



Central Vermont Regional Planning Commission

TRANSPORTATION ADVISORY COMMITTEE

Tuesday January 23, 2024, 6:30 p.m.

Physical Location: 29 Main Street, Suite 4, Montpelier, VT 05602

Join Zoom Meeting via Computer, Tablet or Smartphone:

<https://us02web.zoom.us/j/86220375669?pwd=aXFEYkNaOVYeTBORmlhd2tZV3VKdz09>

Meeting ID: 862 2037 5669- **Passcode:** 692202

Dial in via Phone: +1 929 436 2866

Find your local number: <https://us02web.zoom.us/j/86220375669?pwd=aXFEYkNaOVYeTBORmlhd2tZV3VKdz09>

Download Zoom here: <https://zoom.us/download>

Agenda

- 6:30 1) Meeting Commencement
 - a) Roll Call
 - b) Adjustments to the Agenda
 - c) Public Comment
 - d) Staff Announcement
- 6:40 2) Approval of September & October 2023 TAC Meeting Minutes (*Enclosed; Action*)
- 6:45 3) Memo 1 2024 Meeting calendar (*Enclosed; Action*)
- 6:50 4) Working-Rough Draft of Transportation Chapter of regional plan (*Enclosed; discussion*)
- 7:10 5) TAC Member Round Table
 - a) Local concerns including project updates and other issues
- 7:30 6) Adjourn

Next Meeting February 27, 2023

Persons with disabilities who require assistance or alternate arrangements to participate in programs or activities are encouraged to contact Nancy Chartrand at 802-229-0389 or chartrand@cvregion.com at least 3 business days prior to the meeting for which services are requested.



Transportation Advisory Committee (TAC)

Minutes

Tuesday, September 26, 2023

Attendees:					
	Barre City			Moretown	Joyce Manchester
x	Barre Town	Stephanie Magnan (Chair)	x	Northfield	Thomas Davis
x	Berlin	Robert Wernecke			Jeff Schulz, Alt
	Cabot	John Cookson	x	Orange	Lee Cattaneo
x	Calais	David Ellenbogen	x	Plainfield	Bob Atchinson (Vice Chair)
		Karin McNeill, Alt	x	Roxbury	Gerry D'Amico
x	Duxbury	Alan Quackenbush		Waitsfield	Don LaHaye
		Bill Whitehair, Alt.	x		Alice Peal, Alt
	E. Montpelier	Gina Jenkins		Warren	Michael Bridgewater, Alt
	Fayston	Donald Simonini		Washington	Peter Carbee
	Marshfield	Todd Eaton	x	Waterbury	Mike Hedges
x	Middlesex	Ronald Krauth		Williamstown	Richard Turner
x	Montpelier	Dona Bate		Woodbury	Chris Koteas
			x	Worcester	Bill Arrand
Staff: Keith Cubbon, Guests: Doug Greason, Amanda Holland					

Stephanie brought the meeting to order at 6:30pm.

Roll Call

- Roll was called and a quorum was present

Adjustments to the Agenda

- None

Public Comments

- None

Staff Announcements

- Keith gave an update of still trying to hire a new transportation planner to get back up to full staffing for transportation work hoping to make a job offer within the next week. Also mentioned sending out information on EV and EVSE incentive programs.

Approval of May 2023 TAC Meeting Minutes

- Bob. A. made a motion to accept the July meeting minutes with Alan as 2nd. Motion passed

Memo FFY 23 Budget Adjustment (action)

- Keith explained the budget adjustment. Moving of monies from one task to another to cover overages and moving unspent monies to purchase trail counters for deploying throughout region to cut staff hours and transit time and replacing faulty equipment. David asked if any budget adjustment was need to address flooding. Keith replied that with staff shortages there had been plenty of budget to cover staff hours in response. Bob W. mad a motion to accept the budget adjustment with Lee C. as 2nd. Motion passed.

TAC Member Round Table

- Tom Davis spoke about getting good information from CVRPC about funding for Lover's Lane in Northfield. Still trying to find gap funding for paving but had discussed with Brian and Christian of CVRPC. Mike H. asked if they had looked into district manager funding. That districts have ~ \$160,000 they can grant each year and they may want to contact the district transportation administrator. Stephanie mentioned the PROTECT grant and the Municipal Assistance Bureau may be able to help. Mike also brought up the emergency bridge and road funds, that checking with the district since they administer this.
- Gerry asked if anyone had seen the Times-Argus opinion piece on the MRGP program and how it was very negative of the State and the DEC.*article is attached to the email with minutes.
- Alice-Asked about the sidewalk inventory CVRPC had created and what we plan to use it for and that the town of Waitsfield had been using it for grant applications. Keith-We had shared the data with the State and plan to do gap analysis that will be shared with towns to help prioritize necessary pieces of sidewalk for greater connectivity and food access.
- Alice also shared the Mad River Path idea of a shared use path along the Route 100 corridor connecting Warren, Waitsfield, and Moretown. The director of MRP wants to work within the VTrans Right of Way and is planning a feasibility/scoping study this winter. They have been talking with selectboards and planning commissions trying to

1 get support. Not sure how this will be funded at the town end and the overall cost is
2 currently estimated at around 18 million just for construction. Alan mentioned the
3 conservation and recreation group may be interested in the impacts of this and would
4 like more information. Alice stated she would send along the vision statement from the
5 MRP.
6

7 **Adjourn**

- 8 • At 7:22 PM Lee made a motion to adjourn Alice 2nd the motion. Motion passed.
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DRAFT



Transportation Advisory Committee (TAC)

Minutes

Tuesday, October 24, 2023

Attendees:					
	Barre City		x	Moretown	Joyce Manchester
x	Barre Town	Stephanie Magnan (Chair)		Northfield	Thomas Davis
	Berlin	Robert Wernecke			Jeff Schulz, Alt
	Cabot	John Cookson		Orange	Lee Cattaneo
	Calais	David Ellenbogen	x	Plainfield	Bob Atchinson (Vice Chair)
x		Karin McNeill, Alt		Roxbury	Gerry D'Amico
x	Duxbury	Alan Quackenbush	x	Waitsfield	Don LaHaye
		Bill Whitehair, Alt.	x		Alice Peal, Alt
	E. Montpelier	Gina Jenkins		Warren	Michael Bridgewater, Alt
	Fayston	Donald Simonini		Washington	Peter Carbee
	Marshfield	Todd Eaton	x	Waterbury	Mike Hedges
x	Middlesex	Ronald Krauth	x	Williamstown	Richard Turner
x	Montpelier	Dona Bate		Woodbury	Chris Koteas
			x	Worcester	Bill Arrand
Staff: Keith Cubbon, Guests: Doug Greason, Chris Diamioni					

Stephanie brought the meeting to order at 6:32pm.

Roll Call

- Roll was called and a quorum was not present

Adjustments to the Agenda

- None

Public Comments

- None

Staff Announcements

- Keith mentioned the Transportation Alternatives and Stormwater Mitigation grants are currently open with due date of Dec. 8th. Currently working with multiple towns for salt sheds. Still trying to fill transportation planner position.

Memo 1 2024 Meeting calendar

- Keith reviewed that this is the list of 10 meeting dates for 2024. No action taken.

Memo 2 Mobility Committee

- Keith reviewed the memo and discussed community rides has set the date of official launch in January and was some discussion about their footprint and who is the current ridership.

TAC Member Round Table

- Donna spoke to Montpelier will be glad when Route 2 paving work is complete. Conversation with problems across the whole region w/ construction work especially due to the wet season and flooding.
- Alan asked if someone from CVRPC could meet with Duxbury selectboard about their attempt at getting a salt shed. Mike also mentioned the VTrans Municipal Assistance Bureau may be able to help. They have had it engineered but can't seem to get it built.
- Mike talked about working with Waterbury on Lincoln St. and Perry Hill intersection for pedestrian and traffic calming issues. Also getting Henry Hough Rd listed as no outlet since some maps still show the Middlesex Notch as being open.
- Joyce spoke about the committee's future and would like to do more regional planning for transportation. Keith spoke about the VPSP2 program and still having no guidance if it will be restarted and also if there are topics that the group would like to know more about that he could get speakers. Also spoke about organizing field day in spring for road crews to test electric equipment for town purchases.
- Keith brought up flooding ask by legislators.
 - Donna spoke to dam removal for increased resiliency.
 - Bob- Need to lower fossil fuels to help mitigate flooding. We are reacting to climate change not being proactive. Mike agreed and mentioned that the top 3 selling vehicles are all pickup trucks.
- Joyce mentioned EV incentives for low- and moderate-income vehicles and would like to hear more about charging stations and maintenance costs of vehicles. Would like to do more on that. Mike talked about State and GMP incentives are income based.
- Alice mentioned GMT is getting electric buses. Chris Diamioni spoke about GMT purchasing 20 electric buses with 6 to be delivered in the next week. These will be used

1 in Burlington area since they are urban buses. Alice spoke about the key to this
2 equipment being the batteries. Looking at the kinds of things that each town can do
3 such as park-n-rides and carpooling. Don mentioned recycling of cars and cell phones
4 cuts the cost of lithium by 50% less than mined.

