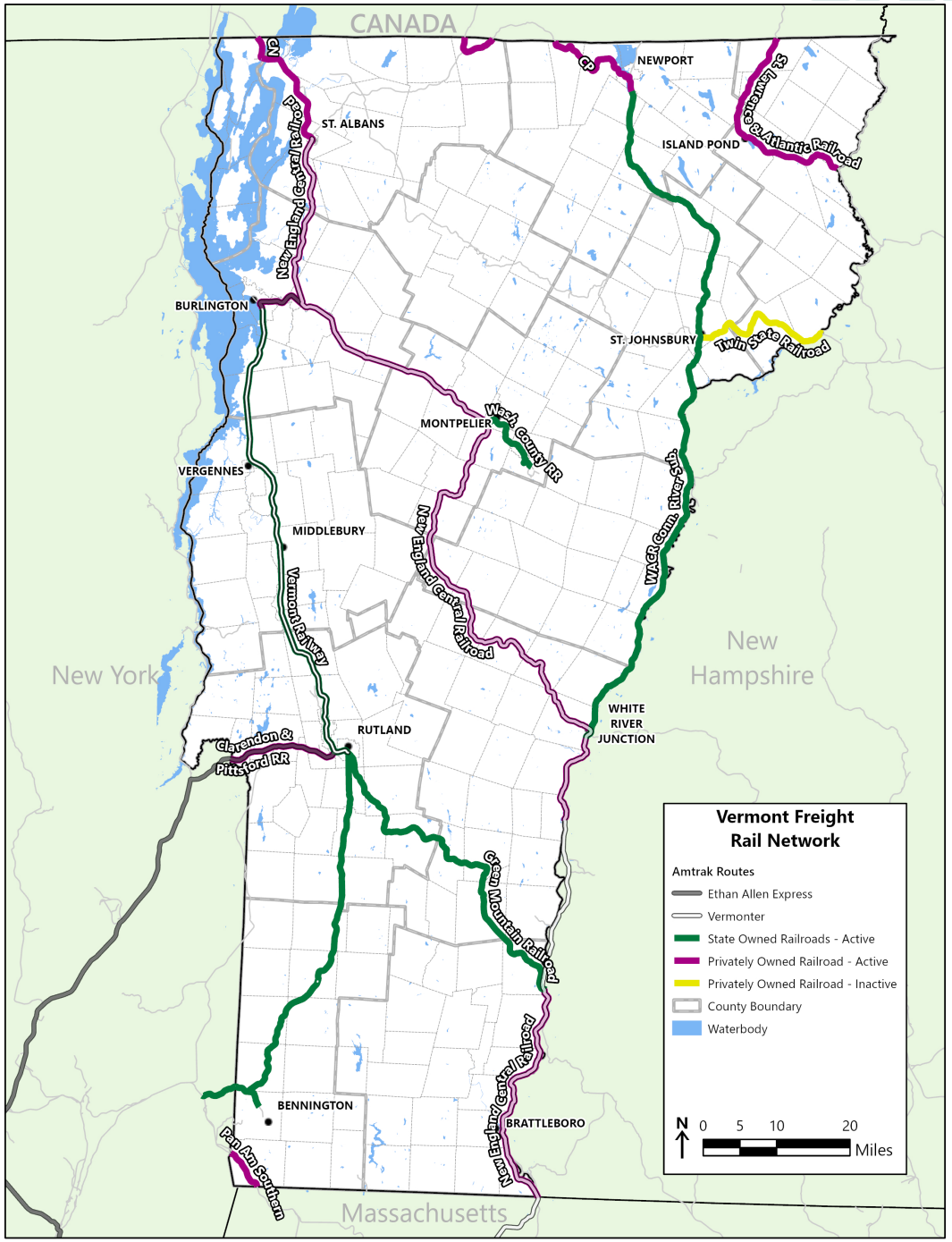
Update of Vermont Rail Plan

Chittenden County Regional Planning Commission
Transportation Advisory Committee
March 5, 2025

Rail Matters in Vermont!

- Nearly 580 miles of active rail lines in Vermont, just under 300 miles owned by the State.
- The rail system carries approximately two million tons of freight per year.
- Passenger Service: Vermonter and the Ethan Allen Express.
- Over 116,000 passengers boarded or detrained at a Vermont station in FFY23 and has been increasing.



