

Strafford Metropolitan Planning Organization
Policy Committee Meeting



Friday, August 21st 2020 **9:00 – 10:30 AM**
Remote Zoom Meeting

The Chair of SRPC has found that, due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic and in accordance with the Governor's Emergency Order #12 pursuant to Executive Order 2020-15, SRPC and committees thereof are authorized to meet electronically.

Please note that there is no physical location to observe and listen contemporaneously to this meeting, which was authorized pursuant to the Governor's Emergency Order.

SRPC is utilizing Zoom for this electronic meeting. All members of the Committee have the ability to communicate contemporaneously during this meeting through this platform, and the public has access to contemporaneously listen and, if necessary, participate in the meeting as follows:

Online Access: <https://us02web.zoom.us/j/85240887267>

Telephone-only Access: 1-646-558-8656 and Meeting ID: 852 4088 7267

These instructions have also been provided on the SRPC website at www.trafford.org. If anybody has a problem accessing the meeting, please email clentz@trafford.org. In the event the public is unable to access the meeting, the meeting will be adjourned and rescheduled.

- 1. Introductions**
- 2. Staff Communications**
- 3. Action Item(s) [Motion required]**
 - 3.1. Draft minutes from June 19th, 2020
 - 3.2. Review and approve TAC weighting of Ten Year Plan scoring criteria
- 4. Project Updates**
 - 4.1. Ten Year Plan progress and next steps
 - 4.2. Timing for updating the Statewide Transportation Improvement Program (STIP)
- 5. Discussion Items**
 - 5.1. Metro Plan updates
 - Ongoing staff efforts and next steps
 - Give feedback to staff on draft theme chapters
- 6. Other Business**
 - 6.1. POP! Data Collection training
 - 6.2. Commissioner roundtable – updates on COVID-19 adaptation & recovery
- 7. Citizen's Forum** – Citizens of the Strafford region are invited to speak on the subject matter of the meeting. Statements shall be limited to three minutes
- 8. Adjournment**

Reasonable accommodations for people with disabilities are available upon request. Include a description of the accommodation you will need including as much detail as you can. Also include a way we can contact you if we need more information. Make your request as early as possible; please allow at least 5 days advance notice. Last minute requests will be accepted but may be impossible to fill. Please call (603) 994-3500 or email srpc@trafford.org.

Rules of Procedure

*Strafford Regional Planning Commission
Strafford Metropolitan Planning Organization, and
Strafford Economic Development District*

Meeting Etiquette

Be present at the scheduled start of the meeting.

Be respectful of the views of others.

Ensure that only one person talks at a time. Raising your hand to be recognized by the chair or facilitator is good practice.

Do not interrupt others, or start talking before someone finishes.

Do not engage in cross talk.

Avoid individual discussions in small groups during the meeting. When one person speaks, others should listen.

Active participation is encouraged from all members.

When speaking, participants should adhere to topics of discussion directly related to agenda items.

When speaking, individuals should be brief and concise.

The Strafford Regional Planning Commission & Metropolitan Planning Organization holds both public meetings and public hearings.

For public meetings, guests are welcome to observe, but should follow proper meeting etiquette allowing the meeting to proceed uninterrupted. Members of the public who wish to be involved and heard should use venues such as citizen forum, public hearings, public comment periods, outreach events, seminars, workshops, listening sessions, etc.

Strafford Metropolitan Planning Organization Technical Advisory Committee

Meeting Minutes

Friday, June 5th 2020 9:00 – 11:00 AM

Strafford Regional Planning Commission
Virtual Meeting via Zoom
Rochester, NH

The meeting was called to order at 9:05am
The chair read the following statement prior to the roll call:

The chair of the Strafford MPO Technical Advisory Committee has found that, due to the COVID-19/Coronavirus crisis and in accordance with Governor Sununu's Emergency Order #12 pursuant to Executive Order 2020-08, this Committee is authorized to meet electronically.

Please note that there is no physical location to observe and listen contemporaneously to the meeting, which was authorized pursuant to the Governor's Emergency Order. However, in accordance with the Emergency Order, this is to confirm that we are:

- *Providing public access to the meeting by telephone, with additional access possibilities by video or other electronic means.* We are utilizing the Zoom platform for this electronic meeting. All members of the Committee have the ability to communicate contemporaneously during this meeting through the Zoom platform, and the public has access to contemporaneously listen and, if necessary, participate in this meeting through dialing the following phone number 1-646-558-8656 and meeting ID 845 7090 3562, or by clicking on the following website address:

<https://us02web.zoom.us/j/84570903562>

- *Providing public notice of the necessary information for accessing the meeting.* We previously gave notice to the public of how to access the meeting using Zoom, and instructions are provided on the SRPC website at www.trafford.org.
- *Providing a mechanism for the public to alert the public body during the meeting if there are problems with access.* If anybody has a problem, please call 603-994-3500 (ext. 106) or email at: clentz@trafford.org.
- *Adjourning the meeting if the public is unable to access the meeting.* In the event the public is unable to access the meeting, we will adjourn the meeting and have it rescheduled at that time. Please note that all votes that are taken during this meeting shall be done by Roll Call vote. Let's start the meeting by taking a Roll Call attendance. When each member states their presence, also please state whether there is anyone in the room with you during this meeting, which is required under the Right-to-Know law.

1. **Attendance:**

Committee Members

Shanna Saunders (Somersworth), Chris Parker (Dover), Michael Williams (COAST), Leigh Levine (FHWA) Linda Dusenberry (NHDOT), Bill Watson (NHDOT), Scott Kinmond (New Durham), Tim White (NHDES), Michael Hoffman (Newmarket), Beverly Cray (UNH Transit).

Staff

Jennifer Czysz, Colin Lentz, Jackson Rand, Rachel Dewey, Jack Aponas

2. **Staff Communications**

C. Lentz noted that most staff are still working from home. Two summer field staff have joined SRPC for the summer and early fall season. Jack Aponas and Alaina Rogers will both be working with Stephen Geis on data collection efforts. When they're not collecting field data, Jack will be working on various transportation planning efforts and Alaina will be assisting Kyle with environmental planning.

3. **Action Item(s)**

3.1 **Minutes from May 1st 2020**

C. Parker made a motion to approve the minutes as written.

Seconded by S. Kinmond

Vote: unanimous in favor (via roll-call vote)

4. **Discussion Items**

4.1 **Ten Year Plan – update on projects, criteria, and scoring**

C. Lentz updated the committee members on the development of the Ten Year Plan process. He said all RPCs, NHDOT, NHDES, and federal partners (known as the Transportation Planners Collaborative, or TPC) had been reviewing the criteria used by RPCs to score candidate transportation projects. He provided a draft of the criteria and noted some recent changes. C. Lentz said there had been a proposal to skip criteria that did not apply to an individual project (for example: if bridge conditions do not apply to an intersection safety improvement project). The points for the criterion that does not apply could then be redistributed evenly among the criteria that do apply. C. Lentz said he agreed with other TPC members that this essentially eliminated the point of having the scoring criteria to compare projects, but he wanted to get additional input from committee members.

M. Williams agreed that eliminating criteria because they don't apply to a project is misleading. J. Czysz noted that the approach could be applicable in a case of a project proposing brand new infrastructure. There is no way for that project to get points under the infrastructure conditions criteria, and it could make sense to adjust the scoring accordingly.

M. Williams agreed but emphasized the value of having a scoring approach that is consistently applied to compare the value of one project to another. C. Lentz said the approach was only a suggestion, not a requirement.

B. Watson noted that the suggestion had not come from NHDOT but came mostly out of a lack of consensus among the RPCs on the criteria. He said NHDOT encouraged RPCs to customize the weighting of the criteria to fit regional values. He said when NHDOT assesses candidate projects from RPCs they will not be comparing the RPCs criteria weights, but looking only at the

top projects proposed by an individual RPC. C. Lentz said he would be collecting weightings from individual TAC members are compiling them for a regional average. He would then use the weighted criteria to conduct a preliminary in-office scoring that could be reviewed and discussed by TAC and Policy Committee members.

C. Lentz noted that the draft Ten Year Plan scoring and criteria guide included a new consideration for comparing the “need” for a project vs. the “impact”. For instance, there may be a high need for a project but the proposed scope would have limited impact, or vice versa. C. Lentz noted that the freight mobility criteria had been moved to the economic development criterion. He said criteria for environmental impact and economic impact were added.

C. Lentz said the TPC would be meeting one more time to finalize the criteria and guidance. He said SRPC staff were still working to develop technical analysis tools that could be used to identify potential projects. C. Lentz explained that SRPC would need to have a draft list of candidate Ten Year Plan projects ready for engineering review by NHDOT by December 1st [at the writing of these minutes, that date has been updated to November 6th].

4.2 Regional corridor studies – how to prioritize potential corridors and be competitive for funding?

C. Lentz reminded members that the current Ten Year Plan has funding for corridor studies (about two studies per year). The four corridors prioritized through previous TAC and Policy committee discussion were NH11, NH125, US4, and NH108 (in no particular order). He wanted to get input from TAC members on the criteria and approach to assessing and ranking the potential corridors in the region. C. Lentz said one of the first considerations was the overall approach. Do municipalities think corridors should be ranked using a “worst-first” perspective (focusing on corridors that have critical issues and the most need), or should the focus be on corridors with a lot of potential for smart development (NH125 being an example of a corridor with a lot of development potential). T. White mentioned that identifying potential sites for electric vehicle charging was also valuable for the upcoming third phase of Electrify America funding (through the Volkswagen Settlement). C. Lentz said staff were looking at data for identifying potential electric vehicle charging sites. T. White said Electrify America was going to hold a webinar on the upcoming round and said he would forward some web tools for identifying potential sites. C. Lentz reviewed some of the potential scoring criteria. M. Hoffman asked about the potential extent of the US4 study (proposed between the Lee traffic circle and the Epping traffic circle) – why wouldn’t it extend out to the intersection with NH16? C. Lentz said the extent was not final in any way, that was just a possible extent. The logic was that US4 between the Lee traffic circle was very different from the section west of the Lee circle. The extent of each study would have to be reviewed and confirmed.