- 5 • Ron Hasn't seen the power companies addressing all the need for grid increase. Will also
6 have to deal with charging problems both in cold and how to recharge emergency
7 vehicles. Multiple members spoke of not having experienced much difference in winter
8 use for their personal EVs. GMP has been using an off-peak discount charging rates.
- 9 • Mike mentioned that eventually we will be requested by the State to review the last list
10 that of AOT prioritization projects for the region. That we could review what was
11 already submitted. Stephanie also mentioned any topics that people are interested in.
- 12 • Keith notified the group that Christian would be running the November meeting and
13 that the regional plan transportation chapter first draft will be finished soon and
14 brought to the group for their review. Joyce asked when the last regional plan was
15 completed? 2016 regional plans are for 8 years.
- 16 • Two members spoke to not being able to attend November meeting and group asked
17 about sending out a survey for the November meeting.

18
19 **Adjourn**

- 20 • At 7:35 PM Don made a motion to adjourn Bob 2nd the motion.
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MEMO

Date: October 19, 2023
To: Transportation Advisory Committee
From: Keith Cubbon, Planner
Re: 2024 Meeting Calendar

✉ **ACTION REQUESTED:** Move to adopt the proposed meeting calendar as proposed

Background:

The CVRPC TAC meets on the fourth Tuesday of each month at 6:30 PM. Traditionally the TAC does not meet in the months of August and December.

Proposal:

Staff proposes meeting on the following dates at 6:30 PM.

January 23, 2024	June 25, 2024
February 27, 2024	July 23, 2024
March 26, 2024	September 24, 2024
April 23, 2024	October 22, 2024
May 28, 2024	November 26, 2024

Staff has reviewed the 2024 calendar and identified no conflicts with national or state holidays.



MEMO

Date: January 17, 2024
To: Transportation Advisory Committee
From: Keith Cubbon, Planner
Re: 2024 Regional Plan Transportation element

✉ **ACTION REQUESTED:** *Review and discussion*

Background:

The CVRPC is in the process of updating the Regional Plan. Please review the statute and the goals from the 2016 plan to see if they still align with the region's goals. Things we want to consider does this address the ACT 153 emissions reduction requirements or provide a framework for our region for the next 8 years.

VT statute on Transportation plan

§ 4348a. Elements of a regional plan (4) A transportation element, which may consist of a statement of present and prospective transportation and circulation facilities, and a map showing existing and proposed highways, including limited access highways, and streets by type and character of improvement, and where pertinent, anticipated points of congestion, parking facilities, transit routes, terminals, bicycle paths and trails, scenic roads, airports, railroads and port facilities, and other similar facilities or uses, and recommendations to meet future needs for such facilities, with indications of priorities of need, costs, and method of financing. § 4302. Purpose; goals (4) To provide for safe, convenient, economic, and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers. (A) Highways, air, rail, and other means of transportation should be mutually supportive, balanced, and integrated. § 4302. Purpose; goals (5) To identify, protect, and preserve important natural and historic features of the Vermont landscape, including: (C) significant scenic roads, (7) To

make efficient use of energy, provide for the development of renewable energy resources, and reduce emissions of greenhouse gases. (A) General strategies for achieving these goals include increasing the energy efficiency of new and existing buildings; identifying areas suitable for renewable energy generation; encouraging the use and development of renewable or lower emission energy sources for electricity, heat, and transportation; and reducing transportation energy demand and single occupancy vehicle use. (B) Specific strategies and recommendations for achieving these goals are identified in the State energy plans prepared under 30 V.S.A. §§ 202 and 202b

TRANSPORTATION GOALS from 2016 plan

GOAL 1:

To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outlined in the Central Vermont Regional Plan.

GOAL 2:

To preserve and maintain the existing transportation system.

GOAL 3:

Enable the transportation system to operate at its highest efficiency by managing travel demand and encouraging shifts to under-utilized and more efficient travel modes.

GOAL 4:

To integrate modes of travel in order to allow for their most effective use and ultimately reduce dependence on single occupant vehicles.

GOAL 5:

To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

GOAL 6: To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively, and economically move goods and people.

GOAL 7:

Promote a transportation system design that strives for aesthetic and functional characteristics that improve the quality of life.

GOAL 8:

To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.

GOAL 9:

To promote a Regional public transportation system.

Aspiration # 6 Provide an integrated regional transportation system that can safely provide reliable mobility for all Central Vermonters.

Importance: The Central Vermont transportation network serves walkers, drivers, bicyclists, and bus and train riders. This multimodal network provides access to jobs, homes, recreation, commerce, and entertainment, with links to regional, statewide, national, and international networks and destinations. There is little in the lives of Central Vermonters that is not directly impacted by the requirements of transportation on a daily basis. To these ends, the collection of state routes, local roads, trails, sidewalks, bus routes, helipads, and airports that make up the local transportation network enables our way of life.

The focus of this transportation element is on transportation issues that are regional in scope or that have regional implications. This focus on regional issues should not be taken to downplay the importance of local transportation issues; CVRPC fully acknowledges that the region's transportation network will not function efficiently without a coordinated local feeder system, which likewise operate efficiently. To emphasize the scope and scale of the regional transportation issues facing Central Vermont and its communities, CVRPC developed Aspiration #6 to guide the development of transportation goals, policies, and action items.

Coordination with other partners (Federal/State/Municipal) and plans (RPC)

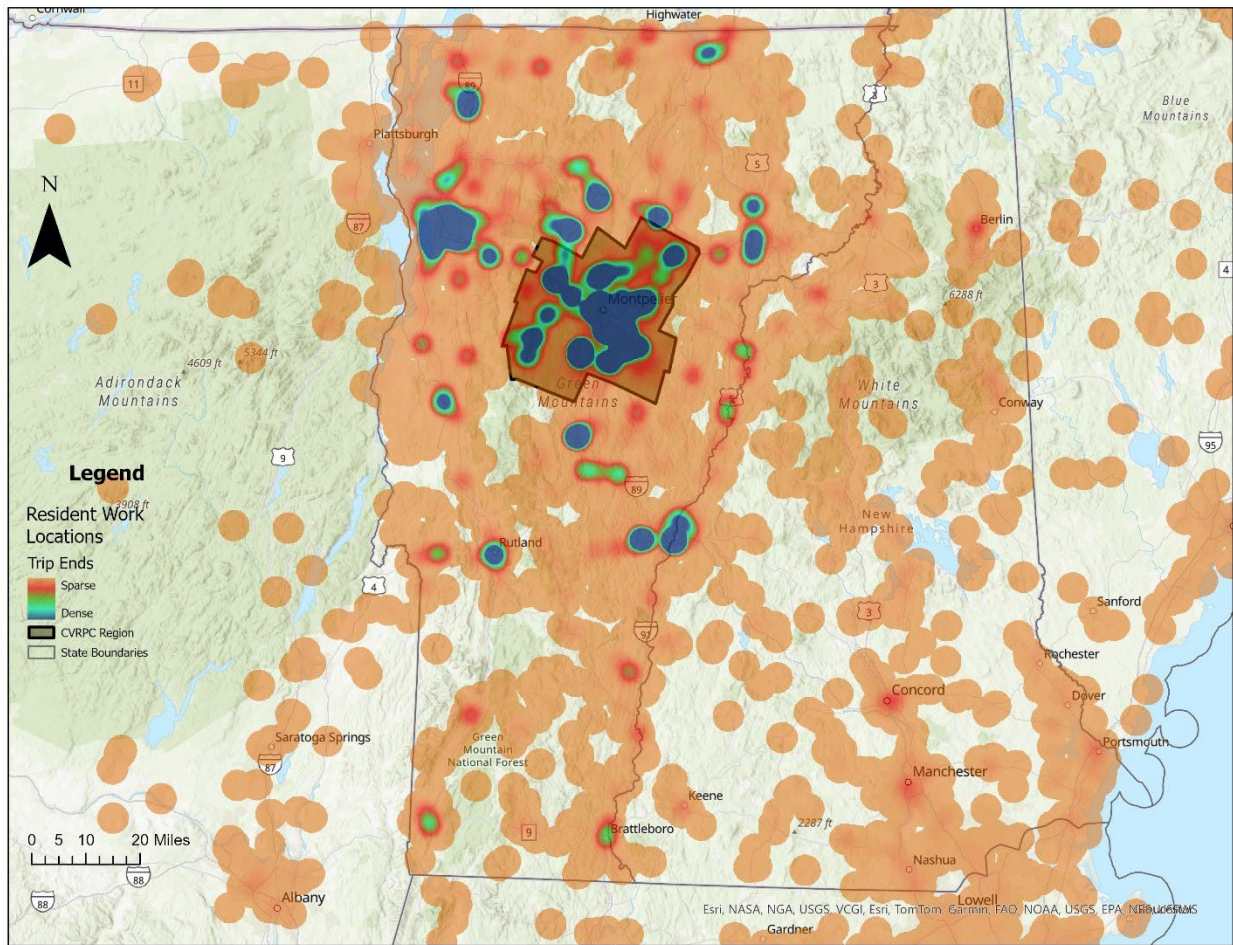
Development of the transportation element to the CVRPC Regional Plan and a direct response on the part of Central Vermont Regional Planning Commission (CVRPC) to the Vermont Agency of Transportation (AOT) Transportation Planning Initiative (TPI). One goal of the TPI is to establish transportation planning as an ongoing process. The Regional Transportation Element meets the transportation goals of Title 24, VSA Chapter 117 Section 4302(4): *To provide for safe, convenient, economic and energy efficient transportation systems that respect the integrity of the natural environment, including public transit options and paths for pedestrians and bicyclers. (A) Highways, air, rail and other means of transportation should be mutually supportive, balanced and integrated.*

The Regional Transportation Plan is consistent with the objectives of the federal transportation law. Cooperative, continuous, and comprehensive...

