



CHITTENDEN COUNTY RPC

Communities Planning Together

Transportation Advisory Committee Agenda

Tuesday, September 6, 2022

9:00 to 10:30 am

This is a virtual meeting only.

Join Remotely:

<https://us02web.zoom.us/j/82462008536?pwd=NVllaWlyZEU2aXRaNHUxZlY5cHoyZz09>

Meeting ID: 824 6200 8536

Password: 684952

One tap mobile: <tel:+16468769923>, [82462008536#](tel:+16468769923), [1#](tel:+16468769923), [684952#](tel:+16468769923)

Dial by phone: 1-646-876-9923 **Meeting ID:** 824 6200 8536

Agenda

1. Call to Order, Attendance (1 min)

2. Consent agenda (0 min)

3. Minutes of August 2, 2022* (Action Item – 2 min)

See attached minutes.

4. Public Comment Period

Members of the public are invited to raise issues of interest or concern to the TAC on items not on the agenda.

5. Regional Park and Ride Plan Update (Action Item – 30 min)

CCRPC and RSG staff will present the draft plan recommendations for TAC consideration and input. Link to draft plan:

<https://ccrpcvt.sharepoint.com/:w:/s/ExternalShare/ETyuVotStT9OqX0HuKkUVo4BrotuTMvnPfljscpVFNy3DA>

6. 2023 Metropolitan Transportation Plan (MTP) Update* (Discussion Item – 20 min)

CCRPC staff will present several updated sections of the 2023 MTP, the region's long-range transportation plan, for input by the TAC.

7. Regional Active Transportation Plan Update (Discussion Item – 20 min)

CCRPC staff will provide progress on updating the Regional Active Transportation Plan and share the initial bicycle network recommendations. Link to draft memo and map:

<https://ccrpcvt.sharepoint.com/:w:/s/ExternalShare/EfnHduFDzgVLqjRLVUF8TLEBk03ThyTkYa0IR0bt8WxqDQ?e=eLama3>

8. Status of Projects and Subcommittee Reports (Information Item – 1 min)

See bulleted list at the end of the agenda for current CCRPC projects. TAC members are encouraged to ask staff for more information on the status of any of these ongoing or recently completed projects.

9. CCRPC Board Meeting Report (Information Item – 0 min)

In accordance with provisions of the Americans with Disabilities Act (ADA) of 1990, as amended, the CCRPC will ensure public meetings are accessible to all people. Requests for free interpretive or translation services, assistive devices, or other requested reasonable accommodations, should be made to Emma Vaughn, CCRPC Title VI Coordinator, at 802-846-4490 ext. 121 or evaughn@ccrpcvt.org, at least 3 business days prior to the meeting for which services are requested.

The Board did not meet in August.

10. Chair/Members' Items (Information Item – 5 min)

- **VTrans 2023 Municipal Highway and Stormwater Mitigation Projects** grant program: Application and program guide can be found at: <http://vtrans.vermont.gov/highway/Municipal-Highway-and-Stormwater-Mitigation-Program>. Electronic applications must be received before 1:00 p.m. October 7. Contact Ross.Gouin@vermont.gov.
- **EV Expo at the REV Conference** October 27 & 28 at the DoubleTree Hilton in South Burlington. Check out new vehicles. Potential opportunity to attend just the EV Expo without having to register for the whole conference. Contact Peggy O'Neill-Vivanco Peggy.O'Neill-Vivanco@uvm.edu.
- **Diesel Emissions Reduction Act (DERA)** funding may be coming this fall: <https://dec.vermont.gov/air-quality/mobile-sources/diesel-emissions/vt-diesel-grant>. Contact Leigh Martin at (802) 261-0713 or leigh.martin@vermont.gov.

* = Attachment

Next Meeting: Tuesday, October 4, 2022

Potential Future Agenda Items:

- Title VI and racial equity update
- Traffic calming policies
- Bike lane design guidance
- Bike facility winter maintenance
- Burlington School District travel plans for 9 schools

Project List:

- Title VI program participation and Public Participation Plan implementation
- Participation in the Vermont Highway Safety Alliance
- Participation in the State's Rail Council
- Advanced Traffic Monitoring System through FHWA AID grant
- Regional Transportation Energy Planning
- Transportation Hazard Mitigation Planning
- ECOS MTP Plan (2023) Update
- Coordination with GMT on ADA and Elders & Persons with Disabilities advisory committees
- Regional Park & Ride Plan
- Active Transportation Plan update
- Chittenden County I-89 2050 Study
- Greenride Bikeshare – *On hold*
- Property Transportation Plan: Reduce transportation emissions in commercial and affordable multi-unit sectors with Burlington Electric Department and Burlington 2030 District
- Richmond Village Sidewalks Scoping Study
- VT15 Corridor Pedestrian and Road System Study (Essex)
- City of Burlington School District School Travel Plan and Traffic Control Plan - *Completed*
- Shelburne Bicycling and Pedestrian Connectivity Study
- Winooski Traffic Calming Policy
- Winooski Parking Inventory, Analysis, and Management Plan
- Kimball Ave Path Feasibility Study for Crossing of Potash Brook (South Burlington) - *Completed*
- Form-Based Code for Williston's Growth Center
- Watershed Resiliency Mapping/Transportation Resiliency Planning Tool (TRPT; Bolton, Richmond, Huntington (and a little bit of Jericho, Essex and Williston)
- Westford Town Green Stormwater Treatment Assessment
- Right-of-Way Condition Inventory for Stormwater Retrofit Feasibility – Phase 3 (Burlington)
- LPM services for Shelburne – Irish Hill Road Sidewalk and Pedestrian Bridge project
- Municipal Road General Permit (MRGP) Work
- Grants-In-Aid Coordination with Municipalities
- Staff are working to initiate the FY23 projects

CHITTENDEN COUNTY REGIONAL PLANNING COMMISSION
TRANSPORTATION ADVISORY COMMITTEE
MINUTES

DATE: Tuesday, August 2, 2022
TIME: 9:00 a.m.
PLACE: Virtual Meeting via Zoom

Members Present

Matthew Langham, VTrans
Matthew Arancio, VTrans
Ashley Atkins, VTrans
Dave Pelletier, VTrans
Chris Jolly, FHWA
Bob Henneberger, Seniors
Laura Wheelock, Burlington
Dierdre Holmes, Charlotte
Barbara Elliott, Huntington
Aaron Martin, Essex
Ravi Venkataraman, Richmond
Dave Allerton, Milton
Sandy Thibault, CATMA
Adam Wechsler, Persons with Disabilities
Tom Dipietro, South Burlington
Bruce Hoar, Williston
Jonathon Weber, Local Motion

Mary Anne Michaels, Rail
Adele Gravitz, Shelburne
Kurt Johnson, Underhill
Elaine Haney, Essex
Wayne Howe, Jericho

Staff

Charlie Baker, Executive Director
Eleni Churchill, Transportation Program Manager
Bryan Davis, Senior Transportation Planner
Christine Forde, Senior Transportation Planner
Marshall Distel, Senior Transportation Planner
Sai Sarepalli, Senior Transportation Planning Engineer
Jason Charest, Senior Transportation Planning Engineer

Guest

Jonathan Slason, RSG

1. Barbara Elliot called the meeting to order at 9:04 AM.

2. Consent Agenda

There is no consent agenda this month however CCRPC staff shared a draft TIP amendment by email yesterday. This was added to the deliberative agenda.

3. Approval of June 7, 2022 Minutes

Bruce noted that Tom Dipietro is listed twice, which CCRPC staff will correct. JONATHON WEBER MADE A MOTION TO APPROVE THE MINUTES OF JUNE 7, 2022, SECONDED BY BOB HENNEBERGER. THE MOTION PASSED WITH ABSTENTIONS BY SAM ANDERSEN, ADELE GRAVITZ, AARON MARTIN.

4. Public Comments

No comments from the public.

5. TIP Amendment

Christine referred to the TIP amendment memo sent via email yesterday which outlined the proposed changes and reason for change. Dierdre asked for short explanation of the amendment, will the project change in appearance? Christine said it will improve safety with signals and pedestrian crossings, the actual look won't really change, just rail safety function. It will bring the project into compliance to get Amtrak service to Burlington. The additional funding is needed because bids came in higher than anticipated. BRUCE HOAR MADE A MOTION TO APPROVE THE TIP AMENDMENT, SECONDED BY SAM ANDERSEN. THE MOTION PASSED UNANIMOUSLY. The TAC also supported VTrans bringing a separate TIP amendment related to a culvert project to the Board later this month rather than waiting until September to bring to the TAC first.

6. VTrans Transportation Equity Framework

Dave Pelletier, VTrans, introduced Jonathan Slason, RSG, from the consultant team who provided project background information and led a discussion on how the CCRPC and municipalities consider transportation equity in their activities. The Vermont Transportation Equity Framework is being developed by the Vermont Agency of Transportation (VTrans) in partnership with the 11 RPCs as directed by the state legislature in Section 41 of Act 55 (2021) (An act relating to the Transportation Program and miscellaneous changes to laws related to transportation). The Framework project seeks to develop a comprehensive set of actions to address inequities through changes in transportation policies and investments.

The Framework will help inform how equity is embedded in transportation planning and decisions. This transportation equity effort is midway through the process, and this presentation and discussion is part of the engagement task. The working definition of Transportation Equity is “Transportation provides access for an individual's daily needs and quality of life. Transportation provision has been unequal in its distribution, application, benefits, and burdens. This has resulted in existing inequities that we experience today.” RPCs are involved in the project working group with Charlie Baker, CCRPC and Mike Winslow, ACRPC participating. Key input from RPCs is during stakeholder/public involvement, draft recommendations, and draft/final plan.

A Transportation Equity Framework is a tool to help decision makers plan for and prioritize projects, ensure accurate representation in decision making, and enhance the equitable delivery of services. This effort corresponds to President’s Executive Order 13985 which defines equity. This provides guidance and starting point for this work but will be adapted to Vermont conditions. Other recent federal actions with guidance and information about transportation equity include the Infrastructure Investment and Jobs Act (IIJA), US DOT Equity Action Plan, and US DOT Strategic Plan.

Project team is working to bring new voices to the table and elevate those previously marginalized or underrepresented in the planning process. Engagement process serves two functions: 1) Identify discrete inequities, barriers, and accountability methods that need to be addressed in the framework; 2) Define pathways toward implementation to ensure the framework is actionable. Four communities statewide are targeted in direct engagement including Winooski/Burlington BIPOC young adults. RPC engagement process includes sharing what transportation equity means for each RPC and each region in the state, and discussing how equity can be embedded in the activities of the RPC.

The preliminary wireframe consists of four Pillars of Process Equity described and discussed as follows (see the [presentation](#) for more detail):

Distributive – How can we obtain an **accurate representation of the population** and identify communities of concern?

Adele said Community Heart & Soul is a great program and process, what they’ve found is that beyond the data is finding trusted community leaders who can serve as liaisons and connectors. Building trust is important. There also may be new groups that arrive in a community between census data collection. Look for non-traditional activities and gatherings to reach new people and groups. Elaine notes that Essex has used Heart & Soul with success.

Deirdre asked about ways to anticipate future growth in communities in addition to knowing who is already here. Jon notes that forecasting is fascinating but impossible so it’s challenging to understand the evolution of how communities change over time. Charlie points out that CCRPC uses census data and notes that in the recently released ECOS report, there were 12,000 new people in Chittenden County, of which only 32 were white. CCRPC continues to identify and contact new groups and people with whom to develop relationships. The [Equity Impact Worksheet](#) is another equity tool used as part of projects.

Laura adds that Burlington is taking significant effort to find community members and groups. The City is also working with high school students which is a diverse population with strong voices. Adam brought up the disability community in Vermont but isn’t aware of anything specific to Jericho, where he lives. He’s also on the Vermont Center for Independent Living council, which has a transportation committee,

1 he notes that there's an issue with finding enough drivers. There's also the E&D (Elders and Persons with
2 Disabilities) program, there was a summit held in June. There's still difficulty ensuring enough volunteer
3 drivers.

4
5 In the chat Jonathon Weber said he thinks it is important to think about how local policies, especially
6 zoning, can and is used by privileged groups to gate keep resources. If we had zoning that allowed for
7 more housing in Burlington, for example, more folks from underserved communities might be able to live
8 here and enjoy access to services like transit. But if we only consider existing populations in
9 communities, we risk perpetuating or not addressing those gate keeping policies. So, in that sense it is
10 important to consider those potential "future" residents.

11
12 Procedural – How can all voices be heard, participate, and engage in the planning process and create
13 space for their involvement? Are those most burdened or affected by the plan part of the dialogue?
14 (equitable access to decision making)

15
16 Bob commented that the people making decisions are typically white middle class people, so while
17 getting input from diverse populations is great, they don't have the decision making power. He used to
18 live in the deep South and that was an issue there. Jon asks if there are examples of bringing new voices
19 to the project planning process. Sam notes that she sits on an economic development committee and when
20 they got a BIPOC member on the committee, it was enlightening to hear their comments, specifically
21 about transportation. Trains were being overlooked and family connections in and out of the state were
22 inhibited because there wasn't good train service to Vermont. Airline travel was too expensive so their
23 family needed more affordable transportation options. Sam also asks if people are able to give up 2-3
24 hours on a weekday morning to participate. How can we make our scheduling more accessible?

25
26 Eleni said that at the project level we try to reach out to diverse populations, including focus groups. One
27 thing that became clear during those groups was identifying who the final decision makers are, and
28 secondly the need to focus on education about how we receive input and how it gets used in decision
29 making. We went back to those groups at the end of the project they couldn't understand that process.

30
31 Sandy said that along with education, employers are finding that transportation impacts who is able to
32 accept and keep jobs, and related a story of someone who had to give up their job because transportation
33 wasn't working out. Providing resources and education to employees and employers could be helpful.

34
35 Contextual – Are there inequities in the outcomes experienced by members of our society? Are services
36 equitable and available to all? (needs analysis, service provision)

37 Jon asked that by bringing new voices to the table, and hearing about needs of different populations, has
38 there been efforts to identify new investments that would be focused on addressing inequities? He
39 referenced the equity analysis and report done by the CCRPC and asked if those and other efforts have
40 resulted in new projects?

41
42 Eleni said they may not have resulted in new or specific projects but those conversations influenced the
43 end result. Bryan noted that outreach for the Regional Active Transportation Plan update included
44 listening sessions for traditionally underserved populations, in FY23 we'll be working on a walk/bike
45 plan for Winooski which will draw on the 2017 Transportation Plan which was a first step for the CCRPC
46 to engage diverse populations and going where people are, including the school. The Old North End
47 (ONE) Mobility Audit with Old Spokes Home used in person surveys and provided new connections to
48 residents in the ONE. In addition, the ONE Walk Bike Stormwater study included translated materials,
49 including fliers in different languages to businesses along North Street. Eleni noted engagement with
50 Winooski youth and officials about transportation to school during winter months since travel from
51 neighborhoods to school is challenging due to lack of options and winter conditions.