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What is a Rail Plan?

- A statewide process and product exploring needs and opportunities for at least the next 20 years.
- The plan is essential for grant applications and guiding the expenditure of federal funds on rail projects within the state.
- The plan identifies and encourages other implementation activities, for example for RPCs
- The plan is coordinated with other State plans including the Vermont Freight Plan, Climate Action Plan, Resilience Improvement Plan, and others.

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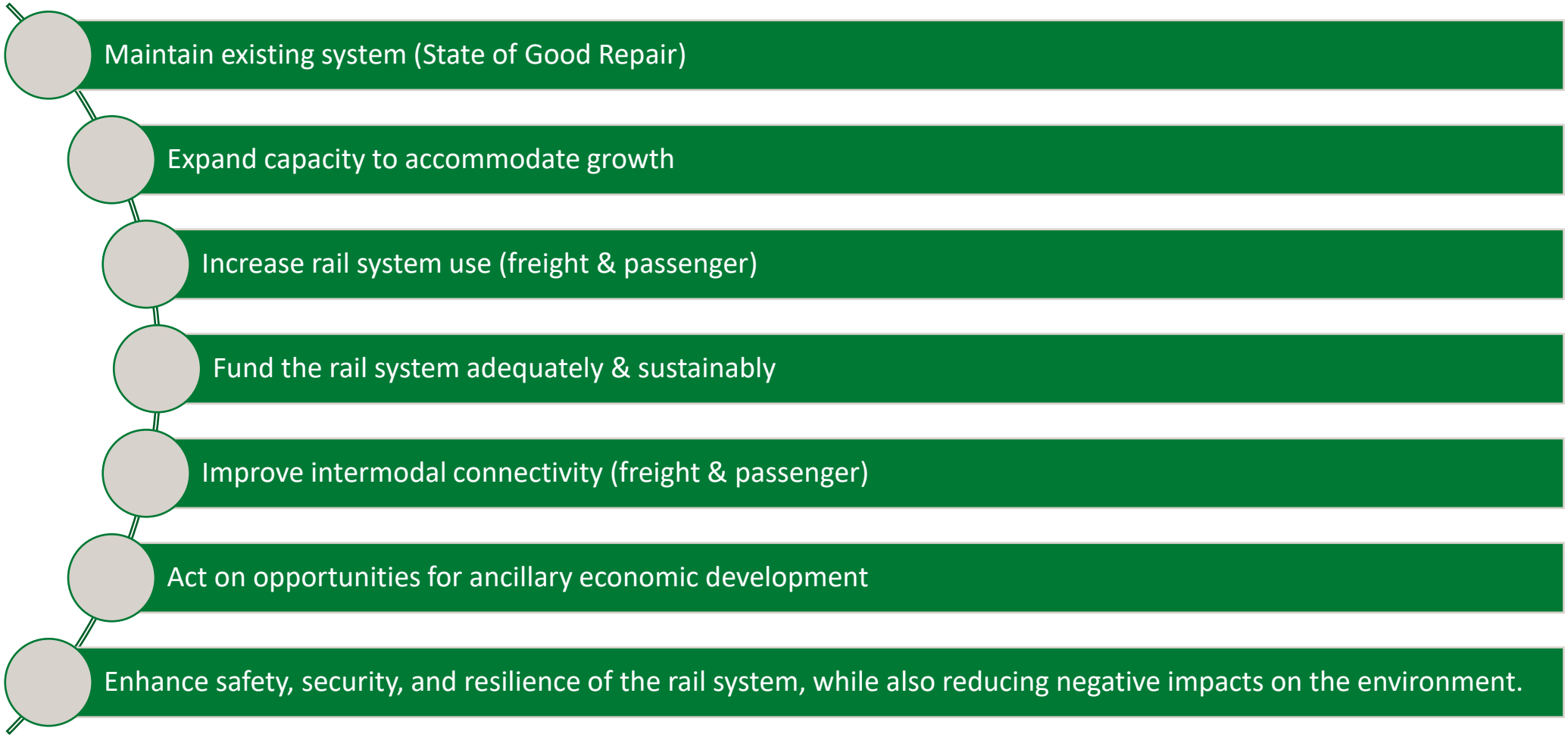
Rail Plan Goals