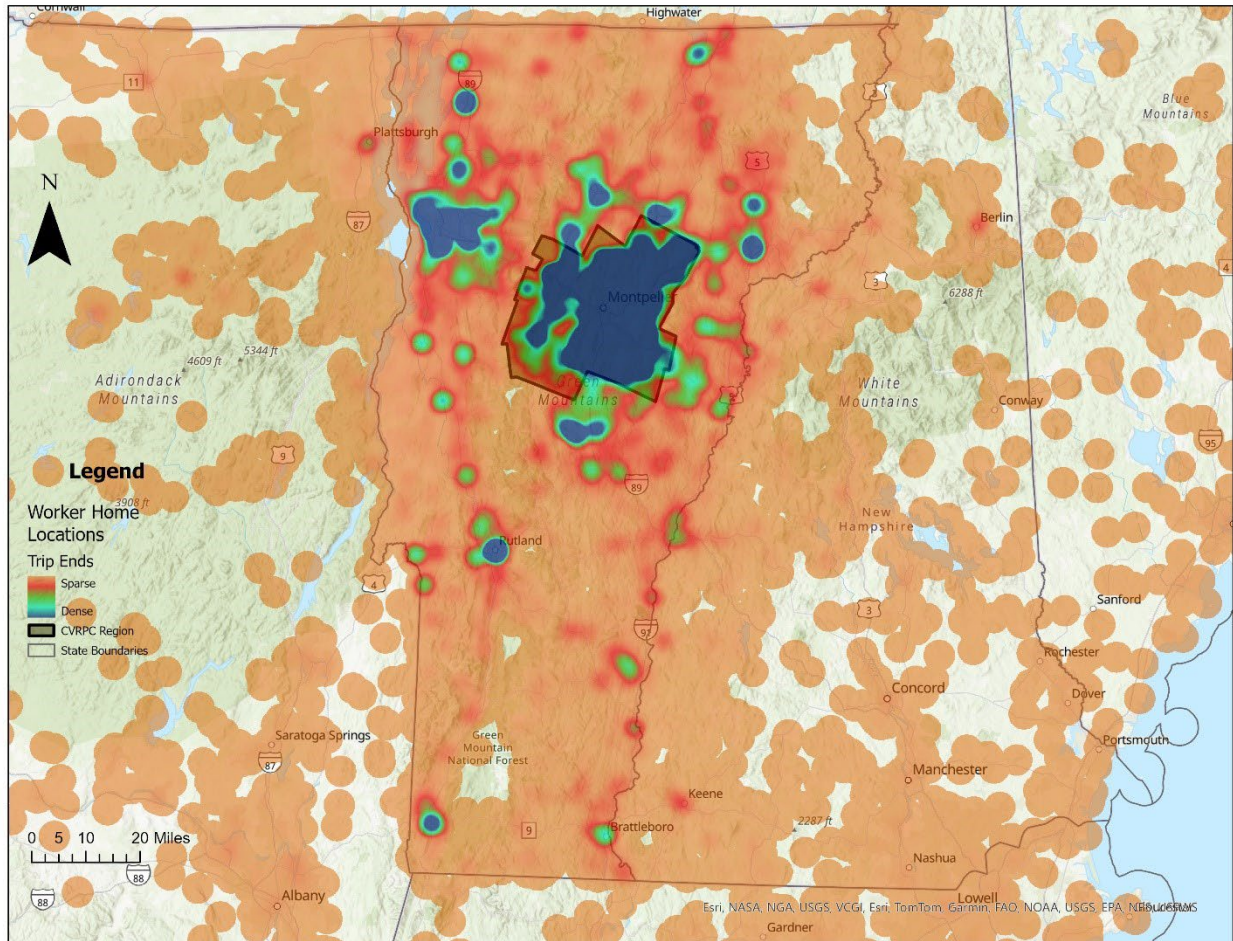
Commuter patterns

Commuting in the Central Vermont planning area is facilitated by convenient access to I-89, Route 2 and a diverse network of minor arterials. This network supports intra- and inter- regional travel patterns.

Map: Work Locations of CVRPC Residents (Source: On the map)



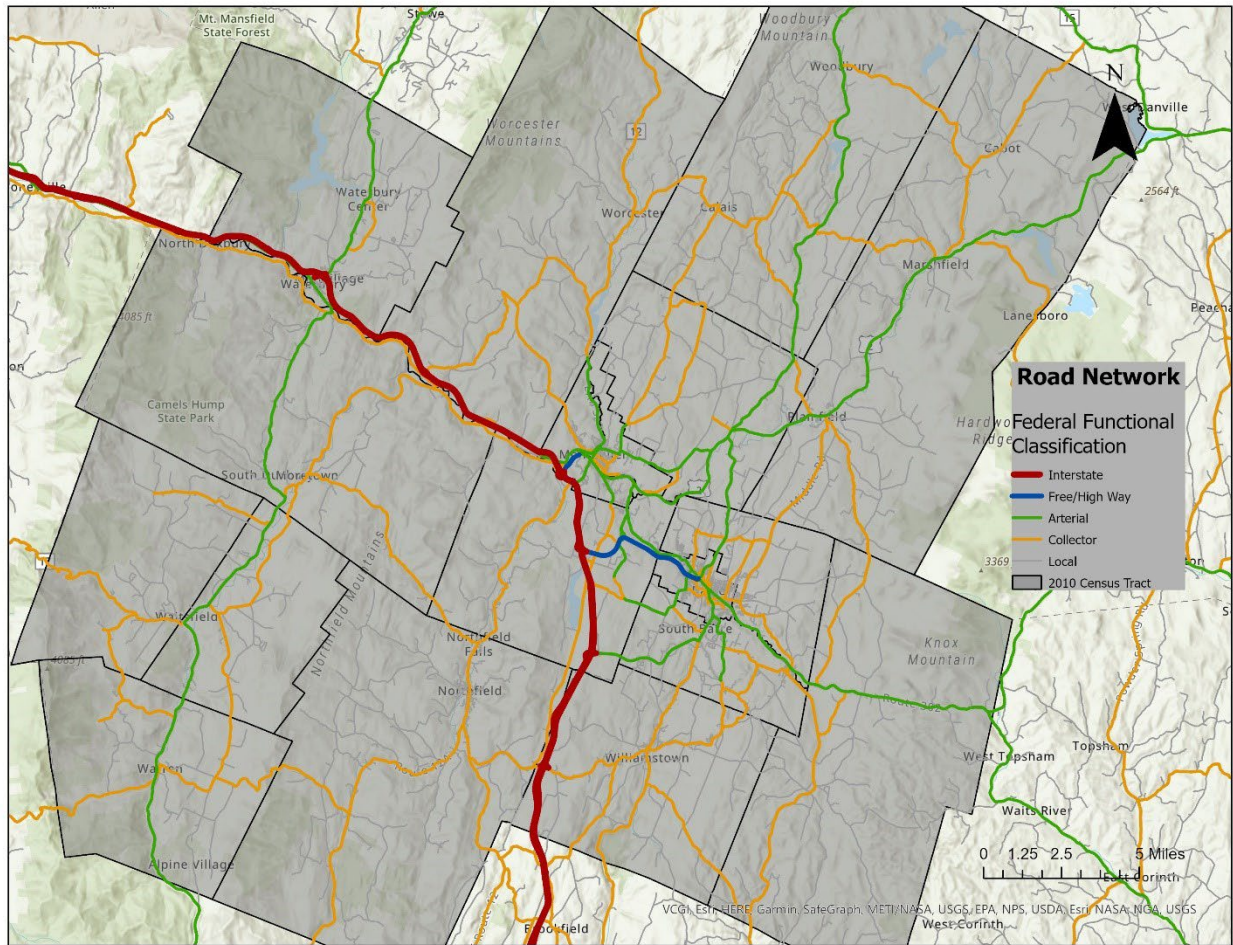
Map: Home Locations of CVRPC Region Workers (Source: On the map)



Parts of the system:

