

## **INITIATIVES, ANALYSIS, & DRAFT IMPLEMENTATION TABLE HANDOUT**

*This handout contains the kinds of material that may be useful during discussions based on presentations made developing the Plan.*

In April 2020, the Vermont Agency of Transportation (AOT or VTTrans) began an update to the State Rail Plan (2015) and State Freight Plan (2012 with a 2017 update) to meet Federal requirements. They are separate documents being updated in a coordinated manner.

The Rail Plan provides a framework to maintain and enhance the rail system over the next 20 years. As required, it covers rail freight and intercity passenger service provided by Amtrak. Commuter rail is a form of public transit that is addressed as part of public transit plans.<sup>1</sup> The Freight Plan provides a framework to maintain and enhance all modes of freight movement in Vermont—rail, highway, air, and water.

Work that has been completed for both efforts can be found at the links below. A link is also provided to an online mapping tool being used to gather input as well as serve as a “single hub” for intercity passenger rail and freight-related data that partners may find useful.

### **WHERE TO GO FOR MORE INFORMATION**

- Rail Plan Webpage: <https://vtrans.vermont.gov/rail/reports>
- Freight Plan Webpage: <https://vtrans.vermont.gov/planning/freight>
- Rail/Freight Online Mapping Tool: <http://bit.ly/VTFreightRailMap>

The remainder of this document focuses on the Rail Plan update and is composed of four parts:

- A summary table of potential initiatives that could be pursued by anyone. It may help with grant applications.
- An overview of the process for technical analysis of potential initiatives. Technical analysis supports well-informed discussions of next steps.
- A summary table showing the draft results of analysis of each potential initiative. These quantitative scores were combined with ballpark costs, feasibility, and qualitative considerations in developing a subset of initiatives that VTTrans intends to implement.
- Draft VTTrans implementation table

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<sup>1</sup> <https://vtrans.vermont.gov/planning/PTPP>

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**TABLE 6.1 POTENTIAL INITIATIVES BY GOAL AREA**

Initiative Description	Primary Goal Area	Freight or Passenger	Notes	ID #
Educate shippers about rail and intermodal service options and contracting approaches	Economic Development	Freight	Work with economic development agencies to encourage intermodal rail freight use by private businesses where viable.	5
Preserve and fully use industrial land parcels with access to rail sidings as well as the rail infrastructure that provides the access.	Economic Development	Freight	Work with RPCs, railroads, agencies, economic development groups, municipalities, etc. to update inventory of these properties and help publicize in a strategic manner. Maintain viability of industrial zoned land near existing or potential sidings, spurs, etc.	6
Develop quick-response capability to leverage economic development opportunities	Economic Development	Freight	Collaborate with State and local economic development agencies to develop tools to help identify, promote, and calculate public/private benefits of developing rail-served sites.	7
Maintain and modernize freight rail yards such as NECR and CP Yards	Economic Development	Freight	Improve sorting of cars for various destinations and support functions such as car/locomotive maintenance, storage and inspection.	20
Burlington Railyard Enterprise Project - multimodal transportation infrastructure improvements. See: <a href="https://www.ccrpcvt.org/our-work/transportation/current-projects/scoping/railyard-enterprise-project/">https://www.ccrpcvt.org/our-work/transportation/current-projects/scoping/railyard-enterprise-project/</a>	Economic Development	Both	Burlington City Council voted to pursue funding after completion of scoping study in 2020. Three potential designs have been identified to move forward to preliminary engineering pending securement of grant funding.	116
Track and respond to COVID-19-related changes regarding impacts on the passenger and freight rail system, both direct and from demographic changes	Funding	Both	Work with Departments of Health & Education (school enrollment), RPCs, and others to understand demographic and transportation change. Increase advertising and bike/ped station access where population is increasing; engage more with e-commerce shippers to understand supply chain changes due to COVID-19 and how rail may help serve changing needs.	12
Seek grants and innovative funding approaches for freight and passenger rail	Funding	Both	Continue to position State to pursue federal grant opportunities and collaborate with ACCD and other economic development agencies on opportunities.	18
Upgrade all rail lines to 286K weight-bearing capability	Increase Use/ Expand Capacity	Freight	286,000 pound is the national standard for freight rail cars. Increasing all lines to this standard will improve regional and national connections and enhance freight business opportunities in the State.	2
Further enhance marketing of Vermont passenger rail	Increase Use/ Expand Capacity	Passenger	Work more closely with ACCD, economic development and tourist groups, chambers, to promote passenger rail opportunities and connections to local tourist attractions.	4
Extension from Burlington to Essex Junction to connect <i>Ethan Allen Express</i> with <i>Vermonters</i> .	Increase Use/ Expand Capacity	Both	See results of modeling. This is a complicated initiative that would need further exploration. Also see #126 improving freight movement in the corridor.	
Bring the <i>Vermonters</i> up to 79 MPH	Increase Use/ Expand Capacity	Both	See results of modeling. Would require signaling system and track work west of White River Junction, as well as installation of signaling system between Brattleboro and East Northfield, MA.	105
Bring the Western Corridor up to 79 MPH	Increase Use/ Expand Capacity	Both	See results of modeling. Would require signaling system and track improvements between Whitehall, NY and Burlington.	106
Upgrade NECR Winooski Branch Bridges and Track to 286k standard (Burlington to Essex Junction)	Increase Use/ Expand Capacity	Both	This is Class I track, rated at 10 MPH for freight. This initiative would serve freight and support extending Ethan Allen service from Burlington to	126