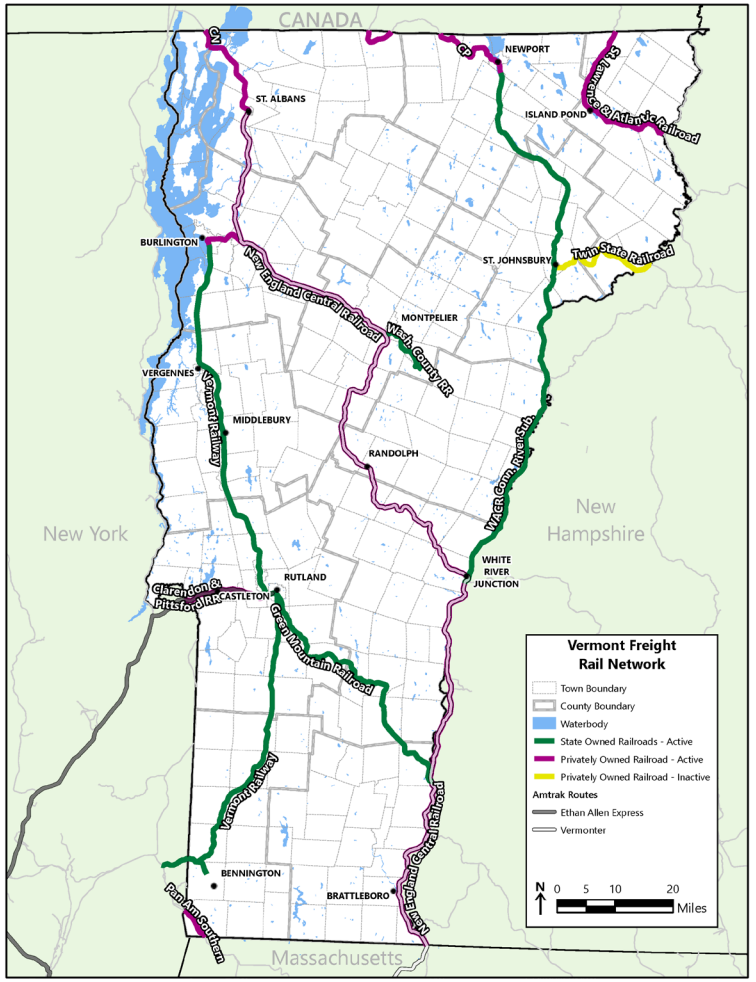


A Bit of Technical Background

Track Class	Maximum Allowable Operating Speed (mph)	
	FREIGHT TRAINS	PASSENGER TRAINS
Excepted Track	10	Not Allowed
Class 1	10	15
Class 2	25	30
Class 3	40	60
Class 4	60	80
Class 5	80	90

A Bite of Freight Rail Alphabet Soup

- **Pan Am Southern (PAS)**
- **Canadian National (CN)**
- **Vermont Rail Systems (VRS)** – VRS operates five integrated properties:
  - **Clarendon & Pittsford Railroad (CLP)** –
  - **Washington County Railroad (WACR)**
  - **Connecticut River Subdivision of the WACR**
  - **Green Mountain Railroad (GMRC)**
  - **Vermont Railway (VTR)**
- **Canadian Pacific (CP)**
- **Genesee and Wyoming (GW)** –GW operates two railroads in Vermont:
  - **New England Central Railroad Company (NECR)**
  - **St. Lawrence & Atlantic (SLR)**



Source: VTrans Webmap

Background on Recommendations

- The range of potential initiatives was updated based on analysis and public comment
- There are ***policy*** initiatives and location-specific initiatives
- Based on screening, leading initiatives follow in three tiers; there isn't ranking within a tier
- General approach, and there is flexibility in order of action
  - Tier 1 – Active, funded, or essential (e.g., increase resilience)
  - Tier 2 – Well-along in development or necessary for function (e.g., expand transload capacity)
  - Tier 3 – Seem to have value for further exploration or are important but will advance slowly

Preliminary
Recommended Initiatives By Goal

State of Good Repair

Description	Tier
• ***Increase resilience of rail system to make critical infrastructure more resilient now and to prepare for increasing storm severity***	First
• Coordinate to upgrade the privately owned East Alburgh Bridge on the NECR line	Second
• ***Maintain State-owned freight trackage at FRA Track Class 2 or better and State-owned passenger rail trackage at Class 4 or better where viable based on geography***	
• VTR track upgrade between Hoosick and Rutland to continuous welded rail (CWR) with a minimum of 115 lb. rail	