52
53 Jonathon Weber expanded on the ONE Mobility Audit and reflected specific comments from a person in
54 a wheelchair about difficulty navigating curb extensions and sidewalk conditions, they were having to use

the roadway instead. This was related in particular to pilot curb extensions so Local Motion is revisiting their policy to ensure pilots meet the needs of all users, and that sidewalks are in good condition before installing curb extensions, and he hopes that municipalities will also consider sidewalk conditions complementary to curb extensions so they meet the needs of all users. Bryan noted a key takeaway from that study was that people aren't familiar with the transportation planning process and are unaware of projects and how they can influence decisions.

Corrective Equity – How will future actions (investments, policies, etc.) deliver equitable outcomes? How will progress toward equitable outcomes be monitored and measured? (prioritization process, ongoing performance management)

Christine said that this is a work in progress at the regional level. It's easier for people to react to specific projects at the local level whereas regional projects tend to be higher level so our process is broader in trying to include as many voices as possible and we're still working on getting better at this. Charlie noted that we started to do some of this work over a year ago through the Vermont Project Selection and Prioritization Process (VPSP2), which is a process between VTrans and RPCs, and we're not doing other prioritization outside of that process. Equity is not a specific component of that process but he made a pitch that it be included in that way.

Jon asked about other local examples, and Deirdre shared that Charlotte is working on a cross-town trail for walking and biking, and the route included a section to go by the Clemmons Family Farm. The Farm is expanding to become a more public place and didn't want the Town trail to go along their property. They spoke several times about this at Town meetings because they felt their concerns weren't being heard. This goes back to who to you go to for information, and who are the decision makers. In this case the decision makers perhaps didn't fully understand the concerns being raised.

Charlie asked if there has been national research on whether investment in projects, for example in low income neighborhoods, result in equitable outcomes. Laura says it may be worthwhile to look at improvements on North Street to see if there are benefits to those communities.

How to view and measure success, what does a successful outcome look like? Have there been metrics considered at the regional or town level? Charlie says that CCRPC identified indicators as part of ECOS Scorecard some of which are based on the fundamental indicator of wealth.

Adele said to ask the community that you're trying to serve about whether there are benefits. Once you make an improvement and if land values increase, are you making the community better if people are unable to continue living there? If we offer to make a place nicer, is that what they really want? Jon notes the term environmental gentrification captures this sentiment.

Please share any additional feedback and examples after the meeting, as well as any comments on a working definition of transportation equity and other key terms. Any examples of tools, methods and measures are appreciated. Jon notes they plan to include a glossary with at least some working definitions as part of the project. Presentation: https://www.ccrpcvt.org/wp-content/uploads/2022/08/VTrans_TranspEquity_TAC_Aug2022.pdf

7. 2023 Metropolitan Transportation Plan (MTP) Update

Christine Forde, CCRPC, provided some background on the Metropolitan Transportation Plan (MTP) and noted that the draft project tables for discussion were included as part of the agenda packet. She commended all the great work to complete the projects in Table 1. Table 2 is the starting point for the 2023 MTP Project List and contains projects that were previously selected, in cooperation with municipalities, and Table 3 is being provided as a reference to TAC members and lists the planning studies that have been completed since 2018. There may be projects on this list that should be added to the MTP project list. Next month we'll bring updated lists for consideration.

Eleni Churchill, CCRPC, said that over the next couple of TAC meetings we'll have more comprehensive discussion on the draft MTP but for now are presenting some draft elements, including the draft MTP vision, goals, and objectives. Eleni screen-shared the draft Transportation Vision, Goals and Objectives which are included in the agenda packet and welcomed comments and suggestions as these are a first draft. Eleni noted that the equity section can be expanded and welcomes comments. Adele suggested including economic equity under Economy, and when you talk about equity to reference the Transportation Equity Framework, it should be mentioned as part of the vision statement. Eleni requested comments by the end of August so we can include them in the September TAC packet.

8. Status of Projects and Subcommittee Reports

See bulleted list at the end of the agenda for current CCRPC projects. TAC members are encouraged to ask staff for more information on the status of any of these on-going or recently completed projects.

9. CCRPC Board Meeting Report

In July the Board held a public hearing on and voted to approve the FY23-26 Transportation Improvement Program, voted to certify the planning process, heard a presentation on the West Central Vermont, Comprehensive Economic Development Strategy (CEDS) and how the CEDS will be incorporated into our 2023 ECOS Plan, considered openings on various Board committees, heard a legislative priority update, heard an update on the Equity Advisory Committee, and other Executive Director updates.

10. Chair/Members' Items

- **Safe Streets and Roads for All:** The Bipartisan Infrastructure Law (BIL) established the new Safe Streets and Roads for All (SS4A) discretionary program to support regional, local, and tribal initiatives through grants to prevent roadway deaths and serious injuries.
 - SS4A website with the notice of funding opportunity (NOFO): <https://www.transportation.gov/SS4A>
 - Webinars with more info: <https://www.transportation.gov/grants/SS4A/webinars>
- **VTrans Mobility and Transportation Innovation (MTI) Grant Program:** Applications are being accepted for innovative strategies and projects that improve mobility and access to services for transit-dependent Vermonters, reduce the use of single-occupancy vehicles, and reduce greenhouse gas emissions. The application, with more details about the program and funding guidelines, is available on the AOT website at <https://vtrans.vermont.gov/public-transit>. The deadline for filing applications (email preferred) is Friday August 26 at 4:30 p.m. To request a copy of the application, or if you have any questions, please contact Dan Currier, Go Vermont Program Manager, 802-279-5236, Dan.J.Currier@vermont.gov.
- **VTrans Park and Ride Grant Program:** Applications are due by e-mail by September 2, 2022. To learn more about this year's grant program and to access the Municipal Park-and-Ride Program information and applications, visit <http://vtrans.vermont.gov/highway/parkandrides>
- The **VLCT Municipal Equity Toolkit** is a ten-part online resource that covers everything from creating a municipal equity committee to building a framework and action plan to listing equity-related books, podcasts, and videos. It is free and available at vlct.org/JDEIB-resources.
- **Greenride Bikeshare** update: vendor Bolt Mobility ceased operating in July. The project team is exploring system options for 2022 and 2023.

Bryan explained that the CCRPC does not plan on applying to the SS4A federal grant program but will support and assist with any local applications. The CCRPC will consider submitted a regional application next year but notes that given the amount of the minimum grant request, the required match is fairly substantial so we'll want to be mindful of using regional matching funds and the potential budget impact. We'll discuss with the TAC in the future.

1 Bryan noted the other items and explained that bikeshare vendor Bolt Mobility unexpectedly ceased
2 operations in July so the local partners are working to warehouse the existing fleet and explore next steps.

3
4 Sandy added that CATMA is celebrating 30 years and is planning a Transportation Summit for October
5 18 at UVM. More information coming soon.

6
7 The next TAC meeting is scheduled for Tuesday, September 6, 2022.

8
9 SAM ANDERSEN MADE A MOTION TO ADJOURN, SECONDED BY BOB HENNEBERGER,
10 APPROVED UNANIMOUSLY. The meeting adjourned at 10:41.

11
12 Respectfully submitted, Bryan Davis

DRAFT



Chittenden County Transportation Advisory Committee

September 6, 2022

Agenda Item 6a: Discussion Item

Metropolitan Transportation – Current Conditions Sections – INITIAL DRAFT

Issues:

The Metropolitan Transportation Plan (MTP) is the region's principal transportation planning document that sets regional transportation priorities. It consists of short- and long-range strategies to address transportation needs that lead to the development of an integrated, intermodal transportation system that facilitates the efficient movement of people and goods.

A key component of the Metropolitan Transportation Plan is an assessment of the characteristics of the current transportation system as a starting point to determine what steps need to be taken to achieve our future goals.

Note that this is a preliminary draft and more refined versions will be presented at future TAC meetings.

Staff

Recommendation:

Recommend that the TAC review the current conditions sections of the MTP and make recommendations for possible edits.

For more

information contact:

Eleni Churchill
echurchill@ccrpcvt.org

Attachments:

Metropolitan Transportation Plan – Current Conditions Sections – INITIAL DRAFT

2023 Metropolitan Transportation Plan

Introduction

The Chittenden County Regional Planning Commission (CCRPC) serves as the region's federally designated Metropolitan Planning Organization (MPO) and is responsible for comprehensive and collaborative transportation planning involving municipalities, state and federal agencies and other key stakeholders in Chittenden County. The CCRPC works to ensure implementation of the regional transportation plan and provides technical and planning assistance to its member municipalities, and the Vermont Agency of Transportation (VTrans).

As a designated MPO, the CCRPC oversees transportation planning and programming of the Federal Highway Trust Funds dollars designated for the Chittenden County and is required to prepare and update the following planning documents that detail the investments and planning activities in the region. These include:

What is an MPO?

The U.S. Department of Transportation requires every metropolitan area with a population of over 50,000 to establish a designated Metropolitan Planning Organization (MPO) to qualify for the receipt of federal highway and transit funds.

Metropolitan Transportation Plan (MTP): Updated every five years, the MTP sets out a vision for the development of the region's transportation infrastructure over the next twenty years. It includes goals and objectives, analysis of regional trends and planned improvement projects throughout the county in all modes of transportation. The MTP is the primary tool that the CCRPC uses to plan for transportation needs within the metropolitan area and recommend solutions based on anticipated funding availability over a minimum 20-year horizon.

Transportation Improvement Program (TIP): Updated annually, the TIP is a four-year list of improvement projects. To be eligible for federal funding, proposed projects must be approved by the CCRPC Commissioners for inclusion in the TIP.

Unified Planning Work Program (UPWP): Updated annually, the UPWP summarizes the transportation planning activities of the CCRPC Transportation planning staff, its member agencies and other transportation and planning agencies conducting work in the region.

Public Participation Plan (PPP): The PPP establishes a methodology for effective public involvement and lays out the steps the CCRPC will take to reach out and involve residents in decisions affecting land use and transportation policies and investments in Chittenden County. The latest PPP was adopted in 2014 and amended in 2017.

ABOUT THE METROPOLITAN TRANSPORTATION PLAN

The MTP is the region's principal transportation planning document that sets regional transportation priorities. It consists of short- and long-range strategies to address transportation needs that lead to the development of an integrated, intermodal transportation system that facilitates the efficient movement of people and goods.

As mandated by federal regulations, the MTP must both articulate and work towards the region's comprehensive long-range land use plans, development objectives, and overall social, economic, environmental, system performance and energy conservation goals and objectives. It should also be consistent with the statewide transportation plan. In addition, the CCRPC is required to make special efforts to engage all interested parties in its development.

Federal regulations also mandate that the MTP considers the following:

- Look out a minimum of 20 years into the future and be updated every five years;
- Identify existing and proposed projects and strategies that together function as an integrated metropolitan transportation system;
- Maintain a multi-modal focus that includes transit and bicycle and pedestrian facilities;
- Estimate costs and identify revenue sources that are reasonably expected to be available for operation, maintenance and capital investments;
- Identify measures and targets to gauge transportation system performance;
- Determine ways to preserve existing facilities and services and make efficient use of the existing system;
- Discuss potential environmental mitigation of MTP projects and strategies; and
- Address the following planning factors the degree possible:
 - “(1) Support the economic vitality of the metropolitan area, 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, for people and freight;*
 - (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.”*

The 2023 MTP incorporates by reference two plans that were adopted/approved by the CCRPC Board. These are: 1) Regional Active Transportation Plan (<https://www.ccrpcvt.org/our-work/our-plans/regional-bikeped-plan/>), adopted ???; and 2) Regional Park and Ride Plan, adopted ???.

Our Region at a Glance

Chittenden County is located in northwestern Vermont between Lake Champlain and the highest peaks of the Green Mountains. The County's nearly 350,000 total acres have a rich diversity of landscapes: forests, farms, water bodies, small cities, suburban areas, and villages. Founded in 1787, Chittenden County has about 168,000 residents living in 19 municipalities that range in size from 43 to almost 40,000 residents. The County is the heart of the Burlington – South Burlington Metropolitan Statistical Area (the economic engine of Vermont); home to the State's largest higher education institution, health care facility, and private sector employer; and nationally recognized as having an outstanding quality of life.



Population &

Diversity: The total population in Chittenden County increased from 156,545 to 168,323; an increase of 11,778 or 7.5% from 2010 to 2020. While the population of people who identify as white alone remained the largest race or



ethnicity group, this population increased by only 0.3% or 32 people. In aggregate, 99.7% of the population growth or 11,746 more people identified as Hispanic (of any race), Black/African American, Asian, American Indian, or Native Hawaiian in 2020 than in 2010, accounting for virtually 100% of the population growth over the last 10 years.

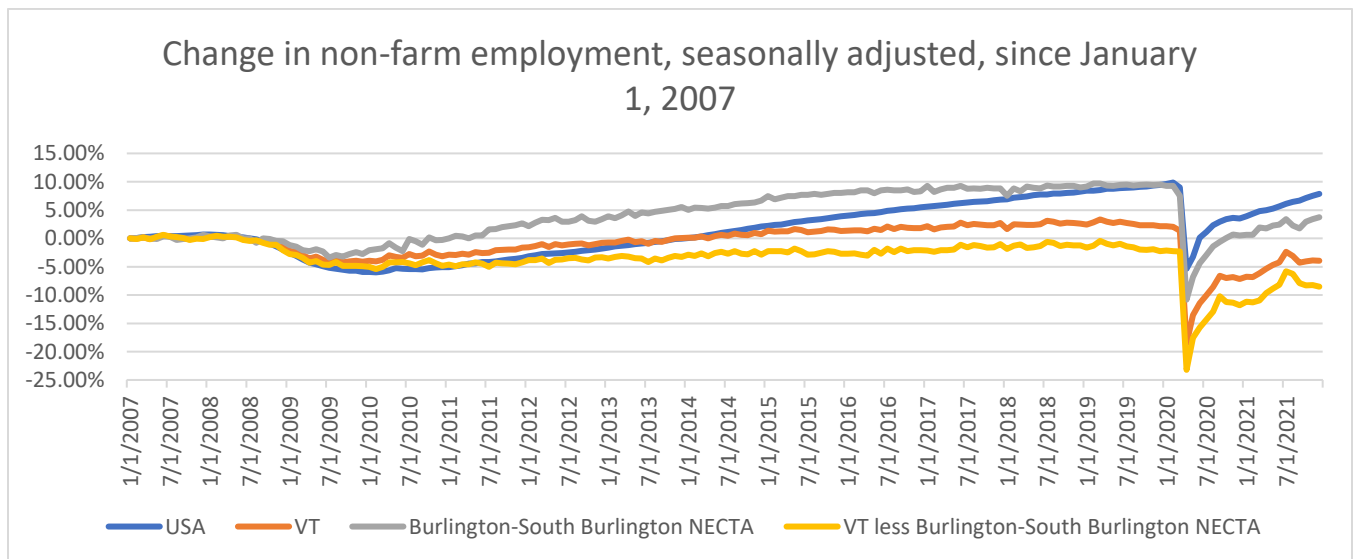


Smart Growth: While development in existing communities can be difficult, infill in the right places has positive benefits of increased inclusivity and economic strength. For the ninth year in a row, Chittenden County has exceeded its 2018 ECOS Plan goal of 80% of development occurring in planned growth areas. In 2020, 419 of 508 units (82%) were in areas planned for growth.

