

# Crude-by-Rail Transportation in Minnesota

# Railroads operating in Minnesota

Shipping freight on rail lines allows us to move goods through the state and provides access to global markets. Minnesota relies on rail to a greater degree than many other states for freight movement. Railroads move more than one trillion tons of freight per year through Minnesota. Half of that originates or terminates in the state. Our share of rail transportation exceeds the U.S. average by almost 30%.

### Why crude-by-rail transportation is important

Beginning with deregulation in the 1980s, the volume of freight movements has steadily increased, causing congestion on existing rail lines. The dramatic increase in oil coming out of the Bakken region since 2005 has exacerbated the problem. Railroads have reached their current capacity to efficiently move freight.

# Bakken oil shipments today

Since 2005, the Bakken shale oil and gas fields in North Dakota, Montana and Saskatchewan have become a major new source of high quality petroleum crude oil and natural gas. The Bakken oil fields are currently producing 1 million barrels per day, more than 10% of U.S. production, and that could increase to 2 million barrels per day by 2023.

Railroads carry 70% of new oil coming from the Bakken region. BNSF transports the majority of Bakken crude through the state each day, about 5 or 6 trains of 110 cars, each car carries 100 tons of crude. Canadian Pacific carries another 1 to 2 trains per day of Bakken crude oil. These volumes are expected to increase over the next few years.

## Railroad regulators

Railroads are primarily regulated by the federal government. MnDOT coordinates rail crossing safety, trunk highway projects and rail regulatory and inspection activities for more than 4,500 public highway-rail grade crossings throughout Minnesota.

# Actions MnDOT is taking

- In 2014, Governor Dayton signed into law an assessment on railroads to hire three additional railroad inspectors – 2 track inspectors and 1 hazmat inspector. These inspectors have been hired and are in the federal training and certification process, expected to last approximately 6 months.
- The law also appropriated \$2 million for new rail grade crossings along oil routes. MnDOT is conducting a study to prioritize how these investments will be made. The study will be complete by October 31, 2014, and safety improvements will be installed in 2015.

# MnDOT Rail Programs

For more information about MnDOT's freight programs, visit MnDOT's website at: <a href="http://www.dot.state.mn.us/ofrw/freight/freight.html/">http://www.dot.state.mn.us/ofrw/freight/freight.html/</a>.

**Minnesota Rail Service Improvement Program** is a zero-interest revolving loan program to shippers, short lines and communities to improve rail infrastructure and shipping facilities. Loans are typically \$250,000 per project, but sometimes can be up to a \$1 million or more.

**Section 103 Grade Crossing Safety Program** administers \$3 to \$5 million per year in federal grants to upgrade crossings with poor safety ratings. Typically 15 to 25 deficient crossing per year are upgraded.

**Antiquated Equipment Replacement Program** administers about \$2 million per year in state funding to replace obsolete warning and signal systems at selected grade crossings. Since 2011, \$7 million in bonding has been appropriated for this purpose.

**Crude-By-Rail Grade Crossing Safety Study** will evaluate and upgrade key crossings on the major crude oil routes. \$2 million was included in the 2014 supplemental budget bill which will fund about eight grade crossings identified in the report due October 31, 2014.

**Operation Lifesaver** is a joint MnDOT and railroad education program about the dangers of grade crossings and trespassing on railroad right-of-way. It is aimed primarily at elementary school children. MnDOT is contributing \$30,000 per year to the program. Most of the presenters are volunteers, including active and retired railroad employees and other partners.

#### Quiet zones

A quiet zone is a railroad segment where train crews do not routinely sound the horn at highway crossings. The Federal Railroad Administration (FRA) oversees the requirements to establish quiet zones; in Minnesota, local governments are responsible for all costs associated with these zones.

A railroad segment may qualify for an FRA quiet zone designation if supplemental or alternative crossing improvements are made to mitigate safety by the lost train horn. Improvements may be crossing closures, one-way conversions, quad gates, medians, signs and pavement markings. For more information, visit FRA's website at: <a href="http://www.fra.dot.gov/eLib/details/L03055">http://www.fra.dot.gov/eLib/details/L03055</a>.

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#### Further information

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