Expand Capacity and Increase Use of Rail

Description	Tier
• ***Upgrade all rail lines to 286K weight-bearing capability, emphasizing bridges and weight restricted locations***	First
• Upgrade WACR Connecticut River Line Bridges and Track up to 286k standard (White River Junction to Newport)	
• Vermonter Extension to Montreal – one round trip/ day	
• Upgrade NECR Winooski Branch Bridges and Track to 286k standard (Burlington to Essex Junction)	
• Upgrade GMRC Bridges and Track to 286k standard (Rutland to Bellows Falls)	Second
• Add passenger service on the Albany-Bennington-Burlington freight route to supplement Ethan Allen Express service in Western Corridor	Third
• Bring the Ethan Allen Express up to 79 MPH where conditions allow	
• Bring the Vermonter up to 79 MPH where conditions allow	
• ***Explore increases to peak season passenger capacity on the two AMTRAK lines.***	
• Extend one Valley Flyer service from Greenfield, MA to Brattleboro, VT	
• Extend one Valley Flyer service from Greenfield, MA to White River Junction, VT	
• Extension from Burlington to Essex Junction to connect Ethan Allen Express with Vermonter.	
• ***Reduce and eventually eliminate restrictions to domestic double stack clearance across the state. For example, on the NECR and the GMRC/CLP.***	
• Upgrade WACR Montpelier & Barre Sub. Bridges and Track up to 286k standard (Montpelier to Barre)	
• Vermonter Extension to Montreal – two round trips/ day	
• ***Work to reduce causes of delay to Ethan Allen Express and Vermonter service within and beyond Vermont's borders through partnerships***	

Funding

Description	Tier
• ***Seek grants and innovative funding approaches for freight and passenger rail***	First
• ***Further enhance marketing of Vermont passenger rail***	First

Intermodal Connectivity

Description	Tier
• Passenger rail station improvements statewide, prioritizing stations with increasing use or with needs at the station or for multimodal access.	First
• ***Facilitate development of freight transload or potentially intermodal facilities or near Vermont***	Second
• ***Improve multi-modal connections including bicycle, pedestrian, and transit to Amtrak stations. Improve wayfinding, Pick-up/Drop-off, supply of nearby parking for short and long term uses. Accomplished through partnerships and collaboration with adjacent neighbors.***	
• ***Improve multimodal coordination between AMTRAK stations with broader intercity and interstate highway access (bus including Greyhound, VT Translines). Including special combo fares and other incentives for multimodal travel. Connections from stations, such as Dartmouth from White River Jct.***	
• Rail station signs on I-91 and I-89 & Other major corridors in Vermont. Emphasis on promoting AMTRAK stations, and other upgrades.	Third
• Investigate a coordinated connection (rail, bus, etc.) at both Rutland and Bellows Falls to connect passengers between the Ethan Allen Express and the Vermonter to Killington, Ludlow/Okemo and Chester.	

Economic Development

Description	Tier
• Burlington Railyard Enterprise Project - Improve safety in rail yard, interconnections for the community, and multimodal transportation infrastructure	First
• ***Preserve and fully use industrial land parcels with access to rail sidings as well as the rail infrastructure that provides access to them.***	Second
• ***Maintain and improve freight network connections for Vermont businesses to regional short-haul markets and competitive Class I railroad (mix of physical and policy matters)***	
• ***Support smart land use growth such as transit-oriented development (TOD) and specifically the housing strategies in the 2024 Vermont Act 47 and 2025 Act 181***	
• ***Educate shippers about rail carload and intermodal service options and contracting approaches***	Third
• ***Modernize freight rail yards***	

