampshire is unclassifiable/attainment for the 2008 8-Hour Ozone National Ambient Air Quality Standard (the 2008 ozone standard) and in April 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. Recent guidance from FHWA in reaction to the US Court of Appeals decision in the South Coast Air Quality Management District vs Environmental Protection Agency (No. 15-1115), requires that the MPO once again demonstrate conformity to the 1997 Ozone Standards. While this requirement does not require air emissions modeling for TIP and MTP documents at this time, the potential requirement to do so remains for future conformity determinations and NRPC will participate in emissions analysis as necessary.

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. Therefore, NRPC no longer conducts a regional emission analysis for CO. However, all other transportation conformity requirements under 40 CFR 93.109(b) continue to apply, including the requirement for the MPO to make a positive conformity determination for the TIP and MTP, and project level conformity determinations based on carbon monoxide hot spot analyses under 40 CFR 93.116.

Task 209 – Anticipated Outcomes:

- Air quality conformity determinations for updates of the TIP and MTP. Planning level under existing requirements.
- Technical memos regarding the status of the revised ozone standard, as necessary.

- Model analysis in support of the development of the mobile source air quality budget in the State Implementation Plan, if required.
- Monitoring of anti-backsliding provisions in coordination with NHDOT, NHDES and EPA.

TASK 210 State Long Range Transportation Plan

NRPC will participate in/assist NHDOT efforts to update the Statewide Long Range Transportation Plan. An update of the Plan will be undertaken during the 2022-23 period.

Task 210 – Anticipated Outcomes

- Assist with scoping the update and consultant selection process.
- Provide regional data and technical assistance to NHDOT as requested.
- Participate in statewide meetings related to the development of the statewide long-range transportation plan.

TASK 211 Bicycle and Pedestrian Planning

NRPC will continue outreach and planning efforts to improve, enhance and expand bicycle and pedestrian facilities in the region. Staff will work cooperatively with the Regional and NHDOT Complete Streets Advisory Committees, other related groups and businesses to support cycling and walking.

Task 211 – Anticipated Outcomes:

- Provide staff support to the Regional Complete Streets Advisory Committee.
- Implementation of goals and objectives of Regional Bicycle-Pedestrian Plan.
- Assistance to communities working to develop bicycle and pedestrian infrastructure, complete streets and multi-use trail projects as requested.
- Revisions/updates to the Regional Bicycle/Pedestrian Plan as needed.
- Bike and pedestrian traffic counting program implementation, including analysis of Strava data and data from various bike-ped counting equipment.

TASK 212 Freight Planning

Freight Planning is a relatively new UPWP task category, having been introduced in the FY 2020-2021 UPWP. The initial efforts have focused on development of a database that includes truck counts, trip generation rates at activity centers and truck travel patterns. Progress was limited due to COVID-19 substantially reducing vehicular activity. The emphasis for the FY 22-23 UPWP will again be data collection and tabulation to work toward the development of regional truck trip tables for input to the traffic assignment module of the regional model. [Addresses Recommendation of the 2019 TMA PCR](#)

Task 212 – Anticipated Outcomes:

- Provide technical assistance and support to updates and revisions to the State Freight Plan.

- Vehicle classification counts at non-HPMS count locations.
- Develop estimates of truck generation rates at activity centers.
- Identify truck origin-destination truck trip patterns, dependent on data availability.
- Obtain local municipality perspectives on freight planning needs.

CATEGORY 300 - PUBLIC INVOLVEMENT AND COORDINATION

Purpose: This category includes tasks that provide necessary assistance to agencies that are involved in the 3C transportation planning process, including the development of MPO policies, plans and project prioritization. It is also intended to support and encourage citizen involvement in the transportation planning process.

TASK 301 Transportation Technical Advisory Committee

Facilitate the Transportation Technical Advisory Committee: The Transportation Technical Advisory Committee (TTAC) has been established by the NRPC for the purpose of ensuring that transportation related decisions of the Nashua Regional Planning Commission are based on technically sound planning principles and the goals and objectives of its member communities. The TTAC responsibilities include:

- Provide recommendations to the Commission and the NHDOT on project funding priorities.
- Rendering technical advice to the NRPC regarding contemplated or ongoing projects in the form of written memorandums and presentations at quarterly Commission meetings as requested.
- Facilitating an exchange of views with the general public to provide information and elicit input regarding the transportation planning process, programs and projects.

