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Restructuring a Rail System: South Dakota's Experience from 1976-81

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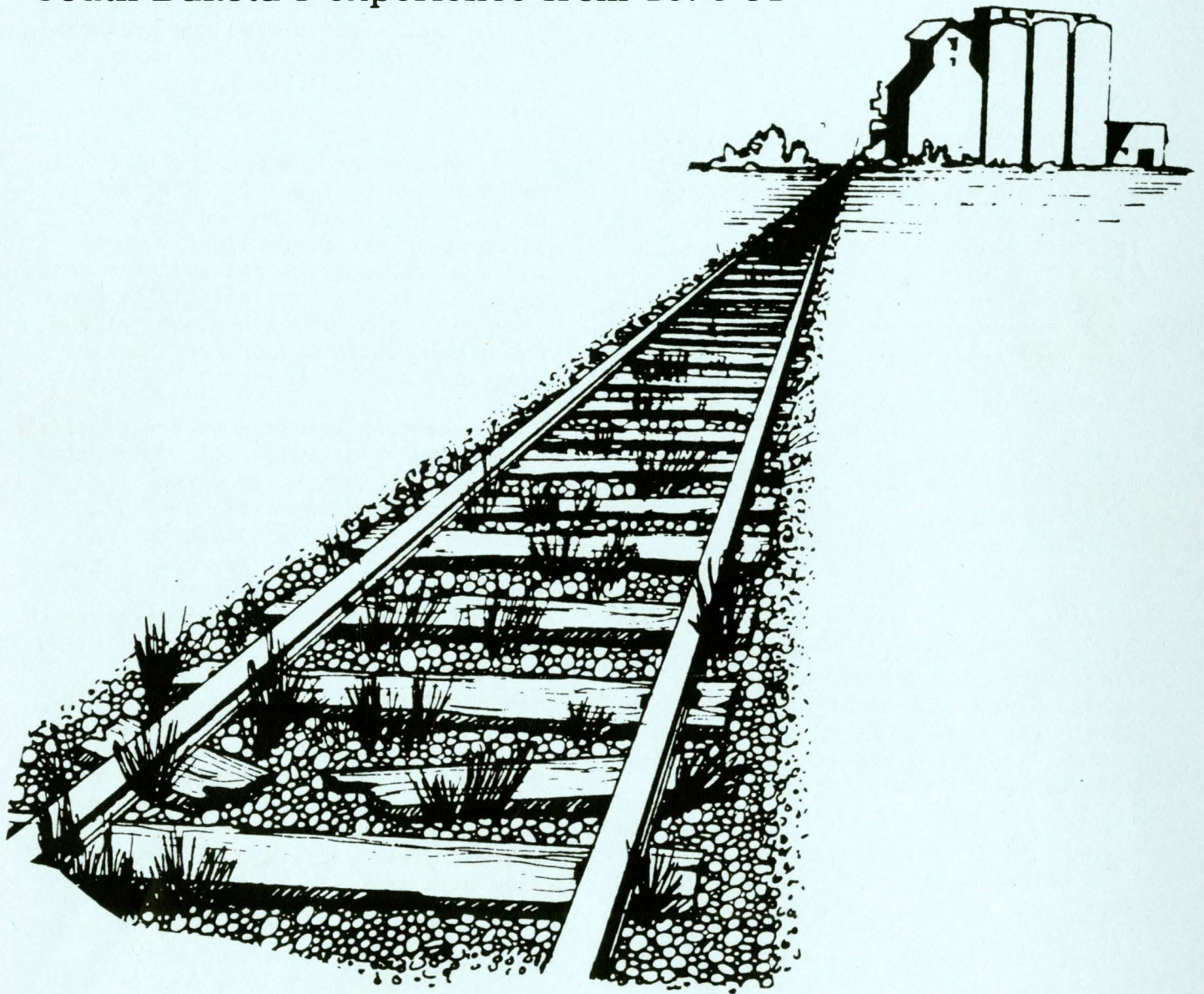
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Restructuring a rail system

South Dakota's experience from 1976-81



Restructuring a rail system

South Dakota's experience from 1976-81

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Introduction

This report is a summary of the restructuring of South Dakota's railroad system between 1976 and 1981 and of a series of six studies on the feasibility of branchline rail service in South Dakota. Each of the six studies examined the economic feasibility of a specific branchline. The lines studied were:

1. Andover to Brampton, ND;
2. Roscoe to Linton, ND;
3. Trent to Elk Point;
4. Napa to Platte;
5. Mitchell to Rapid City; and,
6. Blunt to Gettysburg.

The first five lines were abandoned in 1980 by the Chicago, Milwaukee, St. Paul, and Pacific Railroad Company (Milwaukee) during bankruptcy and reorganization proceedings. The sixth is a light density branchline of the Chicago and North Western Transportation Company (C&NW).

Milwaukee's bankruptcy threatened service on approximately one half the rail mileage in South Dakota. This threat provided the principal impetus for these studies. The studies were funded by the Farmers Home Administration and administered by the Economics and Statistics Service of the USDA. Five of the lines were analyzed

with the cooperation of Rail Management Services, Incorporated, a shortline operator and consulting firm in Syracuse, NY. The sixth line, Napa to Platte, was studied with the assistance of Rowell and Associates, a railway engineering consulting firm in Syracuse.

The six studies were published in November and December of 1980, and distributed to all who had shown interest in the branchlines. Those included shippers, local business and community leaders and officials, state transportation officials, and various potential public and private lending agencies.

A seminar was held on the results of the study, as well. All interested parties were invited to attend the meeting held December 16, 1980 in Brookings, SD. In addition to the presentation of study results, a general discussion of railroad operations and costing was given by representatives of Rail Management Services Incorporated. And, the potential for rail line financing was outlined by representatives of the Omaha Bank for Cooperatives, Farmers Home Administration, Consumers Cooperative Bank, Economic Development Administration, and the Small Business Administration. Subsequent presentations have also been made upon request.

The primary purpose of this report is to describe the developments in South Dakota's branchline system and its relationship to the national railroad system. The first chapter outlines the changed railroad environment and physical restructuring. In

Chapter III, the implications of rate and service policies in a deregulated environment are discussed. Brief descriptions of the recommendations of the six branchline feasibility studies are presented in Chapter III, along with explanations of developments on those lines in the year following the studies. The final chapter presents some conclusions with respect to such rural rail systems and the role of state and local entities in their reshaping.

CHAPTER I South Dakota's branchline system

The developing crisis: 1965-1975

Significant technological developments have occurred in the production, handling, and transportation of grain since World War II. Producers now rely on hybrid seed, chemicals, sophisticated management and marketing skills, and communications and computer systems, as well as more specialized and productive capital equipment. The resulting increase in grain production, combined with greater export demand, has required larger, faster grain handling systems, resulting in larger elevators and subterminals.