Safety and Resilience

Description	Tier
• ***Increase the preparedness and resilience of the rail network, particularly for bigger and more frequent storms.***	First
• Phased deployment of gates, flashers, and other safety improvements at existing and planned public road grade crossings with an emphasis on the top 50 prioritized sites on state highways.	
• Confirm and address the sections of rail that are most vulnerable to flood damage using results of the expansion of the Transportation Resilience Planning Tool (TRPT) to rail. See appendix of Rail Plan for initial priority locations.	Third
• ***Maintain, publicize, and enhance appropriate communication regarding rail movement and storage of hazardous materials (hazmat) while respecting rail exemptions from local control***	
• ***Publicize existing voluntary efforts of railroads and encourage "freight as a good neighbor" (NCHRP Syntheses 320) while respecting rail's exemptions from local control***	
• ***Enhance public safety relating to rail infrastructure, for example by further publicizing and encouraging participation in Operation Lifesaver of Vermont.***	

Regional Planning Commission Roles

- Liaison between VTrans, municipalities, and others
- Plan at the regional scale, connecting transportation, land development, economic development, and environmental conservation
- Identify and prioritize vacant industrial sites with rail access to bring back into use in collaboration with VTrans and ACCD
- VTrans provides funding through the Transportation Planning Initiative (TPI)

Resilience

- VTrans had developed the highway Transportation Resilience Planning Tool (TRPT) with assistance from RPCs
- Finishing a Phase 1 expansion to rail—this is cutting edge!
- Top 20 sections of rail infrastructure most vulnerable to future flood damage will be an appendix to help procure funding to increase resilience

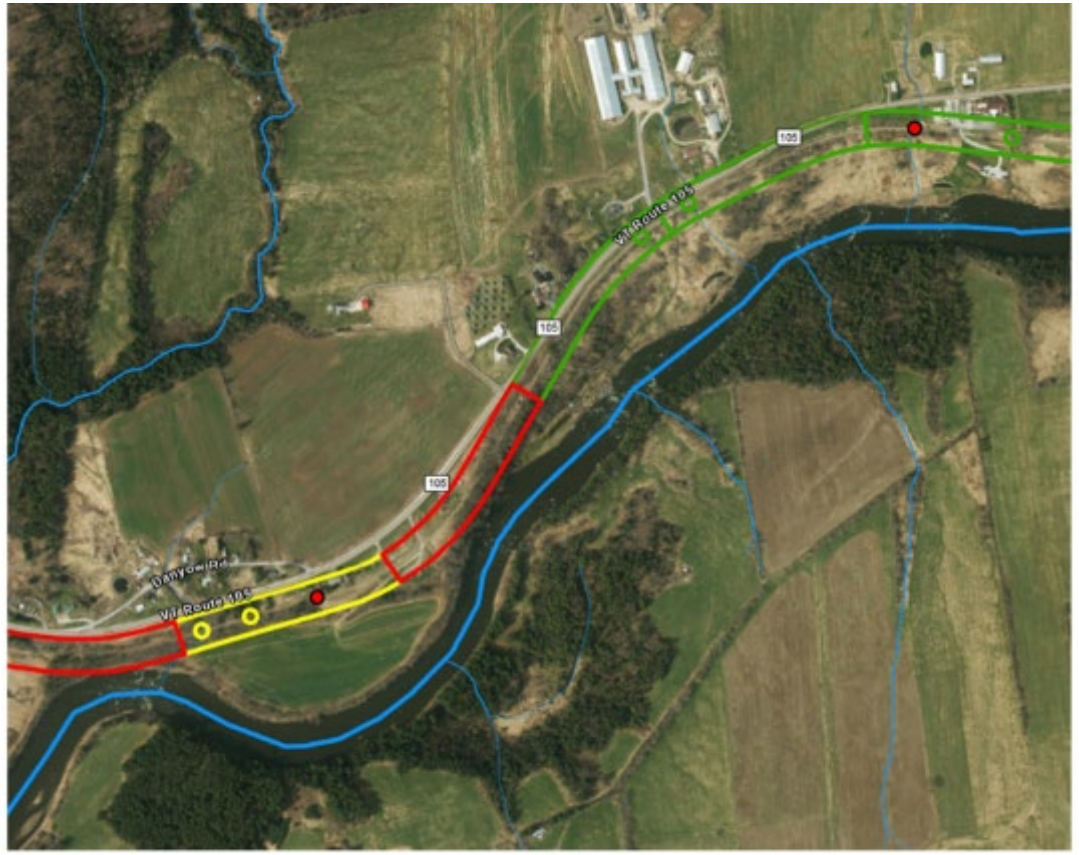


Figure 2: Example Rail Structure Resiliency Map

Source: *Phase 1 of the Vermont Rail Transportation Resilience Planning Tool* (VTrans, 2024)