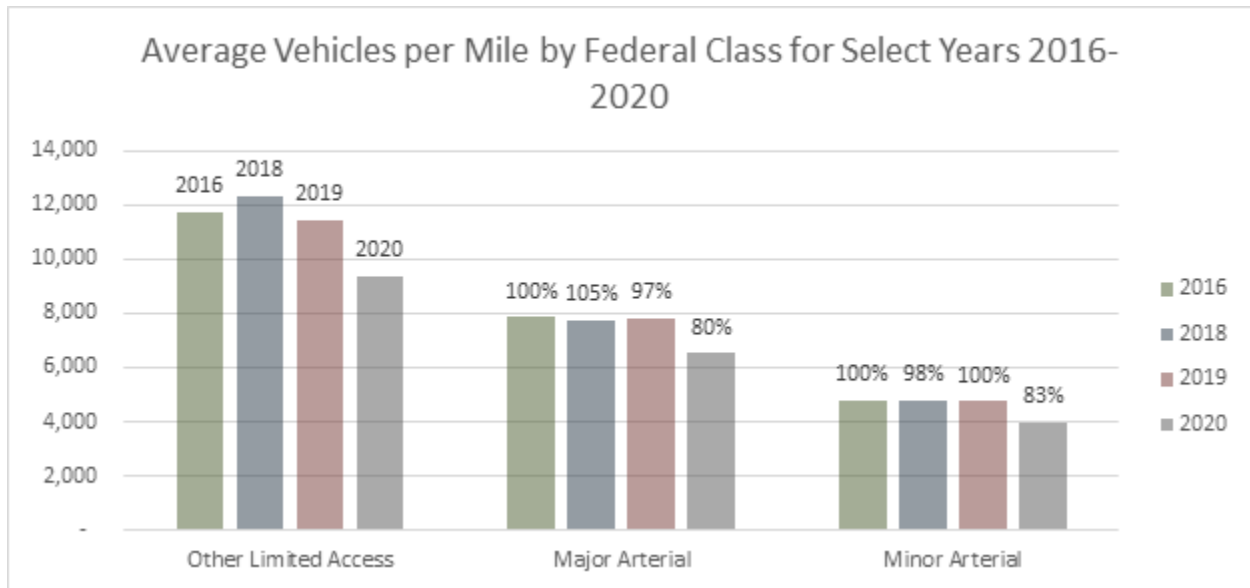
Roadway Functional Classification

The road network in the region consists of highways classified as interstate highway and expressways, principal arterials; minor arterials; major collectors; minor collectors; and local streets. 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. Interstate highways and expressways, at the top of the hierarchy, are devoted exclusively to mobility, with very limited access to adjacent land. Arterials and Collectors provide both mobility and access. The remainder of roads and streets are part of the local road system and are devoted exclusively to providing local access, with limited capacity and relatively slow speeds.



MAP of Federal Functional Class

Taken together the above highway classifications make up the federal-aid network. Roads included in the federal-aid network are eligible for federal highway funding. However, federal spending requires that federally approved design standards must be followed. As many of these roads are also the Main Streets of the Region's towns and villages, the rigidity of federal design standards can play a big role in the livability of our existing development.



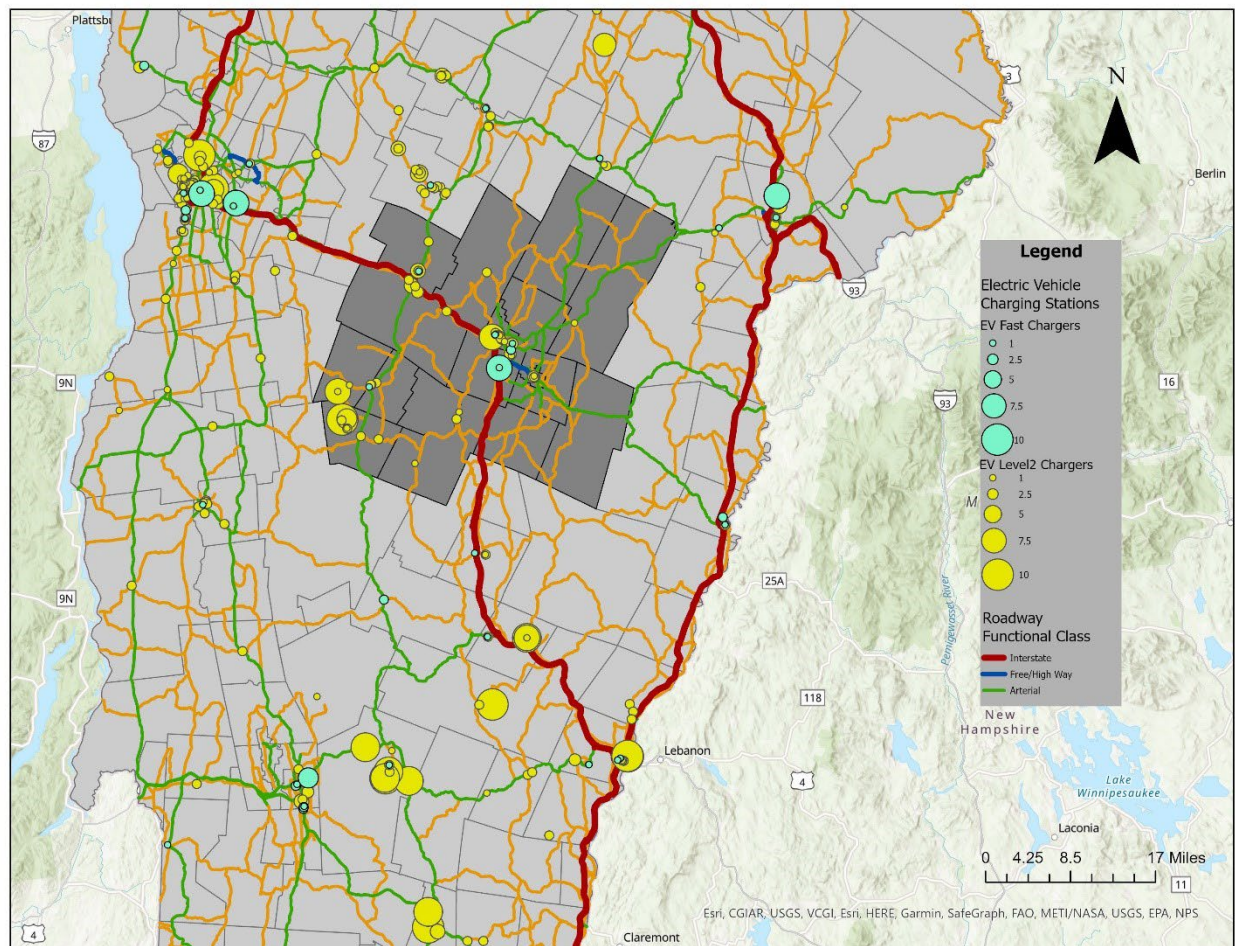
Roadways are also classified by jurisdiction – i.e. the government entity that owns the facilities and has responsibility for their operations and maintenance. In general, jurisdictions can include federal, state, county and local communities (although roads directly owned by the Federal Government are rare). In Vermont, roads are either owned by the State of Vermont and maintained by the Vermont Agency of Transportation (VTrans) or by the local community in which they are located. Local roads make up the majority of the road network in terms of road miles, while State roads are generally larger facilities that carry the most traffic.

Classifications by function and by jurisdiction are related; roads with higher classifications tend to be under state jurisdiction. For example, Expressways and Arterials are generally state roads, while Local Roads are almost always under local jurisdiction. Collector roads are the middle category where roads can fall under either type of jurisdiction.

Charging network

[Insert text here]

MAP of Charger Locations by Type



Traveler services

The State provides rest areas and traveler service amenities to provide a safe location for safety breaks to prevent fatigued driving. The facilities additionally provide travelers with access to restroom facilities, shelter from adverse weather, travel information, coffee breaks, free wireless internet, vending machines, Vermont promotions, brochures, display cases, wayfinding services, and access to travel ambassadors within the Central Vermont planning area, two such locations exist: The Capital Region Visitor Center at 134 State Street Montpelier, and Maplewood Vermont Travelers Service Center at I-89 Exit 7. The latter of these locations was created through a public-private partnership with the State, and offers Vermont information for travelers, restrooms, free wifi, a convenience store, gas, diesel, and electric vehicle charging.

Transit

Public transit is an important modal choice in the Central Vermont transportation system. It facilitates the pooling of trips between important origins and destinations and provides basic mobility any user regardless of access to private vehicles. Public transit provides access to jobs,

medical and social services, education, childcare, shopping, recreation, and other essential services.

By pooling trips in vans and busses and moving individuals out of single occupancy vehicles, transit helps reduce congestion, air pollution, parking needs, and the need for expensive highway improvements. A wide variety of public transit services are available within the Central Vermont planning area, including local, regional, and inter-regional services.

Intra-Regional Transit

The Green Mountain Transit (GMT) is the primary public transit provider for the Central Vermont planning area. GMT is a full service public transportation provider offering fixed route, deviated fixed route, demand response, commuter route, shopping shuttle, Medicaid transportation and transportation services for the elderly and disabled. GMT also provides door-to-door transportation service for those who meet the established criteria for the following programs: Ticket to Ride voucher system, Medicaid, Council on Aging non-Medicaid medical transportation, Job Access and Recovery, and institutional reimbursed transit. In compliance with the Federal Americans with Disabilities Act (ADA), GMT provides door-to-door transportation services for those who are unable to use the non-commuter fixed route bus service.