The NRPC Staff provides technical support to the TTAC in the form of meeting content, related transportation and land use data, technical memorandums and presentations. The NRPC staff facilitates up to ten TTAC meetings per year.

NRPC Staff will also attend TAC meetings at the other adjacent NH and Mass. MPOs as needed to effectively coordinate planning activities.

Task 301 – Anticipated Outcomes:

- Hosting of and participation in at least 6 TTAC meetings per year.
- Participation in other MPO Technical Advisory Committee meetings (including Massachusetts) as needed to coordinate planning tasks.
- Technical memos, presentations, white papers and recommendations detailing staff analysis of transportation issues and needs of the region and NHDOT programs and initiatives.
- Meeting minutes and agendas and related committee information.

TASK 302 Committee Meetings

NRPC Executive Committee: Under the Article VI of the [NRPC by-laws](#) the NRPC Executive Committee shall conduct the affairs of the Commission at times when the Commission is not in session and shall report on its actions to the Commission at the next Commission meeting. The Executive Committee no longer acts as the MPO Policy Committee during months other than regularly scheduled full Commission meetings each quarter. Special full Commissions are called to take official action on MPO business when necessary, per revision to the by-laws in 2020.

NRPC staff provides technical support to the Executive Committee in the form of meeting content, related transportation and land use data, technical memorandums and presentations. The Assistant Director and MPO Coordinator participate in Executive Committee meetings as needed. Staff facilitates public hearings in support of the transportation planning process and endorsement of federally mandated documents.

Task 302 – Anticipated Outcomes:

- Provide staff support to the NRPC Executive Committee at monthly meetings as needed to conduct the affairs of the Commission.
- Policy memorandums, presentations and statements in support of regional transportation needs and priorities.
- Minutes and related committee information.
- Participation in and support of the biennial Ten Year Plan Process as needed.

TASK 303 Public Participation Plan

Public Participation Plan (PPP) Maintenance: NRPC maintains a stand-alone, written plan for involving the public in the transportation planning process and soliciting comments on MPO documents. The PPP is designed to meet the region's changing needs while taking advantage of the latest in communications technologies. Special efforts will be made to include the needs minority and low-income populations in plan development.

Task 303 – Anticipated Outcomes:

- Involvement of underrepresented populations for updates to Plan.
- Revisions and updates to Public Participation Plan as needed.

TASK 304 Public Outreach

Coordination of Public Outreach: NRPC staff facilitates citizen involvement through electronic communications, published reports, informational meetings, forums, charrettes, workshops and the news media.

NRPC works with the NHDOT to facilitate public informational meetings on the state's transportation program and any other transportation planning activities. NRPC provides assistance to the NHDOT in public forums regarding regional transportation projects and other outreach meetings.

NRPC ensures that all required public notices relative to the transportation planning process are published electronically on the NRPC website and in social media in a manner that is consistent the federal requirements and NRPC's Public Participation Plan.

Social Media: NRPC maintains social media such as Facebook, Twitter and YouTube accounts which are used to educate and inform policy makers and members of the public regarding transportation issues. Posts and Tweets contain summaries of important transportation planning documents and modal plans as well as announcements of public meeting and public participation opportunities. Videos of transportation related public meetings and/or presentations may be produced, edited and made available.

E-news : NRPC uses an email service (currently Constant Contact) to provide more frequent updates on transportation planning activities.

www.nashuarpc.org: The NRPC web page has become an increasingly important method of outreach and education to the public on transportation issues. NRPC will continue to develop the web page to provide information on all the major transportation modes and issues and also on specific corridor or area plans that are under development. NRPC will also provide links to the web pages of key transportation system operators and partners in the transportation planning process. In an effort to improve upon web-presence performance, NRPC commits to achieving the following:

- Posting meeting minutes and materials within 30 days of public meetings.
- Annual maintenance of membership/rules of procedure for transportation related committees.

Task 304 – Anticipated Outcomes:

- Addition of planning products, transportation project information on the NRPC website.
- Meeting announcements.
- Social media and Constant Contact posts.
- Public hearing minutes.
- Legal Notices in support of all transportation planning activities.
- Meetings, workshops, charrettes and outreach events.
- Targeted outreach to engage underrepresented transportation groups, including low-income and minority populations.