Results of Modeling (Western Corridor)

- FFY 2023 base ridership on the Ethan Allen Express within Vermont is 46,500
- These are results of basic projection modeling.
- Detailed modeling will be conducted in the Corridor ID effort (more to come on this in the future)

Scenario	2045 Medium Growth	% Change
No Build (includes extension to Burlington)	54,800	This is the base
79 MPH service on the Ethan Allen Express	58,900	8%
Albany - Burlington via Bennington and extension to Burlington (separate trains)	68,900	26%
Ethan Allen Express extension to Essex Junction (Total for EA plus Vermonter)	163,000	20%

Results of Modeling (Eastern Vermont)

- FFY 2023 base ridership on the Vermonter in-state is approximately 70,000.
- These are results of basic projection modeling.
- Detailed modeling will be conducted in the Corridor ID effort

Scenario	2045 Medium Growt	Change
No Build (existing service)	80,700	This is the base
79 MPH service	92,800	15%
Extension of one Knowledge Corridor Valley Flyer train to Brattleboro	93,300	16%
Extension of one Knowledge Corridor Valley Flyer train to White River Jct.	114,100	41%
Vermonter day train extension to Montreal	103,800	29%
Twice-daily Vermonter service, with both terminating in Montreal	200,400	148%
Night train from Montreal to points south	174,500	116%
Boston connecting train at Springfield to Vermonter serving Montreal	110,200	36%

Next Steps and Schedule

Mapping & Feedback

- Initiatives may be explored in interactive webmap
- Sign up to receive on-going communication about the Rail Plan and related upcoming Freight Plan