Employment: There are fewer folks working in Chittenden County as of March 2022 than before the COVID-19 pandemic, and the labor pool is extremely tight. Employment is 92,572 employees compared to 98,208 prior to the pandemic in February 2020. The labor force is 94,094

individuals compared to 100,010 in Feb 2020. The number of unemployed individuals continues to decline. The unemployment rate is very low at 1.6%. These data reflect what has been deemed nationally as the “great resignation” where people have left their jobs for different opportunities or left the workforce altogether for reasons including a lack of childcare.

The employment graph shows employment recovery from the lows of the pandemic, which is still not back to the level of employment pre-pandemic. Both the region, and more so the State, are lagging behind the national recovery.



Transportation Vision and Goals

VISION:

A regional transportation system that is safe, efficient, and resilient; provides for interconnected and sustainable mobility choices in support of livable, equitable, and healthy communities; addresses the climate crisis; and supports the economy of the region.

GOALS & OBJECTIVES

Safety: Enhance safety for all users of the transportation system and reduce the number of fatalities and serious injuries.

- Address safety issues at high crash locations in the county
- Use a Safe System Approach to planning

Livable and Healthy Communities: Promote compact growth and invest in a multimodal transportation system that supports livable, equitable, vibrant, and healthy communities.

- Encourage smart growth with 90% of new housing built in areas planned for growth (see Map ?)
- Improve transit services in the county and encourage housing growth along transit trunk routes and commuter stops
- Improve public health by providing for a safe, interconnected, and efficient walking & biking network as well as viable and convenient transit options

Mobility & Efficiency: Improve the efficiency, reliability, and connectivity of the transportation system for users of all ages and abilities regardless of their mode of transportation.

- Create a safe and efficient multimodal network that supports mode shift from single occupancy vehicle travel to other modes
- Expand walking and biking infrastructure and provide interconnection with the region's transit system
- Improve transit services in the county and beyond
- Support Transportation Demand Management (TDM) programs and partners
- Improve operational efficiency, manage recurring congestion, and maintain reliable travel times on our transportation system

Equity: Incorporate equity in all aspects of transportation planning and programming in the county.

- Prioritize transportation investments and land use policy changes that benefit rather than burden Title VI and Environmental Justice (EJ) communities
- Engage people from historically excluded and traditionally underserved populations in meaningful conversations and facilitate their participation in transportation planning processes
- Incorporate recommendations from VTrans' Transportation Equity Framework

Environment and Resilience: Establish a resilient transportation system that minimizes climate impacts resulting from the transportation sector.

- Reduce greenhouse gas emissions associated with fossil fuels used in transportation by promoting a shift away from gas/diesel to electric vehicles or other low emission fuel options

- Minimize the effects of transportation on water quality
- Improve the ability of our transportation network to withstand and recover from extreme weather events

Economy: Improve the transportation network to promote economic vitality in the region.

- Invest in the transportation system to support anticipated economic growth in the county
- Accommodate freight and goods movement in identified freight hubs and intermodal facilities
- Consider economic equity when making investment decisions

Existing Transportation System: Preserve the condition and performance of the existing multimodal transportation network.

- Maintain the transportation system in a state of good repair

Metropolitan Transportation System

The Metropolitan Transportation System (MTS) is the multimodal network of highways, arterial and major collector roadways, transit services, traffic signal systems, rail lines and stations, walk/bike facilities, park-and-ride facilities, Burlington International Airport, and other intermodal facilities critical to the movement of people and goods in the region. It is also the system (with the inclusion of all public bridges over twenty feet in length) eligible for federal transportation funding investment. Error! Reference source not found. depicts the existing Chittenden County MTS.

The MTS in Chittenden County consists of highways classified as Interstate Highways, Principal Arterials, Minor Arterials, Major Collectors, and Minor Collectors. The classification system is organized as a hierarchy of facilities based on the degree to which the roadway facility serves mobility and access to adjacent land uses. Interstates and Arterials make up just under 19 percent of County road mileage, yet carry 69 percent of all vehicle miles traveled (see: VTrans 2020 VMT data: https://vtrans.vermont.gov/sites/aot/files/highway/documents/highway/2020_Extent_and_Travel_Report.pdf).

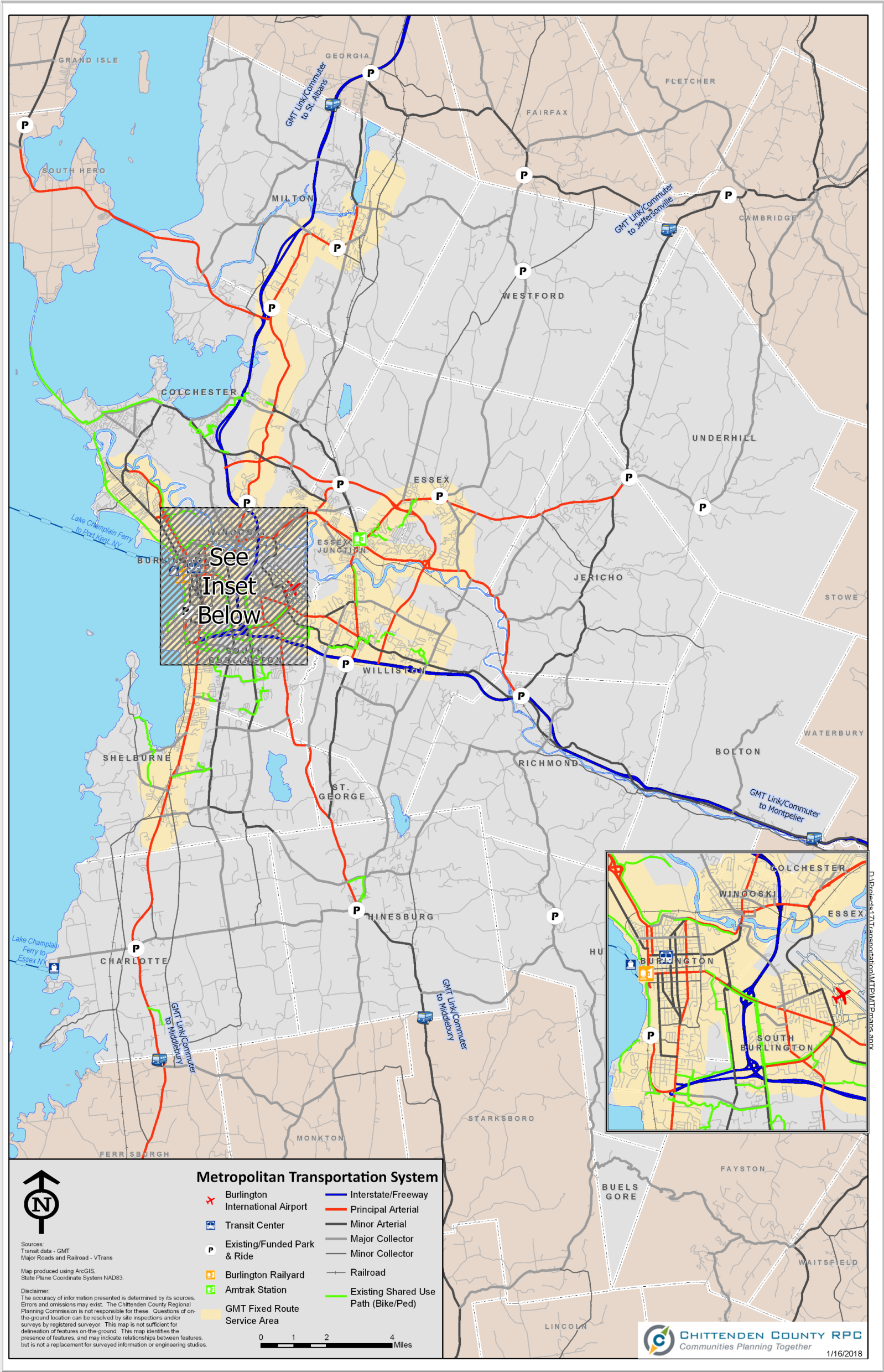
While not specifically addressed in this plan, local roads are also an important part of the road network in Chittenden County. Local roads are owned and maintained by the municipality in which they are located and are generally not eligible for federal transportation funding investment.

The overall condition of the arterial highways in Chittenden County has improved significantly since 2013. In 2013, over 50% of Chittenden County arterials were rated poor or worse in terms of roadway condition. By 2018, that figure had dropped to just under 28%. Meanwhile today, only 26% of arterials are rated poor or worse. While roadway conditions have improved, there is still a concern that transportation funding is overly reliant on the state and federal gas taxes, which are decreasing in value as inflation lowers purchasing power and revenues decline due to improved vehicle fuel efficiency and a growing number of electric and hybrid vehicles. The prospect of less funding to maintain our existing system and invest in new transportation improvements is a disconcerting trend that has not been adequately addressed at the federal or state level.

There are 180 bridge structures greater than or equal to 20 feet in length in Chittenden County. Of these, 85 are owned by the State and the remaining 95 by local governments. Nearly all of the state-owned bridges over 20 feet long are located on major highways, i.e. principal arterials and major collectors. The majority of municipally owned bridges over 20 feet long are located on less heavily traveled highways, i.e. minor collectors and local roads. Note that many bridges and other structures less than 20 feet long are also owned and maintained by both the State and municipalities.

The condition of all bridges over 20 feet in length on public roadways are evaluated every two years by VTrans. The latest evaluation indicated that 3 percent (5 of 180) of Chittenden County bridges are in poor condition (sufficiency rating below 50) and nearly half (88 of 180) are in fair condition (sufficiency rating between 50 and 80) indicating that rehabilitation may be necessary. The remaining 87 bridges are deemed sufficient with ratings above 80. Since 2010, there has been a marked improvement in the number of bridges with a sufficiency rating below 50, down to 5 from 18, a 72 percent improvement. Bridge rating data can be found here: <https://vtransparency.vermont.gov/pages/bridges2>.

MAP 1 – 2017 METROPOLITAN TRANSPORTATION SYSTEM – THIS MAP WILL BE UPDATED



ACTIVE TRANSPORTATION FACILITIES

Active transportation facilities create opportunities to increase physical activity, support healthy communities, enhance economic development, and promote environmental sustainability. Furthermore, communities that support walking and biking provide transportation access to all residents regardless of age, gender, or socioeconomic status. Chittenden County has a range of dedicated transportation facilities to accommodate bicyclists, pedestrians, and other physically active forms of transportation. Facilities dedicated to non-motorized uses (such as sidewalks and off-road, shared use paths) are concentrated in and around the metropolitan core. Non-dedicated facilities that bicyclists and pedestrians share with motorized users are located throughout the region. According to ECOS Scorecard data (<https://app.resultsscorecard.com/Scorecard/Embed/8502>) since the last comprehensive inventory in 2008, there has been an increase in the shared use path mileage. Most shared use paths were recently built and are currently in good condition. There are also about 404 miles of existing sidewalks in Chittenden County. These mileage figures are expected to increase annually as planned bicycle and pedestrian projects continue to be implemented.

Since 2005, twelve Chittenden County municipalities have received a total of nearly \$3 million for 38 new sidewalk projects. Sidewalk projects have been, and continue to be, funded through two VTrans programs: Transportation Alternatives and the Bicycle & Pedestrian Program.

Community support for non-motorized facilities is substantial, as surveys in 2000, 2006, 2012, and 2018 revealed. These facilities have rated second highest (only following transportation system maintenance) on the list of transportation improvements the public desires. This survey is planned to be replicated again in 2023 to evaluate the transportation-related attitudes and opinions of Chittenden County residents.

The CCRPC has regularly updated its regional Pedestrian/Bicycle Plan, most recently in 2017 – see: <http://www.ccrpcvt.org/our-work/our-plans/regional-bikeped-plan/>. The updated Chittenden County Active Transportation Plan (ATP) identifies its goal as creating a safe, comfortable, and connected regional network of pedestrian and bicycle routes that appeal to all ages and abilities. After a robust public input process, detailed existing conditions assessment, and a Level of Traffic Stress model analysis, the ATP outlines recommendations for both non-infrastructure and infrastructure improvements to enhance network connectivity for active transportation in Chittenden County. The ATP recommendations focus on priority corridors as opposed to defining detailed facility types in specific places.

Education and encouragement are also important in getting more people walking and biking. CCRPC supports the work of non-profit Local Motion whose mission is to make it safe, accessible, and fun for everyone to bike, walk, and roll in Vermont. They host public events, workshops, trainings as well as provide technical assistance to businesses and municipalities to help support walking and biking as convenient, affordable transportation options.

PUBLIC TRANSIT OVERVIEW

In Chittenden County, GMT offers fixed routes, local commuter routes, LINK Express routes, and ADA paratransit services. GMT also provides shuttles from senior housing complexes to local supermarkets

and neighborhood specials for student transportation to Burlington schools. The LINK Express routes connect Chittenden County communities with Barre, Montpelier, Middlebury, and St. Albans.

GMT also provides Americans with Disabilities Act (ADA) paratransit services for persons unable to use the GMT fixed route bus system because of a disability. Paratransit services are required to be provided to areas within three-quarters of a mile of each non-commuter fixed transit route. The ADA service is currently contracted out to the Special Services Transportation Agency (SSTA), a private not-for-profit paratransit operator whose service area covers most of Chittenden County. SSTA is also the contracted transportation provider to a number of other client groups through a variety of social service agencies.

