

**TRANSPORTATION OF MAINE FOREST PRODUCTS**  
**MAINE FUTURE FOREST ECONOMY PROJECT**



**CURRENT CONDITIONS AND FACTORS INFLUENCING THE  
FUTURE OF MAINE'S FOREST PRODUCTS INDUSTRY**

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# **TRANSPORTATION OF MAINE FOREST PRODUCTS**

## Transportation for Maine Forest Products

### Overview

Recognizing that freight transportation is increasingly important to the management and growth of the region's overall economic vitality, the Maine Department of Transportation enlisted Cambridge Systematics in 2002 to develop an *Integrated Freight Plan* (IFP). This report follows the first Integrated Freight Plan, completed in 1998.

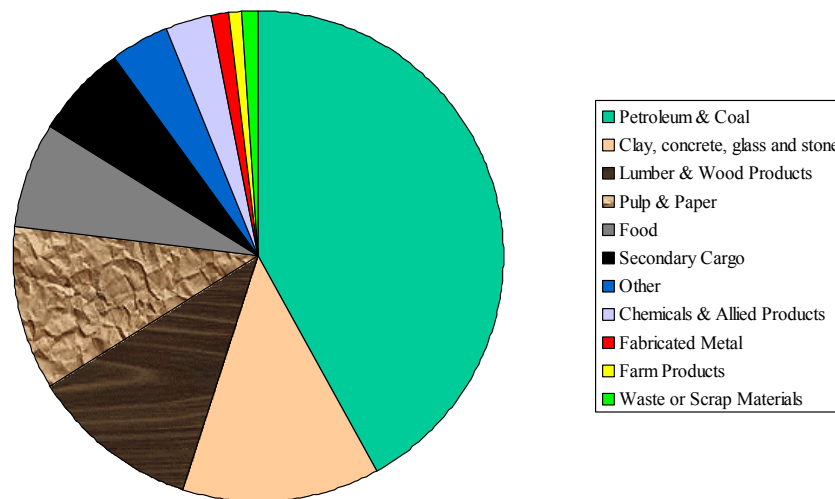
The goals of the 2002 IFP were to:

- Develop an updated freight profile for Maine reflecting changes to the freight transportation system and the evolution of the freight transportation industry;
- Build relationships with and identify the concerns of public and private freight stakeholders in the State; and,
- Recommend specific freight improvement projects and changes to Maine's freight planning program.



Freight transportation, important to all businesses, is crucial to the forest products industry, which relies on almost all modes of transportation but particularly truck and rail transport. For example, in 1998 the forest products industry accounted for two of the top four commodity groups in Maine. Among total commodity flows of 78.1 million tons in 1998, lumber or wood products (excluding furniture) accounted for 11 percent; pulp and paper products accounted for another 11 percent. The IFP projects these commodities to maintain their relative positions in 2006.

**Figure 137. Top commodities in Maine, 1998**



Data Source: Cambridge Systematics

### Issues Relevant to the Forest Products Industry

The 2002 IFP found that the transportation infrastructure in Maine meets the basic needs of businesses, but with some inefficiencies, additional costs to shippers and receivers, and restricted modal selection. The state's highway systems is generally adequate, with the exception of some smaller highways that pass through small community centers and that have narrow segments and steep inclines. Highway access is generally good at the Ports of Portland and Searsport but landside access to the port of Eastport is limited. Some see highway access in Portland as being inadequate and this is being reviewed as part of a proposed connection of Interstate 295.

The IFP identifies institutional issues affecting freight transportation in Maine. Although rail plays a key role in the forest products industry, trucking also is very important to it and many other industries in the state. Approximately 87 percent of freight tonnage moving into, out of, and within Maine was moved by truck in 1998. Most relevant to the



forest products industry are specific issues such as truck size and weight regulations and lack of adequate and consistent rail service. Many respondents to surveys conducted for the IFP noted their desire for increases in the maximum truck size allowed on Maine roadways, particularly on I-95. Another trucking issue relevant to the state level was frustration with regulations that require permits for 53-foot trailers within the state. With the increased use of these trailers, many other states have removed permit requirements and some shippers and carriers feel that the permit creates unnecessary administrative burden not imposed by other states.

The Maine Department of Transportation (MDOT) Office of Freight Transportation is working with Maine's Congressional delegation and the Federal Highway Administration (FHWA) to address some of these concerns<sup>173</sup>. The weight limits, in particular, pose a significant trade issue because Maine's highways lie in a NAFTA freight corridor, with provinces and states to the north and south having higher weight limits than Maine. This creates impediments to trade flows in the region. In 1998 Congress provided an exemption to these weight limits and allowed Maine to enforce its state weight limits on the Maine Turnpike. A condition of this exemption was that the state undertake a study "analyzing the economic, safety, and infrastructure impacts of the exemption." In 2002, MDOT conducted this study in conjunction with the Maine Turnpike Authority and the New Hampshire Turnpike Authority and contracted with Wilbur Smith Associates to study the impacts of the federal exemption. The study found that if Congress removed the current weight exemption on the Maine Turnpike, the net impact for Maine would be an increase of 5.0 crashes annually with associated FHWA defined economic impacts of \$443,000 per year. Similar results were found for New Hampshire, though with less impact. This is largely a result of keeping heavy trucks off smaller state highways and roads<sup>174</sup>.