B. Watson explained that NHDOT has received numerous proposals for potential corridor studies from many different groups. Some are more objective and data-driven, and some are based on political priorities. NHDOT is having to balance requests from RPCs, members of the Governor’s council, and other stakeholders. B. Watson said NHDOT has published a request for qualifications to hire a consultant to prioritize candidate corridors for study and conduct the studies. C. Lentz asked if the consultant will be asked to coordinate with RPCs in their review and prioritization of potential corridors. B. Watson said he anticipates NHDOT will make that request of the consultant. M. Williams asked if B. Watson knows whether NHDOT is considering the question of “worst-first” vs. “greatest potential” in their decision-making process. B. Watson said that was difficult to

answer at this point. He emphasized that NHDOT will probably be pulled in certain directions based on priorities of the Governor's Council. He said NHDOT may be taking a forward-looking approach: looking at corridors with development potential to resolve potential issues before they arise, and to allocate scarce resources strategically.

C. Lentz said he would continue developing metrics on each potential corridor to ensure SRPC had good information for the future consultant.

5. COVID-19 updates – emerging from the shutdown

5.1 How are COVID-19 and the stay-at-home order affecting the region, and how can we be better prepared in the future?

C. Lentz said he wanted to check in with communities about the COVID-19 crisis and how recovery and adaptation is progressing.

M. Hoffman noted the need to pay attention to the change in commuting. He said more people and companies are going to switch to at least part time remote work. This will affect travel patterns and have an impact on real estate prices as businesses reduce their building and facilities cost as they need less office space. C. Lentz noted that broadband internet access is still a barrier in rural areas of the country. S. Kinmond said the New Durham board members have quickly embraced the remote meeting technology for conducting town business. C. Lentz added that the details of NH right-to-know law related to local public meetings still need to be worked out. Individuals and communities have adapted quickly, but governments may be forced to adapt much faster than usual.

C. Parker said Dover had had their first in-person meeting with staff and development applicants. They limited the meeting to 10 people and used a large room designed for many more. The City Hall will also be opening for in-person business soon using an appointment-only approach. There will be a one way-flow of people and each visitor will be escorted by staff. C. Parker added that Dover boards will resume in-person meetings with a virtual option; masks will be required and no more than 10 people will be in a signing room. C. Parker agreed that offices will be changing the real estate market. He said some developers he's spoken to have said that traditional office building space is obsolete – except for special cases like retail space that has co-working space for meetings. He said there will be excess office space on the market as offices take advantage of reducing a major overhead cost.

M. Williams reminded attendants that COAST will be launching their new system on June 29th. All information is on the website and everything is on schedule for the transition. Ridership saw a major reduction since COAST's temporary shutdown and has been steadily climbing back up.

B. Watson asked if municipalities are increasing their capacity for outdoor dining during the pandemic. C. Parker said they were helping restaurants expand outdoor dining by waiving the usual fee for a sidewalk dining permit. He noted that the outdoor dining expansion is taking more public space, including sidewalks and parking spaces. This is essentially using public infrastructure and right-of-way for private revenue. The city has justified this under the circumstances based on the governor's order barring indoor restaurant seating. The city is working on what to do once the Governor's order is lifted. He said customers and businesses have responded positively to the expanded outdoor space. C. Parker complimented Rochester businesses and city staff for their quick adaptation of downtown parking spaces to expand outdoor restaurant seating. He said this will change the description about parking. M. Hoffman noted that outdoor public space and restaurant

seating in large Canadian cities is a huge economic driver. B. Watson noted that a group of Portsmouth business owners have hired an engineering consultant to analyze parking and traffic impacts from expanded pedestrian and outdoor seating in the Market Square area. M. Williams noted that would have a major impact on the existing public transit routes.

6. Other Business

No other business was brought before the committee.

7. Citizen's Forum – Citizens of the Strafford region are invited to speak on the subject matter of the meeting. Statements should be limited to three minutes.

8. Adjournment

C. Parker made a motion to adjourn

Seconded by M. Hoffman

Vote: unanimous in favor

The meeting was adjourned at 10:32 am

INTRODUCTION

What is the Plan?

In the United States, transportation planning is facilitated by a network of metropolitan planning organizations (MPOs) that are established in any urbanized area that exceeds a population of 50,000. The Strafford Regional Planning Commission (SRPC) is the designated metropolitan planning organization for the Strafford region and one of four MPOs in New Hampshire. The Strafford MPO is governed by representatives from each of the 18 municipalities in the Strafford region. Federal regulations require each MPO to develop a Metropolitan Transportation Plan (Metro Plan) that covers at least 20 years and includes specific information about system performance, planned projects, and financial resources. The Metro Plan should help guide the prioritization and funding of regional transportation investments and must be updated every five years (every four years in areas that fail to meet federal air quality standards).

The Transportation Planning Process

Transportation planning in the state is a coordinated effort involving the New Hampshire Department of Transportation (NHDOT), Federal Highway Administration (FHWA), Partner State Agencies, the MPOs, and the rural regional planning commissions (RPCs). The Federal legal framework for highway transportation planning is included in Title 23, Part 450 of the United States Code; federal public transit planning is included in Title 49. The federal government needs to regularly authorize transportation funds to states through legislation. The current authorizing legislation is called the Fixing America's Transportation System Act (known as the FAST Act). The FAST Act was signed into law on December 4, 2015 and upheld core pieces of previous authorizing legislation. A central part of the transportation planning process, described explicitly in 450 USC, is that it should be:

continuing, cooperative, and comprehensive

That early section of the law lays out the following factors that MPOs must consider (§450.206):

1. Support the economic vitality of the United States, the States, metropolitan areas, and nonmetropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;

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7. Promote efficient system management and operation;
 8. Emphasize the preservation of the existing transportation system;
 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
 10. Enhance travel and tourism.

Strafford MPO's Metro Plan

The 2020–2045 Metropolitan Transportation Plan is the comprehensive transportation planning document of the Strafford MPO. It integrates transportation perspectives into considerations of the environment and natural resources, economics, demographics, land use, infrastructure, and public health. It stems from an overall vision for the future, affirms regional planning goals, determines strategies and time-bound targets for reaching those goals, and designates objective measures for tracking progress.

Projects and Fiscal Constraint

The Metro Plan also has a specific role in programming current and anticipated state and federal funds to be invested in operation and improvement of the transportation system in the Strafford region. All metro plans are required to demonstrate that they are fiscally constrained – that a rational methodology was used to determine current and future available funding, and planned projects and programs do not exceed expected funding. (See the financial plan and fiscal constraint for more detail).

Performance-Based Planning: a common approach

Federal law – and common sense – also require projects and funding to be programmed based on the observed performance of the system. The metro plan tracks several performance measures that inform planning and funding decisions for the region. These measures are included in the *indicators* section of the Metro Plan. Some of the performance measures are mandated by federal law and require all state Departments of Transportation and MPOs to set targets for each of the measures.

There are seven national performance goals to be tracked by MPOs, which overlap with many of the core themes in the Metro Plan and are reflected in Strafford MPO's project development and selection practices:

1. **Safety**—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. **Infrastructure condition**—To maintain the highway infrastructure asset system in a state of good repair.
3. **Congestion reduction**—To achieve a significant reduction in congestion on the National Highway System.
4. **System reliability**—To improve the efficiency of the surface transportation system.
5. **Freight movement and economic vitality**—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. **Environmental sustainability**—To enhance the performance of the transportation system while

protecting and enhancing the natural environment.

7. **Reduced project delivery delays**—To 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.

In addition to the Federal Highway Administration (FHWA) performance goal areas are four Federal Transit Administration (FTA) performance areas:

1. **Rolling Stock** – The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).
2. **Equipment** – The percentage of non-revenue service vehicles (by type) that exceed the ULB.
3. **Facilities** – The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
4. **Infrastructure**** – The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile.

** This measure does not apply to the Strafford region because it does not contain any rail infrastructure that qualifies under federal regulations.

Regional Planning Integration

The Metro Plan integrates federal planning mandates and guidelines with regional planning documents published by SRPC. *Local Solutions for the Strafford Region*, SRPC's regional master plan, was adopted in January 2015 and concerns many planning issues that are directly related to the Metro Plan. Five of the broad themes that describe the master plan's goals and recommendations relate directly to transportation:

- **Health and Wellbeing:** Transportation is a modern necessity, and the ability to travel safely between home, work, and services is essential for a good quality of life.
- **Economic Prosperity:** The strength of local economies depends on their links to wider regional, state, and national economies through a modern transportation network.
- **Stewardship and Engagement:** Transportation planning affects everyone, and everyone should be a part of planning their community's future.
- **Accessibility and Equity:** Residents of the region should have access to safe, affordable, convenient, and efficient transportation options and their quality of life should not depend on their ability to own a vehicle.
- **Resilience:** Transportation infrastructure is vulnerable to the impacts of climate change. Transportation also currently depends on fossil fuels that drive of climate change. Improving the transportation system's resilience will require strong infrastructure, cleaner fuel technology, and incentives for travelers to use alternative modes of transportation.

Metro Plan Structure

Major parts of the plan and what they contain

A Brief Description of the Region

An overarching introduction to the region's geography, people, and transportation systems

Public Participation – What we heard from you

The outreach and engagement techniques used to gather input from the public to ensure the Metro Plan was reflective of their needs and goals.

Regional Themes

A focused discussion of specific planning issues around the region. This section is designed to emphasize current and emerging trends and challenges in clear language. No big tables of numbers or fancy charts or graphs; look for those in the *Indicators* section.

- Overall System Performance
- Safety
- Intra-Regional Transit
- Inter-Regional Transit
- Economic Linkages
- Housing & Jobs
- System Conditions
- Population Demographics

Indicators

To make the Metro Plan more readable for a wide audience, all the statistics and quantitative information were reorganized in their own section. SRPC uses numerous metrics for regional planning which are maintained in a dedicated database. Each metric gets its own snapshot which can be updated regularly and referenced easily for various purposes. The Metro Plan includes the metrics that are most relevant to transportation.

Implementing the Plan

This section lists transportation projects planned for the next 20 years. The ones that are closest to construction (within the next 4 years) have the most detail and likely have specific funding sources; as you get farther in the future, projects may have a scope of work and a cost estimate. Several projects are in the “vision” stage when they are an aspirational goal but lack a specific scope.

