



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Proceedings of the Transportation Research Forum

Volume 4

1989



31st TRF Annual Forum
Williamsburg, Virginia

October 11-13, 1989

19 470AA XL1
11/94 02-013-01



**Session 4-A: Rural Transport Issues:
Rail and Motor Carrier**
*Session chair: Gene C. Griffin,
Upper Great Plains Transportation Institute*

Local Rural Roads: A Policy Analysis, by Cathy A. Hamlett, Sherry Brennan, and Dr. C. Phillip Baumel.

Cathy A. Hamlett is with the Pennsylvania State University.

Sherry Brennan is with Falcon Cable TV.

Dr. C. Phillip Baumel is with Iowa State University, Ames, Iowa.

The local rural road system is in a state of deterioration in most states. At the same time, owners of today's expensive cars and of the increasingly larger trucks traveling on local rural roads are demanding higher quality roads. A traffic simulation model, along with primary data collected by personal interviewers or residents on local rural roads, is used to investigate investment policy options for the local rural road system. Investment policies include road abandonment, conversion of low-volume roads to low-maintenance roads, returning selected roads to private drives and reconstructing selected posted bridges. Larger net benefits were obtained for converting low-volume roads to low-maintenance roads and private drives and from not reconstructing selected bridges. The road abandonment analysis indicated that abandonment would create positive net benefits on only a small percent of the local rural roads. The analysis indicates that the optimal restructuring of the local rural road system would include multiple investment and disinvestment strategies and the optimal mix of strategies will likely vary by locations within states and among states.

Changing Costs and Characteristics For Exempt Motor Carriers, by Frank J. Dooley, Wesley W. Wilson, and Leslie M. Bertram

Frank J. Dooley and Leslie M. Bertram are Transportation Economists, Upper Great Plains Transportation Institute, North Dakota State University, Fargo, North Dakota.

Wesley W. Wilson is Assistant Professor of Economics, University of Oregon, Eugene, Oregon.

Performance of the North Dakota grain trucking industry has been mixed during the past decade. Grain shipments by truck have declined in absolute and relative terms. Much of the decline can be attributed to the introduction of multiple-car rail rates and the ensuing changes in the grain elevator industry.

The grain trucking firms which have survived the industry decline have improved operationally and lowered costs. From an operations perspective, evidence suggests that grain trucking firms have improved the utilization of their equipment. Increases in the percentage of loaded miles (i.e., revenue generating miles) and the average payload are both indicators of a healthy trucking industry.

Using an economic-engineering costing model, the typical firm's average total operating costs are estimated to be 0.8990 dollars per mile. Expressed in 1986 dollars, this represents a 27.3 percent drop in total operating costs between 1979 and 1986.