TASK 305 MPO/TMA Policy Committee Meetings

MPO/TMA Policy Committee: The NRPC full commission in conjunction with NHDOT, NHDES and Nashua Transit, comprise the MPO policy committee. The MPO provides direction and coordination for the conduct of the transportation planning process by its staff. Its main functions include:

- Establishing goals, objectives and policies for transportation in the NRPC area with consideration of recommendations by the TTAC.
- Directing the preparation, update and adoption of the Metropolitan Transportation Plan (MTP) and the Transportation Improvement Program (TIP) for the NRPC area and ensuring that the documents are in conformance with the Federal Highway Administration fiscal constraint requirements, per 23 CFR 450 Subpart C.
- Reviewing transportation proposals and projects which require coordination with transportation activities, in order to assure consistency with adopted transportation plans.
- Approving the development of the Unified Planning Work Program (UPWP) and the annual budget necessary to conduct the work tasks.

MPO meetings include representatives from each community within the designated regional planning boundary and the three additional parties who are part of NRPC MPO for conducting transportation business. The meetings are scheduled quarterly and additional meetings are held as necessary.

The NRPC staff provides technical support to the Commission and Executive Committee in the form of meeting content, related transportation and land use data, technical memorandums and presentations. The NRPC staff participates in all Commission and Executive Committee meetings. Staff facilitates public hearings in support of the transportation planning process and endorsement of federally mandated documents.

Task 305 – Anticipated Outcomes:

- Policy memorandums, presentations and statements in support of regional transportation needs and priorities for quarterly meetings.
- Minutes and related committee information for quarterly meetings.
- Participation in and support of the biennial Ten Year Plan Process.
- Execution of TMA Programming authority.

CATEGORY 400 – PLAN SUPPORT (DATA, MODELING, GIS)

Purpose: Reliable data, tools, and analysis methods are critical to effective performance-based planning. Data-driven analysis supports the establishment of reporting baselines, guides objective transportation-decision making, and supports objective progress measurement through time. Specifically, plan support activities will assist NRPC to:

- Accurately forecast transportation needs and land use to provide a minimum 20-year planning horizon for all transportation planning purposes.
- Effectively target transportation investments within a resource-constrained context.
- Achieve conformance with all federally mandated requirements.
- Avoid or minimize adverse impacts to low income and minority populations and to target outreach to LEP groups/populations.

- Protect environmental, cultural, and historic resources in the region.
- Leverage technology investment, increase data sharing, and remove barriers to coordination, leading to increase effectiveness of government.

Data: To support transportation planning NRPC manages a comprehensive data compilation process that usually involves many of the following tasks of the typical data development lifecycle: field data collection or other types of data origination, processing of shared data from external parties, quality assurance, documentation (metadata), and data publication, inter-agency sharing, and associated outreach.

Tools: To support transportation planning NRPC maintains expertise in field asset condition evaluation tools; travel-demand modelling; traffic simulation software; GIS-based decision support tools, e.g. mapping and visualization, proximity analysis, growth and build-out modelling, scenario-planning; relational database management software (RDBMS); and online/cloud-based information collaborative frameworks.

TASK 401 Traffic Count Program

NHDOT Traffic Count Program: NRPC will continue its responsibility for the NHDOT’s Automatic Traffic Recorder (ATR) count program. Staff will perform at least 130 24-hour ATR counts per an NRPC established schedule, up to 10 of which will include vehicle classification counts. Count data will be provided to NHDOT each month throughout the counting season. At the request of NHDOT, NRPC will also conduct up to 10 intersection turning movement counts during the two-year contract period. Where applicable the NRPC will coordinate data collection efforts to maximize efficiency. All data will be made available online through the NRPC website. NRPC will also conduct ATR counts at locations as needed in order to support development and calibration of the TransCAD regional travel model.

Task 401 – Anticipated Outcomes

- Automatic Traffic Counts to support the NHDOT Highway Performance Monitoring System (HPMS) program at 130 sites per year. Perform quality control review of all counts prior to transmittal to NHDOT.
- GIS traffic count database updates and maintenance.
- Updated traffic count web page and traffic flow map for NRPC region.
- Up to 5 peak hour traffic counts, capacity analyses and level of service analyses per year as requested by NHDOT.
- Up to 50 traffic counts per year to support the regional travel model calibration.