GMT is considered a municipality under Vermont state statute and is the first and only transit authority in the State of Vermont. GMT receives funding from the State of Vermont, the Federal Government and local money from municipalities and businesses in the service area. The Board of Directors comprises two commissioners representing Burlington and one commissioner representing each of the following; South Burlington, Winooski, Essex, Shelburne, Williston, Milton, Hinesburg, Washington County, Lamoille County, Franklin County, and Grand Isle County. GMT services are operated out of three locations, Berlin, Burlington, and St Albans. At each of these locations there are administrative offices as well as a maintenance garage and busses storage.

CVRPC GMT Services Ridership by Route (2015 – 2019)

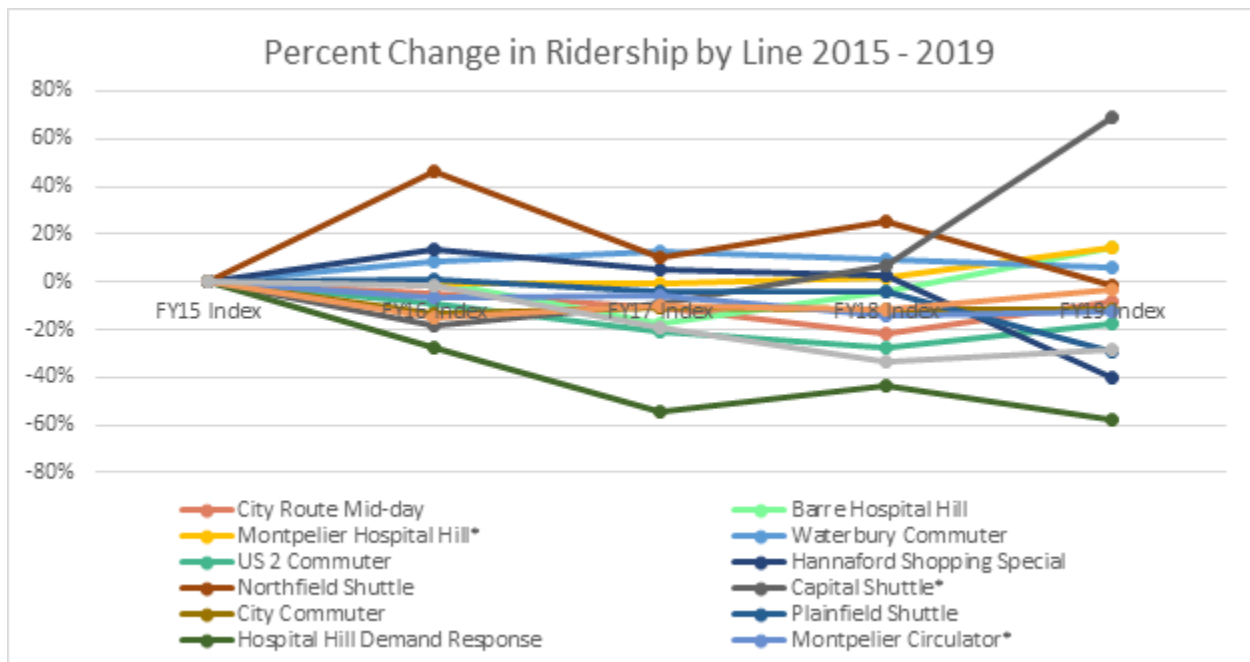
#	Route Name	FY15	FY16	FY17	FY18	FY19
79	CVMC Barre Health Shuttle	600	2,277			
80	City Route Mid-day	27,824	26,421	24,734	21,796	25,426
81	Barre Hospital Hill	30,717	30,766	25,371	29,352	35,252
82	Montpelier Hospital Hill*	21,411	21,259	21,248	21,803	24,528
83	Waterbury Commuter	9,864	10,689	11,107	10,822	10,495
84	US 2 Commuter	10,049	9,125	7,983	7,318	8,280
85	Hannaford Shopping Special	2,609	2,971	2,734	2,681	1,568
87	Northfield Shuttle	868	1,272	954	1,090	857

88	Capital Shuttle*	6,037	4,930	5,474	6,444	10,188
89	City Commuter	41,284	35,657	36,824	36,362	36,401
90	Plainfield Shuttle	811	820	780	779	574
91	Hospital Hill Demand Response	1,963	1,420	896	1,104	820
92	Montpelier Circulator*	19,369	18,015	18,226	16,686	17,021
93	Northfield Commuter	7,783	6,648	7,006	6,896	7,534
100	Route 100 Commuter	12,551	12,356	10,139	8,383	8,952
Full Year Service Ridership		193,740	184,626	173,476	171,516	187,896
120	Valley Floor**	7,600	3,613	7,080	7,574	6,481
121	Valley Evening Service**	2,168	1,633	1,852	2,341	1,837
122	Mount Ellen**	24,130	16,485	19,468	21,858	31,896
123	Mad River Glen**	676				
124	Mountain Condos**	11,088	10,610	13,201	10,808	9,064
125	Access Road**	13,218	9,470	12,508	10,865	0
126	SnowCap Commuter**	757	303			
99	Special Services	3,153	4,148	2,506	2,750	1,472
Total Regional Ridership		256,530	230,888	230,091	227,712	238,646

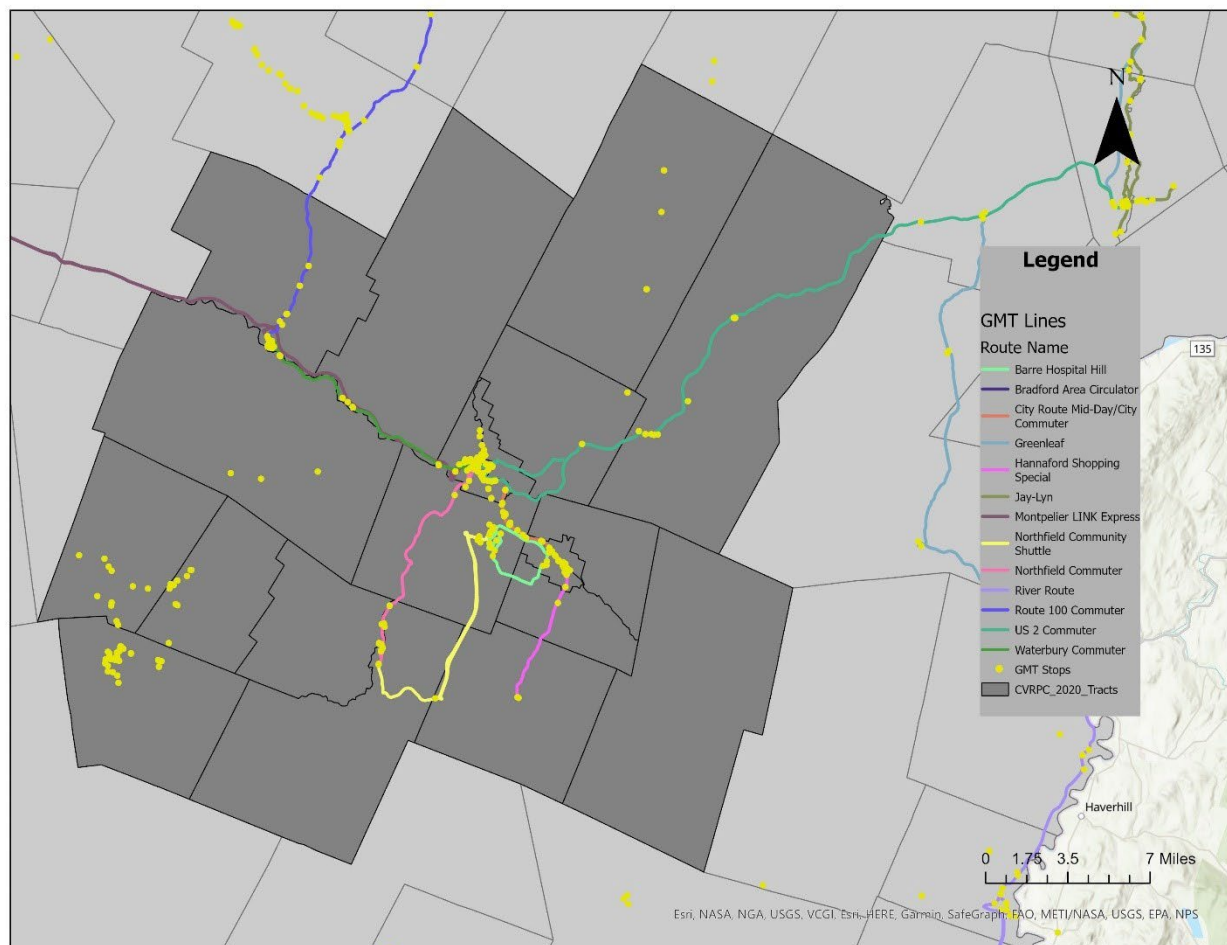
*Replaced by GMT *MyRide*

**Mad River Valley Seasonal Service

Table Funding Trends



Pre-Covid Ridership Trends (2015 – 2019)



Map Barre services

Fixed route service is the most common type of bus transit. It operates along a fixed service route and on a fixed schedule. Riders need only access the schedule and a local bus stop to use this service.