A Brief Description of The Region

Geography

The Strafford MPO region is in southeastern New Hampshire; it shares a border with Maine, and is about 60 miles from Boston, Massachusetts, and Portland, Maine. The New Hampshire Lakes Region and White Mountains lie to the north, the Seacoast and Greater Boston to the south. Massachusetts has a strong influence on southern New Hampshire due to employment in the Boston Metro Area. The region's northern communities are influenced by the recreational opportunities in the Lakes Region and the White Mountains (Figure 1).

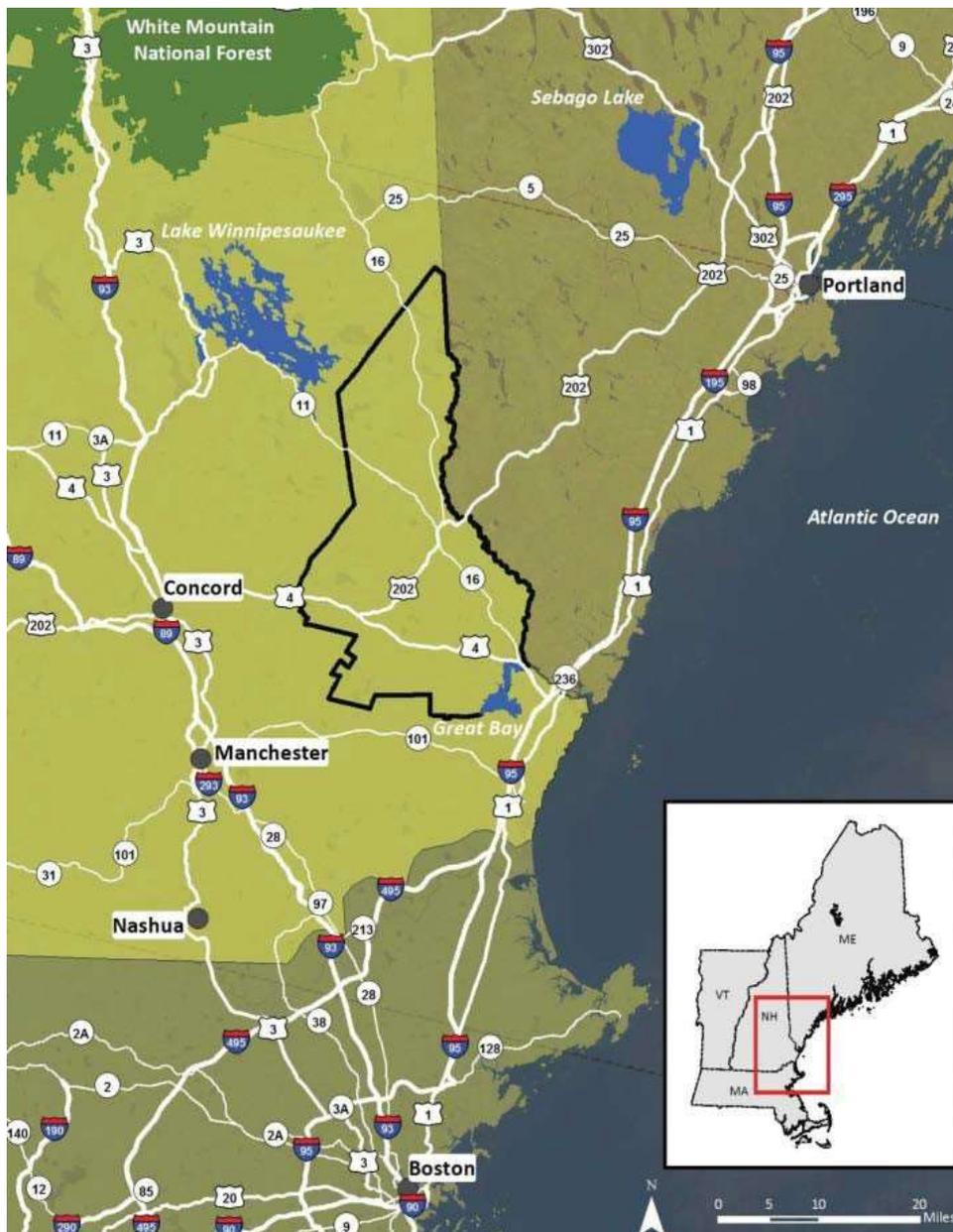


Figure 1. The Strafford region.

Eighteen communities comprise the Strafford MPO region, which is centered around the Dover-Rochester NH-ME urbanized area. The cities of Dover, Rochester, and Somersworth make up the core of the urbanized area. Around the core urbanized area are urban clusters in Farmington, Rollinsford, and Durham. Newmarket is part of the Strafford MPO region, but is incorporated into the Portsmouth, NH--ME Urbanized Area because of its proximity. The 2010 Census showed that pockets of urbanization are moving into Barrington, Lee, and Madbury due to their proximity to expanding urban communities, but the rest of the region is rural.

People

For the past two decades, the Strafford MPO region has been one of the fastest growing areas of the state. According to the 2010 census, 146,895 people lived in the Strafford region.

[More detail on overall demographic picture and trends to be included following completion of analysis]

The greatest population densities are centered around the urban downtown areas of Rochester, Dover, Newmarket, and Somersworth, with additional distinct town centers in Farmington, Rollinsford and Durham. Durham has unique population density because of the University of New Hampshire's flagship campus. Minority populations are also highest in the three cities of Dover, Rochester, and Somersworth. Somersworth has the highest minority densities, particularly in census blocks in the downtown. Somersworth is noted for its strong Indonesian community, which has an annual festival.

An Aging Population

An aging population is a defining factor for communities across the country, and especially for New Hampshire. According to census numbers, between 2000 and 2010, the population of people over 65 in the Strafford region grew by nearly 20%. Analysis by the NH Alliance for Healthy Aging suggests that by 2030, one out of every three people in the state will be over 65. The NH Office of Strategic Initiatives (OSI) also suggests that Strafford County could see a 62% increase in people of 65 by 2040. Seniors are generally spread out across the Strafford region. Ensuring the transportation system supports people as they age is a critical challenge, particularly in rural areas where public transit is more expensive to operate because of the long distances between destinations. The Strafford region has excellent demand response service, but there is still unmet need in rural towns.

The Region's Transportation Systems

Southeast New Hampshire (including the Strafford MPO and Rockingham MPO regions) has the richest mix of transportation modes in the state:

- Major public highways and the Spaulding turnpike, which will be implementing all-electronic tolling in 2021
- The Cooperative Alliance for Seacoast Transportation (COAST) provides fixed route public transit to six New Hampshire communities and four Main communities, as well as on-demand fixed route in three New Hampshire communities.
- In addition to their on-campus routes, University of New Hampshire's Wildcat Transit provides fixed route public transit that connects Dover, Portsmouth, and Newmarket to the flagship campus in Durham.
- COAST and several specialized providers operate demand-response transit service for seniors and people with disabilities. These services are coordinated through the Alliance for Community Transportation.

- C&J Buslines connects Dover NH, Portsmouth NH, and Newburyport MA, to downtown Boston and Logan Airport through intercity bus service.
- Amtrak's Downeaster service connects Boston MA to Portland ME, with stops in Dover, Durham, and Exeter.
- New Hampshire Northcoast operates regular freight rail shipments from Ossipee NH through Rochester and Rollinsford, linking up with the Pan Am Line in Dover.
- While Rochester's Skyhaven Airport is not large enough for commercial passenger flights, Portsmouth International Airport at Pease Tradeport has flights to several destinations through Allegiant Air
- Towns and cities are expanding their networks of infrastructure that provide safe routes for bicycles and pedestrians. There are also several recreational rail trails that connect communities and the region.

Vision for the Region's Future

The Strafford region's transportation network is safe, reliable, and affordable; it connects people to affordable housing, livable-wage jobs, and educational opportunities regardless of their age, income, or where they live.

Transportation infrastructure is well-maintained and resilient, frequent fixed-route transit serves a diverse workforce, demand-response transit enables people to lead active lives regardless of age or disability, inter-regional bus and rail links the region to neighboring economies, freight moves efficiently through a variety of modes, town centers are the epicenter for a growing network of pedestrian and bicycle routes.

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Introduction - What is the Metro Plan

- FAST Act requirements
- 3 C's and Planning Factors
- Federal and supplemental performance measures
 - Just a list, reference to sections later in the plan
- NH Livability Principles from the 2015 Regional Master Plan

The Strafford Region

Broad scope of regional issues and data trends

- Geography
- Demographics

Elements of the transportation network addressed in the plan

- Highways
- Public Transit
- Bicycling and Walking
- Air (passenger and freight);
- Inter-city bus;
- Rail

Public Participation – What we heard from you

- Analysis of the region-wide survey on transportation
- Results from the 2020 regional planning workshop on transportation, housing, and economic development

Regional Themes

Overall System Performance – traffic and travel

System Performance Goals

System Performance Discussion

What We Can Do

Policy In Action

Population Demographics

Population Demographics Goals

Population Demographics Discussion

What We Can Do

Policy In Action

Safety

Safety Goals

Safety Discussion

What We Can Do

Policy In Action

Intra-Regional Public transit

Intra-Regional Public Transit Goals

Intra-Regional Public Transit Discussion

What We Can Do

Policy In Action

Inter-regional transit

Inter-regional transit Goals

Inter-regional transit Discussion

What We Can Do

Policy In Action

Infrastructure Conditions

Infrastructure Condition Goals

Infrastructure Condition Discussion

What We Can Do

Policy In Action

Economic Linkages

Economic Linkages Goals

Economic Linkages Discussion

What We Can Do

Policy In Action

Housing and Jobs

Housing and Jobs Goals

Housing and Jobs Discussion

What We Can Do

Policy In Action

DRAFT

Indicators/Metrics

[Each of the following metric categories will have several “snapshots” with detailed information within the topic area. Examples in the demographics category include population projections, percent population with a disability, employment by industry, and median household income]

Demographics

Housing & Affordability

How People Travel (includes federal performance measures)

Crashes (includes federal performance measures)

Infrastructure Conditions (includes federal performance measures)

Inter-Regional Economic Connectivity

Public Transit Vehicles and Riders (includes federal performance measures)

Equity

Resilience and Environmental Impact

DRAFT

Implementing the Plan

Transportation Funding

Environmental Impacts and Mitigation Strategies

Environmental Justice and Equity

Appendices

Financial Plan and Fiscal Constraint

Project list

Regional and local projects in the Transportation Improvement Program

Regional and local projects in the Statewide Ten Year Plan

Long-range projects in development and vision projects

DRAFT

Economic Linkages

Goals

- Improve multimodal connections that increase mobility and accessibility of people and freight and strengthen inter-regional and interstate economic linkages
- Support the development of walkable community centers that promote local businesses and create a sense of place
- Increase capacity of existing rail infrastructure for passenger and freight

Discussion –

The transportation system is critical to the region's economy. It gets us to work, school, and other daily tasks, gets goods to and from markets, connects visitors to the region, gives us access to recreation, and keeps us connected socially. The highway network is relied on for freight movement; over 80% of freight to and from New Hampshire is on large trucks, which cause the greatest amount of wear and tear on roads due to their weight. Trucks passing through small, rural towns can contribute to safety hazards and damage local roads when major highways are closed.