To assemble the increased quantities at these larger facilities, producers' delivery equipment has changed from farm wagons and small trucks to large farm trucks, and even tractor-trailer combinations which can carry 850 bushels or more. These vehicles helped induce the development of improved rural roads.

The efficiency and convenience of the modern truck and the public provision and maintenance of high quality highways caused much of the grain traffic which had moved by rail to be diverted. This occurred despite technological developments in railroading which included signaling equipment, diesel-electric locomotives, 100-ton cars, and specialized equipment

such as the covered hopper car. There were improvements in rail management systems, as well, reflected in the use of multicar and unit train operations.

All of these changes have individually and collectively altered the economics of grain handling and transportation. The economic changes inspired changes in technology and, perhaps belatedly, changes in social and political institutions and attitudes about transportation. At the same time that larger, more powerful trucks were being built to move over wider, stronger, faster highways, Americans continued to demand service on the ubiquitous railroad branchline system. The laws and regulations which allowed this, while consistent with social desires, often failed to face the economic realities of declining rail traffic and revenues and increasing rail costs.

Penn Central Railroad's bankruptcy in 1970 was a shock which marked a beginning of the recognition of rail problems. The Regional Rail Reorganization (3 R's) Act of 1973 replaced Penn Central with the subsidized Consolidated Rail Corporation (Conrail). The act did not, however, recognize the extent of the rail problem. Conrail was required to provide service over most of the same unprofitable Penn Central branchlines. Rail industry leaders and the US Department of Transportation were quick to notice that the redundant rail system in the Midwest could well face problems similar to those of Penn Central.

In response to their warnings, Congress passed the Railroad Revitalization and Regulatory Reform (4 R's) Act of 1976. It was an attempt to improve railroad profitability by allowing more flexible rates and expediting the decision processes for railroad abandonments and mergers. The act also required states to become involved in rail system planning and provided funds for rehabilitation of part of the branchline system.

Map 1 shows South Dakota's rail system in 1925. Only minor changes occurred during the following 40 years. The restructuring of South Dakota's rail system, which began in 1965, is shown in the following table. A first wave of abandonments occurred between 1965 and 1972. Of the 22 abandonments in these years, 13 reflected a policy undertaken by the Chicago and North Western (C & NW) Transportation Company to rid itself of the financial drain caused by light density branchlines. South Dakota is at the western end of the C&NW system. Since this period of abandonments in the state, the C&NW has continued this policy in Iowa, Minnesota, and Wisconsin. Map 2 shows the South Dakota system after this first abandonment wave.

After the 4 R's Act was passed in 1976, South Dakota experienced a second wave of abandonments. This was primarily due to the financial plight of the Milwaukee. During this second wave, the nation's rail problems gained wider recognition. Conrail continued to require massive federal

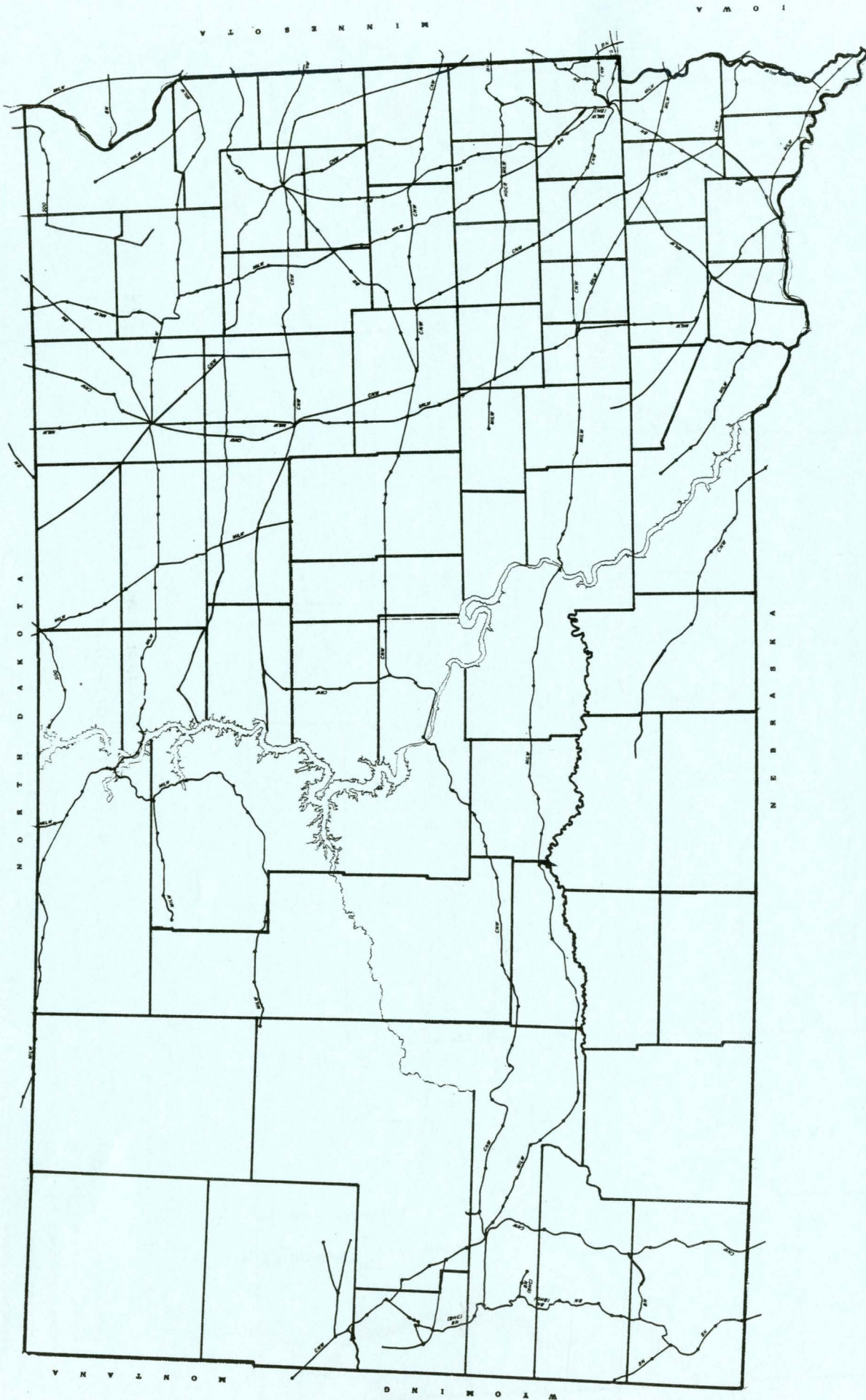
subsidies in the Northeast. And, the Chicago, Rock Island, and Pacific (Rock Island) and the Milwaukee were bankrupt in the Midwest. The 1976 act, which required that individual states become involved in rail planning and made matching funds available for rehabilitation, helped to achieve recognition of the problem at the state level.