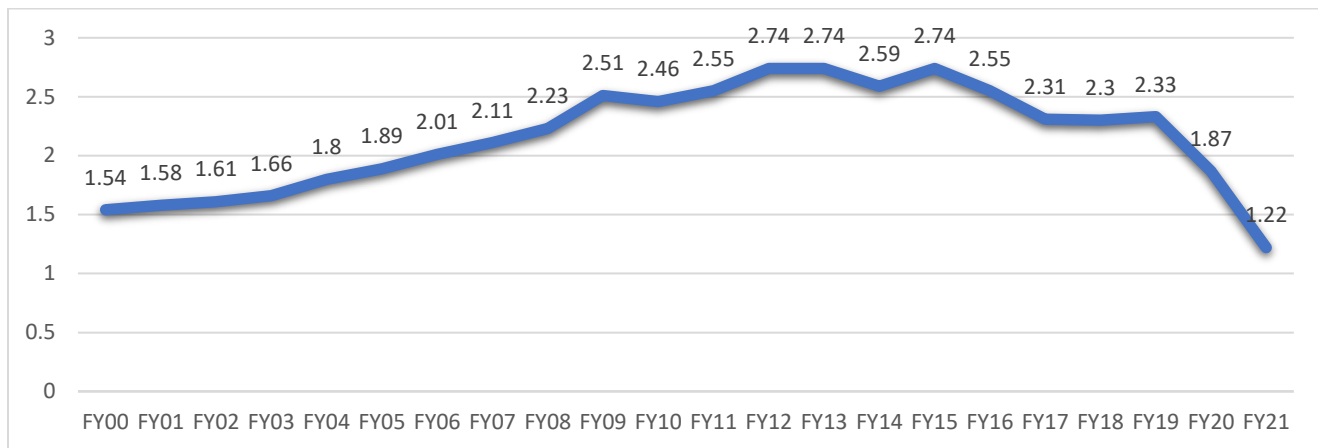
Following the development of GMT's 2017 NextGen Transit Development Plan, planning staff is working to update the Transit Strategic Plan (TSP). The update of the TSP will set the groundwork for potential changes to procedures and policies that will guide long-range transit planning efforts in our region. The TSP will address Service Excellence; Financial Stewardship and Cost-Effective Operations; Public Engagement and Improved Regional Quality of Life; Fairness and Inclusion; Environmental Sustainability; and High Performing Workforce.

Public Transit Ridership

According to the 2020 VTrans Public Transit Route Performance Report, 46% of all public transit trips in Vermont originated in Chittenden County. While access to public transit has improved in the greater Burlington area, some suburban and most rural populations lack access to transit.

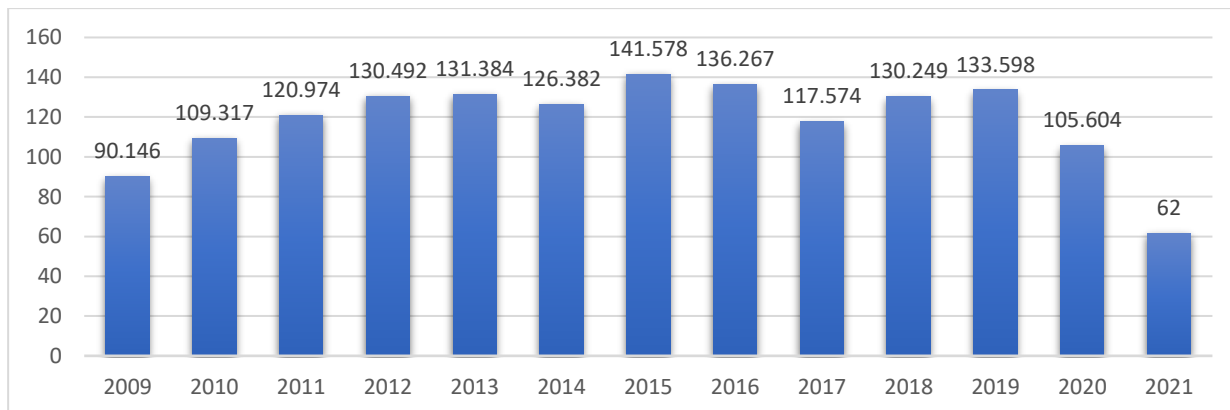
Figure 2 illustrates the steady increase in GMT ridership from 2000 to 2015 and the downward trend starting in 2015, which matched the overall national trend due in large part to low gasoline prices. In the past, public transit service in Chittenden County had served mostly non-driving segments of the population (low income, zero vehicle households, seniors, and children) with a limited ability to attract people with access to cars. However, GMT has made significant strides to improve passenger amenities and services with onboard Wi-Fi, fifteen-minute frequencies at peak times on select local routes (Essex Junction, Williston and Pine Street) and enhanced multimodal coordination. GMT's entire fleet is also equipped with bike racks to encourage this type of multimodal trip making.

As with most transit operations nationally, the COVID-19 pandemic had a dramatic impact on GMT's operations. At the peak of the pandemic, GMT provided 1.22 million trips in Chittenden County, a 55% decrease compared to the 2.74 million trips provided in 2014. In response to the pandemic, GMT began to offer fare-free transit service to help members of the public access essential services. With the support of state and federal funding, GMT will continue to operate fare-free transit through at least June 2023, while avoiding major service cuts.

FIGURE ? – GMT RIDERSHIP IN CHITTENDEN COUNTY: FY2000 - FY2021 (MILLIONS)

Special Transit Services

The Special Services Transportation Agency is a private not-for-profit corporation that provides Americans with Disabilities Act (ADA) paratransit services for persons unable to use the GMT fixed route bus system because of a disability. This is a critical service that gives elderly and people with disabilities transportation needed for social interaction, job training and employment, medical services and therapy.

FIGURE ? – NUMBER OF TRIPS PROVIDED BY THE SPECIAL SERVICES TRANSPORTATION AGENCY (THOUSANDS)

Intercity Bus

There are currently three carriers that provide intercity bus services in Chittenden County: Greyhound Lines, Megabus, and Vermont Translines. These services carry passengers on fixed routes and schedules. Greyhound runs two daily trips between Montreal and Boston with stops in White River Junction, Montpelier, Burlington International Airport and GMT's Downtown Transit Center. Megabus connects Burlington (at Downtown Transit Center) to both Montpelier and Boston with one trip daily. Vermont Translines is the most recent addition to the intercity bus options available to Vermonters. Founded in 2013 by Premier Coach and funded in part by VTrans. Vermont Translines offers a service

along the Route 7 corridor to Albany, New York and currently has three Chittenden County pickup and drop-off locations; in Colchester, Burlington, and South Burlington.

RAIL

Passenger Rail

Passenger rail service available in Chittenden County consists of Amtrak's Vermonter train, with Vermont stops in Essex Junction, Brattleboro, White River Junction, Montpelier, Waterbury, Bellows falls, and St Albans. The Vermonter service runs daily between Washington, D.C., and St. Albans, with numerous stops including Baltimore, Philadelphia, and New York City. Table 3 provides the most recent history of ridership on this service. Amtrak ridership has increased steadily in the pre-pandemic years (with the exception of 2016). However, the Covid-19 pandemic resulted in a significant reduction in ridership with only 18,585 riders taking the Vermonter in 2021. It is expected that ridership will gradually return as the pandemic ends.

TABLE 3 – AMTRAK VERMONTER RIDERSHIP

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
77,783	82,086	84,109	89,640	92,699	89,318	96,000	97,909	99,280	N/A(service suspended)	18,585

In recent years, the State of Vermont has been pursuing multiple initiatives to expand passenger rail service. Planning has been under way for several years to extend Amtrak's Vermonter service north to Montréal. There are still a number of obstacles to overcome to reestablish this service but officials in both Vermont and Quebec are optimistic that this service will be available in the next few years. The [2021 Vermont Rail Plan](#) detailed how the Amtrak connection to Montréal would have the largest potential positive impact on rail ridership of any of the passenger scenarios analyzed in the report. Moreover, this rail connection is highlighted as a First Tier Priority amongst the statewide passenger rail recommendations.



Another top priority for VTrans was to extend the Ethan Allen Express north to Burlington, which has operated between Rutland and New York City by way of Albany. Vermont leveraged more than \$115 million in state and federal funds to restore this Amtrak service to Burlington's Union Station. The work to extend this rail connection was completed in 2022, with daily service first launched at the end of July. In addition to serving Burlington, the extended route also has stops in Middlebury and Vergennes.

Commuter Rail

There is no commuter rail service that currently operates within Vermont. However, over the past decade, a number of studies have evaluated the feasibility of commuter rail systems in our region and Vermont as a whole. The Northern New England Intercity Rail Initiative produced a study in 2016 examining a rail connection between Boston and Montreal via Springfield, MA. A summary of the study results is available here: (<https://www.mass.gov/doc/summary-document/download>). In 2017, VTrans conducted a commuter rail feasibility study for the corridor between St. Albans, Essex Junction, and Montpelier, which also included a study of connecting service to Burlington. The results of that study can be found here: (<https://vtrans.vermont.gov/sites/aot/files/Montpelier-St.%20Albans%20Commuter%20Rail%20Study%20Revised.pdf>). Subsequently, in 2019, the Vermont General Assembly commissioned a study of a rail connection between Barre and Montpelier to determine what the potential capital costs would be to upgrade the rail line for passenger service and construct stations. The results of that study are available here: (<https://legislature.vermont.gov/assets/Legislative-Reports/WACR-MB-Freight-Corridor-Commuter-Rail-Study.pdf>).

Furthermore, in 2022, the CCRPC was awarded a \$2.1 Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant to complete a multi-year planning study to evaluate to develop a comprehensive plan for transit-oriented development and explore the feasibility of commuter rail and/or new transit opportunities across Northwest Vermont.

Park & Ride Facilities

This section will be updated based on the 2022 Park & Ride Plan

Air Service Facilities

Burlington International Airport (BTV) is the largest airport in the state of Vermont. BTV is located in South Burlington and is owned by the City of Burlington. It is governed by an Airport Commission that oversees general airport operations and guides future development. The airport is accessed primarily from US 2 (Williston Road) and serves as a vital link to the national air transportation system for the residents and businesses of northwestern Vermont and northern New York State. According to the 2021 Airport Master Plan, six commercial airlines provided 31 daily departures directly serving 12 destinations from BTV. The airport is also serviced by UPS Air Cargo and FedEx Express commercial parcel carriers, two general aviation/fixed base operators, and two airframe and power plant maintenance facilities. The airport also serves as home to a unit of the Air National Guard fleet of F-35s, a National Guard Blackhawk helicopter air ambulance service and a maintenance and repair facility for Blackhawks and F-35s. There are 93 aircraft based at BTV, which includes both general aviation and military aircraft in 2022.

Since it saw a record high of 759,021 enplanements in 2008, BTV has experienced a steady decline in passenger volumes through 2015. However, since 2016 enplanements gradually increased, reaching a high of 705,165 in 2019. However, the Covid-19 pandemic has contributed to lower enplanement numbers with a total of 209,320 and 388,834 being recorded in 2020 and 2021, respectively. A full recovery of enplanement numbers is expected as the pandemic ends, and public health measures are relaxed.

Landside connections to the airport are provided by private auto, taxi, rideshare services, a GMT fixed route service, and intercity bus via Greyhound Lines and Vermont Translines.

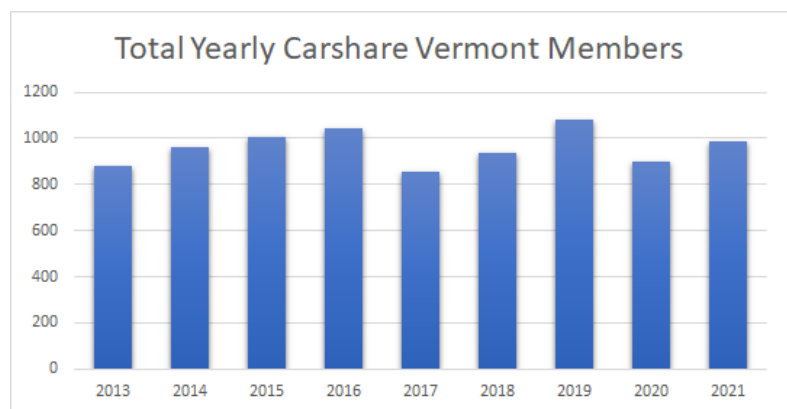
TRANSPORTATION DEMAND MANAGEMENT PROGRAMS

Transportation Demand Management, or TDM, is a general term for policies, programs or strategies that result in more efficient use of transportation resources. Two organizations in the region have notable programs generally fitting this broad category. These are 1) CarShare Vermont, and 2) the Chittenden Area Transportation Management Association (CATMA).

CarShare Vermont, a non-profit organization founded in 2008, strives to provide an accessible and affordable carsharing service to reduce vehicle dependence and improve mobility. CarShare Vermont currently has a fleet of 22 vehicles at 22 unique locations throughout Burlington near where its members live and work; nearly half of its fleet consists of electric and plug-in hybrid vehicles. Vehicles are available 24 hours a day, 7 days a week and can be used by the hour or day to go anywhere. CarShare members pay for their use based on how much they drive. The organization provides comprehensive insurance, routine maintenance, roadside assistance, car washes, fuel (gas and EV charging), and parking.

CarShare Vermont has helped hundreds of households reduce their vehicle ownership and vehicle miles traveled, saving money and improving the environment. For every vehicle CarShare Vermont puts in service, 15 are removed from the road. In 2021, 76% of CarShare Vermont members reported shedding or avoiding purchasing a personal vehicle after joining.

Carsharing is a mobility service that could benefit other Chittenden County communities; however, a lack of sustained funding to support its operations makes it difficult for CarShare Vermont to expand its service area beyond Burlington.



CATMA, also a non-profit membership-based organization, was formed in 1992 by Champlain College, University of Vermont and University of Vermont Medical Center to jointly address, plan and manage a viable, cost-effective and sustainable transportation and parking network in and around Burlington's medical-academic campus district. This structure provides coordinated land use planning, shared resources and efficient delivery of a comprehensive transportation demand management program. CATMA's TDM program includes bike-walk incentives, subsidized transit passes, discounted bikeshare memberships, carpool and vanpool support, trip planning, guaranteed ride home, prize giveaways, events and educational activities. In addition, CATMA conducts employee and student transportation surveys to monitor trends, program performance and identify opportunities. In 2015, CATMA expanded to a regional organization with a mission to work with members and community partners in planning safe, convenient and economical transportation and parking to minimize environmental impacts.

Go! Vermont, established in 2008 by VTrans, is a state-wide transport demand management program that provides information about transit, carpooling, bicycling, and walking. Go! Vermont has several programs designed to reduce single occupancy vehicle use through supporting other transportation options and coordinating their use. These include the ride match program, which allows Vermonters to easily find both rides and riders. The program had 7,350 members in mid-2022, up from 5,245 users in 2019. Commuters can also form groups and have a van or SUV provided by Go! Vermont for a small monthly fee. Additionally, the rides for veterans program specifically assists former service members in getting transportation and the volunteer driver program coordinates volunteer opportunities for all transit agencies in the state. The Go! Vermont website also provides access to the Go! Vermont trip planner (<https://www.connectingcommuters.org/>), which allows users to see routes to and from locations and see carpooling options alongside other types of transportation such as bus routes, bike paths and even walking paths.

