

Soy Transportation Coalition

Railroad Movement of Soybeans and Soy Products



DATA SOURCES

Several different publicly available data sources were used in the development of the analyses included in this report and in the evaluation of U.S. railroad movements of soybeans and soy products, including:

- ◆ U. S. Department of Agriculture (USDA) Annual Crop Reports;
- ◆ U.S. Census Bureau Report titled: *Fats and Oils: Oilseed Crushings*;
- ◆ 2006, 2007, 2008 and 2009 Annual Reports of Freight Commodity Statistics (FCS), submitted by U.S. Class I railroads to the STB;
- ◆ The 2006, 2007 and 2008 Public Waybill Sample (PWS) developed by the STB, which are data bases including over 600,000 records of U.S. railroad movements;
- ◆ Uniform Railroad Costing System (URCS) data for individual U.S. Class I railroads developed by the STB;
- ◆ USDA *Study of Rural Transportation Issues*, April, 2010;
- ◆ *The Rail Transportation of Grain*, Volume 7 (2009 data), published by the Association of American Railroads (AAR), Policy and Economics Department, August 4, 2010;
- ◆ Other publicly available data and internal sources.

The AAR's annual grain report (*The Rail Transportation of Grain*) is a good source for information concerning the production and railroad transportation of soybeans and soy products. It is available for purchase online from the AAR. The tables and data included herein, however, were independently developed by GWF, but may include information which is also included in AAR's grain report.

The most current data available for use in evaluating individual railroad movements is the STB's 2008 PWS data. Several charts and tables herein are based on this database. The STB's 2008 PWS includes approximately 8,000 records of railroad movements of soybeans and soy products. An individual railroad movement (i.e., the movement of a specific commodity moving over the same railroad route and involving the same origin and destination pair) may involve a single PWS record or multiple PWS records.

There are several inherent problems with the STB's PWS data which make it difficult to accurately analyze individual railroad movements. For example, for confidentiality reasons, the STB's PWS does not identify specific locations, such as the Standard Point Location Code (SPLC), nor does it identify the individual railroad(s) involved in the movements. For this report, it was not necessary to identify the specific origins and destinations and the individual Class I railroads were identified based on BEA and other information included in the individual PWS records.

Revenue/Variable Cost (R/V/C) ratios have been historically used in the evaluation of railroad freight rates. For example, the STB's jurisdictional threshold has been set by Congress at a R/V/C ratio of 180%. For this report, R/V/C ratios were developed based on the revenue (rates plus fuel surcharges) of the individual PWS records and the developed 2008 URCS variable cost data.

The STB's PWS also does not include URCS variable cost information necessary to develop the R/V/C ratios for the individual records. The variable costs were developed based on the STB's most current URCS data (2008) for the identified railroads involved in each movement. Regional URCS data was used for movements involving non-Class I railroads and for records where the railroad could not be accurately identified. The variable cost approach utilized closely follows the STB's "unadjusted" URCS costing methodology as set forth in STB Ex Parte No. 646 (Sub-No. 1), Simplified Standards For Rail Rate Cases, served September 5, 2007. The STB's "unadjusted" URCS jurisdictional costing approach disallows adjustments to reflect the actual economies of individual movements. It generally overstates the actual variable cost associated with most rail movements of soybeans and soy products, which often move in efficient multiple car and trainload shipments.

The 2008 revenues and developed costs have not been indexed to a current level. Since freight charges on soybeans and soy products have increased since 2008 and costs have remained fairly level, it is likely that the R/V/C ratios have increased as well.

The developed R/V/C ratios have been grouped into four (4) R/V/C groups:

- R/V/C < 180% (Below STB Jurisdiction)
- R/V/C \geq 180% and < 200%
- R/V/C \geq 200% and < 300%
- R/V/C \geq 300%

Despite the problems associated with the STB's PWS and URCS data, the analyses and summaries that have been developed and presented herein provide a fairly accurate picture of U.S. railroad movements of soybeans and soy products.

