

VERMONT FREIGHT PLAN

Next issue:
Freight trends and
issues

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New State Freight Plan is underway

The Vermont Agency of Transportation (VTrans) is updating its 2001 Vermont Freight Plan and expects the plan to be completed by fall 2010.

The state's effort will develop a comprehensive, multimodal (air, rail, roadways) plan that will consider mobility, safety economic development, and quality of life.

VTrans recognizes the importance of freight transportation to the long term economic development and vitality of the state. The agency also sees a need to balance freight transportation with the public's concern that increased freight traffic on roadways degrades quality of life.

A consultant team, led by Cambridge Systematics, with assistance from the firms of Parsons Brinkerhoff and Fitzgerald & Halliday, Inc., was hired by VTrans to conduct the freight plan update. Costa Pappis is coordinating the development of the plan for VTrans. An Advisory Group will periodically meet to review and comment on the development of the plan. (*see list on reverse side*)

What's in that truck or railcar?

Getting a good picture of what kind of freight is moving through the state, where it's coming from and where it is going requires a bit of digging. Moving freight is a competitive business, so information is not readily shared.

To understand freight movements in Vermont, the consultant pieced together information from four different sources:

- **Global Insight's Transearch® Database** - data on freight movement by county and commodity group for air and truck transportation. All products shipped are identified through a standardized 'commodity code,' which permits classification and analysis of goods that are being transported.
- **Surface Transportation Board's Carload Waybill Sample** – a federal database using a stratified sample of waybills for U.S. rail traffic. A "waybill" is a document attached to goods in transit describing their nature, point of origin, and destination as well as the route the goods will travel.

- **Moody's Economy.com** – an economic and financial data analysis service used by governments, businesses, investors to understand the historical and projected outlook for local, regional, and national economies, and the economic sectors that they comprise.
- **Federal Highway Administration's FAF2 dataset** – a dataset published by the U.S. Department of Transportation containing historical and forecast freight flows, which is used to examine national and regional trends in goods movement.

Using data from federal and private sources, the consultant team learned where freight moving in the state begins and ends, how goods are characterized (food, minerals, stone, etc.), the weight and the value of freight and by what mode (e.g. rail and/or truck) shipments are made.

Goods moved in state

In 2007 there were about 48 million tons of freight moving on the Vermont transportation infrastructure with a value of \$54 billion. Approximately 80 percent of this tonnage moved by truck, while rail consisted of about 19 percent. These two modes basically carry all the freight into, out of, within, and through the state. Inbound and through shipments make up the largest portions of the overall freight shipments in the state with 36% and 37% of the tonnage respectively.

Inbound flows are primarily consumer goods being transported to Vermont including food, construction materials, chemicals/ medicines, paper, vehicles, and fuel. Approximately two thirds of these shipments (67%) come directly from or through New York State. Over 90% of these goods are transported by truck, while rail accounts for 8%, and a small portion is delivered by air.

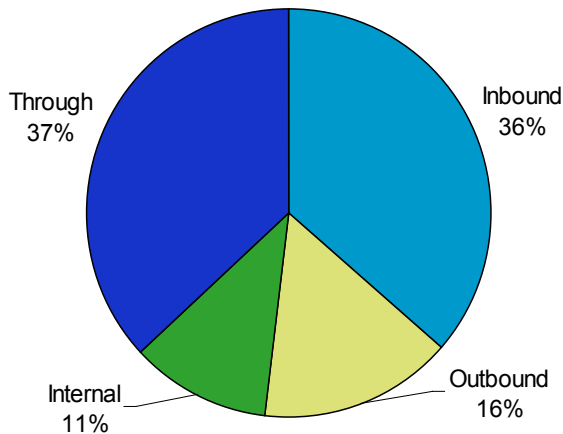
Domestic through flows are comprised of 60% truck and 40% rail moves primarily going to/from New Hampshire, New York, Massachusetts, Maine, and the East North Central region. The top commodities moving through Vermont include non-metallic minerals (e.g. sand, gravel), paper, food, petroleum products, and chemicals.

Outbound shipments account for 16 percent of total shipments by weight. Over 70 percent of these shipments are destined for

- Vermont Freight Plan -

New York, Massachusetts, and New Hampshire. The primary export is non-metallic minerals, followed by the clay/concrete/glass/stone commodity group, and food. The distribution by mode is similar to the inbound shipments, with trucks handling most of the load.

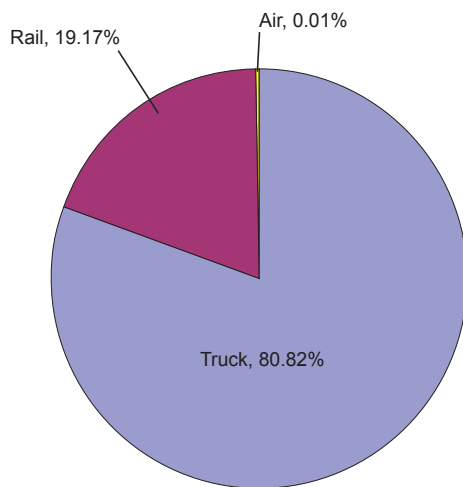
Total Freight Flows by Type of Movement, By Weight



Source: Transearch, STB Waybill, Cambridge Systematics (2007).

How most freight moves

Like most states, Vermont is dependent on trucks for transporting the vast majority of its freight. In 2007 trucks moved 80 percent of the freight tonnage going into, out of, through, and within the state, amounting to just over 39 million tons annually. Trucks also handled 83 percent of the commodities transported by value, representing \$44.9 billion.



Source: Transearch, STB Waybill, Cambridge Systematics (2007).

About 9.3 millions tons of freight valued at \$9.2 billion, or 17 percent of all freight, moved on Vermont's rail network. Non-metallic minerals, hazardous materials, and food are the top commodities transported by rail.

Air freight comprises a tiny percentage of movements by weight – only 0.01 percent, or 5.2 thousand tons and 0.03 percent, or \$17.9 million, by value. Air freight is typically lower in weight and higher in value when compared to rail and road deliveries. Chemicals and electrical machinery are often moved by air.

Top Commodities

The top commodities moved on Vermont's transportation infrastructure by weight are secondary moves, non-metallic minerals, clay/concrete/glass/stone, food, and chemicals. These five commodity groups accounted for approximately 86% of all freight traffic to, from, within, and through the State.

Commodity	Tons	% Share
Secondary Moves	9,572,954	31%
Non-metallic Minerals	7,623,311	25%
Clay/Concrete/Glass/Stone	3,725,767	12%
Food/Kindred	3,393,215	11%
Chemicals/Allied	1,996,514	7%
All Others	4,155,914	14%
Total	30,467,674	100%

Secondary moves comprise a broad range of goods that have been processed through a distribution center and shipped on to the final destination, most often a retailer or local distributor. In the process of re-shipping, multiple commodities are often grouped together into one shipment, and as a result it is no longer possible to specifically identify them. An example would be cheese shipped from Vermont to Pennsylvania through a distribution center in New Jersey, where the Vermont cheese would be co-loaded with dairy products from other origins for local delivery to food markets.

Non-metallic minerals include raw materials such as sand and gravel that are processed to create final products such as glass.

Study Advisory Group

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- **Roland Bellavance**, VT Truck & Bus Association/ Bellavance Trucking
- **Michele Boomhower**, Chittenden County MPO
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Additional information on the Vermont Freight Plan can be found at www.aot.state.vt.us/planning/freightplan.htm.