


5-7-1981

South Dakota Agricultural Transportation Outlook for the 1980s

Charles E. Lamberton
South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/econ_comm

 Part of the [Agricultural and Resource Economics Commons](#), and the [Regional Economics Commons](#)

Recommended Citation

Lamberton, Charles E., "South Dakota Agricultural Transportation Outlook for the 1980s" (1981). *Economics Commentator*. Paper 160.
http://openprairie.sdstate.edu/econ_comm/160

This Newsletter is brought to you for free and open access by the Economics at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Economics Commentator by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



Editor: Donald C. Taylor

Economics Department SDSU, Box 504A Brookings, SD 57007

Tele: (605) 688-4141

No. 162 & 163

May 7 & 21, 1981



South Dakota Agricultural
Transportation Outlook
for the 1980's

by Charles E. Lamberton
Associate Professor
of Economics

Editor's Note: The Newsletter is carrying a three-part series on transportation. The first two parts are reported in this combined issue. The third part will be published on June 4th.

Introduction

Significant technological developments have occurred in the production, handling, and transportation of grain since World War II. Producers now use improved and higher producing farm inputs, much larger-scale machinery, and more sophisticated approaches in farm and marketing management. Greatly increased production requires larger, faster grain handling systems which in turn requires larger elevators and sub-terminals. To assemble the increased quantities at these larger facilities, producers use large farm trucks and even tractor-trailer combinations carrying 850 bushels or more.

Technological developments in railroading include improved signaling equipment, diesel-electric locomotives, 100-ton cars, and specialized equipment such as the covered hopper car. The use of multicar and unit train operations has enabled improved railway management. At the same time, the efficiency and convenience of the modern over-the-road truck and the public provision and maintenance of high quality highways have caused much of the grain traffic which formerly moved by rail to be handled by truck.

All of these changes have individually and collectively altered the eco-

nomics of grain handling and transportation. The economic changes inspired new changes in technology and, perhaps belatedly, changes in the social and political institutions and attitudes with respect to transportation. At the same time that larger, more powerful trucks were being built to move over wider, stronger, and faster highways, Americans continued to expect the same rail services -- including those on low-density branchlines -- that had been provided prior to the era of modern truck technology. The legal and regulatory institutions thereby resulting, while consistent with social desires, often failed to face the economic realities of declining rail traffic and revenues and increasing rail costs.

The bankruptcy of the Penn Central in 1970 provided the initial shock that led to the passage of a series of acts intended to deal with the basic technical and economic problems of the rail industry. The Regional Rail Reorganization Act of 1973 that replaced the Penn Central with the subsidized Consolidated Rail (Conrail) Corporation did not, however, take into account the economic infeasibility of operating the extensive Penn Central branchline network. Based on the experience with Conrail, Congress passed the Railroad Revitalization and Regulatory Reform (4 R's) Act of 1976. The 4 R's Act is intended to improve railroad profitability by expediting the decision-processes for railroad abandonments and mergers and allowing more flexible freight rates. The Act also requires states to become involved in rail system planning and provides funds for branchline rehabilitation.

Railroads in South Dakota

South Dakota's rail system began to be restructured through branchline abandonments beginning in 1965 (Table 1). The first wave of abandonments extended until 1972. Of the 22 abandon-

ments in these years, 13 reflected decisions by the Chicago & North Western (C&NW) Transportation Company to rid itself of uneconomic light-density branchlines.

Table 1. South Dakota Rail Branchline Abandonments

Year	Number	Miles	Year	Number	Miles
1965	1	5.3	1973	0	0
1966	2	35.4	1974	1	26.0
1967	1	47.7	1975	1	41.0
1968	2	53.2	1976	1	4.1
1969	3	65.5	1977	4	143.0
1970	4	128.5	1978	3	210.2
1971	5	73.8	1979	7	256.5
1972	4	122.9	1980	23	1,085.8

The passage of the 4 R's Act in 1976 coincided with the beginning of a second wave of rail abandonments in South Dakota. By that time, both the general public and state rail officials recognized that trying to maintain and operate all the state's branchlines was economically infeasible. Efforts were concentrated on determining which lines were essential to the existence of a healthy minimum rail network for the state, and which lines were not.

