



# THE IMPACT OF JUMBO HOPPER CARS ON KANSAS SHORTLINE RAILROADS

Report Number: K-TRAN: KSU-04-3

By

Michael W. Babcock and James Sanderson, Kansas State University

#### Introduction

Class I railroads have been replacing 263,000-pound (loaded weight) covered hopper cars capable of handling 100 tons of grain with 286,000-pound covered hopper cars that can handle 111 tons. While these heavier cars provide a decrease in railroad cost per ton-mile for the Class I (Union Pacific and Burlington Northern Santa Fe) Railroads; they will cause a significant increase in operating and maintenance costs for the shortline railroads in the state of Kansas.

## **Project Objective**

Currently the shortline railroads make up 44% of the Kansas rail system. Five of the major shortline railroads that were consulted in this study found that at least 70% of their mainline tracks would need to be upgraded in order to efficiently and safely handle the 286,000 pound cars. Eight-six percent of their bridges would also need to be upgraded. The total cost to upgrade the tracks and bridges is estimated at \$308.7 million, a sum the shortlines are unlikely to be able to obtain in the private capital market.

# **Project Description**

An analysis was done that indicated that none of the shortlines can earn an adequate rate of return on upgrading track and bridge investment at their current traffic densities and other characteristics, thus abandoning the lines is a possibility.

### **Project Results**

Kansas has an economic interest in preserving shortline rail service since shortlines annually save the state at least \$58 million per year in avoided road damage cost, and also save the state's wheat shippers \$20.7 million in wheat transportation handling costs. The Federal government, Class I railroads, the state of Kansas, and wheat shippers all have an interest in keeping shortline rail service in Kansas viable.

## **Report Information**

For technical information on this report, please contact: Michael Babcock, Department of Economics, Kansas State University; 317 Waters Hall; Manhattan, KS 66506; Phone: 785-532-4571; Fax: 785-532-6919; e-mail: <a href="mwb@ksu.edu">mwb@ksu.edu</a>.

For a copy of the full report, please contact: For a copy of the full report, please contact: KDOT Library; 700 SW Harrison Street, Topeka, Kansas 66603-3754; Phone: 785-291-3854; Fax: 785-296-6665; e-mail: library@ksdot.org.