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Initiative Description	Primary Goal Area	Freight or Passenger	Notes	ID #
			Essex Junction (#103). Some work was completed to support Middlebury Tunnel detour (rail, ties, bridge timber replacement).	
Upgrade GMRC Bridges and Track to 286k standard (Rutland to Bellows Falls)	Increase Use/ Expand Capacity	Freight	8 bridges with a load rating <286k, 17.9 miles of track is 90 lb. rail or lower. Preliminary engineering and/or right-of-way costs for the rehabilitation of three bridges on this line are included in the Governor's proposed FY22 budget.	112
Upgrade WACR Montpelier & Barre Sub. Bridges and Track up to 286k standard (Montpelier to Barre)	Increase Use/ Expand Capacity	Freight	3 bridges not capable of handling 286k, 12.7 miles of 90 lb. rail or lower. Preliminary engineering costs for the rehabilitation of one bridge on this line are included in the Governor's proposed FY22 budget.	113
Upgrade WACR Connecticut River Line Bridges and Track up to 286k standard (White River Junction to Newport)	Increase Use/ Expand Capacity	Freight	21 bridges load rating not sufficient for 286k, rail weight between 90 and 115 pounds. Preliminary engineering costs for the rehabilitation of five bridges, and construction costs for the rehabilitation of three bridges on this line are included in the Governor's proposed FY22 budget.	115
Achieve full NECR Double Stack Clearance (Alburgh to MA border)	Increase Use/ Expand Capacity	Freight	Lowest clearance is 19'6" (US 5 in Hartland and US 7 in Georgia, VT). 14 total restrictions in Vermont to double-stack access.	120
Achieve full GMRC/CLP Double Stack Clearance (NY border to Bellows Falls)	Increase Use/ Expand Capacity	Freight	19'2" clearance restriction in Proctorsville (GMRC) and Rutland Center (CLP).	121
<i>Vermont</i> Extension to Montreal – one round trip/ day	Increase Use/ Expand Capacity	Passenger	See results of modeling.	100
<i>Vermont</i> Extension to Montreal – two round trips/ day	Increase Use/ Expand Capacity	Passenger	See results of modeling.	102
<i>Vermont</i> connection at Springfield, MA to trains to Boston	Increase Use/ Expand Capacity	Passenger	See results of modeling. Would provide connection for <i>Vermont</i> at Springfield to train service MassDOT is exploring in the "East-West Passenger Rail Study." See: <a href="https://www.mass.gov/east-west-passenger-rail-study">https://www.mass.gov/east-west-passenger-rail-study</a>	109
Add passenger service on the Albany-Bennington-Burlington freight route to supplement <i>Ethan Allen Express</i> service in Western Corridor	Increase Use/ Expand Capacity	Passenger	See results of modeling. Bus service was put in place to assess existing demand.	104
Add a second daily service to the <i>Ethan Allen Express</i> New York City to Burlington.	Increase Use/ Expand Capacity	Passenger	See results of modeling.	107
Extend one Valley Flyer service from Greenfield, MA to White River Junction	Increase Use/ Expand Capacity	Passenger	See results of modeling. This low-volume service may be required to meet Federal Transit Administration (FTA) regulations. Under current FRA regulations, installation of PTC is not required. PTC likely would be part of a broader upgrade in the future.	108
Add whistle stop in Brandon and Shelburne areas once <i>Ethan Allen Express</i> is extended to Burlington	Increase Use/ Expand Capacity	Passenger	Brandon is approximately 15 miles from both Rutland and Middlebury, Shelburne is approximately 15 miles from Vergennes and 7 miles from Burlington. Would need to assess balance of added access with added travel time.	123
Facilitate development of freight transload locations in or near Vermont	Intermodal Connectivity	Freight	As demand warrants, work with customers and railroads to identify opportunities to expand or develop new transload facilities. An intermodal site could be explored where there are high volumes and Class 1 access.	8

