

EXECUTIVE SUMMARY

Why Does a Freight Plan Matter?

Almost everything in our lives relies on the freight system working well.

This includes food at grocery stores, logs for lumber, fuel to heat our homes, and the electronics ordered online that were delivered to your doorstep. Cheese producers rely on raw milk deliveries, farmers on key supplies, and breweries on hops and grain. These items reach their destinations by one or more of these important parts of Vermont's freight system: trucks, trains, aircrafts, pipelines, water—and don't forget the importance of the communication systems and people behind the scenes.



Approximately one-third of Vermont's workforce is employed in "freight-reliant" industry sectors (manufacturing, utilities, construction, wholesale and retail trades, and agriculture). These sectors also produce about one-third of Vermont's Gross State Product. However, all sectors rely upon freight at least to some degree.

The Vermont Freight Plan provides a framework to maintain and enhance the State's multimodal freight transportation system in a manner that also supports other State and national goals. It also helps the State to navigate an uncertain future by considering the potential effects of the COVID-19 pandemic and economic recovery, technological innovation, climate change and increasing extreme weather events, and other issues.

What Are We Trying to Do?

The Vermont Freight Plan has six goals. They are consistent with and support other State and national goals.

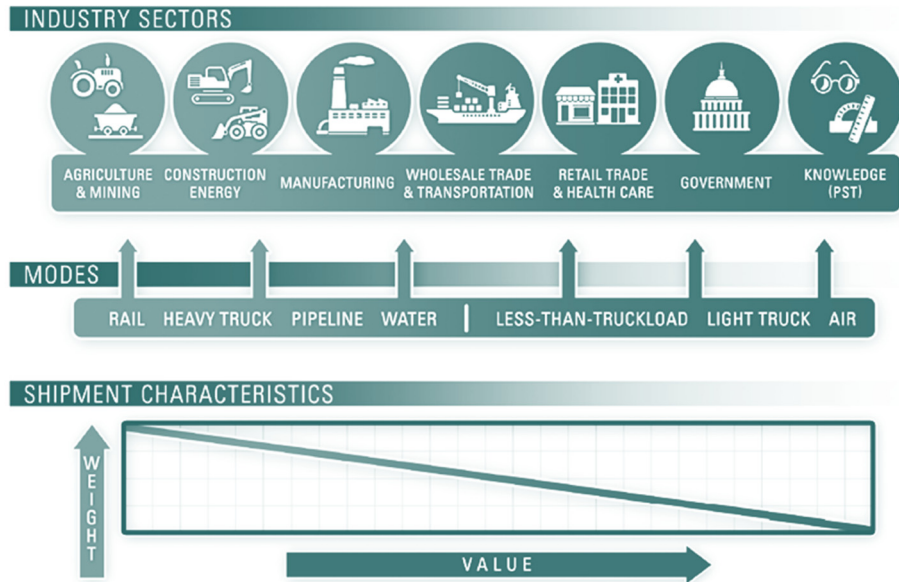
FREIGHT PLAN GOALS

-  Improve safety, security, and resilience
-  Modernize infrastructure and operations
-  Support data, technologies, and workforce
-  Increase rail usage
-  Ensure reliable travel times
-  Maintain state of good repair

Freight Modes and Networks

Freight moves by different modes of transportation, including by truck, rail, air, pipeline, and water. Each mode has advantages and disadvantages, and is best suited for certain types of shipments as illustrated on the next page. Goods that are heavy, bulky, and moving long distances are ideal for rail. Truck transportation is ideal for distributing smaller shipments that may be dispersed across multiple origin or destination points. Trucks also play a key role in transporting goods for the "last mile" to their ultimate destination.

WHAT WOULD BE THE MOST SUITABLE MODE?



Note: PST includes the professional, scientific, and technical services industry sectors.