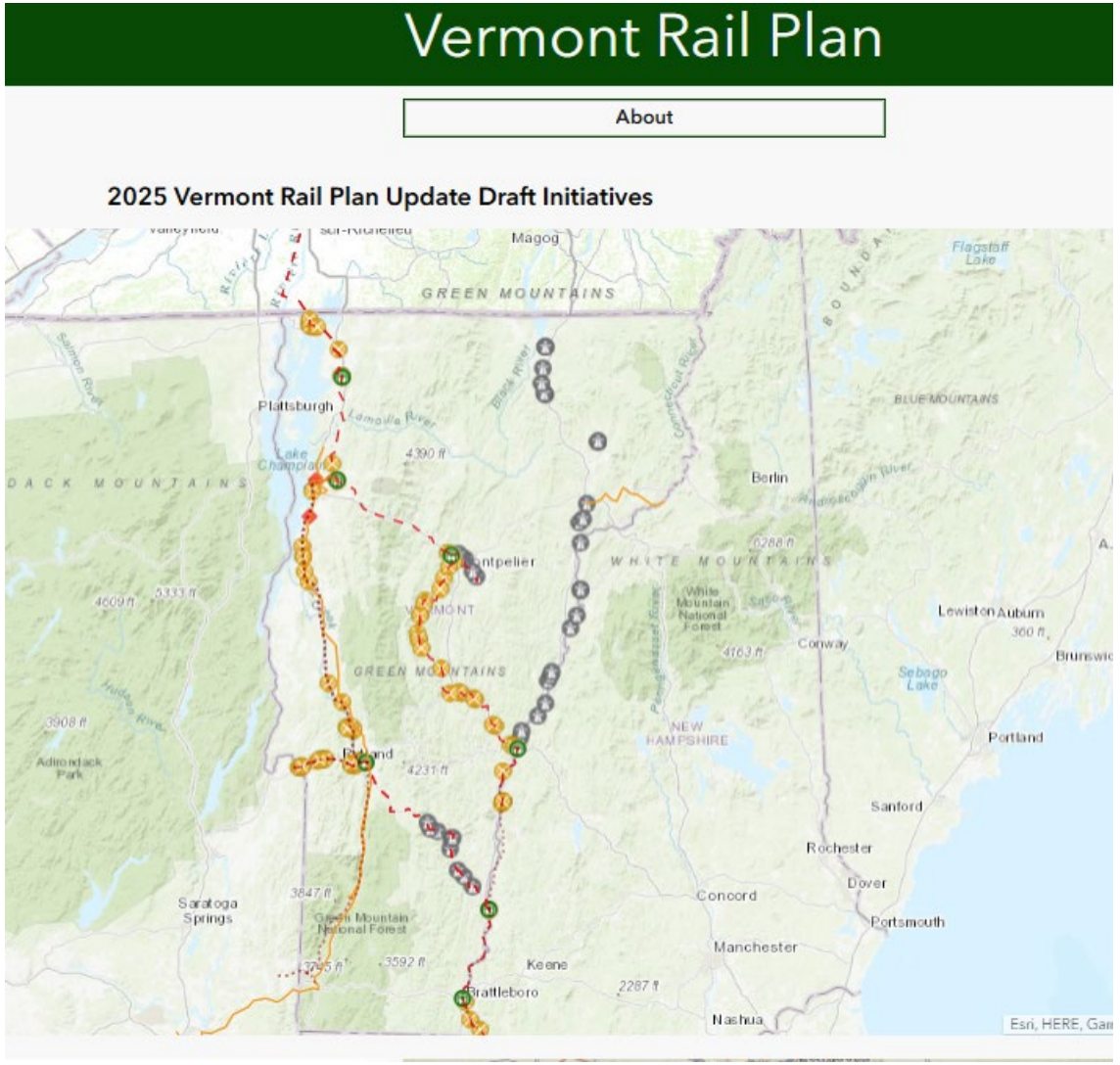
https://arcg.is/1GaW1z2

Vermont Rail Public Meeting #2

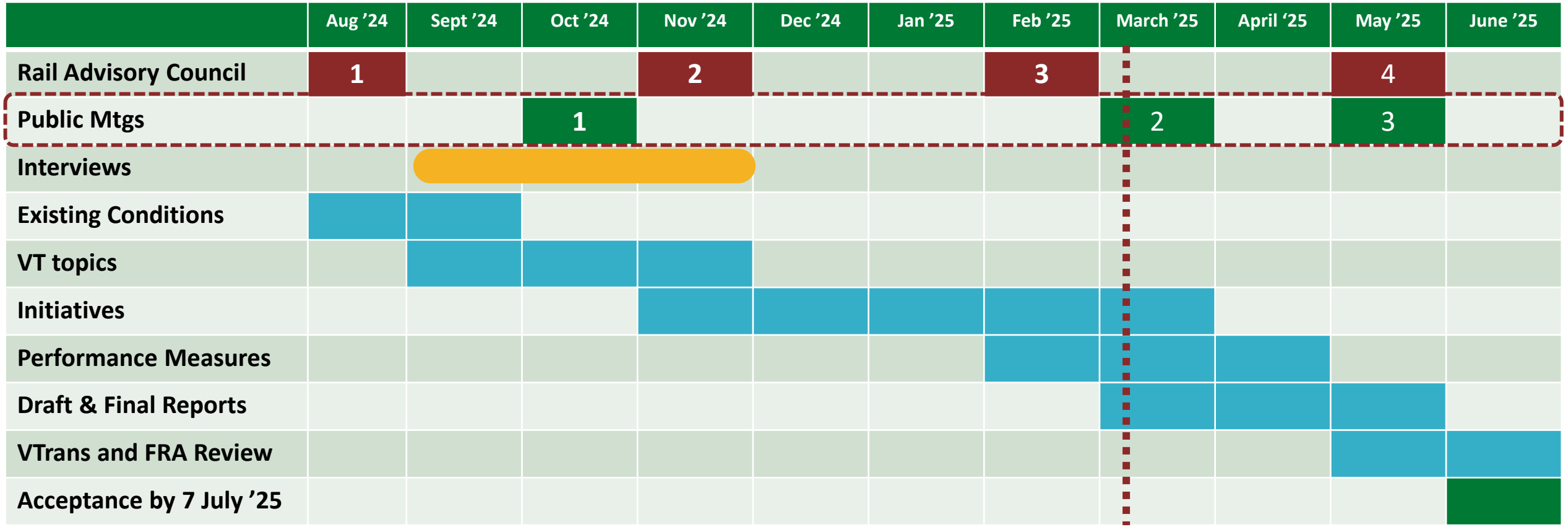
- Mon, Mar 10
- 3:00 PM - 4:30 PM EDT

Online (Register: Link)

In-Person: Brattleboro Municipal Center, 230 Main Street



Rail Plan—Schedule Overview



Thank You!

Comments or Questions?

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