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Initiative Description	Primary Goal Area	Freight or Passenger	Notes	ID #
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)	Intermodal Connectivity	Freight	Advocate on behalf of Vermont businesses for enhanced operating agreements between shortline and Class I railroads to improve efficiency of interchanges. Make physical improvements to support effective interchanges, for example for the State-owned Bennington Rail Yard to be able to support interaction with long Class 1 train sets.	9
Improve multi-modal connections including bicycle, pedestrian, and transit to Amtrak stations. Improve wayfinding	Intermodal Connectivity	Passenger	Work with transit & tourist services to match scheduling, increase comfort and reliability of transfers. Work with municipalities to develop station area plans, improve wayfinding, and enhance bicycle and pedestrian accommodations (crosswalks, bicycle lanes, bicycle parking). Improve sharing of Amtrak guidance for bringing bicycles on trains.	14
Explore transit-oriented development (TOD)	Intermodal Connectivity	Passenger	Work with municipalities to explore and support TOD opportunities near Amtrak stations.	15
Passenger Rail Station Improvements Statewide	Intermodal Connectivity	Passenger	See list of ADA improvements in Table 4.1. Rutland & White River Junction are VTrans/City of Rutland responsibility. Montpelier (2022), Bellows Falls (2022), Brattleboro (2022-23), Essex Junction (2021) have projects planned by Amtrak.	111
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	Maintenance	Both	Long-term goal for the State to upgrade where necessary and then maintain rail at levels suitable for competitive and cost-effective use. Class 2 is 25 MPH for freight, 30 MPH for passenger. Class 4 is 60 MPH for freight, 80 MPH for passenger.	3
Workforce development and training	Maintenance	Freight	Partner on job training with Dept. of Labor, educational facilities, and businesses to ensure that critical rail-related jobs can be filled.	11
VTR track upgrade between Manchester and Rutland to continuous welded rail (CWR) and 115 lb. capacity	Maintenance	Freight	Higher track weight to allow for higher train speeds (passenger and freight) as well as maintain State of Good Repair.	110
Add quiet zone near South Summit St. crossing in Essex Junction	Maintenance	Passenger	Quiet Zone analysis required: <a href="https://railroads.dot.gov/elibrary/how-create-quiet-zone">https://railroads.dot.gov/elibrary/how-create-quiet-zone</a> . This initiative could be included as part of work conducted under Initiative #103 or #126 if not included for implementation.	124
Maintain, publicize, and enhance appropriate communication regarding rail movement and storage of hazardous materials (hazmat) while respecting rail exemptions from local control	Safety	Freight	Publicize voluntary efforts by railroads, such as the local first responder classes offered by VRS. Share the big picture, for example that storage of fuel in Vermont responds to bad winters when there were shortages. Maintain appropriate communication among State agencies, municipal staff and first responders, and railroads. Explore opportunities as part of shift underway to Statewide Emergency Planning Committee.	10
Increase resilience of rail system to make critical infrastructure more resilient now and to prepare for increasing storm severity	Safety	Both	180 miles of rail (109 State-owned) in flood risk areas (see Figure 4.16). Work with railroads to identify priorities and funding to increase resilience.	13
Publicize existing voluntary efforts of railroads and encourage "freight as a good neighbor" (NCHRP Syntheses 320) while respecting rail's exemptions from local control	Safety	Freight	Highlight and support coordination on rail maintenance, operations, and construction activities. This could include -Proactively share information such as FAQs that will be on the VRS website in early 2021	19

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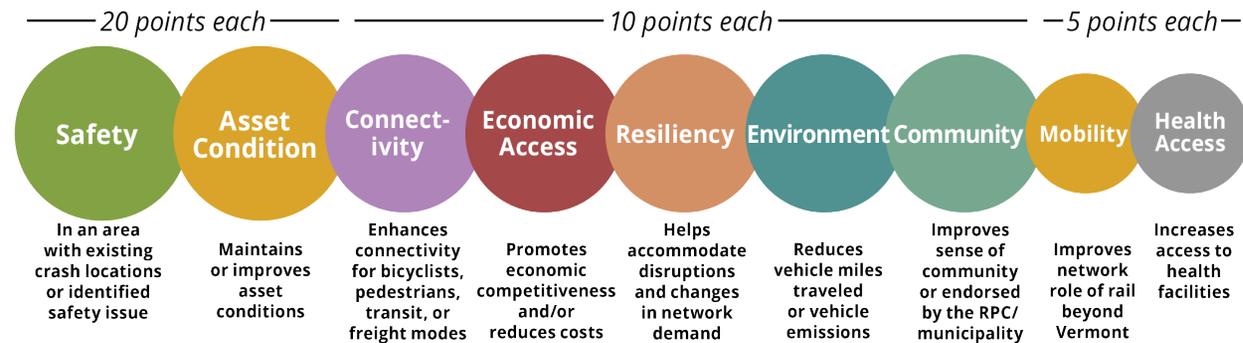
Initiative Description	Primary Goal Area	Freight or Passenger	Notes	ID #
			-Collaborate more on getting information visible to varied audiences such as outreach campaigns ahead of <i>Ethan Allen</i> extension to Burlington. -Continue to explore positive ways for railroads and other Vermonters to resolve issues in a way that strengthens Vermont's economy and communities.	
Phased deployment of Gates/flashers at existing and planned Amtrak public road grade crossings	Safety	Both	Long-term goal of State. Phased deployment at 80 public road crossings including <i>Ethan Allen</i> (to Burlington) and <i>Vermont</i> (to Montreal) routes. Cost of upgrades and maintenance could increase subsidy required of State for Amtrak service.	122
Improve multi-modal crossings, such as WACR line at Montpelier Main Street and bike path area	Safety	Freight	2020 VTrans Bicycle & Ped. grant, See 2019 Scoping study: <a href="https://www.montpelier-vt.org/DocumentCenter/View/7105">https://www.montpelier-vt.org/DocumentCenter/View/7105</a>	125