TASK 402 Statewide Asset Data Exchange System (SADES) Inventory

SADES (Statewide Asset Data Exchange System) establishes a primary transportation inventory of assets, including a maintainable condition assessment program for state and local agencies. These assets include stream crossings, pedestrian infrastructure, Road Surface Management System (RSMS), stream

crossings, guardrails and closed road drainage systems. NRPC anticipates putting emphasis on the following specific modules:

Road Surface Management System (RSMS): Activities and staff time will be devoted to the development and maintenance of road surface condition data, identification of priorities for repair and strategies to best facilitate improvements, general cost estimates, and planning for future maintenance needs.

Pedestrian Infrastructure Assessment: NRPC staff may use the SADES Pedestrian Assessment model to conduct inventory and evaluate sidewalks, curb ramps and this data will support pedestrian planning in the region and support performance-based planning measures focused on active transportation.

Closed Drainage: NRPC will continue to track and participate in the development in the NHDOT's closed drainage SADES module, specifically road drainage structures, outfalls, and pipes, and associated photos to support stormwater planning and management in the region.

Additionally, any data collected through the **culvert inventory** module will be used to support performance-based planning metrics that assess resiliency of the surface transportation network and will support communities with hazard mitigation planning and MS4 permits.

Task 402 – Anticipated Outcomes:

- SADES field inventory and analysis for up to two communities per year. Two projects have been identified, Merrimack RSMS (Subtask 402.1), begun in FY 2021 and Lyndeborough RSMS (Subtask 402.2) . Work scopes and cost estimates are attached to this UPWP for these projects.
- Attendance at meetings with municipal staff and officials to present analysis and findings of SADES projects.
- Follow up with communities for which SADES field inventory has been conducted to perform tracking of implementation plans and evaluating effectiveness of the program. Brookline's implementation of RSMS recommendations will be evaluated during the FY 2022-23 period.
- Creation of associated GIS data layers

TASK 403 Geographic Information System

Staff will maintain, update, and analyze as necessary GIS databases, including spatial and attribute information, for all important variables for the transportation program. These may include but are not limited to:

- **Inventory of Regional Transportation Infrastructure:** NRPC will continue to collect and maintain GIS location and attribute information on transportation assets in the region to support general transportation planning, performance-based planning, and the traffic model. These data layers may include, but are not limited to:
 - Road network infrastructure and input files associated with transportation modeling including friction factors, network delineation, and incorporation of ground counts.

- Comprehensive mapping inventory of the physical and operational components of the public transit system in the MPO region.
- Active transportation infrastructure (sidewalk, trails and paths, crosswalks, signals, etc.).
- Road facilities assets such as intelligent transportation system (ITS) infrastructure and stormwater infrastructure.
- **Transportation System Operational and Safety Data:** NRPC will continue to gauge the utilization and safety performance of the regional transportation system by supporting data development and/or compilation in the areas of:
 - Highway performance monitoring system traffic counts combined with other network volume information.
 - NHDOT Crash statistics and other safety measures.
- **Regional Land Use Monitoring Data:** NRPC will continue to track regional growth patterns and update land use files to support general transportation planning and the traffic model. Specifically, the following conditions will be characterized in GIS, at a point, parcel, or traffic analysis zone (TAZ) level of geography:
 - Any new residential, commercial and industrial development.
 - Environmental features (wetlands, habitat, flood plains, etc.).
 - Updating and digitizing datasets on the elevation and other characteristics of roads, highways, bridges, etc.
 - Restrictions on use (zoning, conservation easements, etc.).
 - Historical, archeological, and other cultural resources for use in the model and other transportation projects.
- **Demographic and Socioeconomic Conditions:** NRPC will incorporate GIS datasets relative to the current and future population in order to reflect changing demands on the transportation system and to help prioritize investment. Examples of such datasets may include, but are not limited to:
 - Current and projected demographics on the general population and vulnerable population groups.
 - Estimates of current and projected socioeconomic conditions in the NRPC including small-area employment estimates.