In addition to reducing roadway congestion and providing multiple ways to get around, the impact of widespread TDM program implementation could significantly benefit Chittenden County municipalities by enhancing mobility, reducing dependence on fossil fuels, improving air quality, and supporting high levels of community livability. While only 9.2% of Chittenden County workers currently work from home (2016-2020 American Community Survey), the CCRPC's 2018 Transportation Survey revealed that over 36% of Chittenden County employees work for an employer that allows them to work from home. Employers need encouragement and support to implement an employee commute program that will assist in reducing congestion and parking demand, resulting in less strain on our existing roadways and influencing individual transportation behavior. There is an opportunity to focus on shifting transportation costs to a sustainable model and better integrating land use and transportation.

Travel Trends, Performance, and Other Issues

REGIONAL TRAVEL CHARACTERISTICS

Residents of Chittenden County make hundreds of thousands of trips every day by various means of transportation (driving, biking, walking, or busing). Transportation planners often categorize travel as either peak or off-peak. Peak travel consists of the trips that coincide with the typical commute to work in the early morning (AM peak) and back home in the late afternoon (PM peak) while off-peak trips occur the remaining hours of the day. Peak and off-peak trips make different demands on the transportation network. Peak period travel places the greatest strain on the transportation system, because of high traffic volumes in shorter time periods, that consequently exhibits the worst congestion seen throughout the day. Even though it is important to evaluate peak hour conditions on our roadways it is equally important to understand off-peak conditions.

Chittenden County is the employment center of a larger area encompassing all northwestern Vermont. Its economic and cultural impacts spread well beyond the county boundaries. 2019 Data from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics show that 33,711 residents from neighboring counties come to Chittenden County for work, while 69,370 Chittenden County residents are employed within Chittenden County. Proximity and easy highway access to Chittenden County have been determinants as to which towns in our neighboring counties have grown the fastest. Franklin County's fastest growing towns are those along the I-89 corridor and/or bordering our northern municipalities. The northern tier communities in Addison County have likewise grown at faster rates than other towns, and in Lamoille County, Cambridge and Stowe have been two of the fastest growing communities.

Error! Reference source not found. shows a slight increase over time in the number of people that work in Chittenden County but live outside the county. Even though this trend is based on various factors (housing affordability in Chittenden County, highway accessibility, and others) it directly impacts and exacerbates capacity issues on Interstate 89, especially between Exits 14 and 15, as well as other major highway arterials.

FIGURE ? – WHERE DO CHITTENDEN COUNTY EMPLOYEES LIVE?

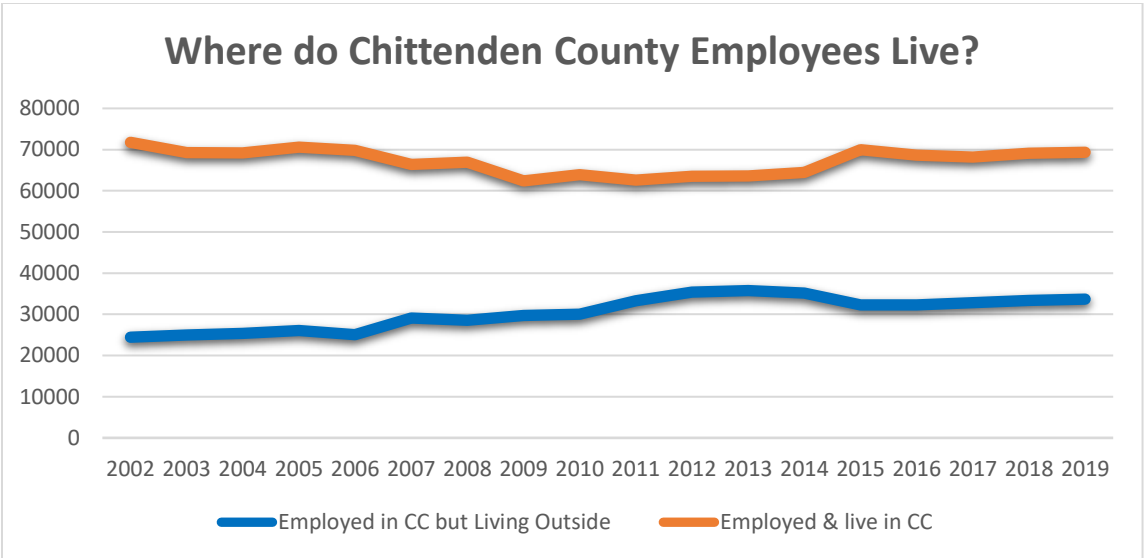
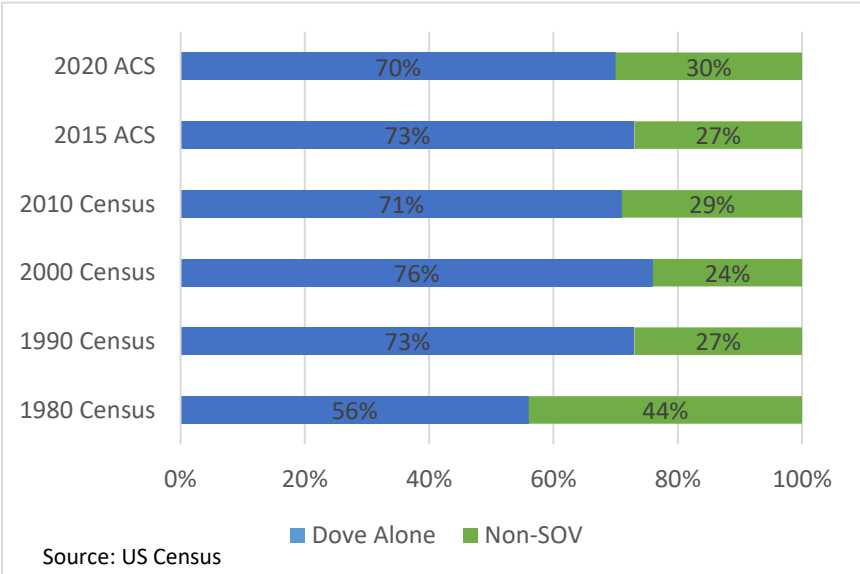


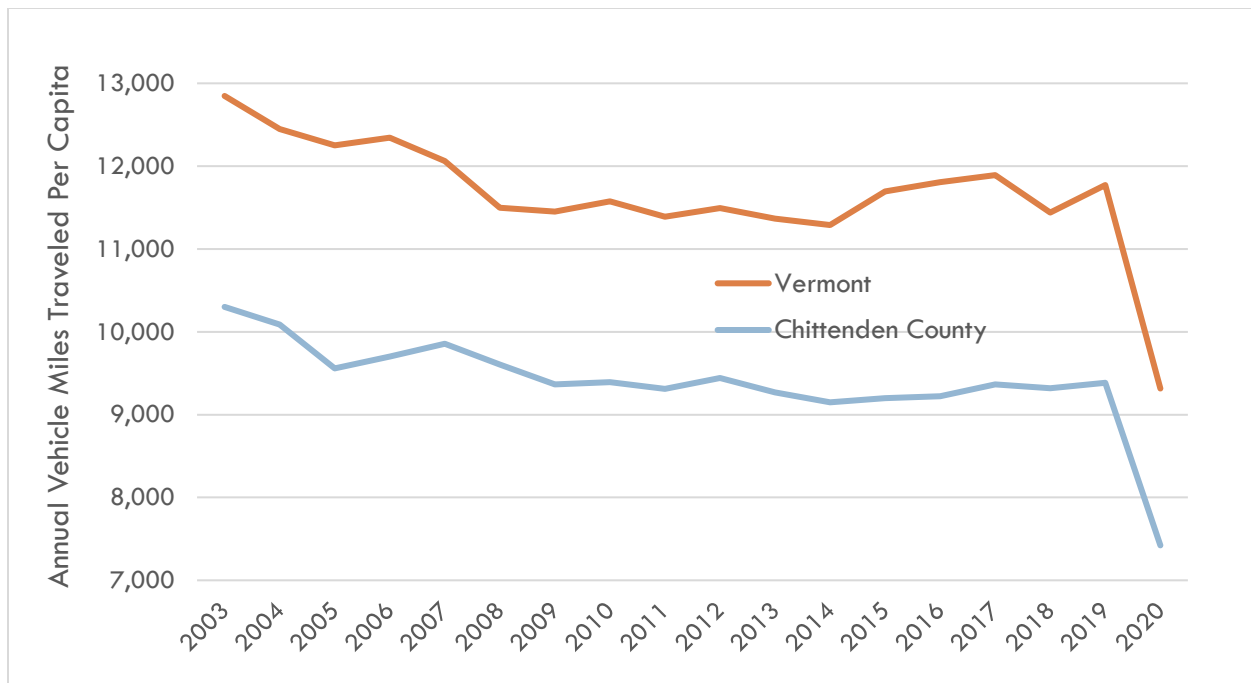
FIGURE ? – PERCENT OF WORKERS COMMUTING BY SOV AND NON-SOV



In Chittenden County, our rate of driving alone to work (commuting in a single occupancy vehicle or SOV) increased from 56% in 1980 to 70% in 2020 according to the latest American Community Survey 5-Year Estimate. When comparing the 2015 ACS 5-year estimates data with the 2020 ACS 5-year estimates data, the percent of workers commuting alone fell from 73% to 70%, primarily due to the increase in teleworking due to the COVID-19 pandemic.

Vehicle Miles Travelled (VMT) per person declined from 2010 to 2019, from 27 to 25 daily miles driven. In 2010, VMT per person was recorded at 25.7 daily miles driven, which also remained the same in 2019, fluctuating downward only slightly in 2014 to 25 daily miles driven. However, between 2014 and 2019, there was a slight increase in daily vehicle miles of travel per capita, possibly due to low fuel prices. In 2020, VMT per capita collapsed as a result of the COVID-19 pandemic but since then we have seen a slow increase in VMT as employees return to work and the economy recovers.

FIGURE ? – VERMONT AND CHITTENDEN COUNTY VMT PER CAPITA



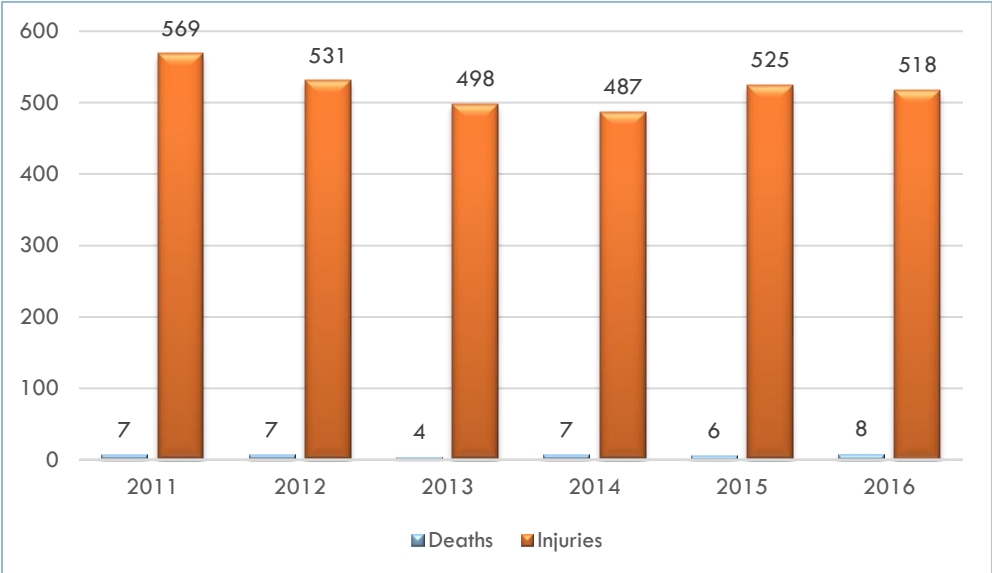
HIGHWAY CAPACITY & CONGESTION

Chittenden County, like many successful metropolitan areas, is no stranger to congestion. Significant congestion is primarily limited to the morning and evening peak hours and is predominantly due to people commuting to and from their jobs. This phenomenon has been worsened by the gradual increase in people living outside and commuting into Chittenden County for work as shown in **Figure ? – Where do Chittenden County Employees Live?**. This is also correlated to the increased cost and lack of available and affordable housing in the county. Traffic volumes that dropped drastically during the depths of the COVID-19 pandemic, have been slowly increasing on most major roads (even though they have not returned to their pre-pandemic levels) and localized congestion issues have returned.

SAFETY

Will add new narrative

FIGURE ?? – CHITTENDEN COUNTY VEHICLE CRASHES RESULTING IN DEATHS AND INJURIES



A reduction in crashes involving bicycles and pedestrians is a key measure that highlights safety improvements for active transportation users. Between 2010 and 2021, these crashes have dropped by just under 45%. In 2021, there were 170 vehicle crashes involving bicycles or pedestrians in Vermont. With 68 crashes in Chittenden County in 2021, this is representative of 40% of the statewide total.