Local Commuter routes are similar to the fixed route services but do not operate all day. They have specific runs developed around the commuting population. They often run between town centers.

LINK Express routes are run out of the Burlington garage and are inter-regional commuter routes.

On demand services provide transit to riders by request. The rider specifies the pick-up time and location and drop off location within the broader service area. Multiple riders can be picked up when routes overlap. In 2021, GMT ended fixed route service in Montpelier and replaced it with an on-demand service, known as MyRide. MyRide also serves as the ADA paratransit service within the service area. Riders can book rides through an app on their phones or by calling into the call center. Rides can be booked in advance or at the time they are required.

ADA Paratransit Services are for individuals unable to use GMT fixed route bus system because of a disability. This paratransit service is provided within three-quarters of a mile, on either side, of the GMT fixed route system and is door-to-door.

Map GMT MyRide

Volunteer Drivers: GMT manages a volunteer driver program to meet the transportation needs of residents that can't use other scheduled services. This service reached all 23 towns in the Region.

Taxi: Does GMT work with any Taxis?

Ticket to Ride Program Persons with disabilities and people over age 60 are eligible for transportation services that may not be covered by other programs. These trips are typically not for medical or shopping purposes, but for errands, personal business, or social reasons. **STATS**

Medicaid:

Central Vermont Council on Aging Transportation

Job access and recovery?

Free Wheel'n

Community Rides VT

Montpelier Transit Center

GMT also operates the Montpelier Transit Center at 61 Taylor Street in Montpelier. The Montpelier Transit Center provides a hub for GMT's passengers as well as passengers of long distances transportation services such as Greyhound. The transit center features a customer service space, a large lobby, an operator break space, and bathrooms.

Rural Community Transportation

Rural Community Transportation, Inc. (RCT), is a private nonprofit 501(c)(3) corporation that provides public transportation services throughout Caledonia, Orleans, Essex, and Lamoille Counties. Additional commuter routes connect Montpelier, Barre and Waterbury to destinations outside of the Central Vermont planning area.

Map Rural Community Transportation

Busing beyond the region:

The Montpelier Transit Center is serviced by Greyhound Lines with intercity routes within Vermont as well as routes connecting to larger cities across the northeastern United States and Canada.

Passenger Rail

The Montpelier-Berlin Station and the Waterbury Station are both serviced by Amtrak's Vermonter line, offering service north and south between St Albans and Washington DC via New York City.

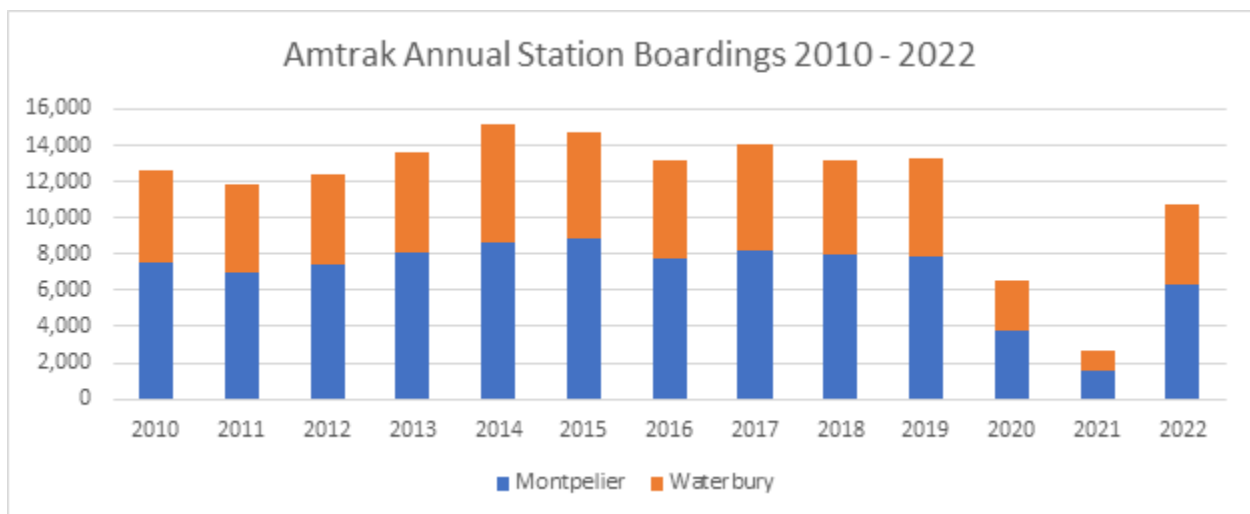


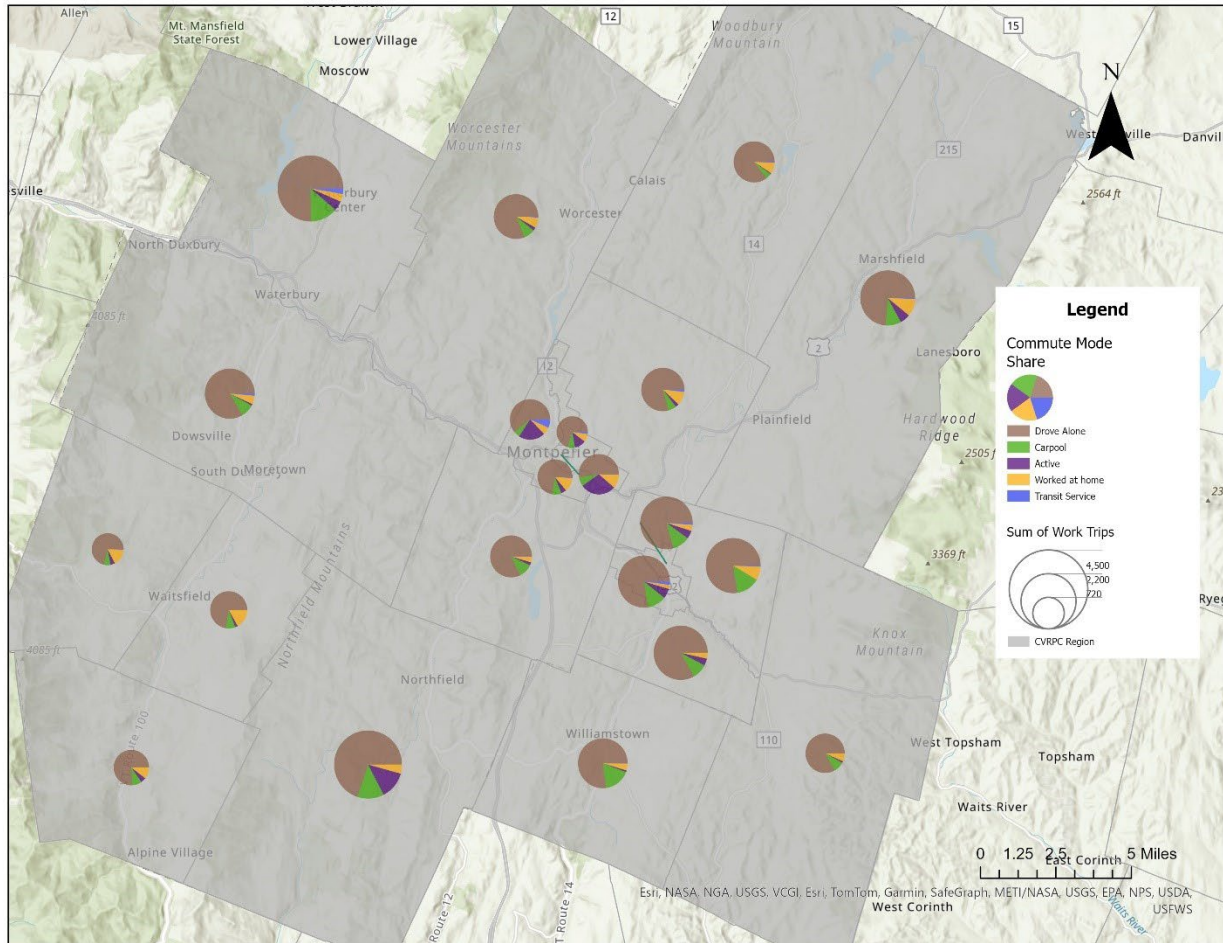
Table: Ridership: Intercity Bus + Amtrak, annual (by O-D if possible)

Commuting patterns

1. Usage of the network (Department of labor? VTRANS? Census Data)
 - a. Commuting patterns
 - i. Network by volume
 - ii. % SOV
 - iii. % Carpool

- iv.% Transit
- v.% Active
- vi.% work-from-home

Map Mode Share (CTPP 2012-2016)



Commute Mode Share by Town and Tract

Town	Tract 2010	Drove Alone	Carpooled	Transit	Active	Home
Orange	50017959101	82.0%	8.7%	0.0%	1.3%	6.6%
Washington	50017959200	76.6%	16.8%	0.2%	1.1%	4.4%
Williamstown	50023954000	73.5%	9.0%	0.7%	6.1%	10.2%