Task 403 – Anticipated Outcomes:

- Maintenance and updates of analytical transportation and land-use planning projects database that includes network level plans, air quality, energy and transit.
- Annual review of transit system with updates to ridership statistics and reference maps as needed.
- GIS maps, applications, data, and reports illustrating spatial and/or attribute information, including but not limited to street inventory, traffic data, Travel Demand Model data, crash analyses, environmental and historic resources, and roadway functional classification.

- Spatial data analysis to support MPO performance measurement development, assessment, and reporting.
- Up to two local build-out analysis updates per year with an accompanying annual review and update of regional build-out analysis, as needed.
- Biennial updates to employment density maps.
- GPS and field data collection on trails and/or other active transportation systems.
- Maps of community key destinations and assets and their proximity to housing that enhance access to opportunity for residents.
- Maps of trails, sidewalks, parks, and recreation facilities to identify opportunities to access natural resources and open space and identify those within walking distance of homes and schools.
- Pedestrian infrastructure inventory and evaluation for up to one community per year.
- Culvert inventory and evaluation of transportation infrastructure vulnerability to failure for up to one community per year.

TASK 404 Demographics

Demographics Data: NRPC GIS staff will maintain and continue to develop a full set of demographic data to support all transportation planning purposes. Data from the 2020 Census, American Community Survey, and other sources will be compiled and maintained for staff and community use. Up to date data sets of employment by North American Industrial Class System and number of employees will also be maintained. NRPC will also analyze demographic data related to planning and project activities to ensure Environmental Justice requirements are met.

Task 404 – Anticipated Outcomes:

- Updates to data sets and mapping analyzing the regional demographic profile.
- Updates to core set of up-to-date ACS data points supporting general transportation planning activities.
- Updates to data in support of Title VI and Environmental Justice requirements, including revision to the Title VI complaint process consistent with FHWA guidance and in coordination with NHDOT's OFC. **Addresses Recommendation of the 2019 TMA PCR**
- Analysis of updates to the ACS Journey to Work Data.
- Participate in Census 2020 UZA boundary smoothing and adjustments to highway functional classification.
- Analysis of other Census Data Products as available and needed.

TASK 405 Equipment and Supplies

Traffic Counting Program Support: The purchase of equipment to support the traffic counting program will be undertaken, including repairing/replacing automatic traffic recorders, purchase of road tubes,

batteries, spikes and tape. Purchase of NPRMRDS analytics tools and enhanced coverage area. Potential purchase of origin-destination data for traffic model development.

NPMRDS (National Performance Management Research Data Set) Data Set: The four MPOs partner in the purchase of enhanced tools for analysis of NPMRDS vehicle probe-based travel time, as well as extended coverage areas.

Task 405 – Anticipated Outcomes:

- Maintenance of automatic traffic counting equipment in good working order.
- Maintain inventory of traffic count supplies.
- Maintenance and replacement of other UPWP equipment.
- NPMRDS enhanced analytical tools and extended data coverage area.
- Origin-destination dataset (TBD)

TASK 406 Travel Demand Model

Regional Forecasts of Population and Employment: NRPC is required under federal mandate to plan for a minimum 20 year time horizon in its transportation planning products. This is accomplished by basing all NRPC regional plans on a consistent set of population and employment forecasts that are developed and adopted every ten years. NRPC utilizes a shift share methodology to forecast regional employment growth and a cohort survival method to forecast population changes.

Model Maintenance and Enhancements: The NRPC travel demand model was updated and recalibrated with 2010 Census data and more recent employment data. Further calibration work has been done in the past two years regarding modification of volume-delay functions, free-flow speeds and lane capacities. Staff will continue to check the network for attribute information that is in error or needs revision. NRPC will continue efforts with the other NH MPOs to investigate the potential for developing an interregional travel demand model for southern NH. This will include working with NHDOT to implement a household travel survey or alternative data source that will provide updated model inputs to trip generation and distribution. Model User Group meetings will be held periodically if this effort moves forward in order to guide the process.

Travel Model Applications: The pending update of the MTP in 2022 may utilize a revised future forecast year for 2045. Consequently, travel demand modeling for a new analysis year will not be required but changes to demographic and employment forecasts will likely result in a new 2045 forecast. Additions of long-range projects will result in an updated Build scenario for modeling. NRPC will also utilize the travel model as requested by local communities for testing project alternatives, as well as for testing on land use development and regional growth scenarios.