FIGURE ??: BICYCLE AND PEDESTRIAN CRASHES IN CHITTENDEN COUNTY

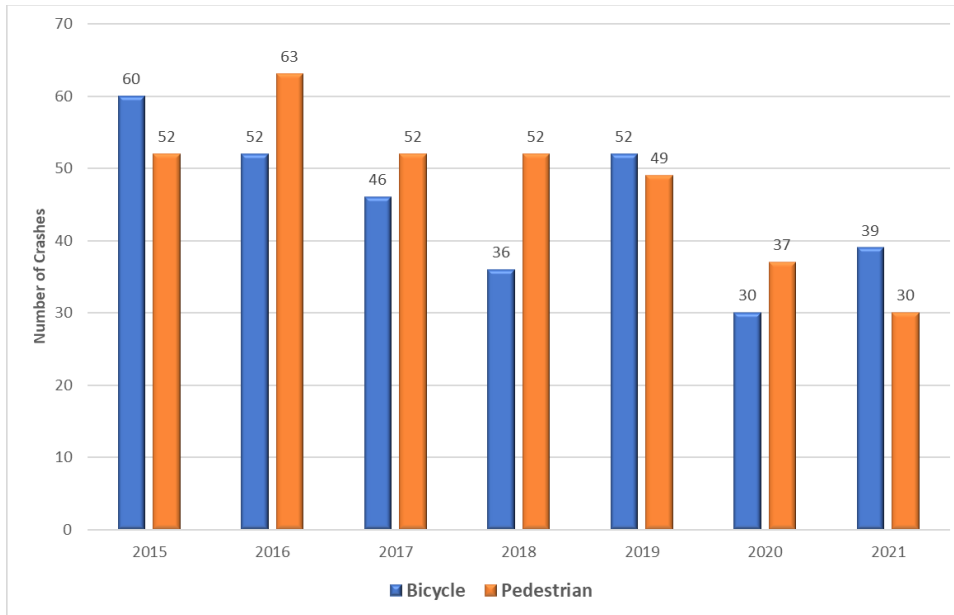


FIGURE ? : BICYCLE CRASHES BY INJURY TYPE IN CHITTENDEN COUNTY

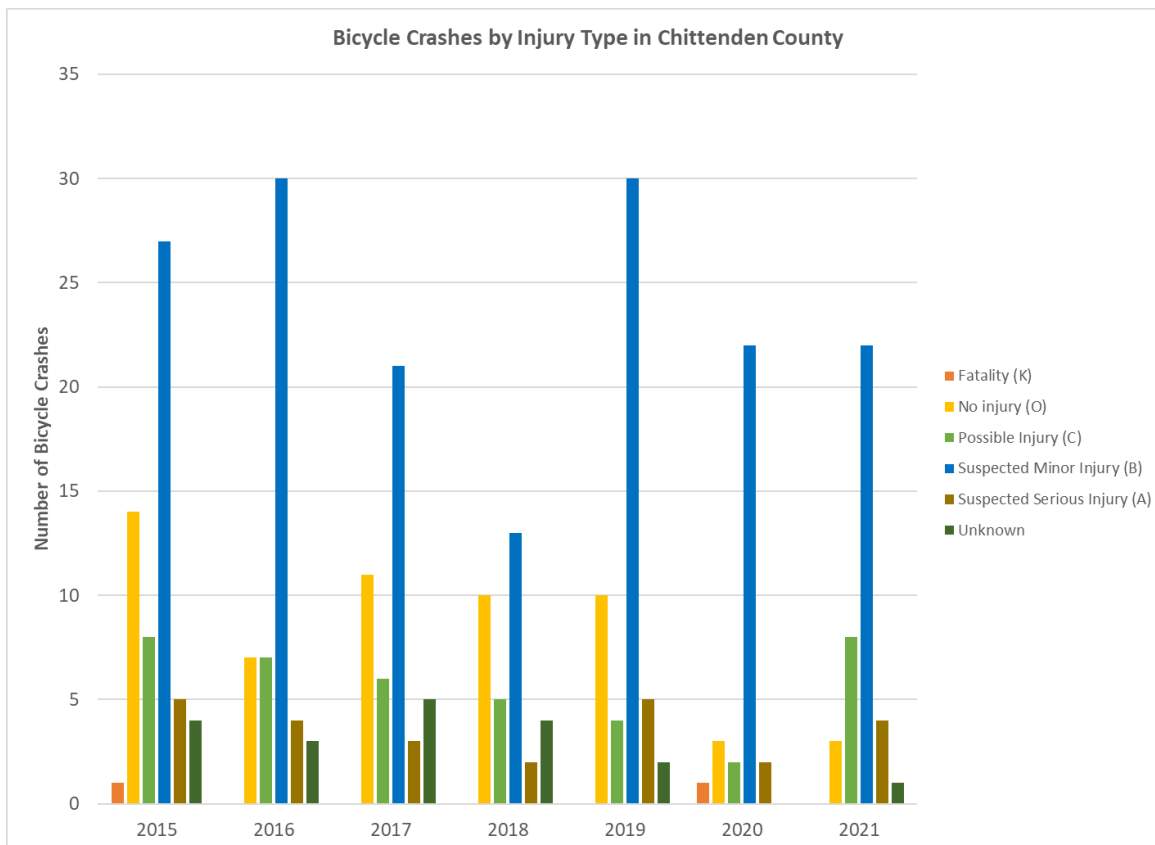
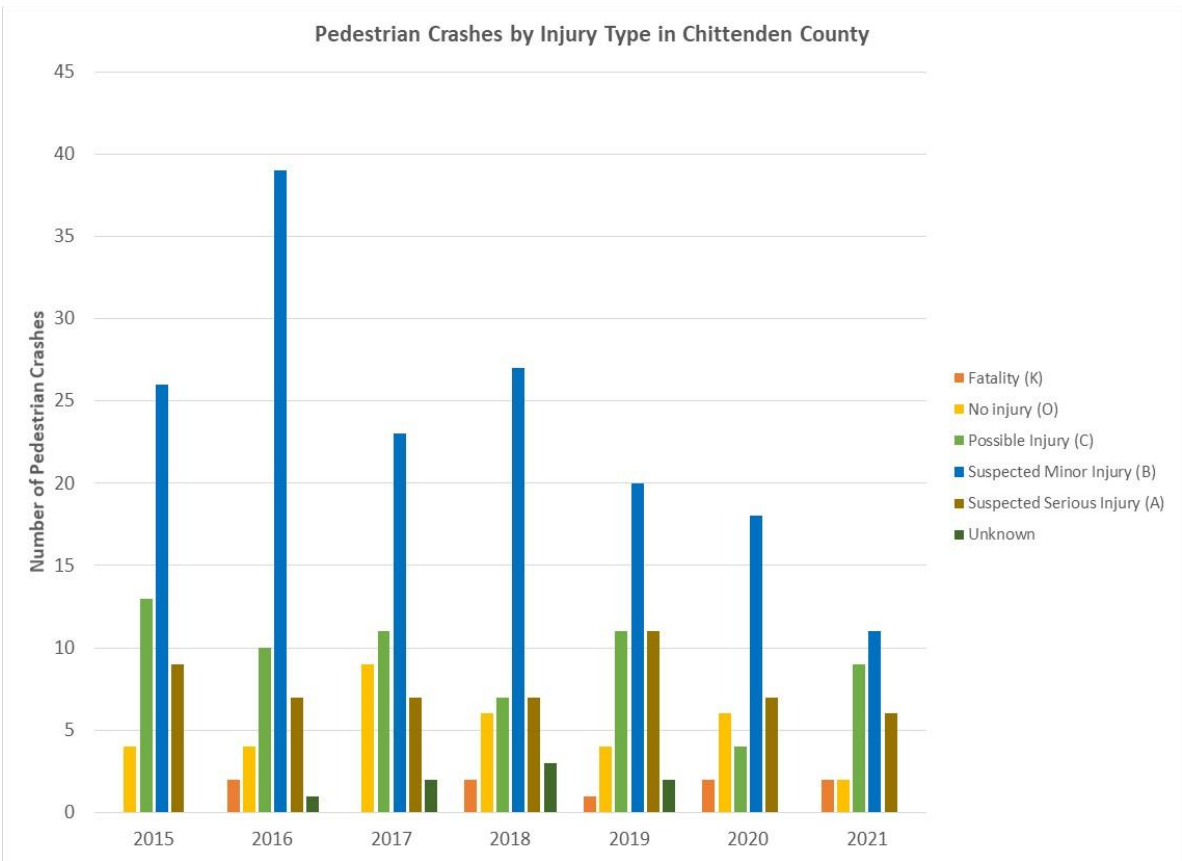


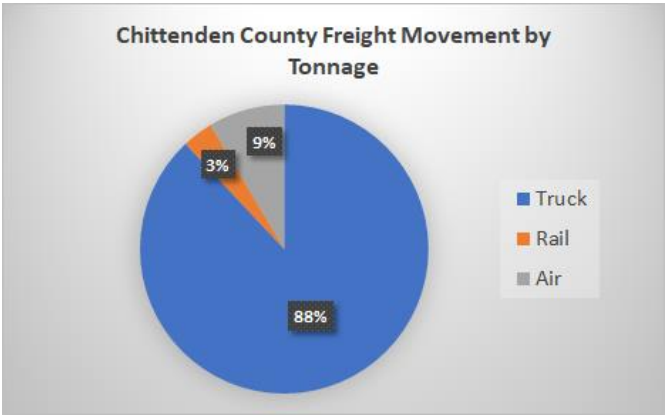
FIGURE ? : PEDESTRIAN CRASHES BY INJURY TYPE IN CHITTENDEN COUNTY



FREIGHT: RAIL AND TRUCK FACILITIES

Economic competitiveness is inextricably linked to the strength of a region's transportation network. Moreover, public and private sectors play a role in freight movement and coordination is necessary at the regional, statewide and national level across many freight modes including rail, air, water and highways. Freight plays a large role in Chittenden County's economy, and the performance of Chittenden County's economy influences freight demand and output. Growth in population and consumer spending fuel demand for durable goods and other consumer products and construction materials to build or improve homes. Growth in consumer demand contributes to growth in manufacturing, wholesale, retail, and other industry sectors that produce and distribute those goods.

According to Freight Analysis Framework (FAF5) data, about 8.2 million tons of freight flow into, out of, or within Chittenden County each year, far more than in any other region of Vermont. This is representative of a 1.9-million-ton increase when compared to Chittenden County freight data reported in the 2012 Vermont Freight Plan.



There are two rail freight operators in Chittenden County: 1) The Genesee & Wyoming (G&W) who purchased the New England Central Railroad (NECR)/RailAmerica and currently has a base in St. Albans. The former NECR was Vermont's largest privately owned and operated rail operating freight service from Alburgh, VT to New London, CT. NECR, now G&W, also operates on the spur line that connects their mainline in Essex Junction to Burlington. 2) The Vermont Railway is based on the waterfront in Burlington and operates on state owned lines south to Bennington, branching off in Rutland to Whitehall, NY and Bellows Falls, VT.

In recent years, the County's freight distribution system has had to adapt to a changing and more competitive marketplace. Rapidly changing technology and increased consumer demand is starting to transform the way goods are delivered. The freight sector is typically among the first to embrace changes in technology. Companies with goods to move have already begun to experiment with autonomous delivery vehicles, utilizing drones for front door delivery and self-driving trucks for long haul shipments on the interstate (highlight BETA example here?). As the economy and demand for e-commerce grows, so does the volume and value of freight moved within, to, and out of the region.

The COVID-19 pandemic introduced a number of challenges to supply chain systems and freight logistics. Problems with production and shifts in demand during the pandemic resulted in logistics challenges and major delivery delays of certain products. The pandemic also resulted in a decline in business for many goods-producing and freight companies in Vermont. Moreover, the economic recovery from the pandemic has been uneven, when viewed by the effect on employment of high-wage versus low-wage workers, and by industry sector. Transportation costs are high and impacting the cost of goods businesses and consumers pay.

TRANSPORTATION AND CLIMATE CHANGE

The overwhelming majority of scientists agree that changes in climate worldwide can be mainly attributed to human activities, primarily the burning of fossil fuels. In Vermont, the largest contributor of greenhouse gas (GHG) emissions is the transportation sector – mostly carbon dioxide (CO₂) coming from the combustion of petroleum-based fuels, like gasoline and diesel in internal combustion engines. Transportation's 40% statewide contribution to GHG emissions is closely mirrored by our 48% Chittenden County estimate (<https://www.ccrpcvt.org/wp-content/uploads/2016/01/Chittenden-County-Climate-Action-Guide-2014.pdf>) and is substantially higher than the nationwide share of 27% from transportation according to the 2015 EPA Greenhouse Gas Emissions data. Transportation's higher contribution is mainly due to the rural nature of Vermont and the higher annual Vehicles Miles Traveled (VMT) per Capita in the state (11,680,000) compared to the nationwide VMT per Capita (9,630,000) according to the 2017 Vermont Transportation Energy Profile.

Climate change is only one of many factors to consider as we plan the region's future transportation investments, but we need to carefully monitor its potential impacts while implementing programs that will slow its progress. For more information go to the air quality and climate sections of the CCRPC website: (<https://www.ccrpcvt.org/our-work/environment-natural-resources/energy/>).

TRANSPORTATION AND PUBLIC HEALTH

The impact of transportation on health is well established in particularly with regard to safety/injury, air quality, physical activity, equitable access to opportunities and noise.

The degree to which individuals in a community are physically active is directly dependent on transportation opportunities, infrastructure and community design. The health benefits of physical activity and its role in reducing the risk for chronic disease has numerous positive societal impacts. Most risk factors for chronic disease do not occur randomly but are closely linked to the characteristics of neighborhoods in which people live, work, and play.

In Chittenden County, 71% of adults report using community resources for physical activity. Walkable communities with a reliable transit network generally have a lower dependence on automobiles and encourage physical activity. Hybrid commutes, that is, trips completed using several modes are an effective option when distance and areas not served by transit are barriers to a more active commute, such as walking or biking. With few exceptions, proximity to public transit stops is linked to higher transit use and higher levels of physical activity among adults.

Chittenden County has a very low percentage of days per year when the surface ozone level and concentration of ambient particulate matter register above National Ambient Air Quality Standards (NAAQS). As the population of Chittenden County increases over the coming decades, bolstering the transit system, creating a contiguous infrastructure for active modes of transportation, and focusing on dense development patterns that encourage non-motorized trips will help to preserve the air quality in the county.

TRANSPORTATION EQUITY

The lack of safe and convenient alternatives to automobile travel disproportionately affects vulnerable populations. Some population segments such as youth, the elderly, low-income, and traditionally underserved and excluded populations lack access to viable public and private transportation options. Access to education, healthy food, healthcare, recreation, social interactions and employment all contribute to health and quality of life. A lack of safe and convenient alternatives to automobile travel limits an individual's options forcing trade-offs in money or time thereby compromising equitable choice. This dearth of options disproportionately affects vulnerable populations.

High costs of owning and operating a personal vehicle disproportionately affect low-income and rural Vermonters that rely on their vehicles to get to work, shopping, medical appointments, and social gatherings. Even though high fuel prices have a number of positive impacts on transportation behavior and choices, we should be cognizant that as fuel prices rise, some vulnerable populations are disproportionately impacted by increases in household transportation costs.