The 1976 South Dakota Legislature repealed several sections of state law which imposed burdensome regulations and expenses on railroads. In 1978, laws were passed to (1) accommodate the handling of federal 4 R's Act funds; (2) facilitate rehabilitation through an "Iowa Plan" which allows railroad companies, shippers, and the state to share in rehabilitation expenses and provides financial incentives for shippers to use the rail service; and (3) allow the formation of Regional Railroad Authorities intended to facilitate local units of government joining together to maintain localized rail services. The 1979 Legislature repealed further railroad regulations. Legislation in 1980 transferred many of the remaining regulatory responsibilities from the Public Utilities Commission to the Department of Transportation to allow more comprehensive and coordinated transportation planning.

During the late 1970's, the financial plight of the Chicago, Milwaukee, St. Paul, and Pacific Railroad Company (the Milwaukee) became unbearable. A Court-appointed Trustee was charged with the task of planning a major reor-

ganization of the Milwaukee. The Trustee seriously considered abandoning the line from the Twin Cities to the Pacific Northwest. Since this line provides the only route by which coal can be delivered from the mine at Gascoyne, N.D. to the power plant at Big Stone City, S.D., loss of this rail service would have imposed a severe economic hardship on the region. To keep the line operating, a \$2.3 million rehabilitation project was undertaken in 1979. While the Trustee's plan was acceptable to the Court, it was rejected in March 1980 by the Interstate Commerce Commission (ICC) on the grounds that the expected return on capital was less than the minimum ICC target level.

Recognizing that the Milwaukee would abandon service and remove all of its lines in South Dakota, the 1980 Legislature took a major new initiative. The South Dakota Railroad Authority was established with the power to purchase rail properties from private railroad companies. The purchase was to be financed by the imposition of a one percent retail sales tax. The tax would be automatically repealed on June 30, 1981, or upon reaching a total revenue of \$25 million. In October 1980, the Court approved the Railroad Authority's purchase of some 760 route miles and other facilities from the Milwaukee for about \$19 million.

As part of a bill dealing with the liquidation of the Rock Island, Congress directed the ICC to provide funds for 30 days of directed service on lines of the Milwaukee immediately preceding their acquisition by the state. Directed service involves the ICC directing another railroad to provide rail service over lines of a bankrupt railroad. The operating railroad is guaranteed a six percent profit, with any shortfall to be covered by the Federal Railroad Administration (FRA).

South Dakota can take advantage of this mandated directed service during the first 30 days of any operation authorized for the state system. Thus, much of the cost of reopening and rehabilitating the purchased track could be covered by the federal funds. This would require an intensive effort during the short 30-day period.

The Staggers Rail Act of 1980 extends the policies covered in the 4 R's Act of 1976. The principal intentions are to facilitate the restructuring of both the physical rail system and the rail rate system, so as to improve the financial condition of the railroads. The physical restructuring of the rail system is intended to incorporate a number of large regional or transcontinental railroads into a national rail system. Both the 1976 and 1980 Acts support this philosophy by allowing railroads faster and easier abandonment of light-density branchlines. This allows smaller regional railroads such as the Milwaukee and C&NW to become more attractive for takeover by or merger with larger national railroads.

The Staggers Act also accelerates the decision making process in rail merger cases. This provision is significant to South Dakota in that the state's rail system consists of only one major railroad -- the BN with approximately 475 route miles -- and two regional railroads, the Milwaukee and C&NW. As the latter are reduced by abandonment and sale, shippers lose rail service, rail competition is reduced, and market access restricted. Loss of rail service on some branchlines may result in improved service on other lines, implying that shippers as a group may benefit while some individual shippers are injured.