Task 406 – Anticipated Outcomes:

- Review and update of population and employment forecasts.

- Continue calibration of highway assignments through modifying free flow speeds to replicate uncongested time period speeds and capacities to match congested period speeds.
- Updated model inputs obtained through surveys or other means.
- Meetings and communications with MPO Model User Group.
- Updated users guide and technical documentation. **Addresses Recommendation of the 2019 TMA PCR**
- Model application for MTP Update
- Potential efforts to develop Southern NH travel model integrating all MPO regional models

TASK 407 Memberships, Subscriptions and Professional Costs

Memberships, subscriptions and professional costs: NRPC staff may participate in professional memberships or subscriptions related to transportation planning in order to stay current on regulations and planning practices, advance technical, professional and outreach skills, and participate in knowledge sharing with peers. Current memberships, subscriptions and professional costs include:

- AMPO: Association of Metropolitan Planning Organizations (annual membership)
- APA: American Planners Association (annual membership, transportation portion only)
- NHPA: New Hampshire Planners Association (annual membership, transportation portion only)
- NADO: National Association of Development Organizations (annual membership, transportation portion only)
- NARC: National Association of Regional Councils (annual membership, transportation portion only)

Task 407 – Anticipated Outcomes:

- Participation in memberships and/or subscriptions related to transportation planning.

CATEGORY 500 - TECHNICAL ASSISTANCE AND TRANSIT SUPPORT

Purpose: The purpose of this work category is to provide technical assistance to integrate transportation, land use, and environmental planning techniques within the Nashua region. With reductions in funding for transportation improvements at the federal and state level it is increasingly clear that the NRPC cannot expect the construction of major new facilities to serve increased transportation needs. As a result, NRPC, the municipalities of the region, and public transit providers must work together to plan land use patterns that reduce dependence on private automobiles as the primary transportation mode and to improve the efficiency of the transportation system. Work tasks under this category will assist communities with coordinating both transportation and land use systems to successfully guide development and address issues such as automobile dependency and development patterns which hinder the implementation of a multi-modal transportation system.

Any sub-agreement in a contract between NRPC and its member communities that proposes to utilize UPWP funds in the execution of tasks must be reviewed and approved by NHDOT prior to execution of

the contract. This would apply to conducting transportation chapters of Master Plans or any other transportation-related services that are provided in a contractual arrangement between NRPC and its municipalities.

TASK 501 Local and Regional Assistance

Technical Planning Assistance: Upon request by local officials, NRPC will provide technical assistance for local transportation planning needs.. Information and minor assistance by phone, letter, or attendance at meetings to address transportation needs of member communities. Technical assistance will be provided to communities on a variety of transportation and land use issues such as, but not limited to, access management, corridor management, driveway regulations, scenic road process and designation, subdivision road layout, etc. Review of traffic impacts of local developments and developments of regional impact are conducted at the request of NRPC communities. Staff provides updated transportation chapters to municipal master plans as these documents are being revised.

Additional Traffic Data Collection: Staff will perform 24-hour automatic traffic recorder counts per NRPC established schedule for trend analysis and for local master plan updates. This may involve the development of traffic count location maps. Peak hour turning movement counts and capacity analysis at intersections may be conducted for local planning studies. NRPC will maintain a traffic count location GIS database and associated maps. Signal warrant studies, speed studies, crash data analysis and calculation of local trip generation rates are other types of local assistance provided. .

Data Accessibility: NRPC provides online application services to support community and public stakeholder needs in viewing, analysis, and download of planning data. These tools are suitable for both lay and technical audiences and support education, outreach and local technical assistance projects. Access to NRPC data also prompts stakeholders to provide feedback on data elements that leads to correction and continual quality improvement.

Task 501 – Anticipated Outcomes:

- Technical transportation and land use research, assistance and support to communities as requested.
- Comment letters on traffic impact analyses related to site plans, subdivisions and developments of regional impact.
- Update and review of local Master Plan transportation chapters and data.
- Up-to-date online GIS, traffic count, and transportation project data viewing, download, and direct-connect services.
- Community requested traffic data collection and analysis: ATR counts, TMCs, intersection analysis, speed studies, crash data analysis, as requested.
- Publishing of Local Trip Generation Rates to supplement the ITE Trip Generation Manual.
- Publication of educational material to support the transportation/land use connection and USDOT, EPA and HUD Livability Principles.