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### PROCESS FOR TECHNICAL ANALYSIS OF INITIATIVES

The list of potential location-specific and policy/program initiatives was explored and summarized using a simplified version of VTrans Project Selection and Project Prioritization (VPSP2). As illustrated below, this process considers the initiative's potential effectiveness within each of the VPSP2 goal areas. It uses the weights developed through an extensive process for VPSP2. See the draft Initiative analysis workbook for more details. Worksheets from it are posted on the Rail Plan web page under Technical Memos, Reports, & Resources

### VTRANS PROJECT SELECTION AND PROJECT PRIORITIZATION (VPSP2) GOAL AREAS



There is a summary table for the location-specific initiatives and one for the policy/program initiatives. Each has the following information.

- Initiative number
- Initiative name
- Primary goal area (see the "Summary of Potential Initiatives" section)
- If the initiative is on State-owned infrastructure
- If initiative focuses on passenger rail, freight rail or both
- Initiative score – note this is one element of the VTrans discussion developing its implementation table
- Notes on the initiative (location, clarification about purpose, etc.)
- Additional qualitative notes to consider

## DRAFT Rail Plan Initiative Technical Analysis - Summary

Version: 1/7/2021

This is a sketch-level analysis to help move from the table of reasonable possible initiatives to a shorter implementation table for VTrans.

It is for use with the update of the State Rail Plan within the Rail program and may evolve over time for various reasons.

**The results of technical analysis of initiatives are an aid in making well-informed decisions rather than a precise answer. They are among the factors considered when deciding which initiatives to advance to implementation.**

The intent is to keep this table easy to skim. Please see worksheets on Location-Specific and Program/Policy projects for analysis. See the Table of Initiatives for more description of initiatives.

Program/Policy initiatives start at ID #1. It's difficult to analyze their specifics so they have technical analysis scores 1-20. Location-specific initiatives start at ID #100. They have scores ranging from 0-100. These are different scales.