Truck freight is still vital for local last-mile delivery of goods, but the safest, most efficient way to move large volumes of freight over longer distances is by rail. It has its own dedicated infrastructure, has limited interaction with passenger vehicles, is more fuel-efficient, and can move huge volumes. New Hampshire Northcoast Rail (NHN) was built to transport sand, aggregates, and other raw materials from Ossipee and Rochester for construction projects. NHN moves more freight by tonnage than any other short line railroad in New Hampshire; an average of 600,000 tons annually of freight consisting primarily of concrete sand, propane, and steel. That's the equivalent of removing 40,000 large tractor-trailer trucks - and the associated wear and tear—from local and state roads. In Rollinsford, the NHN line joins rails owned by Pan Am, which are shared by additional freight trains and the Amtrak Downeaster. Aside from a few spots where trains can pass each other, most of the track through the Strafford and Rockingham Regions allows only one train in one direction. Since NHN and Amtrak share these rails with other freight providers, the number and length of trains that can operate on the tracks is very limited.

The closest large airport is Pease Tradeport in Portsmouth. Skyhaven Airport in Rochester cannot handle large commercial flights or freight, but the airfield has been expanded recently and the adjacent manufacturing complex with Albany and Safran is a logical partnership for expanding air services. Close to half of all homes in New Hampshire rely on fuel oil for heat, and 90% of that comes through the Port of New Hampshire and Sprague Terminal in Newington. From there the network of state and local roads is relied on for home delivery. Fuel oil is by far New Hampshire's largest import by value, and its largest exports by value are electronics, machinery, and precision instruments. For additional statewide freight planning efforts, check out the [State Freight Plan](#) published by NHDOT.

Tourism is New Hampshire's main economic driver and again, the highway network is depended on by visitors and residents alike. There are famous tourist destinations in the north, but the Strafford region has plenty of beautiful places, interesting historic sites, and local restaurants to visit. Strafford MPO works with several municipalities on two registered scenic byways that are designed to give drivers a unique experience. The Mills Scenic Byway tours the cities and towns with river mills that were the core of manufacturing in their heyday and are being revitalized. The Branch River Scenic Byway is being

expanded to integrate unique places in the northern part of the Strafford region. This expansion effort is in collaboration with [Explore Moose Mountains](#), an initiative to promote tourism and economic development in the Moose Mountains region.

Climate change represents an existential threat to New Hampshire's economy. The impacts may be most obvious on the tourism industry. Global climate change is impacting New Hampshire's regional environment and what attracts people to the state for a quintessential Northern New England experience. Winters are getting shorter; ponds are freezing later and melting earlier, snow pack on ski slopes is shallower. Unpredictable patterns in precipitation and seasonal temperatures are affecting the famous fall foliage. Summers are getting hotter and drier. Some of the state's iconic wildlife is threatened by the large-scale changes: more ticks are surviving the warmer winters to reduce moose populations; brook trout are unable to survive in many of the streams and rivers in which they used to thrive.

What We Can Do

Improving the multimodal capacity of the freight network is a priority for the region. New Hampshire's reliance on truck freight increases the cost of highway maintenance and makes the freight network and economy more vulnerable to potential disruptions. Strafford MPO will continue to work with MPO colleagues, freight stakeholders, and decision-makers to improve the multimodal connectivity of the region's freight network. This includes identifying upgrades to NHN and Pan Am railroads to improve efficiency and capacity of passenger and freight rail service. The Northern New England Passenger Rail Authority (NNEPRA) has proposed and implemented several expansions of track siding that allow trains to pass each other. Strafford MPO assisted UNH in expanding the passenger rail station to accommodate more passengers and be more accessible for people with disabilities. Capacity is currently the limiting factor for passenger and freight rail along the Pan Am line. Most of the route comprises a single track with few places for trains to pass each other. Currently, the Amtrak Downeaster is at capacity and adding a car to accommodate more passengers isn't possible without additional track or siding.

Strafford Regional Planning Commission also operates as an Economic Development District (Strafford EDD) to collaborate with community and business leaders in developing the region's economy. Transportation plays a critical part of economic development by enabling a wider range of people to be mobile and access businesses, recreation, and social engagement. Strafford MPO will continue to work with regional stakeholders to improve accessibility through a multimodal network. Public transit service provided by the Cooperative Alliance for Seacoast Transportation (COAST) is an essential transportation service for a broad range of workers in the region. Strafford MPO is working with COAST and economic development stakeholders to expand COAST service and link local economies.

Strafford MPO will continue to collaborate with Explore Moose Mountains initiative to promote tourism and economic development in the northern rural section of the region. This includes expansion of the Branch River Scenic byway in partnership with the Lakes Region Planning Commission.

The COVID-19 outbreak in early 2020 had wide ranging impacts on the economy, many of which will require long-term recovery. Some of the initial impacts to the transportation system were ironically positive, with lower traffic volumes and reduced emissions. Many people also took the opportunity to walk and bicycle around their communities, and the number of people visiting local parks spiked sharply. The long-term impacts are far less certain but will likely not be positive. Such a massive economic downturn will inevitably have long-term impacts on municipal and state budgets, and their ability to

maintain critical infrastructure. Public transit service in the region shut down almost entirely during the Governor's stay-at-home order. COAST receives no state funding to support its operations and relies on local funds to match federal dollars, and municipal budgets will be hurt by the COVID-19 shutdown.

While it is not a transportation issue strictly speaking, access to highspeed internet remains inconsistent across New Hampshire. Main Street storefronts are the classic image of economic development in our rural region. But websites, social media, and online networking are just as critical as a vibrant streetscape. COVID-19 demonstrated how important it is to have reliable highspeed internet service, for continued business operations and local government decision-making.

Policy in Action

Strafford MPO will continue to plan and advocate for a truly multimodal transportation network. This includes projects to improve connections between modes (such as COAST and C&J Buslines), and projects to improve transit frequency (such track siding that can increase Amtrak capacity, and adapting traffic signals to increase efficiency of bus travel). Personal vehicles are required for much of the travel in a rural region, so if someone can't drive alone or doesn't have access to a vehicle, they may be limited in the education, nutrition, employment, healthcare, and recreation resources they can access. This means they may also be unable to fully participate in the local and regional economy.

Strafford MPO will continue to support and advocate for public transit service which provides equitable mobility and accessibility throughout the region. Multimodal improvements will require innovative and flexible sources of revenue. Strafford MPO will continue to engage state legislators to develop novel revenue sources that reflect modern needs.

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Housing and Jobs

Goals

- Increase public transit service in the region
- Support coordination of affordable housing development with public transit and multimodal transportation improvements
- Improve accessibility in areas with low income and limited transportation options
- Increase workforce mobility

Discussion – Where People Live and Work

The Center for Neighborhood Technology maintains a national level [Housing and Transportation Cost Index](#). It shows that for the average household in the region, housing and transportation costs account for 45% of total income. Generally, a home is considered affordable when total housing cost is less than 30% of household income. 26% of households are above this threshold. However, according to the index the Strafford has the lowest combined housing and transportation cost in New Hampshire, with some rural regions like Coos County reaching a combined cost of 62%. Within the Strafford region, rural municipalities have slightly higher combined costs. This is a critical factor for rural residents who are low-income or on a fixed income such as the growing number of seniors in New Hampshire.

According to 2018 American Community Survey data, nearly 60% of people living in the Strafford region commute outside the region for jobs. The highway network is critical for reliable travel outside the region; public transit and alternative modes should be emphasized for mobility and accessibility within the region.

The Strafford region is a beautiful place to live and housing prices are rising as the region grows. Affordable housing for the region's workforce is key to ensuring economic sustainability and quality of life for a broad range of people.

[Detailed geographical analysis of vulnerable populations is in-progress. This will be a discussion of parts of the region where people have reduced access to jobs, healthy food, and other critical services due to transportation-related limitations (income, age, etc.)]

The COVID-19 pandemic had an immediate economic impact throughout the country. Municipalities and the state will be challenged by the ripple effects for years to come. Decreased vehicle traffic meant a sharp decline in state and federal gas tax revenues that fund transportation programs. New funding mechanisms are required to ensure a stable and equitable revenue stream. The pandemic will likely have long-term effects on transportation demand; many businesses and public services may permanently adjust to online and virtual interaction with customers and clients.

What We Can Do

Transportation should not be a limiting factor in someone's access to essential services and quality of life. Strafford MPO will increase collaboration with the Seacoast Workforce Housing coalition and related agencies to find way to better coordinate housing and transportation in the seacoast. Strafford MPO will increase focus on communities and populations that are more transportation limited (such as

low income and seniors). Strafford MPO will also continue working with regional partners to increase transportation options for employment accessibility. One example is the collaboration between the Portsmouth Naval Shipyard, Southern Maine MPO, and Rockingham MPO to improve transportation access for shipyard employees who travel from throughout the region. Geographical analysis of the region's vulnerable populations will enable Strafford MPO staff to identify and develop projects that increase transportation access.