TASK 502 Statewide Assistance

Statewide Planning Assistance: NRPC routinely provides technical assistance for projects, plans, and committees that affect transportation decisions at the State level. NRPC will work with NHDOT to provide data and analysis for development of transportation projects.

Task 502 – Anticipated Outcomes:

- Technical transportation and land use research, assistance and support to NHDOT planning initiatives
- Technical memos, analyses and presentations on transportation and land use strategies that address State level needs
- Formation of technical committees to work on specific state level issues that impact the region
- Review of state level transportation plans and data
- Participation in DOT initiatives such as LEAN Review and project cost estimation review committee
- Travel demand model analysis upon requests.
- Traffic data collection and analysis: ATR counts and TMCs upon request
- Support statewide GIS advisory, planning and coordination initiatives
- Participation in monthly meeting of the Statewide Coordinating Council (SCC) and Technical memos and presentations in support of the SCC.

TASK 503 Local Public Agency Program Support

This task will support efforts aimed at assisting constituent communities in applying for or managing federal funding programs and grant funds.

Transportation Alternatives and Congestion Mitigation Air Quality: NRPC will fully participate in the administration of the Transportation Alternatives Program (TAP) and Congestion Mitigation Air Quality (CMAQ) programs managed by the New Hampshire Department of Transportation. NRPC will review program guidelines, project requirements and eligibility, and project scoring criteria. NRPC will maintain a project ranking and scoring process at the regional level that is compatible with the NHDOT process and requirements. NRPC will provide technical assistance to member communities in the development of TAP and CMAQ applications. NRPC will also participate in the Scenic By-Ways program where applicable.

Highway Safety Improvement Program (HSIP): NRPC will coordinate with the NHDOT HSIP program manager to identify potential project(s) based on the NRPC regional Highway Safety Plan and Safety Analyst Software maintained by NHDOT. This may include the participation in the Road Safety Audit (RSA) program as applicable.

Other Funding Sources: NRPC staff will actively coordinate with the Bureau of Planning and Community Assistance to increase awareness and understanding of any other funding sources as they become available.

Task 503 – Anticipated Outcomes:

- Review of program guidance and criteria for the TAP and CMAQ programs
- Technical assistance for application development and presentation materials for communities applying for grant funds under the CMAQ and TAP Programs
- Development of regional project scoring and ranking criteria for CMAQ and TAP
- Completion of air quality analyses for the CMAQ program
- Traffic data collection and technical assistance to support Road Safety Audit application development
- Educational materials and technical support for other state funding programs as needed
- Participation on project review committees as requested

TASK 504 Special Projects

This task serves as a placeholder for conducting special transportation projects in the region with the concurrence of the NHDOT. These projects require a separate work scope and budget approved by NHDOT and apply to major study efforts which exceed the usual level of support and assistance provided by the MPO staff.

Task 504 - Work Products

- FEE Turnpike Exit 12 Interchange Study, to evaluate the need for and impacts construction of ramps to and from the north at the Exit 12 interchange. A work scope and budget is attached to this UPWP.
- Additional local and regional projects funded through the UPWP under separate work scope and budget approved by NHDOT.

TASK 505 Regional Coordinating Council (RCC)

Facilitate the Regional Coordinating Council (RCC): NRPC completed an update to the Locally Coordinated Transportation Plan for the Greater Nashua and Milford Area (LCTP) which was adopted on April 15, 2020. The plan was developed through a process that included representatives of public, private and non-profit transportation providers and public, private and non-profit human service providers. The LCTP meets federal requirements allowing the distribution of FTA funds to human service Transit Providers throughout the NRPC region. NRPC will continue to maintain and update the LCTP for the region.

The Nashua Regional Planning Commission continues working with its human service partners towards regional and statewide coordination of human service-oriented transportation network in the region. NRPC staff will function as the staff of the RCC on an interim basis to coordinate regional efforts with the

state human service transit planning process and implementing stated goals of the LCTP. NRPC will monitor human service-oriented transit planning efforts at the state and regional level and work closely with officials from the NHDOT. NRPC staff will also provide support and grant writing assistance to human service transit providers to allow access to FTA funding sources. The end result of this effort will be more cost-effective service delivery; increased capacity to serve unmet needs; improved quality of service; and services which are more easily understood and accessed by riders. NRPC will continue to attend area agencies meetings; sponsor transportation coordination forum(s), and work with the social service agencies on coordination efforts.