The Staggers Act provisions for restructuring rail rates recognizes competition among railroads, trucks, and barges for traffic. The ratemaking freedoms include: (1) railroads can charge rates up to a maximum, based upon the variable costs of the service on traffic where railroads do not exercise "market dominance," i.e., where trucks or barges can conceivably compete for the traffic; (2) railroads can raise rates with increases in a quarterly index of railroad costs; (3) railroads can reduce rates to meet truck and barge competition as long as rates cover the variable costs of the service; (4) for three years a railroad can levy a surcharge on its share of a rate if its rate does not exceed its variable costs by more than ten percent, and on light-density branchlines a railroad can levy surcharges to cover

the total cost of service; (5) a railroad can cancel a joint rate on traffic moved jointly with another railroad if the rate does not exceed variable costs by more than ten percent; and (6) railroads are permitted to contract for service and rates with individual shippers.

These provisions will affect South Dakota shippers. The structure of grain gathering rates has historically been based upon mileage, and hence shippers in South Dakota have paid higher rates to move grain to the east than those in Minnesota. Because rates were also based upon the value of the commodity being shipped and South Dakota shipped primarily low-valued bulk commodities, the rate differential was not enough to price South Dakota products out of the markets. As export markets were developed and more grain moved on the Mississippi River and Great Lakes, trucks took the shorthaul business away from the railroads. Much of the grain produced in Minnesota and Iowa could be moved to water less expensively by truck.

The new ratemaking freedom will allow railroad rates to be based on the higher variable costs of serving South Dakota shippers. It will allow rates to be as low as variable costs where trucks and barges are tough competitors, and as high as 160 to 180 percent of variable costs where they are less competitive. South Dakota rail shippers may therefore have to pay a larger share of railroad fixed costs than they have in the past. The remaining light-density branchlines in the state may have surcharges placed on traffic. Such surcharges will effectively raise rates, divert traffic to the highways, and accelerate the branchlines' abandonment.

The ability of railroads to contract with individual shippers may also work to the detriment of South Dakota agriculture. Favorable contract terms are more likely in areas (1) with a high production density, (2) in proximity to major international grain trading firms, and (3) where alternative modes of transportation (such as barges) are available. Judged by any of these criteria, shippers and producers in South Dakota are disadvantaged



Third class mail
(Bulk Mail)

Postage and Fees Paid
U. S. Department of
Agriculture
AGR 101

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

Cooperative Extension Service
U. S. Department of Agriculture
South Dakota State University
Brookings, South Dakota 57007

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the USDA, Hollis D. Hall, Director of Cooperative Extension Service, SDSU, Brookings. Educational programs and materials offered without regard to age, race, color, religion, sex, handicap or national origin. An Equal Opportunity Employer.

relative to those in states such as Iowa and Illinois.

The growth of Asian grain markets and grain traffic through the Pacific Northwest ports, however, could offer South Dakota producers an opportunity for greater earnings. Corn and sorghum produced in the southeast and east central regions of the state are being trucked to Minnesota and Nebraska where unit train rates are available from the BN and Union Pacific (UP) railroads. Similarly, wheat and barley from northern South Dakota are being trucked to Minnesota and North Dakota to take advantage of BN's unit train rates.

Whereas the unit train rates are more favorable for South Dakota producers, the necessity for South Dakota grain to be trucked longer distances to reach the mainline rail service will place producers in South Dakota generally at a disadvantage relative to those in neighboring states. The degree of disadvantage will be less for producers in southern S.D. -- because of competition between BN and UP for west-bound grain -- and relatively greater in northern areas where the BN is the only rail service to the Pacific ports.

In 1981 the South Dakota Legislature approved a subsidy plan for the operation of state owned lines by a private company. Funds for the subsidy are to be raised by a one cent per gallon motor fuels tax for a three year period. Even with this service, South Dakota will face some difficult rail problems in the 1980's. These include: (1) retaining service on the Milwaukee line from the Twin Cities to Miles City and the C&NW line from Mankato to Rapid City; (2) ensuring long term service on the state owned system; (3) obtaining traffic outlets through both the BN and UP; and (4) encouraging shippers to invest in loading facilities on the state system.

These problems are all related to the basic need of South Dakota's rail system -- the need for more rail traffic. This requires investment in shipping facilities which will only occur if there are diverse outlets for traffic and certainty of long-term service.