### Location Specific Initiatives

Initiative #	Initiative Name	Goal Area	State-owned infrastructure?	Passenger or Freight	Technical Analysis Score	Technical Analysis Notes	Qualitative Considerations
100	Vermont Ext. to Montreal	Increase Use/Exp Cap	Yes	Passenger	95	Partial points for flood zone (the entire stretch of track over the Missisquoi National Wildlife Refuge is floodplain, in addition to the lake crossings) but missing data to give full points	Previous commitment to extending this service
116	Burlington Rail Yard Enterprise	Economic Devel.	Yes	Both	93	For more information see scoping study at <a href="https://www.ccrpvt.org/our-work/transportation/current-projects/scoping/railyard-enterprise-project/">https://www.ccrpvt.org/our-work/transportation/current-projects/scoping/railyard-enterprise-project/</a>	This is primarily a road project. VTrans has agreed to place it in the 2022 Capital Program so that preliminary design can begin.
112	GMRC Bridges and Track Upgrades	Increase Use/Exp Cap	Yes	Freight	87	8 bridges with a load rating <286k, 17.9 miles of track is 90 lb. rail or less.	Critical east-west route. CP would like to see this line upgraded to 286k as a higher priority than the WACR Conn River
104	Albany-Bennington-Burlington Passenger Service	Increase Use/Exp Cap	Yes	Passenger	85		High cost and low feasibility. Relatively low increase in passenger ridership (64,000 - 94,000)
113	WACR M&B Bridges and Track Upgrades	Increase Use/Exp Cap	Yes	Freight	84	3 bridges not capable of handling 286k, 12.7 miles of 90 lb. rail or lower. Includes new routing	Additional track being constructed to handle pending growth in traffic (granite) however there is a sense that this may be able to hold as a VTrans recommendation until the next update.
115	WACR Conn. River Bridges and Track Upgrades	Increase Use/Exp Cap	Yes	Freight	84	21 bridges load rating not sufficient for 286k, rail weight between 90 and 115 pounds	Generally identified as a lower priority by stakeholders
102	Vermont Ext. to Montreal (X2 trips)	Increase Use/Exp Cap	Yes	Passenger	83	No resiliency or safety points as adding a 2nd service does not impact infrastructure	
103	Ethan Allen Amtrak service extension to meet Vermont: Burlington to Essex Jct.	Increase Use/Exp Cap	Yes	Passenger	80	Would require #126 improving infrastructure first. Would require system schedule changes for passenger transfers between the two services	In conjunction with Initiative #126, noted as a high priority by stakeholders.
126	NECR Winooski Track and Bridge Updates (Burlington - Essex Jct)	Increase Use/Exp Cap	No	Freight	78	Non-State asset. Work with NECR to upgrade rail and any necessary bridges to allow for 286k and FRA Class II/III. Currently Class I rail. Would be in conjunction or prior to ID #103: Extension of Ethan Allen to Essex Junction.	Noted as a high priority by stakeholders.
108	1 Valley Flyer extended to WRJ	Increase Use/Exp Cap	Yes	Passenger	70	Will reduce VMT and improve safety statewide as rail is a safer mode of travel than vehicle. Supported by Town of Brattleboro	
106	Ethan Allen (Western Corridor) to 79 mph	Increase Use/Exp Cap	Yes	Passenger	70	Hard to estimate if this would improve resiliency. Includes necessary at-grade crossing improvements. This is assumed to not include track re-alignment. If track re-alignment was included, the resiliency score could increase. Will reduce VMT and improve safety statewide as rail is a safer mode of travel than vehicle.	
105	Vermont to 79 mph	Increase Use/Exp Cap	Yes	Passenger	70	Assumes Initiative #100 completed first. Includes necessary at-grade crossing improvements. Hard to estimate if this would improve resiliency. This is assumed to not include track re-alignment. If track re-alignment was included, the resiliency score could increase. Will reduce VMT and improve safety statewide as rail is a safer mode of travel than vehicle.	SWCRPC Regional Plan identifies rail improvements for increased speeds as a transportation need
111	Passenger Rail Station Improvements	Intermodal Conn.	Yes	Passenger	65	Montpelier (2022), Bellows Falls (2022), Brattleboro (2022-23), Essex Junction (2021) have projects planned by Amtrak. Rutland, WRJ are VT/City responsibility and not scheduled	CCRPC would like Essex Junction broken out separately (if not all separate)
107	2nd service on Ethan Allen	Increase Use/Exp Cap	Yes	Passenger	65		
125	Montpelier Main St. bike path and grade crossing improvements	Safety	Yes	Other	63	2020 VTrans Bicycle & Ped. grant, See 2019 Scoping study <a href="https://www.montpelier-vt.org/DocumentCenter/View/7105">https://www.montpelier-vt.org/DocumentCenter/View/7105</a>	
110	VTR Upgrade to CWR and 115lb (Rut-Manch)	Maintenance	Yes	Both	63	Higher track weight to allow for higher train speeds (passenger and freight) as well as maintain State of Good Repair (SOGR)	Would take advantage of work completed under BUILD and TIGER grants in the Western Corridor
109	Connection to future rail @ Springfield: MTL-BOS	Increase Use/Exp Cap	Yes	Passenger	61	Intended to connect with future service (not Lake Shore Limited). Scores MTL-Springfield segment	
122	Phased deployment of Gates/flashers at existing and planned Amtrak public road grade crossings	Safety	Yes	Both	55	Long-term goal of State. Phased deployment at 80 public road crossings include Ethan Allen (to Burlington) and Vermont (to Montreal) routes.	Cost of upgrades and maintenance could increase subsidy required of State for Amtrak service. Crossings are being improved through several programs.
120	NECR Full Double Stack Clearance	Increase Use/Exp Cap	No	Freight	54	Project unlikely to improve flood resiliency or environmental protection	
121	GMRC/CLP Full Double Stack Clearance	Increase Use/Exp Cap	Yes	Freight	54	Project unlikely to improve flood resiliency or environmental protection	
123	Whistle stop in Brandon and Shelburne	Increase Use/Exp Cap	Yes	Passenger	51	Brandon is approx. 15 miles from both Rutland and Middlebury, Shelburne is approx. 15 miles from Vergennes and 7 miles from Burlington. Would need to assess balance of added access with added overall time	Feasibility of adding new stops along a new route is low.
124	Quiet Zone - South Summit St. Essex Jct	Maintenance	No	Other	19	The specific request was for this location. However, if service is added to the Winooski Branch, this should include a corridor-wide review of the potential to implement. Could be included as part of EAE to Essex Junction if that initiative is advanced and this one is not	While the individual initiative scores low, quiet zones should be a consideration if Initiative #103/126 is recommended

