



THE FREIGHT RAIL SYSTEM: MOVING ESSENTIAL COMMODITIES FOR OREGON'S ECONOMY

Today, America's freight railroads serve nearly every industrial, wholesale, retail, and resource-based sector of the economy, operating over a network of nearly 140,000 miles. Railroads account for approximately 40 percent of intercity freight volume — more than any other mode of transportation. Together with their counterparts in Canada and Mexico, North America's freight railroads form the world's most efficient, cost effective, and reliable freight rail system in the world.

Fossil fuels like coal and oil have always been transported via rail. However, these are just two of the many commodities critical to our way of life that must be transported by the freight rail system.

GRAIN AND OTHER FOOD PRODUCTS

The U.S. is the world's top grain producer and exporter, and railroads are critical to its transportation. In 2013, U.S. Class I railroads originated 1.3 million carloads of grain — accounting for 4.6 percent of total carloads — or 124.5 million tons. Grain is also a key commodity for scores of short line and regional freight railroads. U.S. freight railroads carry more corn than any other type of grain, well ahead of wheat and soybeans. In addition, railroads carry smaller amounts of oats, rice barley, rye, and sorghum. Railroads also haul large amounts of grain-related food products such as soybean cake and meal, corn syrup, flour, animal feed, and more.

The nature of U.S. grain production and consumption patterns is volatile and complex. For example, large fluctuations in grain production are common from one year to the next — especially in the global grain markets. Plus, weather, soil conditions, government policies, conditions in importer countries, crop prices, and many other factors determine what crops are grown and where they are transported. Freight rail has the agility and flexibility to meet the demand peaks and valleys for this important commodity.

In addition to grains, farm-fresh produce and frozen foods from across the country are available to consumers year-round thanks to freight rail's fast, reliable, and sophisticated climate technology. Railroads rely upon "cold trains" that maintain perishables at key temperatures during loading, shipping, and unloading, and Railx

refrigerated rail cars control temperature and humidity throughout the journey. Together, innovations like these allowed railroads to deliver hundreds of thousands of carloads of perishable foods in 2013 to grocers, restaurants, and kitchen tables across the nation.

INTERMODAL

Rail intermodal, the transportation of shipping containers and truck trailers by rail, is used to haul a huge variety of goods that Americans use every day: furniture, frozen foods, electronics, auto parts, and other consumer goods. Intermodal has been growing rapidly for many years and has supplanted coal as the largest single source of rail revenue. For the rail industry, 2013 was a record-breaking year with railroads moving 12.8 million containers and trailers — and railroads are projected to move even more in 2014. Today, exports and imports account for around half of U.S. intermodal traffic, down from closer to 60 percent from 2007 and 2008. The domestic share of intermodal traffic has been rising in recent years as goods that used to move solely by truck are now moving by rail.

CLEAN ENERGY — ETHANOL AND WIND ENERGY

Ethanol (ethyl or grain alcohol) is a renewable biofuel used to power vehicles and other internal combustion engines. About 90% of ethanol is manufactured from corn (also usually carried by rail to the ethanol manufacturing facility). Ethanol is the highest-volume chemical carried by U.S. railroads.

With more than 8,000 parts and weighing up to 335 tons, wind turbines are a major transportation challenge. Today, more than 400 manufacturing plants across the U.S. build wind turbine components. Wind turbine components are also manufactured internationally. The Port of Longview, just north of Portland, Oregon, has become one of the nation's top entry points for wind energy equipment. The port designed a specialized system to move them from the dock directly to rail cars, eliminating the need for trucks in that stage of the transportation process.

The U.S. Energy Information Administration projects that wind power capacity will increase by 8.6 percent in 2014 and 13.9 percent in 2015. Electricity generation from wind is projected to contribute 4.5 percent of total electricity generation in 2015.

FOREST PRODUCTS

In a typical year, America's freight railroads carry more than a million carloads of lumber and paper products, including wood used to build homes, newsprint and magazine paper, paperboard for packaging, and more. Railroads also haul tens of thousands of carloads of scrap paper each year for recycling. Wood products make up 47% of all raw materials used in manufacturing in the U.S. Nearly 100% of a log can be used to make lumber and other consumer products.

Oregon is the number one lumber producer in the U.S., accounting for 18% of total U.S. softwood lumber production. The state's forest sector employs approximately 57,000 Oregonians with an annual payroll of \$2.1 billion. Oregon currently harvests about 1/10 the lumber taken in the 1980s, making the industry sustainable for the future. Oregon forestland owners must adhere to some of the strictest environmental standards in the world through compliance with the Oregon Forest Practices Act.

Sources:

Association of American Railroads | Progressive Railroading Magazine | Texas Comptroller of Public Accounts | The New York Times | Oregon Forest Industries Council