Saving the tracks

During this time the attitude of both the general public and state officials in South Dakota changed from that of fighting each mile of abandonment to one of realizing the need to retain an essential core system. An early step in the evolution of this new attitude came in 1973 when the governor appointed an Advisory Task Force on Railroad Abandonment Policy. Although the task force continued to focus on the prevention of abandonments, it also recommended changes in the state taxation and regulation of railroads which recognized the railroads' financial plight. Out of the work of the

South Dakota railroad 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	0	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	73.83	1979	7	256.5
1972	4	122.9	1980	21	1,089.0
			1981	4	70.3



Map 1
 South Dakota's rail system in 1925

task force the South Dakota Railroad Advisory Commission was established to provide ongoing citizen input and oversee the rail related work of the South Dakota Department of Transportation.

In 1976 the South Dakota Legislature repealed several sections of state law which imposed unnecessary regulatory and expense burdens on railroads. In 1978 it passed laws to accommodate handling federal 4 R's Act funds, rehabilitating the state's rail system through an "Iowa Plan," and setting up the Regional Railroad Authorities. The "Iowa Plan" allows the railroad company, shippers, and state to share rehabilitation expenses and to provide financial incentives for use of the rail service. Regional Railroad Authorities are a device under which local units of government can join together to maintain rail service in their region.

The 1979 legislature repealed much of the law which called for regulation of railroad practices and rates. Necessary regulatory law was rewritten by the 1980 legislature after study by an interim committee. In this rewriting, many of the remaining regulatory responsibilities were transferred from the Public Utilities Commission to the Department of Transportation. The intent was to allow for a more comprehensive and coordinated planning effort within a single agency, the Division of Railroads. In 1979 this agency had identified the lines which provide essential service. See Map 3. After this core system was identified, resources were directed toward retaining these lines.

Meanwhile, the Milwaukee Railroad's court appointed trustee was designing a reorganization plan. One of the options was to embargo and abandon service on the line from the Twin Cities to the Pacific Northwest. This line is the only route by which coal can be delivered from a mine at Gascoyne, ND, to a power plant at Big Stone City. Losing this service would

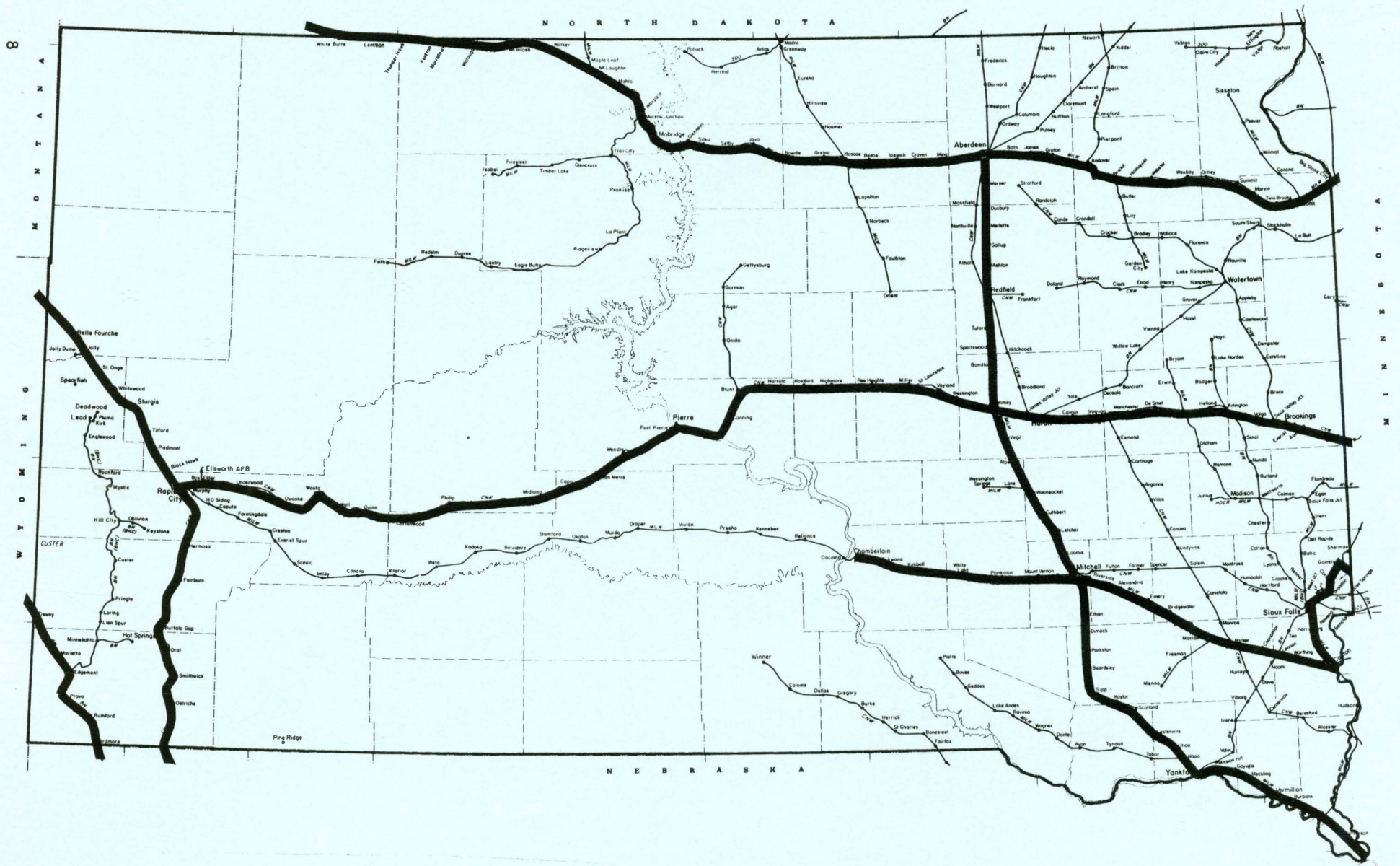
have imposed a severe economic hardship on the region.

To keep the line operating, a \$2.3 million rehabilitation project was undertaken in 1979. South Dakota, North Dakota, and Minnesota funded the project with federal money available under the 4 R's Act. Users of the line contributed the required 20% matching funds. Additional work was undertaken in 1980, also using federal 4 R's funds.