Planning Assistance to Souhegan Valley Transit Collaborative (SVTC): NRPC staff will continue to support the SVTC expansion efforts. NRPC will provide basic transit planning assistance to SVTC including interpretation of FTA funding requirements and applying for additional funding to implement the goals and objectives of the SVTC Strategic Plan.

Task 505 – Anticipated Outcomes:

- Facilitation of the Region 7 Coordinating Council bi-monthly meetings
- Identification of service improvements through strategic planning activities with the RCC
- Technical memos and presentations in support of the Region 7 Coordinating Council.

TASK 506 Transit Assistance

Planning and Technical Assistance to NTS: NRPC staff will continue to work with NTS to update route and ridership data. NRPC will continue to conduct data collection efforts to address changes to the service and routes, solicit rider opinions and assist in the development of transit policies and programs. NRPC will maintain a current transit route map and provide route modification maps at the request of Nashua Transit System staff. NRPC will also maintain the NTS Ride Guide and produce outreach materials to encourage use of the transit system. Staff will maintain the ridership prediction model and use it to assist NTS in its efforts to expand fixed route service throughout the region.

NRPC will assist NTS in the update of its Transit Asset Management (TAM) Plan, in accordance with FTA's National Transit Asset Management System Rule. NRPC will also continue to assist in split/share negotiations of the Nashua UZA allocation of FTA 5307 funds.

Passenger Rail Service Planning: NRPC will support planning analyses for passenger rail service between Lowell, MA and Nashua. In addition, NRPC will work with federal state and local agencies to evaluate the next steps recommended in the Capitol Corridor Project by providing technical planning services and data in support of the NH Capitol Corridor Initiative. Further NRPC will:

1. Work with City of Nashua Community Development Department, NHDOT, Boston Express, NTS, Northern Middlesex Council of Governments and Pan AM Railroad to coordinate all aspects of the passenger rail project including development activities for the station sites, providing technical information to support legislation, and technical planning.

2. Coordinate with local regional and state level stakeholders for the proposed extension to Manchester and Concord including The Nashua Rail Transit Committee, the towns of Merrimack, City of Manchester, Manchester Airport, the Greater Manchester Chamber of Commerce, and Southern New Hampshire Planning Commission.
3. Provide public information on the future of passenger rail in the region. This will include maintaining and updating the NRPC website with the most up to date project information.

Regionalization of Transit Service: NRPC will coordinate with NTS, NHDOT, neighboring transit providers and MPOs to develop a coordinated approach to regionalizing transit service across the Region. Previous work includes the update of the Regional Transit Plan in 2016 the 2019 Nashua Region Transit Expansion Feasibility Study and the Nashua Interregional Transit Expansion Study to be completed in June 2021. These studies reflect trends in ridership and service and identifies a full program of recommendations for improvements to transit service within and beyond the region. NRPC will continue work with Nashua Transit System, the municipalities of the region, the NHDOT and Massachusetts MPOs on the implementation of service alternatives. In addition, NRPC will work with NHDOT, surrounding regions and private providers on the expansion of inter-city transit.

Task 506 – Anticipated Outcomes:

- Updated Transit Asset Management Plan in cooperation with NTS
- Conduct passenger surveys and data analysis as warranted to support transit planning
- Update NTS route maps for service modifications; maintenance of NTS Ride Guide and other outreach materials, as requested
- Participation in NTS staff meetings
- Ridership estimates for potential transit service extensions or enhancements
- Technical memos addressing transit planning and ridership trends
- Developing information to keep the public informed of the project status
- Assist in implementation of service alternatives proposed in previous transit studies
- Attend Nashua Rail Committee meetings
- Monitor NH Transit Association (NHDT) activities

TASK 507 Transportation Demand Management (TDM)

This task includes efforts to reduce single-occupancy vehicle travel, thereby reducing roadway congestion, fuel consumption and air emissions. A major emphasis is to work with major employers in the region to implement programs such as flexible work schedules (to shift travel from peak to off-peak periods), compressed work weeks, telecommuting and ridesharing.