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### Program/Policy Initiatives

Initiative #	Initiative Name	Goal Area	State-owned infrastructure?	Passenger or Freight	Technical Analysis Score	Technical Analysis Notes
3	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	Maintenance		Both	16	Class 2 is 25 MPH for freight, 30 MPH for passenger. Class 4 is 60 MPH for freight, 80 MPH for passenger.
2	Upgrade all lines to 286K weight-bearing capability	Increase Use/Exp Cap		Freight	15	286,000 pound is the national standard for freight rail cars. Increasing all Vermont lines to this standard will improve regional and national connections and enhance freight business opportunities in the State
6	Preserve and fully use industrial land parcels with access to rail sidings as well as the rail infrastructure that provides the access.	Economic Development		Freight	15	Work with RPCs, railroads, agencies, economic development groups, municipalities, etc. to update inventory of these properties and help publicize in a strategic manner. Maintain viability of industrial zoned land near existing or potential sidings, spurs, etc.
14	Improve multi-modal connections to Amtrak stations including transit, bicycle, and pedestrian access. Improve wayfinding.	Intermodal Connectivity		Passenger	15	Work with transit & tourist services to match scheduling, increase comfort and reliability of transfers. Work with municipalities to develop station area plans, improve wayfinding, and enhance bicycle and pedestrian accommodations (crosswalks, bicycle lanes, bicycle parking)
13	Increase resilience of rail system to make critical infrastructure more resilient now and to prepare for increasing storm severity	Safety		Both	13	180 miles of rail (109 state owned) in flood risk areas. Work with railroads to identify priorities and funding to increase resilience
18	Seek grants and innovative funding approaches for freight and passenger rail	Funding		Both	13	Continue to position state to pursue federal grant opportunities and work collaboratively with ACCD and other economic development agencies to identify opportunities for freight funds
8	Facilitate development of freight transload locations in or near Vermont	Intermodal Connectivity		Freight	12	As demand warrants, work with customers and railroads to identify opportunities to expand or develop new transload facilities. An intermodal site could be explored where there are high volumes and Class 1 access.
19	Publicize existing voluntary efforts of railroads and encourage "freight as a good neighbor" (NCHRP Syntheses 320) while respecting rail's exemptions from local control.	Safety		Freight	10	Highlight and support coordination on rail maintenance, operations, and construction activities.
9	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)	Intermodal Connectivity		Freight	9	Advocate on behalf of Vermont businesses for enhanced operating agreements between shortline and Class I railroads to improve efficiency of interchanges. Make physical improvements to support effective interchanges, for example for the State-owned Bennington Rail Yard to be able to support interaction with long Class 1 train sets.
4	Further enhance marketing of Vermont passenger rail	Increase Use/Exp Cap		Passenger	8	Work more closely with ACCD, economic development and tourist groups, chambers, etc.
7	Develop quick-response capability to leverage economic development opportunities	Economic Development		Freight	8	Collaborate with state and local economic development agencies to develop tools to help identify, promote, and calculate public/private benefits of developing rail-served sites
10	Maintain, publicize, and enhance appropriate communication regarding rail movement and storage of hazardous materials (hazmat) while respecting rail exemptions from local control	Safety		Freight	8	Publicize voluntary efforts by railroads. Share the big picture. Maintain appropriate communication. Explore opportunities as part of shift underway to Statewide Emergency Planning Committee.
15	Explore transit-oriented development (TOD)	Intermodal Connectivity		Passenger	8	Work with municipalities to explore and support TOD near Amtrak stations.
20	Maintain and modernize freight rail yards such as NECR and CP Yards	Maintenance		Freight	8	Supports sorting of cars for various destinations and support functions such as car/locomotive maintenance, storage and inspection
1	Post freight rail system performance measures, including trends	Maintenance		Freight	7	Performance measures may need to be modified. Could be in VTransparency or elsewhere
5	Educate shippers about rail and intermodal service options and contracting approaches.	Economic Development		Freight	7	Work with economic development agencies to encourage intermodal rail freight use by private businesses where viable
11	Workforce Development	Economic Development		Freight	6	Partner on job training with DOL, educational facilities, and businesses
12	Track and respond to COVID-related changes regarding impacts on the passenger and freight rail system, both direct and from demographic changes	Funding		Both	6	Work with Dept. of Health, Education (school enrollment), and RPCs, & others. to understand demographic and transportation change. Increase advertising and bike/ped station access where population is increasing; engage more with e-commerce shippers

## DRAFT VERMONT RAIL PLAN – HANDOUT (VERSION: 2/2/2021)

### CHAPTER 8: RECOMMENDATIONS & NEXT STEPS FOR VTRANS

The table of potential initiatives in Chapter 7 has a range of productive actions that could be undertaken by any of a range of entities—and indeed many will best be advanced through teamwork. VTrans intends to lead action on 19 recommendations for projects or policies in the coming years.