Add info on VTrans' Transp. Equity Framework

OTHER TRANSPORTATION ISSUES

2018 Chittenden County Transportation Survey

In 2018 CCRPC released an updated version of its Transportation Survey Report conducted in cooperation with Steadman Hill Consulting and WBA Research which the organization uses to guide both short-term and long-term planning. Data was gathered through mailing over 8,000 Chittenden

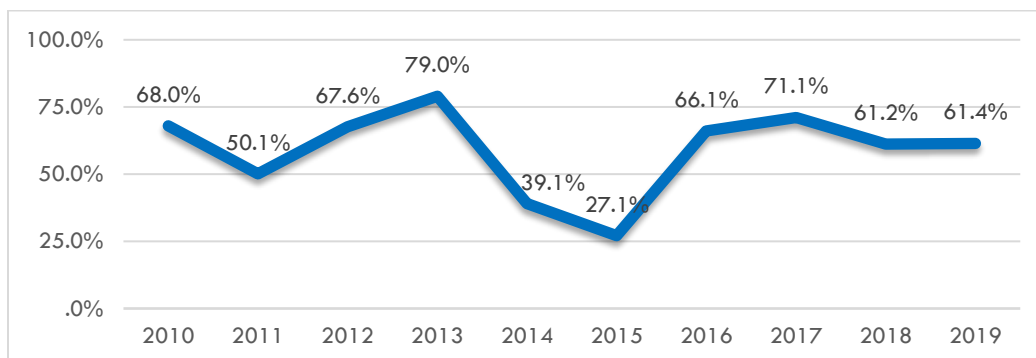
County residencies a letter requesting they participate in a survey online. Data created by the survey was then grouped into four key areas: strengths, weaknesses, opportunities and obstacles.

In total, 500 Chittenden County residents completed the survey. 71% answered yes when asked if they were satisfied with Chittenden County's transportation system but approval varied when asked about specific aspects. Residents were most satisfied with opportunities the county has for walking with 81% approving, although residents also said they wanted more investments in infrastructure supporting walking such as sidewalks. Approval of the driving conditions was significantly lower at 61% with many residents citing issues like road quality, traffic congestion and deteriorating bridges. Satisfaction with public transit opportunities was significantly higher with 70% approving but residents still indicated interest in minor improvements like providing live information on bus locations and building more bus shelters. Finally, biking had the lowest satisfaction at 59% with residents, with common complaints being a perceived lack of supportive infrastructure such as bike lanes, separate bike paths, and bike racks.

Funding

Maintaining our existing transportation system is a critically important task and a top sustainable transportation priority. It is estimated that 70% of anticipated future federal transportation funds, on average, will need to go to system preservation in order to sustain its integrity and protect public safety. This annual calculation will be tracked to assure adequate system maintenance investment (while realizing there may be year to year fluctuations).

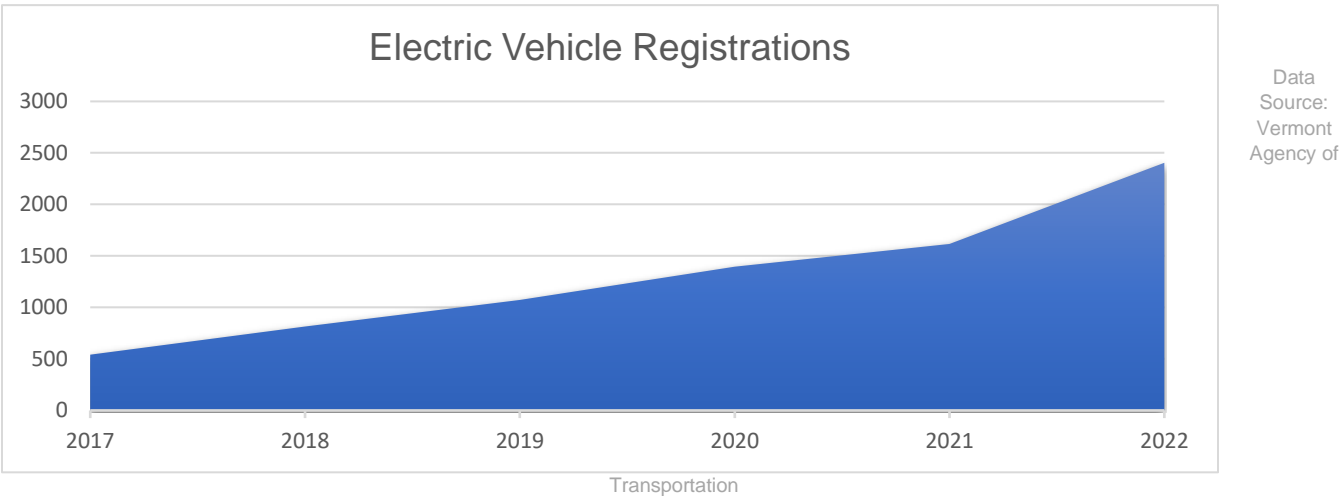
FIGURE ? – SUSTAINABLE FUNDING, SYSTEM PRESERVATION BY FISCAL YEAR



Electrification of the Fleet:

Increasing the number of electric vehicles is key to reducing the use of fossil fuels for transportation and to reducing transportation energy use. Currently, electric vehicles make up a very small part of Chittenden County's vehicles. In 2015, there were 106,936 vehicles registered in Chittenden County. As of February 2022, there were 2,404 electric/plug-in hybrid vehicles registered in Chittenden County.

FIGURE ? – CHITTENDEN COUNTY ELECTRIC VEHICLE REGISTRATIONS



Future Transportation Scenarios

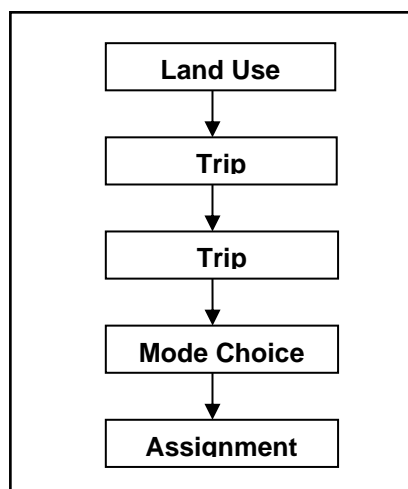
Add discussion on approved population, housing and employment numbers. See Melanie's memo to the Board

TABLE 1 – CHITTENDEN COUNTY DEMOGRAPHICS

Demographics	2015	2050	2015 to 2050 % increase
Population	161,382	183,172	14%
Employment	135,511	182,688	35%
Household	63,498	79,151	25%

Transportation models have been used in Chittenden County since the mid-1980's. The current model framework was developed in 1994 and was updated and enhanced in 1998, 2011, and 2017. It uses custom designed computer software to examine travel impacts on roadway capacity and congestion in the county based on various land use, demographic, mode share, highway network, and other scenarios. The model is a sophisticated tool that simulates the interaction of trips generated by households and employment and evaluates their impact on the transportation system. It is also sensitive to how congestion impacts trip making decisions.

TRAVEL MODEL PROCESS



The model can analyze morning (AM) and afternoon (PM) peak hour as well as daily conditions. For the current MTP analyses, daily results of specific metrics were used to gauge county-wide performance of each scenario relative to one another. The AM and PM peak hour results highlight specific network problems of each scenario. The AM and PM peak hour results are used for this purpose since they represent the time in which the network exhibits the greatest levels of congestion. It is important to look at both AM and PM peak hours to ensure potential future problems are not overlooked.

The model follows a five-step process as shown at the diagram on the left. This process is built first to replicate existing travel conditions and then adapted to simulate future scenarios.

The five model steps break-down the relationship between the land use, economic activity and travel behavior. Trip generation

estimates the total number of trips produced and trip distribution estimates where these trips will go. Both of these steps are based on where the households and employment are located. Mode choice evaluates how people will travel (i.e. drive, bike, walk, or bus) and trip assignment estimates which route travelers will use.

Careful input data, combined with powerful software analysis and real-world calibration make the model a reliable tool to assess our potential future. For more information on the regional model visit <https://www.ccrpcvt.org/our-work/transportation/transportation-resources/modeling/>.

The Chittenden County Transportation Model is a powerful and important analytical tool, but it is just that – a tool for helping us to better understand transportation issues. The model does not make decisions but is one of numerous resources the CCRPC calls upon to make more informed choices about how to invest limited resources to improve the region’s transportation system.

2050 SCENARIOS THAT WILL BE INCLUDED IN THIS SECTION:

- **Base Scenario** – model for 2050 with future land use and only the TIP projects included
- **2018 MTP** without the third lane on I-89 between Exit 14 & 15 and the Exit 12B placeholder
- **Proposed 2023 MTP Scenario:**
 - 90% of households in existing developed areas
 - Safety improvements
 - New Exit 14 Interchange (DDI? Preferred alternative from FY24 scoping study)
 - Significant Transportation Demand Management Investment (will be further explored in a FY24 study)
 - Increase teleworking by 50%
 - 90% of households in existing developed areas
 - Double trips made by bike
 - Triple transit services and improve frequencies
 - Double participation in TDM program
 - Increase cost of parking
 - Mileage-based fee (5 cents/mile)
 - Localized capacity improvements



Chittenden County Transportation Advisory Committee

September 6, 2022

Agenda Item 6b: Discussion Item

Metropolitan Transportation Plan Preliminary Project List

Issues: The Metropolitan Transportation Plan (MTP) is the region's principal transportation planning document that sets regional transportation priorities. It consists of short- and long-range strategies to address transportation needs that lead to the development of an integrated, intermodal transportation system that facilitates the efficient movement of people and goods.

One component of the MTP is a fiscally constrained list of federally funded projects that will help us work towards our vision and goals for the future transportation system. We are currently working on the financial plan that will estimate the federal funds expected to be available over the next 20 years. That plan will be presented at a future TAC meeting.

The MTP project list includes federally funded transportation projects proposed to be implemented over the next 20 years. The list is multimodal but does not specifically list maintenance projects. Maintenance projects, including paving and bridge rehabilitation, are funded through a set-aside for those activities.

The TAC is being asked to review the current MTP project list and make recommendations for additions and deletions to the list. Note the following items about this list.

- Projects highlighted in pink were not in the previous plan. These are either new TIP projects or new projects identified through scoping.
- Projects with horizontal hatching are being considered for removal. Many of these have been incorporated into another project.
- The costs are being reviewed and may be updated.
- Park & Ride projects will be added following approval of the Park & Ride Plan.

Staff Recommendation: Recommend that the TAC review the MTP project list and make recommendations for additions or deletions to the list.

For more information contact: Christine Forde
cforde@ccrpcvt.org

Attachments: Initial Draft 2022 MTP Project List

Initial Draft 2023 MTP Project List
September 6, 2022

Project		Category	Time Frame from 2018 MTP	Cost Estimate 2022
Burlington				
Capital Program - Front of the Book and on CCRPC TIP				
Burlington	Champlain Parkway	Roadway/Traffic & Safety	Short	\$66,049,627
Burlington	Intervale Road Rail Crossing Improvements			\$675,000
Burlington	Intervale Road Shared Use Path	Bike&Ped	Short	\$1,452,500
Burlington	Lake Street Sidewalk and Stormwater Management	Bike&Ped	Short	\$405,000
Burlington	Railyard Enterprise Project	Roadway/Traffic & Safety	Short-Medium	\$16,500,000
Burlington	Schifilliti Park Shared Use Path			\$373,160
Burlington	Shelburne Street Roundabout	Roadway/Traffic & Safety	Short	\$12,176,529
Burlington	Queen City Park Road/Austin Drive Bicycle and Pedestrian Connections	Bike&Ped		\$2,073,000
Capital Program - Development & Evaluation and on CCRPC TIP				
Burlington	Colchester Avenue/Prospect Street Intersection Improvements (VPSP2 Regionally Driven)	Roadway/Traffic & Safety	Short	\$1,180,000
Burlington	Colchester Avenue/ Barret Street/ Mill Street/ Riverside Avenue Intersection Improvements (VPSP2 Regionally Driven)	Roadway/Traffic & Safety	Medium	\$4,012,000
Capital Program - VPSP2 Selected Project -- not yet added to Capital Program				
Burlington	Main Street Great Street - Battery to Union (\$10.3m funded at 50% federal) (VPSP2 Regionally Driven)	Roadway/Traffic & Safety	Short-Medium	TBD
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Burlington	Battery Street Improvements (\$3.5m funded at 50% federal)	Roadway/Traffic & Safety	Medium	\$1,750,000
Burlington	Champlain Elementary Safe Routes to School - Phase II (\$425,000 funded at 20% federal)	Bike&Ped	Short	\$85,000
Burlington	Cherry Street Complete Street	Roadway/Traffic & Safety	Short	\$590,000
Burlington	Colchester Avenue/East Avenue Intersection Improvements (\$0.78m funded at 50%)	Roadway/Traffic & Safety	Medium	
Burlington	Colchester Avenue Bicycle Improvements & East Avenue Intersection			\$8,000,000
Burlington	Depot Street Improvements (Bike/Ped)(\$1.1m funded at 50% federal)	Bike&Ped	Short	\$550,000
Burlington	Main Street Complete Street - US2 Section	Roadway/Traffic & Safety	Medium	\$472,000
Burlington	North Avenue Improvements (\$16.35m funded at 50%)	Roadway/Traffic & Safety	Short-Medium	\$8,175,000
Burlington	Pearl Street Complete Street (\$3.3m funded at 50% federal)	Roadway/Traffic & Safety	Short	\$1,650,000
Burlington	Shelburne Street Improvements - Complete Streets	Roadway/Traffic & Safety	Medium	\$15,222,000
Burlington	Sherman Street Connection to Depot Street - Stairway Street (0.775m funded at 50% federal)	Bike&Ped	Short	\$387,850
Burlington	Winooski Avenue Improvements (\$12.9m funded at 50% federal)	Roadway/Traffic & Safety	Short	\$6,450,000
Burlington/ Winooski				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Burlington / Winooski	Bike/Ped Bridge Crossing of the Winooski River in the vicinity of the "Blue Bridge"	Bike&Ped	Long	Futher Planning Needed
Burlington/ Winooski	Winooski River Bicycle/Pedestrian Bridge (dependent on outcome of Winooski Main Street Bridge scoping)	Bike&Ped	Medium	
Charlotte				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Charlotte	Town Link Trail	Bike&Ped	Short	Further Planning Needed

