ECONOMIC IMPACTS OF RAILROAD ABANDONMENT ON RURAL KANSAS COMMUNITIES

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RESEARCH

Introduction

Increasing railroad abandonment and other changes in the Kansas grain transportation system have lead to increased trucking of grain. Further losses of shortline railroads would have negative effects on rural Kansas communities, including increased road damage costs and reduction in farm income. Policy makers should account for these effects when developing an effective state rural transportation program.

Project Objective

This research measured quantifiable impacts of shortline railroad abandonment in Kansas through the following four research tasks. First, an assessment of Kansas county road conditions and financing was conducted to determine the ability of counties to absorb the resulting incremental heavy truck traffic. Second, the changes in wheat handling and transportation costs were computed. Third, the increase in truck-attributable road damage costs to Kansas county and state roads was computed. Fourth, the additional highway accident benefits and costs attributable to the resulting incremental truck traffic were calculated.

Project Description

The western two-thirds of Kansas was selected as the study area. County road officials were interviewed and surveyed to assess county road conditions and finances. GIS routing software was used to model the wheat handling and transportation costs with and without shortline railroads. Using the results of the GIS transportation model and an existing pavement damage model, the additional damage costs to county and state roads are calculated. Finally, the safety cost was calculated using the estimated increased truck miles driven, accidents per mile traveled data and costs per accident. Benefits accruing from elimination of on-grade rail-crossing accidents were subtracted from the safety costs to calculate the net annual safety impact of shortline railroad abandonment.

Project Results

The four shortline railroad systems in the study area annually saves the state of Kansas $57.8 million dollars in road damage cost, $20.7 million in additional transportation and handling cost, and $1.3 million in incremental highway safety costs.

Report Information

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