These 19 recommendations are divided into three tiers of priority. The recommendations are sorted by goal area within the tier—there is no additional prioritization of initiatives within each tier. The recommendations address specific locations, policies, and programs. Some recommendations include more than one initiative from the table in Chapter 7.

The recommendations are summarized below.

#### First Priority Set

- Track and respond to COVID-related changes regarding impacts on the passenger and freight rail system, including marketing Amtrak
- Extend *Vermont* to Montreal.
- Upgrade all State-owned freight rail lines to be able to carry the industry-standard rail carweight of 286,000 lbs. (286k).
- Passenger Rail Station Improvements.
- Phased deployment of gates/flashers at existing and planned Amtrak public road grade crossings.

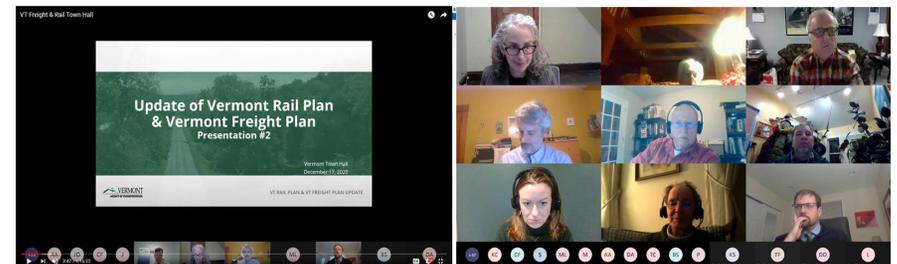
#### Second Priority Set

- Burlington Rail Yard Enterprise project.
- Seek grants and innovative funding approaches for freight and passenger rail.
- GMRC Bridges and Track Upgrades.
- WACR Connecticut River Bridges and Track Upgrades.
- 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).

- Improve transit, bicycle, and pedestrian connections to Amtrak trains. Improve wayfinding.
- 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.
- Publicize existing voluntary efforts of railroads and encourage “freight as a good neighbor” (NCHRP Syntheses 320) while respecting rail’s exemptions from local control.

#### Third Priority Set

- Preserve and fully use industrial land parcels with access to rail sidings as well as the rail infrastructure that provides the access.
- Add passenger service on the Albany-Bennington-Burlington freight route to supplement *Ethan Allen Express* service in Western Corridor. *Ethan Allen* Amtrak service extension to meet *Vermont*: Burlington to Essex Junction/NECR track improvements.
- Publicize intermodal options to potential shippers, including how to contract for them. Facilitate development of additional freight transload locations in or near Vermont.
- Maintain and modernize freight rail yards such as NECR and CP Yards.
- Increase resilience of rail system to make critical infrastructure more resilient now and to prepare for increasing storm severity.



Gathering input from the public and stakeholders at one of two Vermont Rail Plan Virtual Town Hall Meetings

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**TABLE 8.1 RECOMMENDED INITIATIVES**

<b>RECOMMENDATION</b>	<b>DESCRIPTION</b> <i>(SEE TABLE 6.1 FOR MORE DETAIL)</i>	<b>GOAL AREA</b>	<b>PASSENGER, FREIGHT</b>	<b>ADDITIONAL CONSIDERATIONS</b>	<b>INITIATIVE ID#(S)</b>	<b>TIMING</b>
<b>First Priority Set by Goal Area</b>						
Track and respond to COVID-related changes regarding impacts on the passenger and freight rail system, including marketing Amtrak	We need to figure out how to rebound as we recover from the pandemic.	Funding	Passenger		12, 4	Short-term
Extend <i>Vermont</i> to Montreal	This is a key, well-underway priority. It could start as one trip per day (ID 100) and then be expanded to two trips per day (ID 102).	Increase Use/ Expand Capacity	Passenger	This is a top priority for the State.	100, 102	Short-term
Upgrade all State-owned freight rail lines to be able to carry the industry-standard rail carweight of 286,000 lbs. (286k)	The policy is to attain this system-wide.	Increase Use/ Expand Capacity	Freight	Important to keep working toward this to maximize freight efficiency and expand use.	2, 112	Short to Long-term
Passenger Rail Station Improvements	VTrans is assessing improvements needed at stations and sources of additional funding to complete them. This will result in a more-detailed plan. Also see ID 14: Multi-modal access to Amtrak stations.	Intermodal Connectivity	Passenger	VTrans will continue to evaluate all funding opportunities.	111	Short-term
Phased deployment of gates/flashers at existing and planned Amtrak public road grade crossings	Safety at rail crossings is being addressed in multiple programs including the underway 2020/2021 Section 130 analysis.	Safety	Both		122	Long-term
<b>Second Priority Set by Goal Area</b>						
Burlington Rail Yard Enterprise project	This is primarily a road project. \$100,000 is in the Governor’s proposed FY22 budget for preliminary engineering.	Economic Development	Both		116	Long-term
Seek grants and innovative funding approaches for freight and passenger rail	There are more needs than funds currently available.	Funding	Both		18	Short-term
GMRC Bridges and Track Upgrades	Governor’s proposed FY22 budget includes some work on this line.	Increase Use/ Expand Capacity	Freight	Critical east-west connection in/through Vermont.	112	Short to Long-term
WACR Connecticut River Bridges and Track Upgrades	Governor’s proposed FY22 budget includes some work on this line.	Increase Use/ Expand Capacity	Freight	With the possible sale of PAR to CSX, this could become a very large freight through route.	115	Short to Long-term