These efforts retained service on the line as far west as Miles City, MT. The projects were stopgaps which allowed the line to remain in Milwaukee's reorganization plan. By 1980 the Milwaukee had applied for a \$49 million loan from the Federal Railroad Administration to rehabilitate the line.

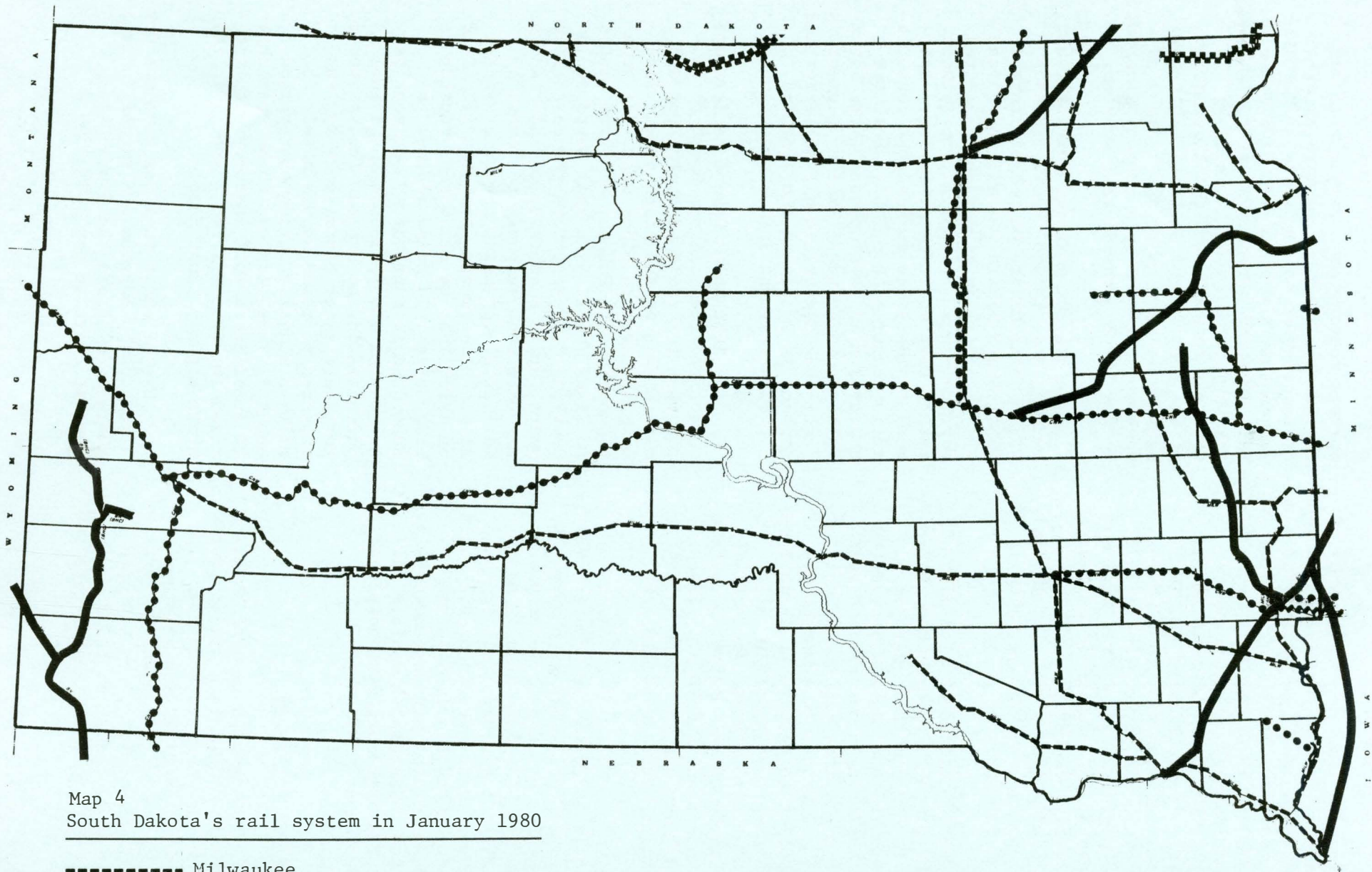
To enhance the line's profit potential so it could remain as part of the reorganized railroad, the Milwaukee negotiated a partial gateway agreement to interchange traffic with the Burlington Northern (BN) at Miles City, MT. Grain from North and South Dakota could move west through the gateway. One third of the coal traffic originating on the BN in Montana and terminating at two Wisconsin power plants on the Milwaukee moved east through the gateway.

Map 4 shows the South Dakota rail system before Milwaukee's reorganization in 1980. While the reorganization plan was acceptable to the bankruptcy court, it was rejected by the Interstate Commerce Commission (ICC) in March 1980. In recent years, the commission has calculated a target rate of return on invested capital which it believes railroads should earn to be able to attract investment funds in the financial markets. This is part of the commission's effort to restore the nation's railroads to financial health. The commission did not believe that the Milwaukee could achieve the target rate of return under the reorganization plan.



Map 3
 South Dakota's core system (identified in 1979)

————— Railroad lines included in the core system



Map 4
 South Dakota's rail system in January 1980

- Milwaukee
- Chicago and North Western
- Burlington Northern
- ▣▣▣▣▣▣ Soo Line
- ▲▲▲▲▲▲ Illinois Central Gulf

Recognizing that the bankruptcy court would allow the Milwaukee Road to embargo service on all of its South Dakota lines south of the mainline as of February 29, 1980, and that abandonment and removal of lines would follow, the 1980 legislature took the initiative. It established the South Dakota Railroad Authority to purchase rail properties from the private railroad companies. Purchases were to be financed by a 1% retail sales tax on all commodities except food. The tax would be automatically repealed on June 30, 1981, or upon reaching a total revenue of \$25 million.

Of the 23 abandonments in 1980, 17 were lines of the Milwaukee Road which amounted to 963.9 miles. See Map 5. In October 1980 the court approved the Railroad Authority's purchase of some 760 route miles from the Milwaukee. See Map 6. Included in the purchase was the option to acquire track in Iowa to have access to connecting rail service at Sioux City and Sheldon, IA. Also included was the option to operate between Canton and Elk Point. Track into Sioux City and the Canton to Elk Point segment were eventually purchased.

Also included in the October 1980 purchase were facilities such as yards and structures at several locations. The authority also purchased 17 miles of track from the C&NW. This track links Beresford to the Canton-Elk Point segment at Hawarden. In all, the Railroad Authority spent approximately \$25 million to establish a state rail system. The purchases were completed in the spring of 1981.