Marshfield						
Plainfield						
Calais	50023954100	84.7%	4.4%	0.8%	0.8%	8.5%
Woodbury						
Middlesex	50023954200	81.7%	8.2%	0.7%	2.4%	7.6%
Worcester						
Waterbury	50023954300	74.7%	13.4%	2.7%	4.7%	3.8%
Duxbury	50023954400	82.3%	8.4%	1.4%	1.1%	5.4%
Moretown						
Berlin	50023954500	81.5%	10.3%	0.3%	2.3%	4.2%
Montpelier	50023954600	60.5%	5.0%	6.7%	21.4%	5.9%
	50023954700	70.1%	7.5%	2.1%	11.7%	8.3%
	50023954800	52.1%	7.1%	0.3%	28.6%	10.9%
	50023954900	72.2%	8.3%	1.1%	5.0%	12.8%
	Total	62.4%	6.9%	2.7%	18.1%	9.4%
East Montpelier	50023955000	78.5%	6.1%	1.8%	2.5%	10.2%
Barre	50023955100	77.4%	10.5%	1.2%	4.9%	3.6%
	50023955200	74.8%	11.3%	2.0%	5.9%	2.5%
	50023955300	76.6%	13.7%	0.7%	0.0%	7.9%
	50023955400	82.4%	9.0%	0.0%	4.2%	3.5%
	Total	77.8%	11.1%	0.9%	3.7%	4.4%
Northfield	50023955500	69.3%	12.5%	0.0%	13.0%	4.3%
Roxbury						
Warren	50023955600	74.2%	8.6%	0.0%	4.8%	10.2%
Waitsfield	50023955700	73.0%	8.0%	0.0%	2.4%	17.0%
Fayston	50023955800	70.9%	6.8%	0.5%	4.7%	16.9%

Transportation Demand Management

Transportation demand management is the attempt to maximize the efficiency and resilience of the transportation network by providing users with the widest variety of modal choices. In the Central Vermont planning area this entails assessing the regional network of assets, including the transportation assets described in this chapter and identifying opportunities to expand accessibility to all users.

CVRPC regularly collaborates with municipalities, State agencies and other organizations to ensure we support and promote complementary programs (VTrans; GMT). Additional ongoing work takes place on an ad hoc basis with the region's 23 member-municipalities to promote transit and active transportation. An example of initiatives CVRPC has regularly participated in include:

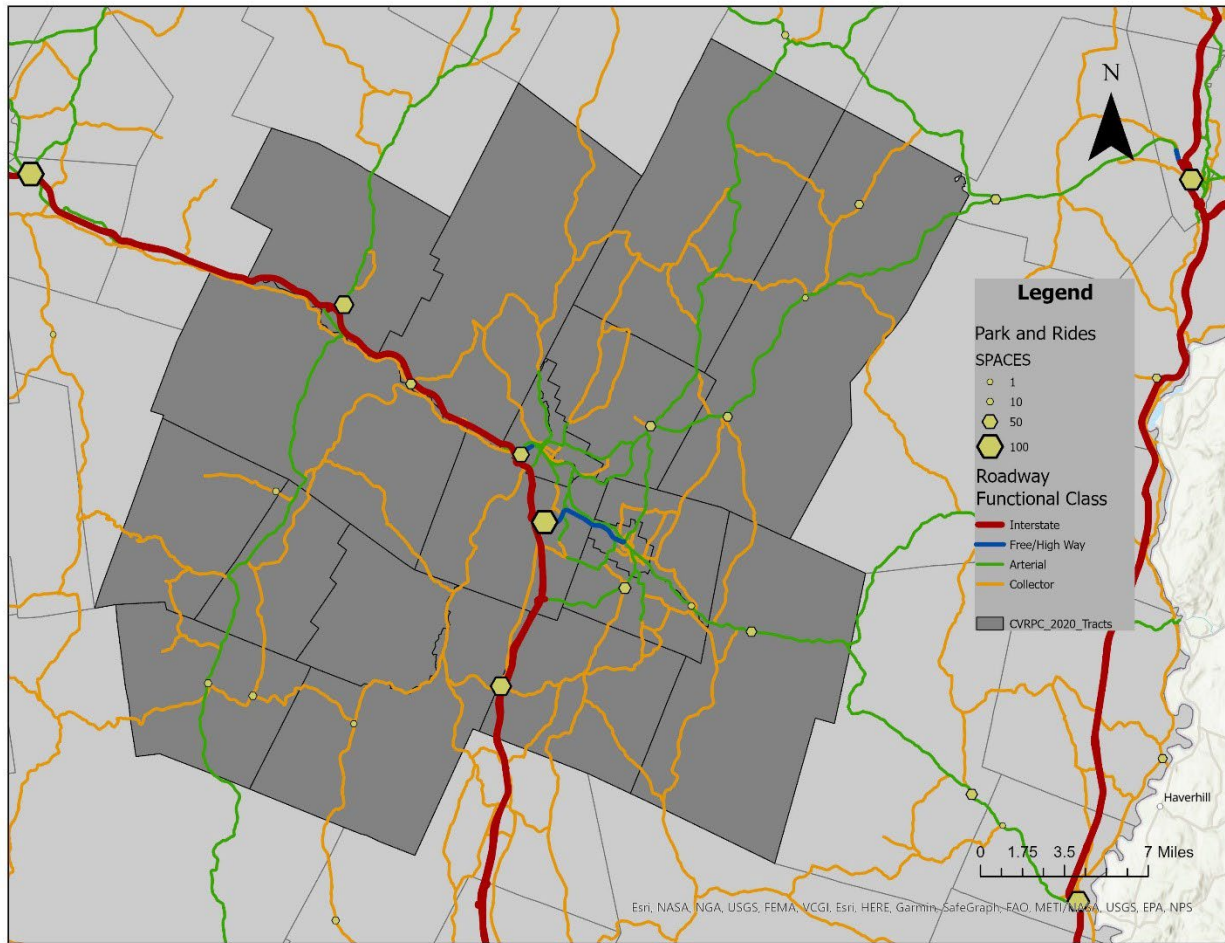
- Promoting the maintenance and investment in transit

- Support the study of and investment in pedestrian facilities within in the commuter pedestrian walk-shed
- Support the study of and investment in bike facilities within the commuter bike-shed.
- Support the study of and investment in a network of Park and Ride lots (see below)
- Disseminate and promote information on alternative transportation modes for accessing job sites and schools
- Staff time to distribute transit information and coordinate mobility programs in the Central Vermont planning area
- Allow staff to participate in alternative work formats and recognize communication and broadband investments are part of modern transportation infrastructure
- Flexible schedules to accommodate carpools and the use of transit
- Remote Work (see below)
- Compressed work weeks
- Staggered hours/off-peak shifts
- Employer provided transit passes.

Park & Ride Lots

The function of a park and ride lot is to provide a safe and secure location for motorists to park their vehicle while they share a ride with another motorist or on a transit bus. Its spin-off impacts can include reducing gasoline consumption and air-pollutant emissions, reducing traffic volumes in major business areas, lengthening the life of vehicles, and reducing commuting costs. Statewide, the typical Vermont park and ride commuter lives in a small town, travels about fifteen minutes to a lot, moves into another automobile with one or two other people, and travels around forty minutes to their job in a larger town located off I-89 or I-91. There are twelve facilities located in the Central Vermont Region. **The location, capacity, and usage of these lots are noted in Table ##.**

CVRPC Region Park and Rides



State Lots		Winter		Summer		Autumn	
Location	Total Spaces	# of vehicles	% full	# of vehicles	% full	# of vehicles	% full
Montpelier DOL	170	81.5	48%	39	23%	44.3	26%
Montpelier MJSH	55	29	53%	24	44%	37.7	68%
Waterbury	69	53	77%	50.5	73%	52.3	76%
Middlesex	28	12.5	45%	12.5	45%	13.7	49%
Berlin	81	42	51%	58.5	72%	49.0	60%
East Barre	10	2	15%	3	30%	3.0	30%
Barre Town	34	14	40%	10	29%	9.3	27%
Williamstown	25	12	46%	15.5	62%	17.3	69%
Roxbury	8	1.5	19%	0.5	6%	0.3	4%
Plainfield	22	4	18%	2.5	11%	4.0	18%
Marshfield	6	2.5	42%	0.5	8%	1.0	17%
Orange	26	4	15%	0	0%	3.0	12%
Warren	12	2	17%	5.5	46%	2.7	22%
East Warren	15	3	17%	1	7%	0.7	4%
Cabot*	19	1	5%	15.5	82%	9.7	51%
East Montpelier	6	4	58%	1.5	25%	1.7	28%

Park and Ride Average Utilization by Season

* Cabot PnR values reflect regular use associated with foodbank/historical building

Aviation

The two airports located in the Central Vermont Region are mapped: the Edward F. Knapp State Airport and the Warren-Sugarbush Airport. Burlington International Airport is the closest commercial service airport.