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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)	Participate in efforts with the railroad companies, other State agencies, and businesses that enhance operating agreements between shortline and Class I railroads. Make physical improvements to support effective interchanges, for example for the State-owned Bennington Rail Yard to interact with long Class 1 train sets.	Intermodal Connectivity	Freight	This initiative will help address complex network issues with results that support Vermont businesses. Vermont has an existing investment program that promotes the economic development of rail adjacent properties for expanding rail use.	9	On-going
Improve transit, bicycle, and pedestrian connections to Amtrak trains. Improve wayfinding	Start by supporting imminent <i>Ethan Allen Express</i> service to Burlington. Encourage transit-train coordination for comfortable, reliable transfers. Encourage improvements to crosswalks, bicycle lanes, bicycle parking, and information sharing including how to take bicycles on Amtrak.	Intermodal Connectivity	Passenger	Coordinate with ID 111: Amtrak station upgrades.	14	On-going
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		Maintenance	Both		3	Long-term
Publicize existing voluntary efforts of railroads and encourage “freight as a good neighbor” (NCHRP Syntheses 320) while respecting rail’s exemptions from local control	Help railroads publicize community-related postings or information, trainings. Focus period will be start of Burlington extension. Coordinate with Operation Lifesaver.	Safety	Freight		19, 10	On-going
<b>Third Priority Set by Goal Area</b>						
Preserve and fully use industrial land parcels with access to rail sidings as well as the rail infrastructure that provides the access	Work with RPCs, railroads, agencies, economic development groups, municipalities, etc. to update inventory of these properties and publicize in a strategic manner. Maintain viability of industrial zoned land near existing or potential sidings, spurs, etc.	Economic Development	Freight	Exploring a Transportation Planning Initiative (TPI) task for FY22 with RPCs.	6	On-going
Add passenger service on the Albany-Bennington-Burlington freight route to supplement <i>Ethan Allen Express</i> service in Western Corridor	This would be in addition to existing <i>Ethan Allen Express</i> service and use a different route between Albany and Rutland.	Increase Use/Expand Capacity		Monitoring ridership on Shires bus connection to better understand demand.	104	Long-term

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Ethan Allen Amtrak service extension to meet Vermonter: Burlington to Essex Jct./NECR track improvements	Need to first do track improvements in #126: NECR Winooski Track and Bridge Updates (Burlington - Essex Junction).	Increase Use/ Expand Capacity	Both	Non-State asset. Work with NECR to upgrade rail and any necessary bridges to allow for 286k and FRA Track Class II/III. Currently Class I.	103/126	Long-term
Publicize intermodal options to potential shippers, including how to contract for them. Facilitate development of additional freight transload locations in or near Vermont	Publicize, educate, and encourage use. Where viable, explore new transload facilities of appropriate scale based on service needs. Educate shippers about rail and intermodal service options and contracting approaches.	Intermodal Connectivity	Freight	Beyond transload facilities, an intermodal terminal in Vermont would require higher volumes than are currently present in Vermont.	8, 5	Short-term
Maintain and modernize freight rail yards	Support, though this would be done by the railroad companies (eg. NECR and CP).	Maintenance	Freight		20	Long-term
Increase resilience of rail system to make critical infrastructure more resilient now and to prepare for increasing storm severity	Maintain culverts, monitor erosion areas, consider physical improvements and agreements to be as ready as reasonable.	Safety	Both		13	On-going

Note: For the "Timing" Column: Short-term initiatives can be accomplished within the next five years. Long-term initiatives will start beyond five but within the next 20 years. Short to long-term initiatives should start within the next five years but continue beyond that timeframe. On-going initiatives require action throughout the next 20 years and possibly beyond.