Revitalizing the system

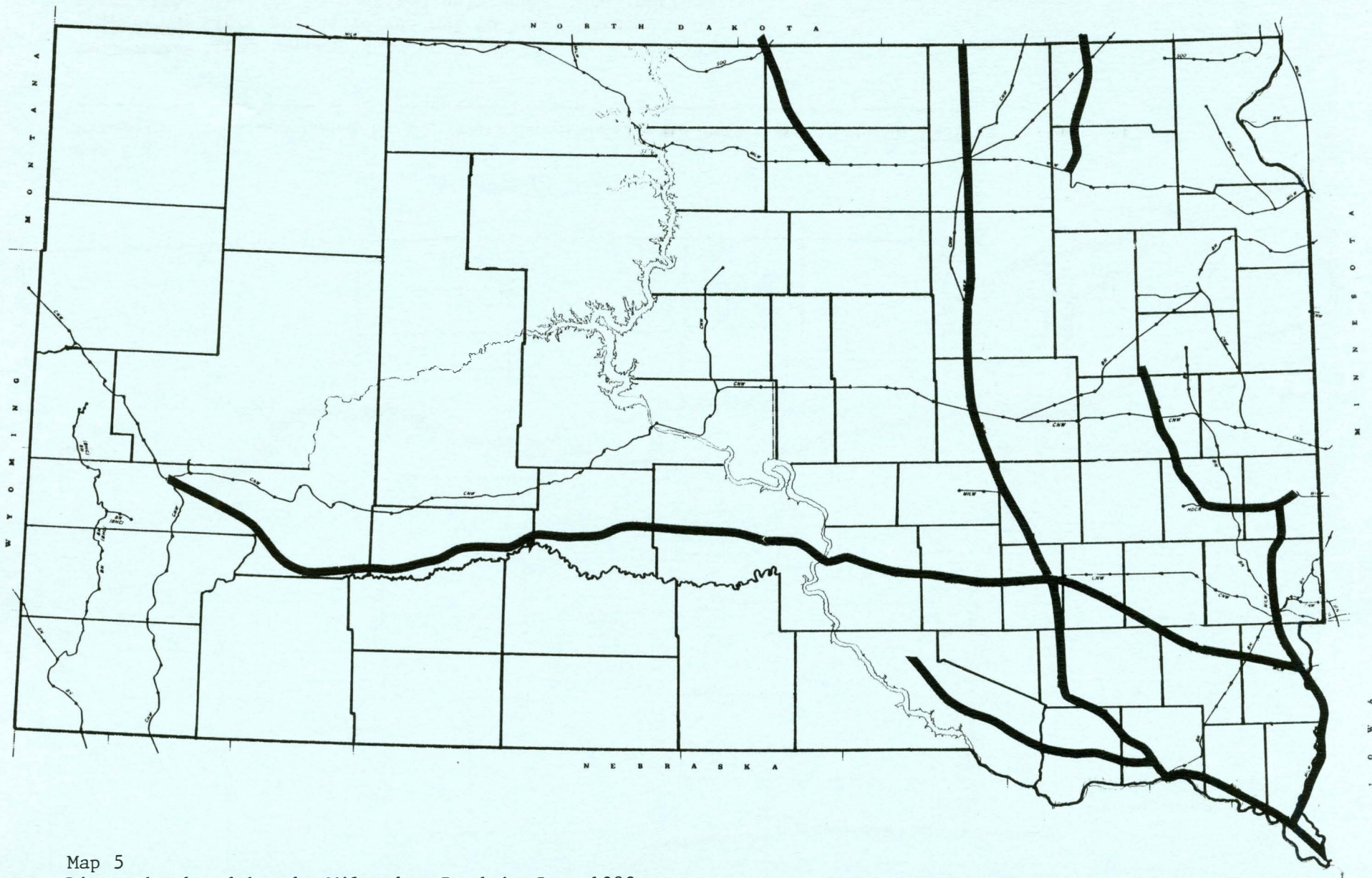
The 1980 legislature also established the South Dakota Railroad Board to oversee any operations on the state's newly acquired rail system. Although no railroad company was granted operating authority, the Division of Railroads developed plans to identify companies qualified to rehabilitate and

operate the system. In the meantime, the ICC provided for 30 days of directed service on the lines of the Milwaukee that the state was to acquire. This directed service was made available by part of a bill passed by Congress to deal with the liquidation of the Rock Island Railroad. Directed service is service on the lines of a bankrupt railroad by a company directed by the ICC to provide that service.

Before the directed service could be provided, though, South Dakota's rail system had to be rehabilitated. Thus, South Dakota was allowed to use the \$2.3 million of mandated directed service funds for capital improvement rather than short-term service. Railroad Builders was awarded the rehabilitation contract for 1981. Work was undertaken in three phases: the Sioux Falls-Canton-Mitchell-Wolsey segment in June; the Chamberlain-Mitchell-Scotland segment in July; and the Scotland to Elk Point segment in August.