Policy In Action –

The affordability of housing is paired with transportation access and cost. Equity for residents of the region will require continuing collaboration between planners, housing advocates, municipalities, and developers. Strafford MPO will advocate for residential development in town and city centers that is paired with public transit and walkable, bikeable infrastructure.

DRAFT

Infrastructure Conditions

Goals

- Keep public roads in good condition
- Restore or upgrade bridges and culverts critical for local safety and infrastructure resilience
- Increase adoption of alternative transportation modes to reduce wear and tear on roads

Discussion – Transportation Infrastructure in the Strafford Region

In general, the highway network is in good condition. In 2017 none of the highway miles or bridges on the National Highway System routes in the region were rated as being in poor condition. However, there are 17 municipally owned bridges that are on the red list because part of their structure is in poor condition or near failing (per national bridge inspection standards). Three of those bridges are officially closed because of a structural failure. Local bridges may be on small routes with low volume, but they can be vital links for local travel and freight. Multiple red-list bridges in the region are on the border with Maine, such as in Milton and Wakefield. Municipalities are responsible for maintenance of locally owned roads and information on the condition of locally owned roads is locally managed. Strafford MPO participates in a program to assess the condition of local roads – the Road Surface Management System (RSMS). This includes data collection and development of a local road maintenance plan. In a rural area like the Strafford region, even the smallest route or bridge may be a critical link for evacuation or emergency response. Climate change is leading to more frequent extreme storms, which will put more pressure on vulnerable roads, bridges, and culverts.

Implementation – What We Can Do

Strafford MPO supports NHDOT's emphasis on maintaining existing highway infrastructure, not build new infrastructure that will add to statewide and local costs. Strafford MPO is not directly involved with the maintenance of the highway network, but it can prioritize other efforts that have a positive impact on infrastructure conditions. Decreasing the number of trips people take alone in their cars reduces congestion, reduces wear and tear on roads, and improves safety. Strafford MPO will continue to work with NHDOT and municipalities to coordinate improvement projects with paving schedules so work is completed efficiently. RSMS assessments have been completed in Wakefield, Rollinsford, Nottingham, and New Durham. The assessment results are used to develop a 10-year road maintenance plan with municipal staff. Strafford MPO will continue to conduct RSMS assessments with municipalities to provide technical assistance with local pavement management.

Policy in Action

Much of the revenues for highway maintenance and improvement come from fuel taxes (known as the gas tax). Emission reductions from more fuel-efficient cars has improved the environment and human health, but this has also meant decreasing revenues for transportation system maintenance and operations. NHDOT prioritizes road and bridge maintenance through the statewide Ten Year Plan and has needed funding through additional sources (such as a government loan through the TIFIA program) to make progress on highway paving and red list bridges. Strafford MPO has given testimony at legislative hearings on proposed revenue bills and will continue to advocate for new revenues for transportation maintenance and improvement to the New Hampshire legislature

Inter-Regional Transit

Goals

- Improve linkages to existing intercity bus service for pedestrians, cyclists, and local transit
- Support policy and develop projects that expand inter-city bus service to new destinations
- Increase passenger capacity on Amtrak Downeaster

Discussion – Our Connection to other Regions and States

The Strafford region is situated approximately one hour from economic centers in Portland Maine, Boston Massachusetts, and Manchester and Concord in New Hampshire. Connections to these metro areas are vital to the economic vitality of the Strafford region. Currently, passenger rail connects the Strafford region to Boston and Portland on the Amtrak Downeaster and Intercity bus connects the region to Boston (and New York City). Ridership makes it clear that these services are in-demand and that people value alternatives to personal cars and trucks. In 2019 ridership on the Amtrak Downeaster grew for 9 out of 12 months during the year (<https://media.amtrak.com/2020/01/amtrak-downeaster-achieves-record-ridership-in-2019/>). Total ridership for the year was 574,404, 7.8% higher than 2018, and broke the all-time record of 546,056 set in 2017. 44.3 million passenger miles were logged that year and vital ticket revenues were generated. Yet Amtrak service is constrained by the capacity of the tracks that run through the region. Because most of the route consists of single track, only a certain number of trains can operate at any given time because of the lack of “track siding” where trains can pass each other. Amtrak shares the limited space with freight rail traffic as well.

C&J Buslines provides essentially 24-hour service that connects stations in Dover and Portsmouth New Hampshire and Newburyport Massachusetts to South Station and Logan Airport in Boston. C&J also travels to New York City. Ridership has grown steadily since service started and has reached the point where C&J has become the victim of its own success. Parking has become a critical issue as the Dover and Portsmouth stations, which also serve as regional park & rides for commuters. The lots have become packed year-round because of growing C&J ridership, use by commuters for carpooling, and unfortunately some abuse of their purpose.

The Strafford region has good multi-modal connections to metro regions to the south and north, but employment and educational opportunities in Concord and Manchester are only accessible by car. The 2020 Statewide Strategic Transit Assessment Study funded by NHDOT looked at communities and areas of the state that lacked transit service. The region is well-covered by fixed route through the Cooperative Alliance for Seacoast Transportation and by demand-response service through the Alliance for Community Transportation. But the NHDOT Transit Assessment identified east-west service as a priority service gap. It estimated that commuter bus service (primarily for employment) from Rochester to Concord would have around 23,000 riders per year and service from Portsmouth to Manchester would have around 26,000 riders. The assessment also identified rural areas that lack connection to the existing inter-city network. A Portsmouth to Concord connection could have around 11,500 riders. It also identified the need for a north-south connection from the Strafford region to communities in the North Country, though it was a lower priority. A new connection between Dover, North Conway, and Berlin would provide better mobility along the eastern border in those currently underserved communities.

Developing a stronger multimodal network is one strategy for mitigating climate change and regional air pollution. In the United States, motor vehicles are responsible for approximately one-third of all carbon dioxide (CO₂) emissions – which are accelerating global warming and climate change. These emissions can be reduced by increasing options for alternative transportation and incentivizing people to leave their cars at home. Regional air quality is also affected by the reliance on cars and trucks. In the United States, motor vehicles are responsible for up to half the chemical by-products that cause smog and ground-level ozone; they release more than 50 percent of hazardous air pollutants; and they emit up to 90 percent of the carbon monoxide found in urban air.

What We Can Do

The lack of east-west transit service has been a topic of concern for many years. Strafford MPO will work with Rockingham, Southern, and Central Planning Commissions to further assess the feasibility of the new commuter and inter-city services identified in the Statewide Transit Assessment.

In 2016, the New Hampshire Legislature established a Public-Private Partnership Infrastructure Oversight Commission that was chaired by the Commissioner of NHDOT. Public-Private Partnerships (known as P3) are used to finance new infrastructure. In 2019, the P3 commission prioritized developing a new long-term lease agreement for the maintenance and operation of the Dover and Portsmouth bus terminals. In 2020, the commission released a request for proposals, citing the parking capacity challenges and the need to continue the vital bus service. It identified possible expansion of the current park and rides and implementation of fee-based parking to manage capacity and abuse, and to fund improved maintenance and operations at the facilities. C&J is an applicant and an obvious candidate given that they already operate bus service and currently maintain the lots. C&J has proposed that they would allocate some of the fee-based parking revenues to the Cooperative Alliance for Seacoast Transportation to increase local public transit service to the intercity bus terminals. Strafford MPO will continue to support the implementation of the long-term lease agreement and P3 at the Portsmouth and Dover bus terminals.

Strafford MPO will continue collaborating with municipalities, planning partners, and agencies like the Northern New England Passenger Rail Authority (NNEPRA), which operates the Amtrak Downeaster, to expand and enhance passenger rail service in the region. Past efforts have included applications for funding through the Congestion Mitigation Air Quality Program to improve tracks and capacity for trains. Strafford MPO will continue to work with stakeholders to identify additional rail improvements.

Policy in Action

Strafford MPO regularly advocates for the advancement of a multimodal transportation system in NH. Investments in transit, passenger rail, and bicycle and pedestrian infrastructure were all top priorities identified by Strafford MPO staff in testimony on the Statewide Ten Year Plan.

Strafford MPO has also been able to communicate the need for more multimodal improvements to congressional representatives. Most notably, transportation planners and staff from New Hampshire's four MPOs met with Congressman Chris Pappas to discuss ongoing transportation challenges as he worked on an update to the federal transportation authorization. One of the overarching issues was that NH receives the least amount of federal transportation funding out of the 50 states. This hampers New Hampshire's ability to develop a modern, multimodal transportation network.

Regional Public Transit

Regional Public Transit Goals

- Increase funding for public transit
- Increase ridership on regional public transit
- Increase frequency on existing public transit routes
- Increase service coverage and coordination of demand-response transit service for seniors and people with disabilities
- Coordinate new development with public transit access
- Increase transit access for seniors and people with disabilities

Discussion – Public Transit Need, Value, and Sustainability

In July of 2020, COAST launched a new, more efficient system of routes that provides better connections throughout the region. There are 68,708 people and 55,611 jobs within a half mile of the new route system. People want more public transit and mode options for getting to work and other daily tasks. Ridership on the Cooperative Alliance for Seacoast Transportation fixed route system has grown over 150% since 2000. This is 14 times faster than population growth in the Seacoast (data from COAST). Rider surveys show that people ride the bus primarily for employment, shopping, medical appointments, and education (generally in that order). Most people who ride COAST for critical work and shopping trips are doing so more than 3 times a week. Riders also reported using COAST regularly during the week for recreation and entertainment.

The rising senior population is a familiar trend in New Hampshire. The number of people older than 65 is growing throughout the region, in rural and urban communities, and is projected to double by 2040. Enabling seniors to maintain their independence and quality of life as their desire or ability to drive diminishes is a significant transportation challenge in a rural region. Demand for ADA trips on COAST has grown 880% since 2008 (data from COAST). Multiple agencies in the Strafford and Rockingham regions provide demand-response service throughout and coordinate their service through the Alliance for Community Transportation (ACT). Demand-response services include non-emergency medical appointments, shopping trips, food delivery or transportation to meal sites, and social activities. ACT recently developed a central call-taking and ride scheduling platform called TripLink which will further coordinate existing services and make it easier for clients to find the service that best fits their needs. ACT is a model for transportation service delivery, and yet there is growing unmet need in the region due to the growing senior population and lack of resources for transportation and healthcare providers.