A trucking logistics issue is created by the fact that Maine produces more goods than it consumes, meaning that inefficiencies are created with trucks returning empty to Maine. These "deadhead" miles increase transportation costs for shippers, carriers, and consumers. This is a significant problem for forest product manufacturers.

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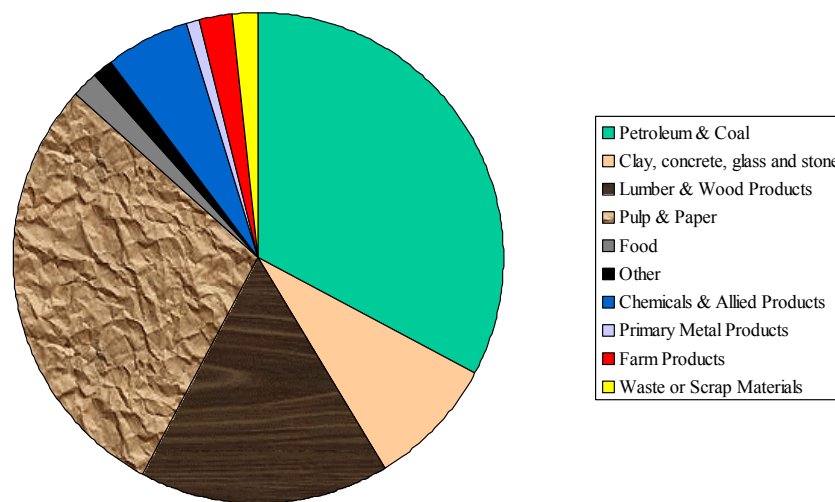
<sup>173</sup> Personal communication, Rob Elder, Maine Dept. of Transportation, Office of Freight Transportation.

<sup>174</sup> Study of Impacts Caused by Exempting the Maine Turnpike and the New Hampshire Turnpike From Federal Truck Weight Limits. Study conducted by Wilbur Smith Associates, June 2004.



The forest products industry has unique transportation needs. In general, the industry produces low-value, high-volume commodities that depend on cost-effective transportation for their shipment. This makes rail transportation very important to the industry and this is reflected in transportation statistics. The IFP points out that by weight, more than half of the products moved in Maine by rail are related to the forestry industry (pulp and paper, lumber and wood products, chemicals and allied products, and clay).

**Figure 138. Top Rail Commodities for Maine, 1998**



Data Source: Cambridge Systematics

Institutional rail issues in Maine reflect national trends. The IFP survey of service providers and users indicated that poor rail service is a key issue for Maine’s freight transportation system. Key issues include the lack of adequate and consistent rail service in the state. Six railroad companies serve Maine but many businesses do not have easy access to their services. The IFP notes that this is a result of abandoned rail sidings and short lines and lack of interest by the railroads in providing specific shippers with rail service. A further hindrance to efficient rail service in Maine is height restrictions that prevent the statewide operation of 286,000 pound rail cars and double-stack service in some areas. Some of Maine’s regional and short line railroads have the ability to handle such cars and double-stack service offered along some corridors, there is no current strategy to address these and other rail infrastructure issue at a statewide level.

Rail is extremely important to the forest products industry but inefficiencies in the system create added costs. As the IFP points out, the forest products industry is the “anchor”



customer for the regional rail carriers. The three main regional railroads connect with Class I carriers, which connects them to points across North America in the U.S. and Canada. These three also have connections in Chicago, which is a major destination for rail and intermodal traffic. The Guilford Rail System serves most of Maine's paper and forest products industry with a scheduled service package tailored to each mill. It is the only carrier to directly service the Port of Portland. Although Maine has good connections to Class I carriers, Maine rail shippers must use multi-line rail service to reach distant markets. This can be more expensive and less timely because of the need to shift loads among different rail lines, rather than move products on a single railroad.

MDOT has also been working to address these issues. In particular, several sections of key rail infrastructure have been upgraded, in particular along the Montreal and Atlantic railroad line. Also, double-stack service is now available on the Auburn-Montreal and Montreal and Atlantic lines. The rail weight limits remain a concern because of outdated rail.<sup>175</sup>

Ports are also important to the forest industry. Maine has three main ports: Eastport, Searsport, and Portland. The primary customer of the port in Eastport is Domtar. Eastport is the deepest natural port in the United States and can accommodate ships with drafts of up to 64 feet. Furthermore, it is the closest U.S. port to Europe. Unfortunately, the port of Eastport lacks direct rail access, with the closest rail head 17 miles away at the Ayers Junction of the state-owned Calais Branch Railroad. A study of the feasibility of establishing one or more rail-to-truck trans-load facilities along the Calais Branch Railroad indicated that such a project might lead to slightly increased freight traffic through the port of Eastport. All three of Maine's major ports recently added significant warehouse capacity totaling approximately 160,000 square feet. These were added through a combination of private investment and public-private partnerships.

## Conclusion

Freight transportation, important to all businesses, is crucial to the forest products industry, which relies on almost all modes of transportation but particularly truck and rail transport. These modes of freight transportation are generally adequate in Maine but demonstrate some inefficiencies due to a variety of institutional issues, including truck size and weight regulations, lack of adequate and consistent rail service within the state, railroad weight and height regulations, a significant amount of empty back-haul loads for trucks, and incomplete networks connecting ports to other modes of transportation. Maine's *Integrated Freight Plan*, developed for the Maine Department of Transportation, offers recommendations for addressing all of these issues.

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<sup>175</sup> Personal communication, Rob Elder, Maine Dept. of Transportation Office of Freight Transportation.