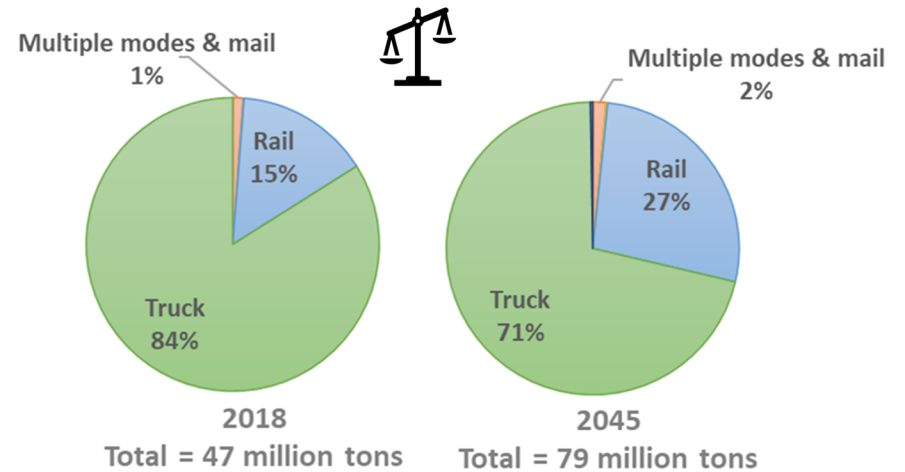
How Much Freight Went Where?

Approximately 46.7 million tons of freight moved into, out from, through, or within Vermont in 2018. Trucks carried approximately 84% of that freight and rail carried 15%. By 2045, the volume of freight (when measured by weight) is **expected to increase 68%** to 78.7 million tons. By 2045, rail is expected to move a larger share of freight in Vermont.

The value of freight moved in Vermont in 2018 was approximately \$71 billion. Trucks carried the highest dollar value share of freight flows (67%). However analysis by value highlights the contribution of air (3%) and multiple modes and mail (13%). Shipments reported as multiple modes represent commodities that move by more than one mode. The "Mail" component recognizes that shippers who use parcel delivery services typically do not know what modes were involved after the shipment was picked up.

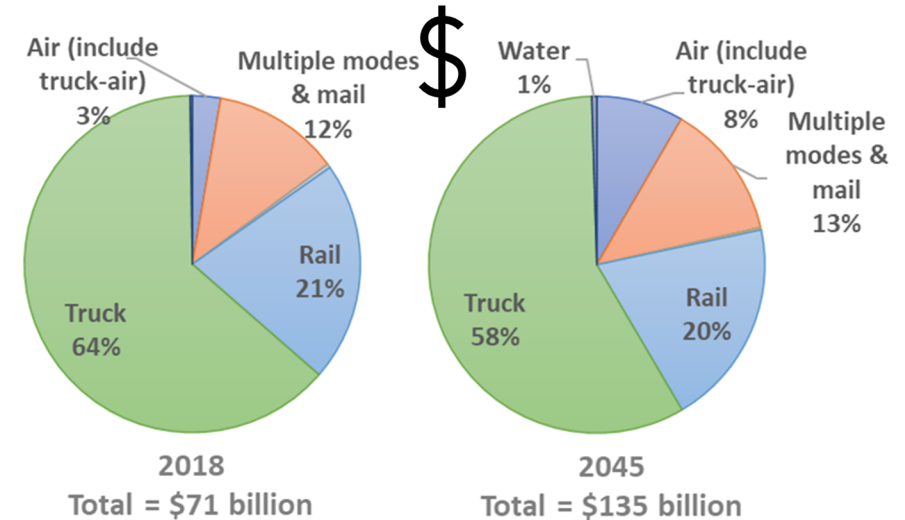
The charts below show the distribution of freight by mode of transportation used by weight in tons (top) and by value of goods (bottom).

MODE USED IN 2018 & ANTICIPATED IN 2045 IN VERMONT (BY TONS)



Note: Pipeline, Water, and Air carried less than 1% of freight tonnage in 2018 and are expected to carry less than 1% in 2045

MODE USED IN 2018 & ANTICIPATED IN 2045 IN VERMONT (BY VALUE)



Note: Pipeline and Water carried less than 1% of freight by value in 2018 and are Pipeline is expected to carry less than 1% in 2045

Source: Freight Analysis Framework (FAF), Surface Transportation Board (STB) Confidential Waybill Sample; Analysis by Cambridge Systematics, 2020.

What Needs Doing to Support Freight in Vermont?

Vermont is performing well across most freight performance targets. It either meets or exceeds specified targets or more general “desired outcomes.” There are additional areas where initiatives could help meet freight needs.