COAST provides critical service for people with mobility challenges, but it is an unfortunate and incorrect stigma that public transit is mainly for people who can't drive because they're poor or old or disabled. In COAST's most recent survey of riders, half of the respondents said they ride the bus for reasons other than lack of vehicle access or mobility. Many noted wanting to reduce congestion and environmental impacts, reducing wear on their own vehicle, or that they simply liked riding the bus. Public transit is also a huge economic driver. The estimated annual regional economic impact of COAST is over \$24M (data from COAST). Averaged out across the country, every \$1.00 invested in public transit yields \$4.00 of economic return. These benefits are both broad and localized. Public transit improves transportation options for individuals and reduces congestion and emissions. It increases access to businesses without the need for additional parking. Access to public transit is a valuable attribute for properties and those

along transit routes will have higher value. Transit oriented development describes the approach of clustering development close to transit service (usually fixed route bus or passenger rail). Even better if development is mixed use, combining residential with shopping and other services in walking distance of transit. This also helps the transit system since the most efficient route is a straight line. Downtowns and town centers are perfect opportunities to use a transit-oriented approach to increase property values, develop spaces designed for people, rather than cars, and create affordable housing.

Funding for public transit in New Hampshire is a critical issue. Federal funds for operating public transit require matching dollars and in New Hampshire this burden is currently borne exclusively by municipalities. The state provides some assistance for replacing buses, but operations are the bulk of the cost of public transportation service. In addition, under the current FAST Act, the amount of federal transit funding available is projected to increase by only 1.5% per year (FTA apportionments). New Hampshire is 48th in the country for federal and state funding for public transit.

State	2017 Population	2017 State Funding	2017 Per Capita Funding	2017 State Funding for Operating	Per Capita Funding for Operating
Massachusetts	6,859,819	\$2,005,445,417	\$292.35	\$1,973,598,935	\$287.70
Connecticut	3,588,184	\$632,110,145	\$176.16	\$364,010,145	\$101.45
Rhode Island	1,059,639	\$57,309,695	\$54.08	\$48,420,242	\$45.70
Vermont	623,657	\$7,928,915	\$12.71	\$6,745,749	\$0.82
New Hampshire *	1,342,795	\$1,846,351	\$1.38	\$0	\$0.00
Maine	1,335,907	\$1,263,595	\$0.95	\$1,147,845	\$0.86

* NH saw a sizeable jump in State funding in 2017. Included \$1.161M of Turnpike Toll Revenues used for short-term Spaulding Turnpike construction mitigation projects.

Per Capita Funding National Average: \$58.47
Per Capita Funding National Median: \$5.45

Implementation

Funding Advocacy

Funding is arguably the central challenge for COAST over the next three years. NHDOT awarded funds to COAST through the Congestion Mitigation and Air Quality improvement program (CMAQ) to implement their new route system. But that funding will be spent in 3 years and new revenues must be found to make up the difference. Strafford MPO will be working during that time to study COAST's economic impact, promote its value throughout the region, and advocate to state legislators for the need for sustainable funding for public transit in New Hampshire.

Technology opportunities

New technologies could support public transit operations and improve the on-time performance of buses. Traffic signals could be upgraded to sense when a bus is approaching an intersection and keeps the light green until it passes. This is not the same as emergency vehicle preemption which turns all lights red as an emergency vehicle approaches. Strafford MPO will collaborate with municipalities and COAST to investigate implementation of transit signal prioritization within the COAST service area.

Strafford MPO staff will continue to participate on the boards of COAST and ACT and advocate for increased funding to support these critical transportation services.

Strafford MPO is researching connections between public transit and economic development in the region.

Policy in Action

Strafford MPO will continue to advocate for public transit to increase the sustainability of transit service in the region. The regional study on public transit and economic development will include specific focus on communication to state decision-makers regarding the value of public transit to residents and the economy. The Statewide Ten Year Plan is updated every two years and allocates all funding for New Hampshire's transportation needs for the next ten years. The Ten Year Plan is reviewed by the House and the Senate and Strafford MPO takes every opportunity to advocate for public transit and other regional priorities.

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Overall System Performance

System Performance Goals

- Maintain and improve the reliability of the highway system
- Reduce congestion and travel delay
- Increase accessibility to alternative modes of transportation
- Increase safety for non-motorized modes of transportation
- Fix or replace red list and closed bridges

Discussion – Service of the Highway Network

The Strafford MPO is a growing region where public transit is a critical service and municipalities are investing more in growing local networks of bicycle and pedestrian routes. But it's also a rural region where cars and trucks are still required for many trips. Over 80% of trips are made by people driving alone in a personal vehicle and the average household logs nearly 23,400 miles per year. Many people live in the region and commute to jobs elsewhere, including Manchester, Concord, and the Boston Metro area.

The highway network comprises a good mix of roads with high-capacity and local access. Due to large volumes of commuters in the morning and evening, there is some predictable congestion at specific points on the highway network. More detail on congestion is provided in the indicators section on how people travel. The Spaulding Turnpike, NH125, and US4/NH202 are critical corridors for inter-regional travel and freight. Tourism is critical to the New Hampshire economy and the many visitors travel through the Strafford region on their way to vacation spots and second homes in the lakes and mountains. This causes congestion at specific locations such as the junction of the Spaulding Turnpike and Rt 11 in Rochester. The highway network facilitates reliable truck freight travel in the region, however large volumes of trucks choose to travel at night to avoid higher traffic volumes during the day. Some major routes bisect municipalities like Northwood and Barrington along US4 and NH125, restricting the development of community centers and creating safety hazards.

Over 40% of greenhouse gas emissions in New Hampshire come from transportation ([NHDES](#)). It is the largest source of emissions after electricity generation (20%). While New Hampshire has good air quality overall, but emissions still contribute to ground-level ozone which causes respiratory illness and can reach dangerous levels in the hot summer months. Identifying and mitigating locations with reoccurring congestion is an effective way to reduce emissions. Even more effective is reducing the number of people driving alone by increasing public transit ridership and promoting alternatives like carpooling, telecommuting, biking, and walking. This is important as climate change is leading to more days over 90 degrees, impacting people who are more susceptible to heat and air quality impacts.

Communities are developing local and regional connections for bicycles and pedestrians, but safe routes for regular commuting by bicycle are still limited throughout the region. Strafford MPO has analyzed the regional network for bicycle safety (known as level of traffic stress). only ____% of roads are safe for novice riders. [More detail will be included on bicycle level of traffic stress.] The Strafford region has its own network of trails developed by the state, municipalities, or private groups. Trails are important in a state where tourism is a central part of the economy: the Farmington Recreation Rail Trail connects to Rochester over 6 miles but is part of an extensive network of snowmobile trails; the Rockingham

Recreation trail will take you from Newmarket all the way to Manchester or Windham. Municipalities are building their local trail networks to improve pedestrian safety and access. Dover's Community Trail begins along the Cocheco River, passes through the transportation center, past schools, and ends in a large housing development. Somersworth has connected their schools with the downtown on an improved network of sidewalks and trails. Rochester is developing a Riverwalk for recreation and economic development.

Electric vehicles are becoming more prevalent and in-demand. Municipalities, individual companies, and state government looking to make investments in electric vehicle infrastructure. Aside from specific charging locations in Rochester, Dover, and Durham, much of the Strafford region lacks public charging stations for electric vehicles ([electric and alternative fuels map](#)). Electric vehicles adoption is much higher in neighboring states like Massachusetts; more tourists visiting from out of state will be looking for charging stations on their way to the Strafford region or points north. Electric vehicle adoption is growing in New Hampshire and the public charging network needs to support that growth. Personal electric vehicles can be charged at home, but people will need more charging stations at or near their workplaces to ensure they have enough power to get back home.

Implementation: Improving Transportation Efficiency and Accessibility

Strafford MPO will take advantage of new tools to analyze travel patterns, congestion, and network gaps throughout the region. The regional traffic demand model is a powerful tool that will be used to identify specific locations where congestion occurs and develop potential solutions. Strafford MPO will continue to help municipalities continue to grow their local networks of bicycle and pedestrian networks to enable more people to bike and walk. The recent analysis of the highway network using a level-of-stress approach will help identify gaps and potential projects. Strafford MPO will also promote and support alternative modes through Seacoast CommuteSMART.

Technology is playing a growing role in the transportation system. All-electronic tolling will be installed at the Dover and Rochester toll plazas on the Spaulding Turnpike which will have a major impact on emissions and noise at those locations. Autonomous vehicles are in development but infrastructure is unprepared for widespread adoption. Strafford MPO will work to identify where the transportation network is vulnerable to climate change impacts. The travel demand model can also be used to plan response and recovery efforts in emergency scenarios where important bridges are damaged or closed. Strafford MPO should conduct a regional planning effort around trails and outdoor recreation. Local planning and regional inventories could be built upon to create a regional trails and recreation plan.

Electric vehicle technology is maturing and more people are switching to them for their daily driving needs. However, electric vehicle charging infrastructure in New Hampshire is currently inadequate to facilitate rapid growth of electric vehicle adoption. Strafford MPO will conduct analysis and use planning tools to identify optimal locations for new charging stations. This includes both DC fast charging and level-2 charging. DC fast chargers can charge an average vehicle in approximately 20 minutes and are better suited to commercial centers for quick charges on longer trips. Level-2 chargers take about 6-8 hours to charge the average vehicle. Level-2 chargers would be better suited for employment centers where employees could charge their vehicles during the workday.

Policy in Action

Strafford MPO is in a perfect position to continue advocating for a multimodal transportation system. New Hampshire is a rural state and personal vehicles will continue to dominate, but there are plenty of

opportunities to improve other modes. The Strafford region and southeast New Hampshire has the richest mix of transportation modes in the state: highways and turnpike, fixed route and demand response transit, passenger and freight rail, intercity bus, commercial and freight air, and a marine port. The framework is there, it just needs to be built on.