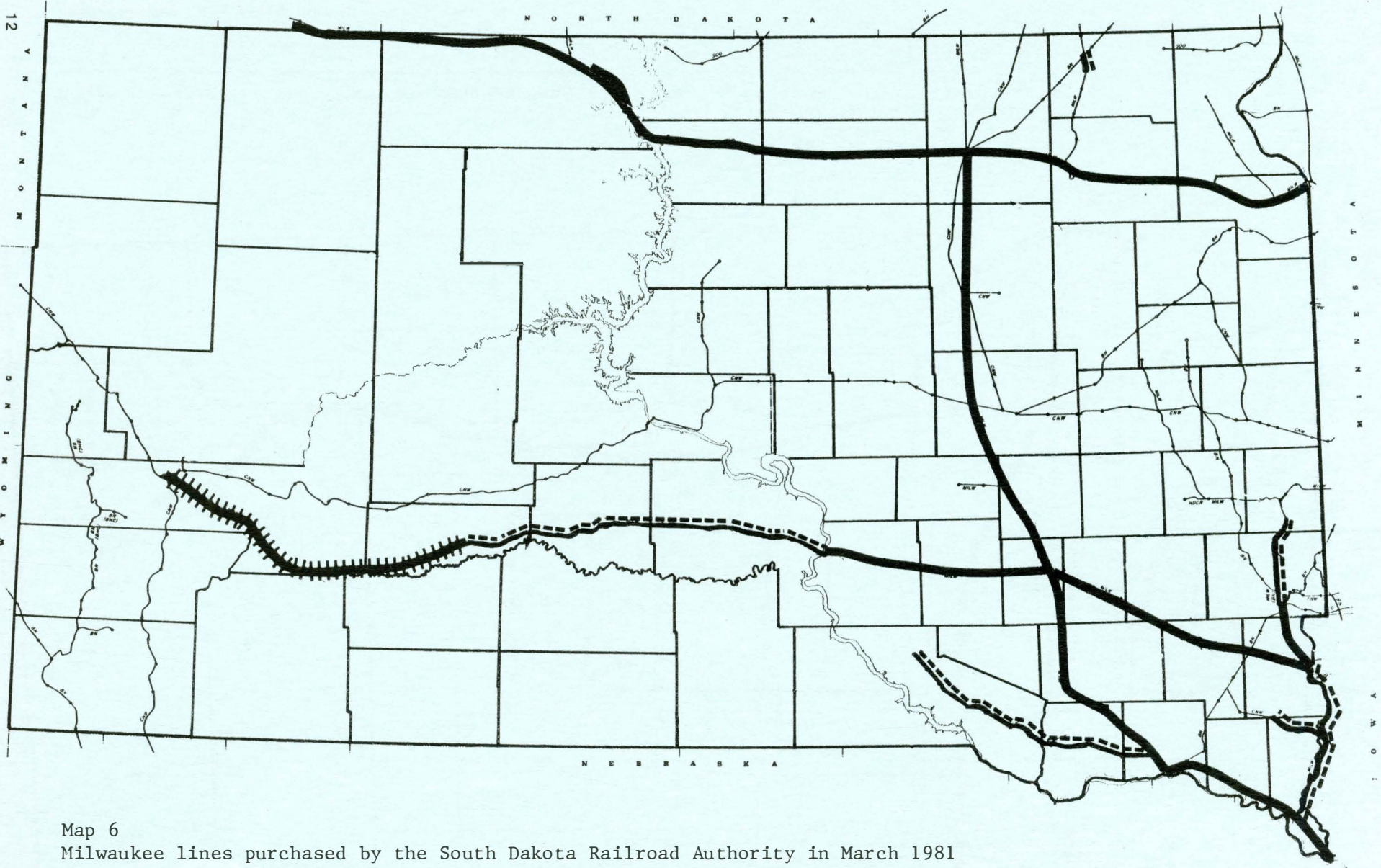
The 1981 South Dakota Legislature authorized the Railroad Board to contract for railroad operations and maintenance on the state owned lines from Aberdeen to Sioux City, IA; from Chamberlain to Canton; and from Canton to Sioux Falls. The Rail Board could contract for operations for up to five years. While a contract of this length may encourage shippers to invest in facilities for using the rail system, it was not expected that traffic would be sufficient to allow the operator to break even. To raise revenue to subsidize an operator, a one cent per gallon tax was levied on motor fuel purchased in the state. The tax was to terminate after three years and was expected to raise approximately \$5.2 million annually during that period. About \$2.7 million was to be available to subsidize a rail operator with the remaining \$2.5 million accruing to the state highway trust fund.

Use of motor fuel tax revenues for a nonhighway purpose was successfully challenged before the South Dakota Supreme Court in May 1981. In a

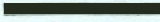

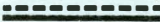


Map 5
 Lines abandoned by the Milwaukee Road in June 1980

————— Lines abandoned



Map 6
 Milwaukee lines purchased by the South Dakota Railroad Authority in March 1981

-  Lines purchased to be operated
-  Lines purchased yet not to be operated
-  Lines to be operated only under local option

special session, the legislature responded by leaving the entire motor fuel tax increase in the highway fund and making other monies available for rail subsidies.

The 1981 legislature also authorized the Rail Authority to purchase the track from Canton to Sheldon, IA and in Sioux City, IA. This was to allow traffic to interchange with other carriers. The one cent sales tax used to raise the funds needed to purchase lines was terminated at the end of the March 31, 1981 tax quarter. The tax raised approximately \$3.8 million more than was needed. This additional revenue was made available for loans to Regional Railroad Authorities for establishing service on local option or privately owned lines. Local option lines are those owned by the state but which can be operated only with sufficient local support. The Canton to Elk Point line was acquired as a local option line.

After several months of reviewing shortline operating proposals, the Division of Railroads negotiated an operating agreement with a major railroad, the Burlington Northern. The BN phased in service on the state owned system as rehabilitation work was completed during the summer of 1981.

BN service offers advantages shortline operations can't provide. BN provides single carrier movements of grain to the principal export terminals without interchange delays. BN also provides unit train grain rates. It operates the South Dakota lines without direct subsidy although South Dakota funded the \$6.9 million rehabilitation work needed to bring the lines up to operating standards. That was done with the state's share of 4 R's money and the funds available for operating subsidies. In short, the South Dakota owned core system has been placed in the national rail system without requiring direct operating or maintenance subsidies. Map 7 shows how it fits into the transcontinental BN system.

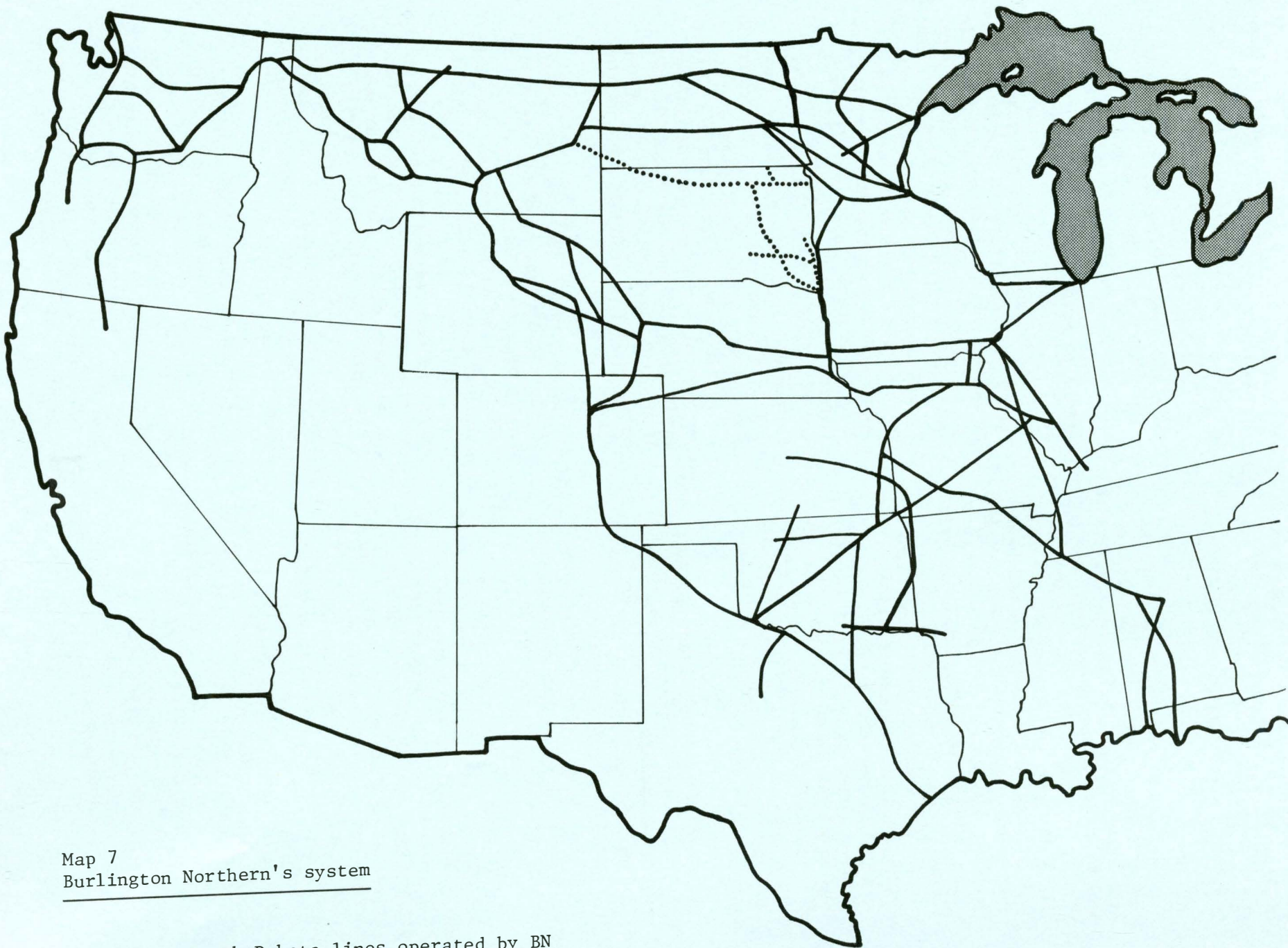
When rehabilitation work is completed in 1983, all of the state owned lines being operated by the BN, with the exception of the Mitchell to Chamberlain line, will be capable of carrying unit trains of fully loaded jumbo covered hopper cars.