Initial Draft 2023 MTP Project List
September 6, 2022

Project		Category	Time Frame from 2018 MTP	Cost Estimate 2022
Colchester				
Capital Program - Front of the Book and on CCRPC TIP				
Colchester	Exit 16 Improvements - CIRC ALT PHASE I	Roadway/Traffic & Safety	Short	\$16,913,517
Colchester	Exit 17/US2/US7 Interchange Improvements	Roadway/Traffic & Safety	Medium	\$28,088,272
Colchester	Severance Corners Improvements - CIRC ALT PHASE II	Roadway/Traffic & Safety	Short	\$5,598,257
Colchester	W Lakeshore Drive / Prim Road Intersection Improvements - CIRC ALT PHASE III	Roadway/Traffic & Safety	Short	\$4,135,000
Capital Program - Development & Evaluation and on CCRPC TIP				
Colchester	Bayside Intersection Roundabout and Stormwater Improvements (VPSP2 Asset Driven)	Roadway/Traffic & Safety	Medium	\$3,905,800
Colchester	VT2A Colchester Village and Mill Pond Road/East Road Intersection -CIRC ALT PHASE III	Roadway/Traffic & Safety	Medium	\$5,450,000
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Colchester	Heineberg-Blakely Bypass and Shared Use Path	Bike&Ped	Long	\$22,363,360
Colchester	Mill Pond Road/Severance Road Intersection Improvements	Roadway/Traffic & Safety	Long	\$326,860
Colchester	Severance Road Shared Use Path	Bike&Ped	Long	\$2,462,070
Colchester	VT127 Roadway and Intersection Improvements	Roadway/Traffic & Safety	Long	\$24,000,000
Colchester	VT15/Lime Kiln Road Intersection Improvements	Roadway/Traffic & Safety	Medium	\$1,215,400
Colchester	West Lakeshore Drive Path Phase II - Harbor View Plaza to Public Boat Launch	Bike&Ped	Medium	\$1,062,000
Colchester	West Lakeshore Pedestrian Tunnel at Bayside park	Bike&Ped	Long	\$2,000,000
Colchester/Essex/ Essex Junction				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Colchester / Essex / Essex Junction	VT15 Multi-use Path - Phase 2, I-89 Exit 15 to Lime Kiln Road	Bike&Ped	Long	\$360,726
Colchester / Essex / Essex Junction	VT15 Multi-use Path - Phase 3, Susie Wilson Road to West Street Extension	Bike&Ped	Long	\$421,850
Colchester/Winooski				
Winooski, Colchester	Intelligent Transportation System Improvements - Signal and Communications - US7	Roadway/Traffic & Safety	Medium	\$600,000
Essex				
Capital Program - Front of the Book and on CCRPC TIP				
Essex	VT15/Sand Hill Road Signal - CIRC ALT PHASE II	Roadway/Traffic & Safety	Short	\$1,390,453
Essex	Susie Wilson Road Improvements and Intersections including VT15 and Kellogg - CIRC ALT PHASE III	Roadway/Traffic & Safety	Short-Medium	\$1,815,000
Essex	VT117/North Williston Road Intersection Improvements - CIRC ALT PHASE III	Roadway/Traffic & Safety	Medium	\$2,104,774
Capital Program - Candidate and on CCRPC TIP				
Essex	North Williston Road Flood Plain Elevation Improvements - CIRC ALT PHASE III	Roadway/Traffic & Safety	Medium	\$477,900
Essex	VT15 Sidewalk - Old Stage Road to Essex Way - CIRC ALT PHASE III	Bike&Ped	Medium	\$188,800
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Essex	VT15 Bike/Ped Improvements, Athens Drive to VT289	Bike&Ped		\$1,616,600
Essex Junction				
Capital Program - Front of the Book and on CCRPC TIP				
Essex Junction	Crescent Connector Road - VT2A to VT15 - CIRC ALT PHASE I	Roadway/Traffic & Safety	Short	\$13,750,000

Initial Draft 2023 MTP Project List
September 6, 2022

Project		Category	Time Frame from 2018 MTP	Cost Estimate 2022
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Essex Junction	VT15/West Street Extension Intersection - Additional NB lane on West Street Ext.	Roadway/Traffic & Safety	Long	\$243,080
Hinesburg				
Capital Program - Front of the Book and on CCRPC TIP				
Hinesburg	Village South Sidewalk	Bike&Ped	Short	\$352,625
Hinesburg	VT116/Charlotte Road Improvements to facilitate Concurrent Signal Phasing	Bike&Ped	Short	\$128,075
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Hinesburg	Mechanicsville Road Sidewalk	Bike&Ped	Medium	\$167,560
Hinesburg	Richmond Road Shared Use Path, CVU Road to North Street	Bike&Ped	Long	\$3,478,000
Hinesburg	Richmond Road/North Road/Texas Hill Road Intersection Scoping			\$287,280
Hinesburg	Route 116 East Sidewalk - Commerce Street to Mechanicsville Road	Bike&Ped	Medium	\$431,290
Huntington				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Huntington	Huntington Lower Village Traffic Calming and Bike/Ped Improvements	Bike&Ped	Medium	\$1,055,038
Jericho				
Capital Program - Front of the Book and on CCRPC TIP				
Jericho	Lee River Road Sidewalk	Bike&Ped	Short	\$428,000
Jericho	Riverside Village Sidewalk	Bike&Ped		\$750,000
Capital Program - Development & Evaluation and on CCRPC TIP				
Jericho	VT117/Skunk Hollow Road Improvements (VPSP2 Asset Driven)	Roadway/Traffic & Safety	Medium	\$1,298,000
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Jericho	Browns Trace Multimodal Connection - MMU to Lee River Road	Bike&Ped	Medium	\$556,134
Jericho	VT15/Dickinson Street Modifications	Roadway/Traffic & Safety	Medium	\$1,888,000
Milton				
Capital Program - Front of the Book and on CCRPC TIP				
Milton	US7/Middle Road/Railroad Street Safety Improvements	Roadway/Traffic & Safety	Short	\$6,976,355
Capital Program - Development & Evaluation and on CCRPC TIP				
Milton	US7/Racine/Legion/Bartlett/West Milton Road Improvements (VPSP2 Regionally Driven)	Roadway/Traffic & Safety	Medium	\$607,700
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Milton	US7/Main Street Intersection Improvements	Roadway/Traffic & Safety	Long	\$1,215,400
Richmond				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Richmond	US2 Path - Park and Ride to Richmond Village	Bike&Ped	Long	\$3,997,840
Shelburne				
Capital Program - Front of the Book and on CCRPC TIP				
Shelburne	Irish Hill Road Pedestrian Bridge and Sidewalk	Bike&Ped	Medium	\$724,000
Capital Program - Development & Evaluation and on CCRPC TIP				
Shelburne	US7/Harbor Road Improvements (VPSP2 Asset Driven Project)	Roadway/Traffic & Safety	Medium	\$1,540,000
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Shelburne	Bay Road Pedestrian Bike Safety Improvements	Bike&Ped	Medium	\$23,600
Shelburne	Shelburne Southern Gateway (South of Bostwick/Marsett)	Bike&Ped	Medium	\$2,950,000

Initial Draft 2023 MTP Project List

September 6, 2022

Project		Category	Time Frame from 2018 MTP	Cost Estimate 2022
South Burlington				
Capital Program - Front of the Book and on CCRPC TIP				
South Burlington	Bike/Ped Bridge over I-89 in the vicinity of Exit 14	Bike&Ped	RAISE Grant	RAISE Grant
South Burlington	Dorset Street Shared Use Path, Old Cross Road to Sadie Lane	Bike&Ped	Short	\$835,000
South Burlington	Exit 14 Area Signal Upgrades	Roadway/Traffic & Safety	Medium	SAFETEA-LU Grant
South Burlington	Spear Street Bike/Ped Improvements - Swift Street to US Forest Service	Bike&Ped		\$604,229
South Burlington	Williston Road Bicycle and Pedestrian Improvements - Dorset Street to Midland Drive (\$2,412,670 50% TIF funding)	Bike&Ped		\$800,000
Capital Program - Development & Evaluation				
South Burlington	VT116-Cheese Factory Road (VPSP2 Asset Driven Project)	Roadway/Traffic & Safety		NA
Capital Program - VPSP2 Selected Project -- not yet added to Capital Program				
South Burlington	Williston Road Intersection and Roadway Improvements - Dorset Street to Garden Street (\$10m funded at 50% federal)	Roadway/Traffic & Safety	Short	TBD
South Burlington	Williston Road Intersection and Roadway Improvements - Garden Street to VT116 (\$3.3m project to be funded with local funds)	Roadway/Traffic & Safety	Short	TBD
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
South Burlington	Airport Drive Extension to Airport Parkway	Roadway/Traffic & Safety	Medium	\$14,357,178
South Burlington	Airport Parkway Shared Use Path, Kirby Road to Winooski River Bridge	Bike&Ped	Short	\$1,943,978
South Burlington	Allen Road Shared Use Path - US7 to Existing Facility	Bike&Ped	Short	\$236,000
South Burlington	I-89 Interstate Access Improvements Between Exit 12 and Exit 15	Roadway/Traffic & Safety	Long	\$44,016,360
South Burlington	I-89 Widening, Exit 14 to Exit 15 (3 lanes in each direction)	Roadway/Traffic & Safety	Long	\$43,660,000
South Burlington	Lindenwood Drive Path and Crossing Improvements	Bike&Ped	Short	\$424,800
South Burlington	Queen City Park Road Bicycle and Pedestrian Connections - US7 to Central Avenue	Bike&Ped		\$1,316,000
South Burlington	Kimball Avenue Recreational Path Crossing of Potash Brook	Bike&Ped		\$790,000
South Burlington	Shelburne Road Streetscape and Bike/Ped Improvements between IDX Drive and Queen City Park Road	Roadway/Traffic & Safety	Medium	\$5,900,000
South Burlington	Spear Street Bike/Ped Improvements - Allen Road to Swift Street	Bike&Ped	Medium	TBD
South Burlington	Spear Street Shared Use Path, Davis Road to Jughandle	Bike&Ped	Short	\$533,832
South Burlington	Swift Street/Spear Street Intersection Improvements	Roadway/Traffic & Safety	Medium	Locally Funded
South Burlington	VT116 Bike Path - US2 to Kennedy Drive	Bike&Ped	Long	\$590,000
South Burlington/Williston				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
South Burlington / Williston	Shared Use Path Connection over Muddy Brook	Bike&Ped	Short	Remove
St. George				
Capital Program - Development & Evaluation and on CCRPC TIP				
St. George	VT116/VT2A Intersection Improvements (VSPS2 Asset Driven)	Roadway/Traffic & Safety	Long	TBD
Westford				
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Westford	Browns River Path Common to School	Bike&Ped	Short	Further Planning Needed

Initial Draft 2023 MTP Project List
September 6, 2022

Project		Category	Time Frame from 2018 MTP	Cost Estimate 2022
Williston				
Capital Program - Front of the Book and on CCRPC TIP				
Williston	Park and Ride South of I-89	Park&Ride/ Intermodal	Short	\$7,197,785
Williston	US2/Industrial Avenue Intersection	Roadway/Traffic & Safety	Short	\$9,322,515
Williston	US2/Trader Lane Signal - CIRC ALT PHASE II	Roadway/Traffic & Safety	Short	No Federal
Williston	VT2A/Industrial Avenue Improvements and Improvements to VT2A to James Brown Drive - CIRC ALT PHASE III	Roadway/Traffic & Safety	Short	\$9,266,919
Williston	VT2A Connector Path - Beaudry Lane to VSECU	Bike&Ped		\$399,000
Williston	Exit 12 Stage 1 - Shared Use Path and VT2A lane from Marshall to VT2A - CIRC ALT PHASE III	Roadway/Traffic & Safety	Medium	\$2,265,624
Capital Program - Development & Evaluation and on CCRPC TIP				
Williston	Exit 12 Stage 2 - New Grid Streets and VT2A Intersection	Roadway/Traffic & Safety	Medium	\$10,974,000
Williston	Exit 12 Stage 3 - Diverging Diamond Interchange (VPSP2 Asset Driven)	Roadway/Traffic & Safety	Medium	\$27,022,000
Williston	Exit 12 Stage 4 - VT2A Boulevard	Roadway/Traffic & Safety	Long	\$13,452,000
Williston	VT2A Infill Sidewalks	Bike&Ped	Short	\$101,578
Capital Program - Candidate				
Williston	Mountain View Road Multimodal Improvements: Old Stage Road to VT2A -- CIRC ALT PHASE III	Roadway/Traffic & Safety	Long	\$4,546,540
Williston	US2 - Taft Corners to Williston Village - Shared Use Path - CIRC ALT PHASE III	Bike&Ped	Medium	\$3,422,000
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Williston	Taft Corners Park & Ride	Park&Ride/ Intermodal	Long	\$300,900
Williston	North Williston Road Improvements	Roadway/Traffic & Safety	Long	TBD
Williston	US2/North Williston Road/Oak Hill Road Intersection	Roadway/Traffic & Safety	Long	\$1,166,784
Williston	Industrial Avenue Sidewalks	Bike&Ped	Long	\$496,780
Williston	Marshall Avenue Shared Use Path - Muddy Brook to South Brownell	Bike&Ped		\$1,938,000
Winooski				
Capital Program - Front of the Book and on CCRPC TIP				
Winooski	Gateways Crosswalk Enhancements	Bike&Ped	Short	\$425,484
Capital Program - VPSP2 Selected Project -- not yet added to Capital Program				
Winooski	East Allen Street (VT15) Improvements, Weaver to Florida Avenue	Roadway/Traffic & Safety		TBD
Need Identified in a Scoping or Planning Study, Not in Capital Program or on TIP				
Winooski	Riverwalk East	Bike&Ped	Long	\$2,124,000
Winooski	Main Street (US7) Revitalization - Transportation, Utility, Stormwater	Roadway/Traffic & Safety	Short-Medium	Further Planning Needed
Regional				
Regional	Aviation Projects ad Burlington International Airport	Aviation Projects		FAA
Regional	Sidewalks/Path in Areas Planned for Growth	Bike&Ped	Ongoing	TBD
Regional	Regional Stormwater Projects	Stormwater	Ongoing	TBD
Regional	Burlington-Montpelier Inter-Regional Bus Service	Transit		TBD
Regional	Burlington-Waterbury Inter-Regional Bus Service	Transit		TBD
Regional	Essex Evening	Transit		TBD

Initial Draft 2023 MTP Project List
September 6, 2022

Project		Category	Time Frame from 2018 MTP	Cost Estimate 2022
Regional	Hinesburg Route	Transit		TBD
Regional	Jeffersonville Commuter (CMAQ funding ending in FY18)	Transit		TBD
Regional	Milton Route	Transit		TBD
Regional	Milton/Colchester to Burlington (CMAQ funding ends in FY18)	Transit		TBD
Regional	North Avenue Increased Peak Frequencies (CMAQ funding begins in FY20)	Transit		TBD
Regional	US2 Corridor	Transit		TBD
Regional	Williston Mid-Day (CMAQ funding ends in FY18)	Transit		TBD
Regional	Transit Capital	Transit		TBD
Regional Rail	Bring all Tracks in Chittenden County to Class 4 standard	Rail		FRA or FTA
Regional Rail	Essex Junction to Burlington 286 Rail Upgrade	Rail		FRA or FTA
Regional Rail	Essex Junction Train Station Upgrades	Rail		TBD
Regional Rail	Freight Improvements to bridges, sidings, railyards, crossings and clearance	Rail		FRA or FTA