DRAFT

Population & Demographics

Goals

- Increase transportation independence for a growing number of seniors
- Increase access to jobs and essential services for people with low income and limited vehicle access
- Increase funding for public transit

Discussion – People in the Strafford Region

The Strafford region is growing steadily around 1% per year. The NH Office of Strategic Initiatives (OSI) project that this growth will continue. The headline issue in the region and the state is the increasing number of people over 65. The Census shows a steady increase over the past decade and OSI projects the senior population will more than double by 2045. The Cooperative Alliance for Seacoast Transportation (COAST) also has data that document the rise in seniors. Through the Americans with Disabilities Act (ADA), COAST is required to provide demand response transit service for people who live within $\frac{3}{4}$ of a mile of the nearest bus route and are physically unable to reach a bus stop. Demand for ADA service has risen by 880% over the last 10 years. This service is vital, but it is also the most expensive; COAST's ADA costs have risen over 500% during the same ten years. Imagine how a doubling of the senior population will affect demand. COAST is already limited by lack of state financial support and the cost of matching federal dollars for transit service falls to municipalities. Without ADA and transit service, people who are unable to drive would be reliant on family and friends or simply unable to accomplish essential tasks. Census numbers indicate that the largest increases in senior population have been in rural communities; this makes the transportation challenge more difficult where people and their destinations are spread out.

Transportation Equity

The region's minorities are primarily concentrated in urban municipalities. Somersworth has the most concentrated minority population in their active Indonesian community. Minority status is an indicator of potential transportation concerns if English is not someone's first language. Their access to jobs and income may be constrained by language proficiency and equitable transportation service could be a limiting factor. Similarly, if a family or individual has limited income transportation is a limiting factor when transportation costs can take a quarter of household income (on average). The census records how many vehicles each household has; many parts of the region have concentrations of households that have limited access to personal vehicles, or no vehicles at all. There are specific census blocks in the cities (Dover, Rochester, and Somersworth), and rural communities (Wakefield, Milton, and Farmington) where more than 100 housing units do not have a vehicle and are more than $\frac{1}{2}$ mile from the nearest supermarket.

Climate change increases the vulnerability of people living in rural areas. The Strafford region is crisscrossed by streams and rivers, and bridges and culverts in poor condition can be damaged or destroyed by intense rainstorms. Storms have been getting stronger and more frequent with climate change and evacuation routes may become suddenly impassible due to damage. Rural residents with mobility challenges are particularly vulnerable in emergency situations if the road network is damaged. Climate change is having the most immediate and visible effect on coastal communities, where high spring tides predictably flood roads, homes, and businesses. People are concentrated at the coasts and

may be forced to move inland as sea levels rise and coastal storms continue to impact communities. Both emergency evacuations and long-term, permanent migration will strain the services of the region's transportation system.

What We Can Do

Strafford MPO will ensure vulnerable and transportation-limited populations are specifically identified and addressed in planning efforts. Staff will continue to participate on the boards of COAST and the Alliance for Community Transportation (ACT) and partner with them to expand transit service. ACT coordinates medical, nutritional, and social transportation services for seniors and people with disabilities throughout the region. Strafford MPO will work with ACT and Rockingham Planning Commission to implement recommendations in the Coordinated Human Services Transportation Plan focused on demand-response service improvements. Strafford MPO can use technical tools like the travel demand model and bicycle level of stress analysis to identify obstacles to transportation accessibility and propose potential projects. These could include opportunities for transit-oriented development for downtown housing, or non-motorized transportation improvement projects (through the Transportation Alternatives Program).

Policy in Action

Public transit is one of the best ways to ensure transportation equity and accessibility (to say nothing of the congestion, air quality, and safety benefits). Strafford MPO will continue to engage decision-makers and advocate for sustainable transit funding in New Hampshire. The State of New Hampshire does not provide funds for transit operations (the largest share of costs, by far). Strafford MPO staff will continue advocating for the need for new sources of revenue to support the state's transportation system, including transit. State law also prohibits the use of turnpike revenues for anything other than direct turnpike maintenance and improvement. Currently this restriction extends to public transit, but COAST's operating system is centered on the turnpike and reduces traffic congestion and infrastructure wear and tear. Strafford MPO supports COAST's request that turnpike revenues be eligible for transit operating assistance. At the federal level, the fares that transit riders pay do not count as match for federal dollars. Strafford MPO has discussed this and other public transit funding challenges to be addressed in the next federal authorization of transportation funds.

Safety

Goals

1. Reduce the number of crashes on public roadways that result in fatalities and severe injuries
2. Reduce the number of crashes involving non-motorized users
3. Reduce motorcycle crashes
4. Proactively identify high-crash locations

Discussion – Highway Safety in the Strafford Region

Safety is arguably the most important factor in transportation. People need a transportation system that enables them to accomplish their daily tasks without getting injured or killed. The ultimate goal for Strafford region and the state is zero fatalities on all public roads. This is the only acceptable number of fatal crashes when people's lives are at stake. New Hampshire is a Vision Zero state and Strafford MPO supports this philosophy.

Nationwide, there are fewer fatal crashes over the long term and New Hampshire reflects that positive trend. Technology in vehicles and evolving laws have undoubtedly contributed. However, 101 people were killed on New Hampshire roads in 2019. Over the past five years there have been an average of 14 fatal crashes per year in our region; this is about 12% of the statewide total. There has been an average of 61 crashes resulting in serious injuries per year in the region which is about 13% of the statewide total.

More people are walking and biking for work and recreation, and communities and transportation agencies are investing more in infrastructure improvements for non-motorized users. Municipalities are especially focused on making town centers more walkable and bikeable. But this has also resulted in a rise in the number of pedestrian and cyclist injuries and fatalities. On average, 9 cyclists or pedestrians have been killed or seriously injured in the region per year (average of the past 5 years)

The largest contributor to crashes is errors made by the humans driving whether it is an honest mistake, distraction, or reckless negligence. Distracted driving, speeding, and alcohol or drug impairment are all primary factors in fatal and severe crashes. Across the state or region, crashes occur randomly because even the best designed infrastructure can only do so much if someone isn't paying attention.

Human behavior may be the largest factor in safety outcomes, but infrastructure improvements are still an effective way to improve the safety of the transportation system. Strafford MPO staff regularly collaborate with local public safety staff and NHDOT to identify locations in the Strafford region where improvements could reduce the possibility of crashes. Getting local crash data is critical because it is necessary to understand why certain crashes are happening at an intersection or along a stretch of road. Unfortunately, crash data are inconsistent in their level of detail (including the physical crash location).

Autonomous and connected vehicle (cars, trucks, and transit vehicles that can operate without a driver) technology is an exciting advancement. This technology is advancing rapidly and has the potential to significantly reduce crashes by eliminating the human error factor. Modern cars already have some semi-automated features such as lane departure correction and obstacle-sensors that break automatically.

Implementation – What We Can Do

Road Safety Audits

Strafford MPO staff will continue to work with Police departments and state agencies to identify locations that are eligible for a road safety audit. These are facilitated by NHDOT and are focused on locations that have a history of fatal and severe crashes.

Collaboration for data accuracy and access

Continue to collaborate with state agencies and police departments to ensure crash data are accurate. Advocate for new crash recording equipment and training for local police. This will include advocacy for Regional Planning Commissions to access data from crash reports that critical for identifying causal factors.

Bicycle and Pedestrian safety analysis

Utilize Level of Traffic Stress (LTS) and related tools to identify gaps and develop potential projects to improve safety and accessibility for non-motorized users.

Safety Hotspot Analysis

Conduct safety hotspot analysis on major routes like NH125 and the Spaulding Turnpike/NH16 in collaboration with NHDOT's Transportation System Management & Operations Bureau.

Policy in Action

Strafford MPO will continue to advocate for statewide policy changes that are focused on improving safety.

- Primary seatbelt laws
- Primary helmet laws
- Enable wider range of safety enforcement techniques and tools for law enforcement. Public safety officials need to be enabled with a wider range of enforcement techniques and traffic safety countermeasures.

What We Heard From You

Public outreach is critical for the foundation of the Metro Plan. A plan that is reflective of the region needs input and perspective from a wide range of stakeholders so that strategies and projects will lead to inclusive advancement. Strafford RPC conducted an integrated outreach approach for the 2020 Metro Plan consisting primarily of three processes: A comprehensive survey, a regional workshop, and meetings with individual municipalities and agencies to develop prospective projects (and manage ongoing projects). The initial survey of transportation stakeholders comprised a wide range of topics and responses were solicited throughout the region. The regional workshop focused on the integration of transportation, housing, and economic development. In January 2020, municipal staff and technical professionals from around the region met to discuss how these three issues are linked in planning for the region's future. At least every two years, Strafford RPC staff meet with municipal and agency staff to discuss local and regional projects. Projects may already have funding programmed and are nearing construction, they may be in the state's ten year plan and approaching final development, or they may be in the early stages of development and prioritized in the Metro Plan's list of long-range projects. See the plan Implementation chapter and project list for more details on the project solicitation and development process.