Saving a mainline

In March 1981 the Milwaukee requested permission to abandon the two remaining branchlines operated off the Miles City, MT extension. These were the lines from Milbank to Sisseton and from McLaughlin to New England, ND. On May 15, 1981 Milwaukee's court appointed trustee also filed an application to abandon the Miles City extension west of Ortonville, MN. As noted before, losing service on this line would eliminate the daily coal unit train service between Gascoyne, ND and the Big Stone power plant. It would also sever South Dakota's direct connection to the growing West Coast grain markets, and the access to the Twin Cities and Twin Ports for wheat shippers in the northern part of the state.

A September 1981 special session of the legislature approved the Railroad Authority's issuing up to \$35 million in industrial revenue bonds to purchase the Ortonville, MN to Miles City, MT line. In February 1982 an agreement was reached between the Railroad Authority and Milwaukee for the purchase of the line as far west as Terry, MT. The Railroad Authority would issue \$30.4 million of bonds to purchase the line and receive credit for the \$4.5 million in rehabilitation funds already invested.

Also in February 1982, the Railroad Authority announced that the BN would lease and operate the line and pay off the Railroad Authority's bonds. When the bonds are retired, ownership of the line will be transferred to BN. Rehabilitation of the line will be financed with a \$30 million loan from the Federal Railroad Administration



Map 7
Burlington Northern's system

..... South Dakota lines operated by BN

under the 4 R's Act. This loan will also be repaid by the BN.

The net effect of the plan is to transfer the ownership and operation of the line from the Milwaukee to the BN at a price which realizes both the lower interest rate available to the Railroad Authority as a public agency and also the federal funds already invested in the line. Milwaukee received a higher price for the lines and BN paid a lower price than would be possible without the participation of the state.

Although the Milwaukee's New England, ND branchline has been abandoned in 1982, the Sisseton branch was purchased by a limited partnership formed by rail users. The new owners have also formed Dakota Rail (DR) to operate as a shortline railroad on the 38 mile branchline. They interchange traffic with the BN and Milwaukee at Milbank.

Incorporating the Milwaukee mainline into the BN system provides South Dakota shippers with direct, single carrier access to the Pacific Northwest. By shortening BN hauls between the West Coast and western coal fields, and the markets in Minnesota, Wisconsin, Missouri, and the Gulf Coast, the development of bridge traffic is made more likely. Bridge traffic on any given line segment is traffic which neither originates nor terminates on it. The development of such bridge traffic could provide vital support to the rest of the state owned system. It could also be instrumental to future industrial development in South Dakota.

Saving a trans-state branchline

South Dakota has negotiated with the C&NW for using \$3.4 million of 4 R's money to rehabilitate track between Huron and Pierre. C&NW may abandon both the Pierre to Rapid City and the Redfield to Oakes, ND lines. C&NW has abandoned the line segment between