Issue	Need
Technological Innovation	Anticipate deployment; partner with innovators
COVID Recovery	Monitor to anticipate potential effects on freight in Vermont
E-Commerce and Last-Mile Delivery	Acquire data and estimate the potential effects of deliveries on highways, emissions, and the economy
Cross-Border Issues	Continue coordinating among stakeholders and taking actions
Truck Permitting and Harmonization	Consider talks with New York to join New England Transportation Consortium (NETC) or otherwise streamline permitting for trips between VT and NY
Freight Workforce	Support the development of workforce capabilities that improve freight system performance
Climate Change and Resiliency	Support initiatives to reduce greenhouse gas (GHG) emissions, and harden vulnerable freight infrastructure
Freight as a “Good Neighbor”	Coordinate discussions around “good neighbor” strategies and practices
Asset Management	Engage as Vermont Asset Management Information System (VAMIS) develops for freight planning aspects

Packages of Initiatives

There are 40 initiatives grouped into seven thematic packages. The graphic to the right lists a sample of important initiatives in each package. The full list of initiatives is provided in Chapter 7 of the Freight Plan.

SAMPLE FROM EACH OF THE SEVEN INITIATIVES PACKAGES



Freight Planning and Policy

- Ensure that freight needs are considered in VTrans Project Selection and Prioritization Process (VPSP2).
- Engage in equity and “good neighbor” elements of freight planning.



Climate Change and Resiliency

- Plan for freight sector alternative fueling capacity and access.
- Enhance resiliency of Vermont’s freight transportation infrastructure.



Technological Innovation

- Work regionally to harmonize regulations related to the deployment of new transportation technologies.



Trade Corridors and Economic Development

- Promote coordination between industry and education stakeholders to develop workforce.
- Provide full domestic double-stack railcar clearances on New England Central Railroad (NECR) and Western Corridor.



Highway Operations

- Maintain a state of good repair (SOGR).
- Maintain or improve truck travel time reliability.
- Promote the safe movement of commercial vehicles through enforcement and leveraging technology and communications.



Rail Development

- Preserve and fully use industrial land parcels with access to rail sidings.
- Participate in multistate rail planning and programming to improve regional rail network.
- Improve weight capacity.



Air Freight

- Monitor obstructions to airport approaches and implement action plans as needed.

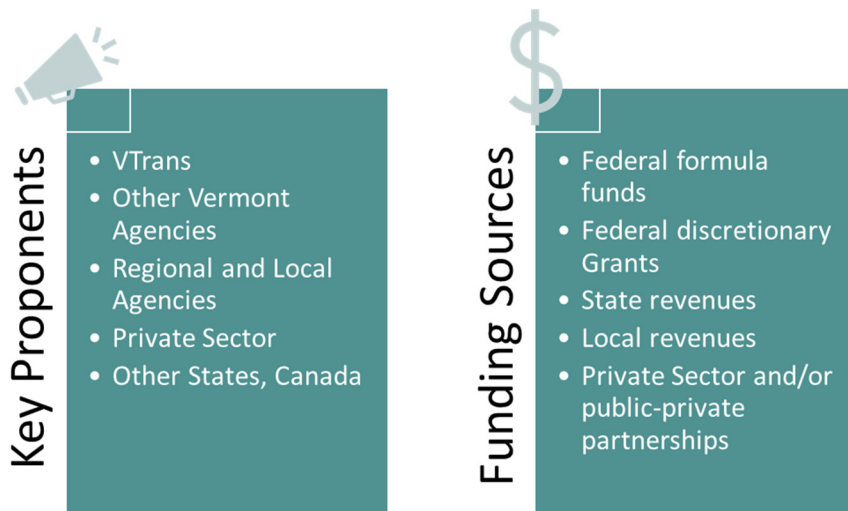
Implementation

Implementing the initiatives identified in the Vermont Freight Plan will require the participation of federal, state, regional, and local agencies as well as the private sector. Many of the initiatives involve regional issues, and will require participation from neighboring states and Canada.

Participation in the implementation of initiatives could include helping with education and outreach, advocacy, coordination, or contributing funds to support the implementation of initiatives.

Table 8.1 in the Freight Plan lists the initiatives, and includes some guiding parameters for implementation.

HOW ARE FREIGHT INITIATIVES IMPLEMENTED?



Who Helped Develop the Plan?

- Freight Plan Advisory Committee
- Vermont Rail Advisory Council
- Widely advertised Vermont Freight Forum meetings
- Regional Planning Commission Transportation Advisory Committees
- Hundreds of other people invited and kept informed through e-newsletters, social media, and an ongoing online web tool.

The Freight Plan was developed in coordination with work on the anticipated 2022 Comprehensive Energy Plan and Climate Action Plan.

KEY TAKE-AWAYS AND THEMES FROM ENGAGEMENT