[insert link to Plan Implementation chapter]

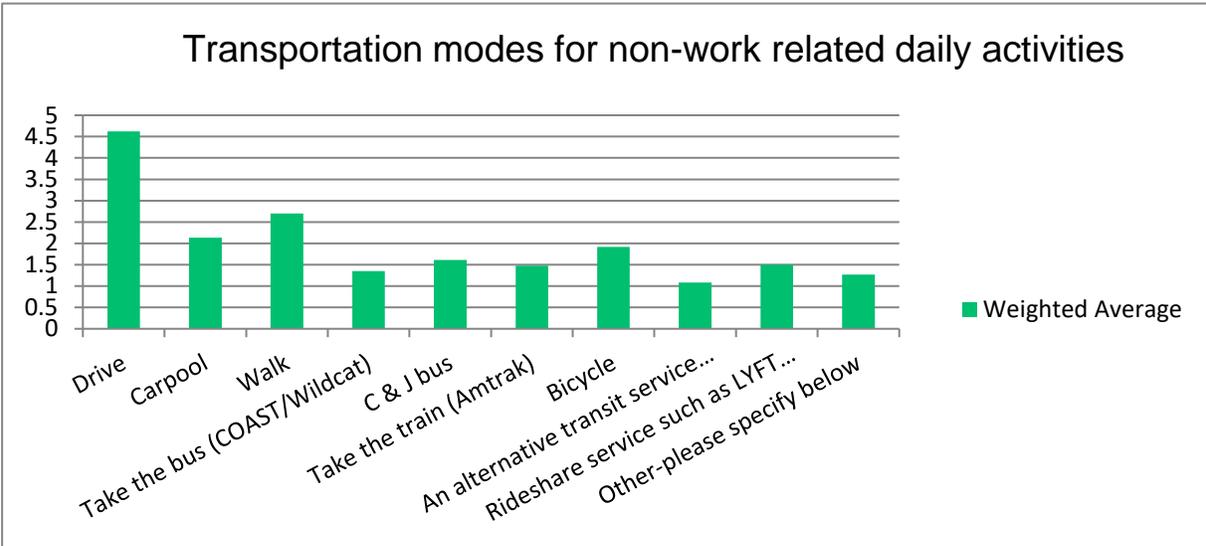
Survey results

Employment

- 75% of respondents work full or part time
- 72% of respondents said they lived in Dover, Rochester, Rollinsford, Durham, or Newmarket
- 47% of respondents work in the Portsmouth/Newington area, Dover, and Durham

Commuting & Work

- 60% of respondents said they commute 30 minutes or less to work on average
 - Others noted that they were retired or had jobs that did not have a fixed location
- 68% of respondents said they drive alone for work every day
 - 5% carpool or walk
 - 2% said they take COAST or UNH Wildcat
 - 4% said they bike
 - 6.5% said they bike 1-2 times per week
- 0% said they take Amtrak every day
- 35% of respondents said they never work from home
 - 32% said they work from home 1-2 time a week or a few times a month



Public Transit

- Cheaper fares on transit were not a major factor for people. Majority of respondents identified more frequent service and expanded routes as the things that would encourage them to take public transit.
- Ideal new transit options majority responses
 - Intercity bus from the seacoast to Manchester, Manchester Airport, Concord, Boston
 - Commuter rail from the region to Boston
 - More frequent bus routes throughout the seacoast

Non-work trips

- 68% said they drive every time
- 11% said walk every time

Infrastructure

- Top 4 priorities for transportation improvements
 - Sidewalks/Crosswalks/Pedestrian safety
 - Bicycle Access and Safety
 - Road Conditions
 - Services for the senior population and those with disabilities
- Top 4 “urgent” improvements
 - Road maintenance improvements
 - More bike lanes
 - More services for our senior population and those living with disabilities
 - Increase resiliency to growing climate change threats and storm events
- Of several infrastructure improvements, many people noted the amount of sidewalks, crosswalks, and traffic calming as needing the most improvement

Vehicles

- From 1 (I'm terrified) to 100 (Technology is incredible! I can't wait) regarding self-driving cars, the average was 42
- 97% said don't own EV
 - 52% were very likely or somewhat likely to purchase an EV
 - 57% said it is important for the state to invest in EV infrastructure
- 42% of respondents feel access to transportation for health appointments, errands, and social activities for the aging population is an extremely urgent issue
 - Top 4 strategies to address gap:
 - Free public transportation service for seniors in urban areas
 - Volunteer driver programs that provide non-emergency medical trips
 - Better promotion of existing services
 - Increased state and federal funding support for senior transportation

Funding

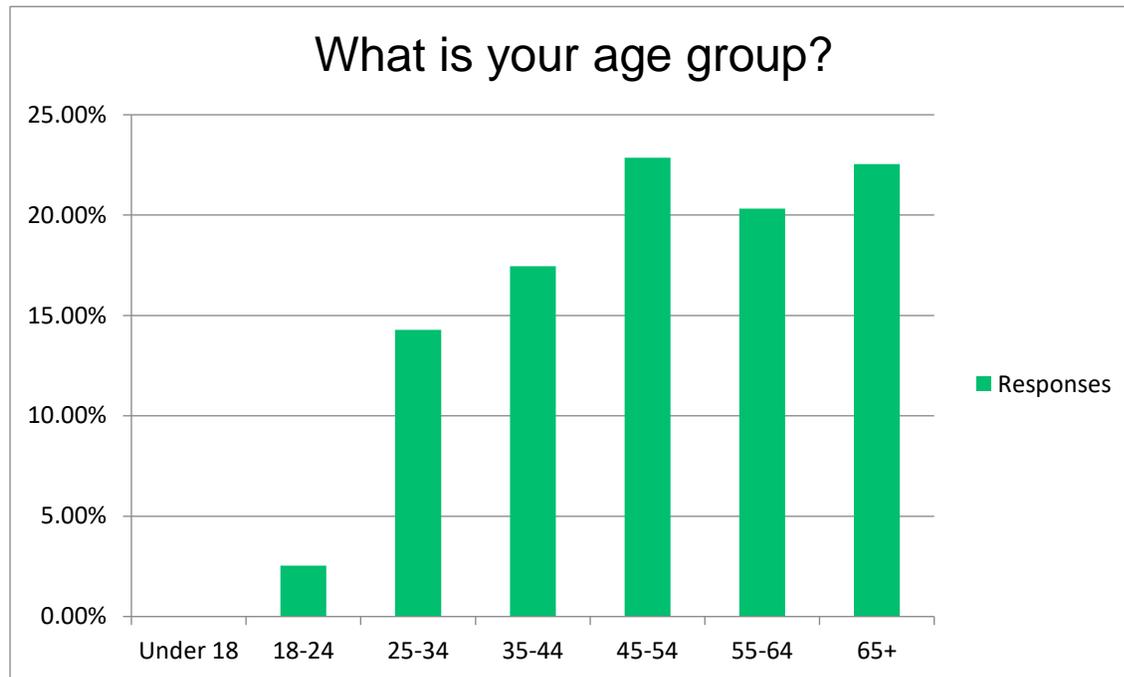
- Over 50% of people would support additional taxes or fees to increase transportation funding
- Revenue generators
 - More people in favor of new fees based on fuel efficiency rather than VMT
 - More in favor of raising tolls and gas tax

Climate change

- People most concerned with impacts from flooding and extreme precipitation (42%)
 - Pavement failure due to extreme temperatures (35%)
 - Sea-level rise (25%)

People

- 83% home owners (46% were 2-person household, 52% 2 cars)



Workshop Summary

The 2020 regional workshop brought together municipal and agency staff and other technical professionals to discuss the integration of housing, transportation, and economic development in planning for the region's future. The workshop started by asking participants to imagine idealistic, dream improvements without considering cost or logistics (e.g. "COAST buses every 15 minutes", "Real estate tax reductions for seniors", or "more advanced manufacturing in the region and training for employees"). Using those ideal scenarios, participants brainstormed short-, medium-, and long-term strategies and actions that could lead to real progress toward the underlying concepts of the idealistic goals.

Summary Points from Workshop Participants

Housing

The region needs to focus on creating housing that is more affordable and is tailored to different sectors of the population. People of different ages, income brackets, and at different stages of life have distinct needs which should be reflected or incorporated into housing choice. Housing should be located within proximity of both services and transportation to reduce transportation costs and congestion.

To move towards this objective, municipalities need to develop more flexibility to ensure community livability and sustainability and respond to housing trends (e.g. smaller/tiny homes). Local planning can set the vision for what a "home" and housing looks like. Housing developments should have an increased focus on conserving land and reducing environmental impact; building codes should be updated to include energy requirements that would increase quality and safety of housing. Housing

development is driven by market demand; municipalities should collaborate with housing agencies, developers, and real estate professionals to be responsive to marketability and ensure affordability.

Transportation

Transportation should be affordable and accessible to the whole population. In terms of transit, the region needs more frequent public transit service with more connections and capacity. This could include increased transit east/west such as Seacoast to Concord and increasing the frequency of the Downeaster to Boston or Portland. NH will have to provide financial support for these developments to happen. It is also necessary that the region prepare for emerging technologies such as electric vehicles and autonomous vehicles.

Mixed housing and mixed-use downtowns will also require increased safety and access for pedestrians and bicycles, we need to address this need by improving our bicycle and pedestrian infrastructure and networks. There is also an expressed desire to enjoy more transit options to recreation opportunities. Ideas such as a train to North Conway or a beach bus are popular.

Economic Development

The region needs to respond to an evolving economy and equitable economic development in NH will require new revenues (income tax). The model of the big box store is no longer relevant and there is a renewed focus on role and value of the downtown. There is a huge amount of land used for big box stores and communities need to evaluate how to redevelop these sites. More residents now value a walkable community and want to spend their money more locally with more support for small businesses. Outdated zoning/ordinance is a barrier to downtown redevelopment and business. There are needs for zoning and ordinance updating and adaptation to reflect the evolving economic needs. In addition, there is a need for a small business incubator infrastructure to be developed. Employment and economic development need to be tied more conscientiously to transportation: along corridors; within reach of current transit; and updating our bike and pedestrian networks.

In terms of employment, there need to be more diverse employment opportunities based on stage of life and more mid-career jobs. Education and funding need to be focused on changes in the economy with increased training programs in manufacturing and skilled trades and community colleges filling gaps in job training for the jobs that exist. There needs to be a general shift in education and perception about the traditional four-year degree. Pushing all students to go to college and accrue very large student debt is not addressing the labor market needs and is affecting a lot of people in our region.

SRPC project scoring criteria for the 2023-2032 Ten Year Plan - Approved by the TAC on August 7th 2020

Major criteria	Weight	Sub-Criteria	Weight
Safety	18.6%	Safety Performance	8.9%
		Safety Measures	9.7%
Mobility	15.3%	Mobility Need & Performance	9.5%
		Mobility Intervention	5.8%
Network Significance	15.3%	Traffic Volume	9.0%
		Facility Importance	6.3%
State of Repair	9.9%	State of Repair	4.4%
		Maintenance Considerations	5.5%
Natural Hazard Resilience	10.5%	Natural Hazard Risk	5.7%
		Natural Hazard Mitiation	4.8%
Equity, Environmental Justice, & Accessibility	10.5%	Equity & Environmental Justice	4.6%
		Accessibility	5.9%
Economic Development	10.9%	Local & Regional Economic Development	6.8%
		Freight Mobility	4.1%
Support	9.0%	NA	9.0%

Total 100.0%

Total 100.0%