Knapp Airport has two runways, including a 5,000 foot runway. Knapp Airport sees regular jet traffic and accommodates a scheduled daily freight service. Knapp Airport is state owned public-use airport that is part of the National Plan of Integrated Airport Systems (NPIAS) and is thus eligible to receive federal funding under the Airport Improvement Program (AIP). Under the Vermont Airport System Plan Knapp Airport is considered a Category 3 Airport. As such, it can accommodate jet activity during a broader range of weather conditions and serve as regional gateways for activities such as corporate aviation, charter services and small cargo-feeder operations.

Warren-Sugarbush Airport is privately owned and has one 2,575-ft long by 30 feet wide paved runway. Warren-Sugarbush Airport primarily provides specialty services as a premier soaring center.

Active Transportation (Bike and pedestrian infrastructure)

Currently Throughout the region, dedicated space on road shoulders supports bike commuters. Additionally, sidewalks are widely available in the traditional town centers. The following map overlays employment centers with existing bike and pedestrian infrastructure.

Recreation and multi-use trails

Identify recreational facilities

Cross Vermont Trail

Freight

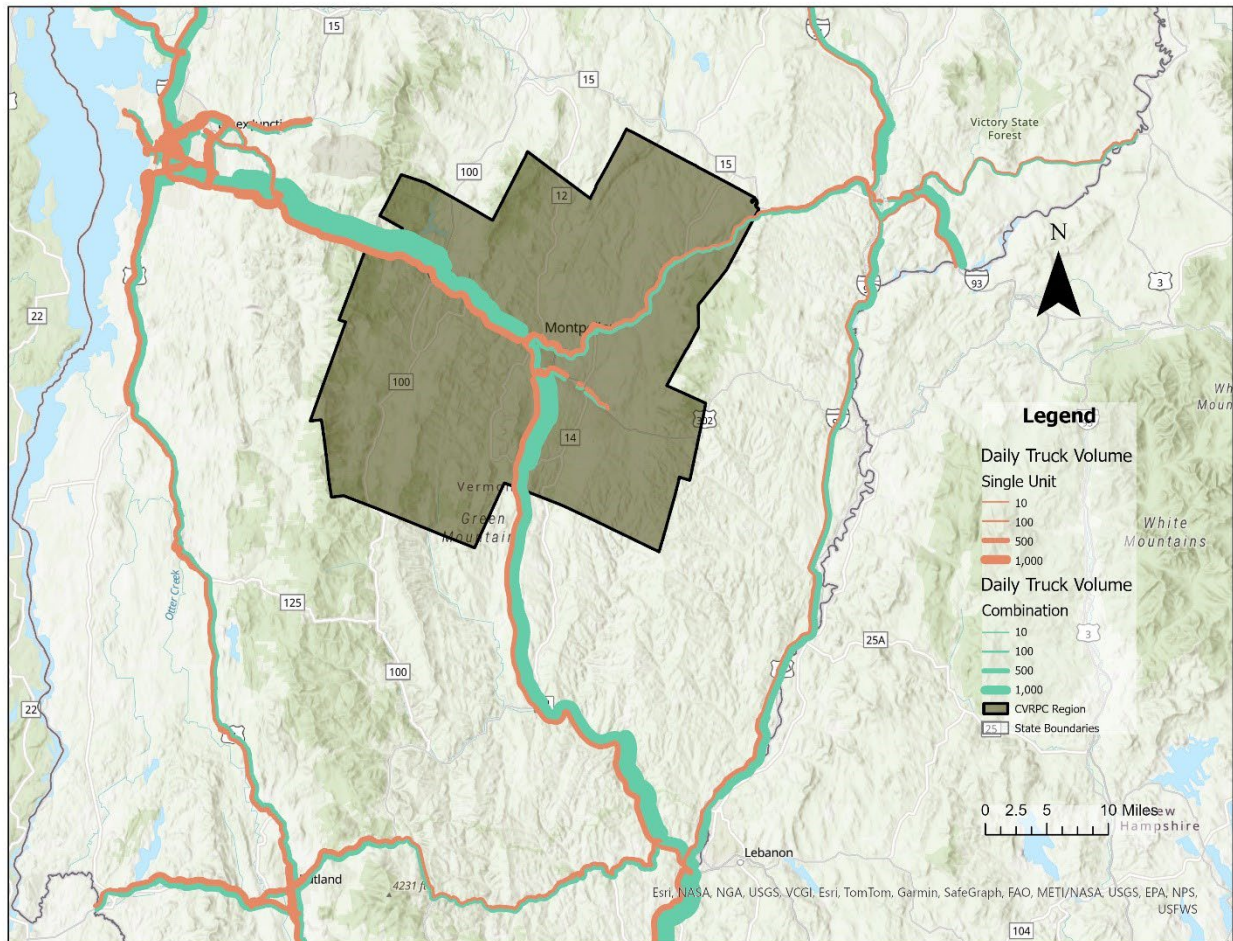
The national freight network comprises the highway, rail, air, water and pipeline systems and the intermodal transfer points that facilitate the freight exchange between networks. Central Vermont does not have access to ports or pipelines, as such this chapter will focus on highway freight network, the rail freight network and air freight.

Truck Borne freight

In central Vermont, the highway freight system comprises nearly all roads from the local roads that carry milk and log trucks and e-commerce, the state routes that support longer distance trips, to the interstate system that connects Vermont shippers to the rest of the county, Canada, and coastal ports. Within this network, certain routes stand out for the volume of truck traffic they carry. In Central Vermont I-89 is the obvious backbone of the highway freight system and as such is designated as part of the National Highway Freight Network and eligible for federal

freight funding for investment. However, from our analysis of truck volumes through the region, many routes play an important role in the collection and distribution of freight through the region or connecting Central Vermont to adjacent regions.

Truck Volumes from HPMS



Rail Freight Network

New England Central Railroad (NECR) operates a FRA Class 3 Railroad along the Route 12A corridor through Roxbury, Northfield, and Berlin, and the I-89/Route 2 corridor to the Burlington area. Freight service is operated over this line in addition to Amtrak passenger rail service. This rail line is an important link between Canada and Southern New England. In addition to picking up traffic from the Washington County Railroad, there are a limited number of local industries serviced along the NECR. Much of the freight is considered overhead, or through traffic, and does not impact the Central Vermont region.

The rail spur between Montpelier Junction and the Rock of Ages Granite quarry in Barre is owned by the State of Vermont and is known as the Washington County Railroad (WACR). The Washington County Railroad is a private operator that leases the line from the State.

Map of Rail Assets and Volume if available

Air Freight

Edward F. Knapp Airport handles small cargo-feeder operations.

Inter-Modal transfer centers

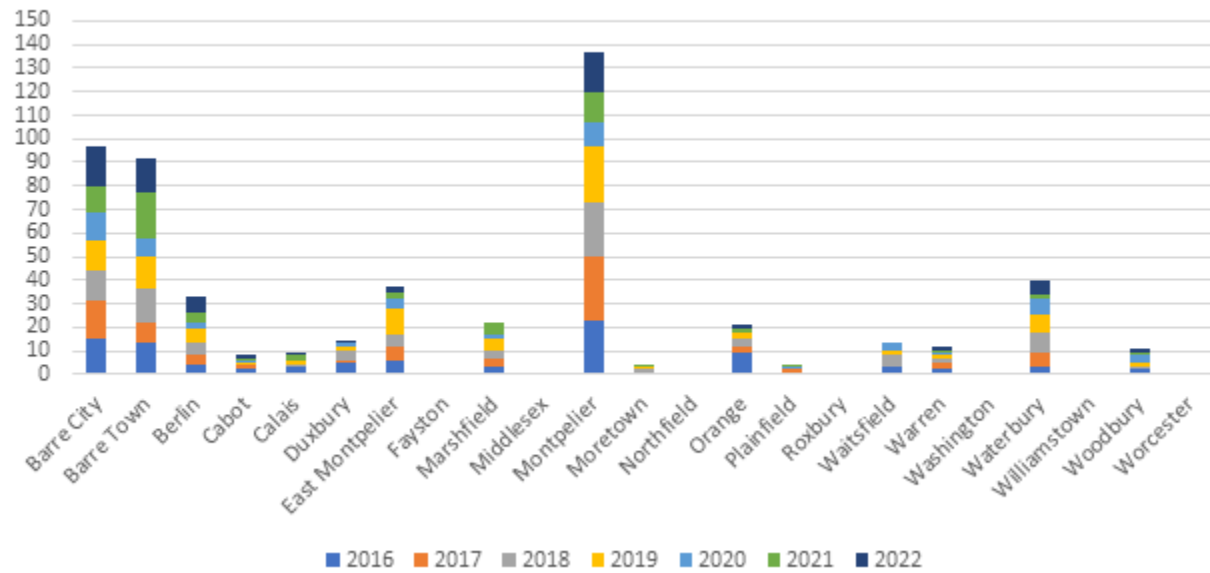
Intermodal transfer centers provide a location where freight can move between freight modes. In Central Vermont this is limited to transfers between rail and truck and services heavy cheap materials and fuels.

Financing the Network

Annual investment by dollar (Expansion vs Maintenance) (VTRANS annual budget Town spending/Road Foremen)

CVRPC Region Injury and Fatality Crashes October 2015 – October 2023

Crashes with Injury on Arterials 2016 - 2022



Crashes with Injury on Collectors 2016 - 2022