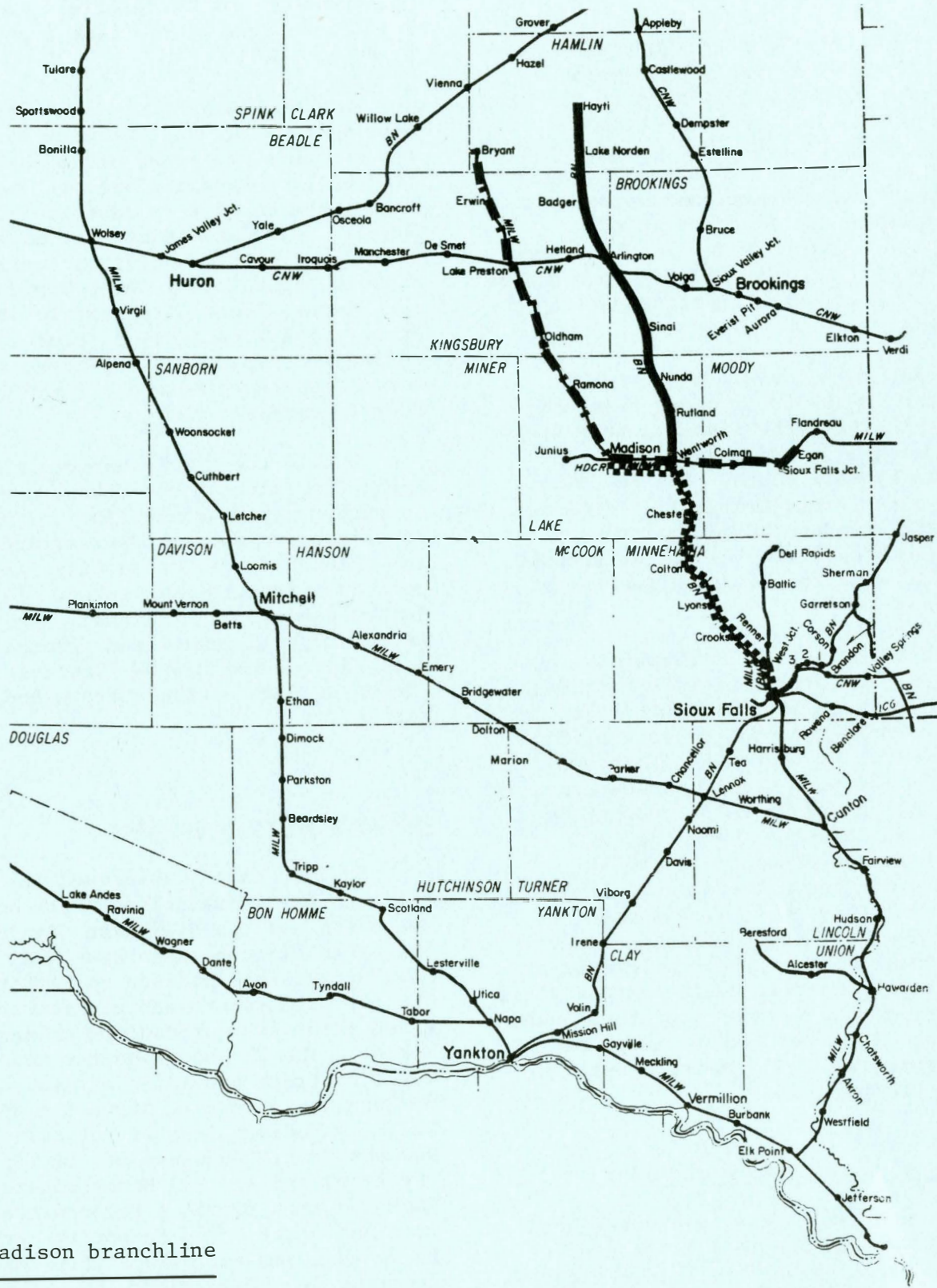
Mansfield and Aberdeen and may abandon the remainder of the Redfield to Oakes, ND line as well as the line from Pierre to Rapid City.

Losing the Redfield line would be less serious because the line is parallel to the state owned and BN operated line between Redfield and Aberdeen. Losing the Rapid City line would, however, eliminate east-west service across the state. While virtually no traffic originates between Rapid City and Pierre, Rapid City traffic does support the line east of Pierre. Losing the Rapid City to Pierre segment could threaten the line all the way back to Mankato, MN.



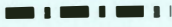
Should the C & NW abandon the Rapid City line, South Dakota may need to either purchase the line and have it operated, or re-establish service on the Chamberlain to Rapid City line purchased from the Milwaukee. In the latter case it may eventually be necessary to purchase and arrange for operation of the C & NW line east of Pierre as part of the state owned core system.

Saving a short branchline

In 1980 the BN abandoned its Sioux Falls to Hayti branchline north of Wentworth and the Milwaukee abandoned its branchlines between Egan and Madison and from Madison to Bryant. These two lines crossed at Wentworth, seven miles east of Madison as shown on Map 8. The BN purchased the seven miles of track providing access to Madison and agreed to serve the Sioux Falls to Madison line if rehabilitation was possible. Shippers on the line organized and in 1981 Minnehaha and Lake counties formed a Regional Railroad Authority. The Authority agreed to issue bonds and make a \$2.06 million interest free loan to the BN. This loan, along with \$1.7 million of the state's 4 R's funds and \$1.5 million contributed by the BN, was used to rehabilitate the 44 mile line.



Map 8
The Madison branchline

-  Sioux Falls to Madison branch
-  Line abandoned by BN
-  Line abandoned by the Milwaukee

BN will repay the authority's loan as it receives revenues from traffic originating and terminating on the line. As shown in the following schedule, when BN revenues on a carload are as shown in the left-hand column, BN repays a part of the loan as shown in the right-hand column.

<u>BN revenue</u> <u>/carload</u>	<u>Amount to be</u> <u>Repaid</u>
At least \$2,000	\$100
\$1,500 to \$2,000	75
\$1,000 to \$1,500	50
\$500 to \$1,000	25
Less than \$500	0

Interest on the authority's bonds will be paid with funds from the shipper's organization. This organization agreed to pay the Regional Rail Authority four cents per hundredweight on all commodities shipped by rail or truck.

In addition to the shippers already located on this branchline, four cooperative elevators in the region which had lost rail service joined to purchase an elevator at Wentworth. To be able to load unit trains they expanded the facility, rebuilt part of the former Milwaukee tracks, and constructed new siding. This new facility handles grain delivered from its member cooperatives and their members. The cooperative elevator at Madison, the largest on the line, was destroyed by fire in 1981. A new, larger facility has been constructed and provides a second unit train loading facility on the line.

The restructuring of the physical railroad system has been influenced by policies concerning rates and service. In particular, deregulation through the passage of the Staggers Rail Act in October 1980 brought about major changes in railroads' rights and responsibilities in setting rates and rate agreements. Some of these changes and those affecting the physical restructuring are described in the following chapter.

CHAPTER II

Railroad deregulation: rate and service policy developments

Use of volume rates

Unlike Conrail in its early years, railroads have been unwilling to make generous revenue divisions agreements with shortline railroads. In the agricultural regions, the western railroads have chosen a policy of abandoning service on branchlines in the expectation that branchline traffic would then be trucked to remaining mainline service in the region. This policy, combined with unit train rates and service on mainlines, allows railroads to earn virtually the same amount of revenue while eliminating the expense of branchline maintenance and operation. This is part of the process of eliminating internal cross-subsidization of rural branchlines and shifting a greater share of transportation costs onto agricultural producers and sellers.

As part of this policy, the railroads are unwilling to take less revenue when traffic is brought to them by a shortline railroad than when it is brought by truck. Thus, a shortline operating on an abandoned branchline must charge rates for its own haul which cover the entire cost of its operation. Although the shortline can make joint rates with the connecting railroad, the rate level will be essentially the same as if only combination rates were available. (A joint rate is a single rate applied to the entire haul over two or more railroads. A combination rate is the sum of the rates charged by each railroad participating in the haul.)

Introduction of unit train rates by both the C & NW and the BN has drawn grain into elevators and subterminals capable of loading 25 - 100 cars in a single day. Since these rates usually apply only when 100-ton jumbo covered hopper cars are used, facilities which load unit trains must be located on

mainlines or branchlines with heavy rail. There has been substantial investment in unit train loading facilities on such lines in western Minnesota and eastern South Dakota in response to these rates.

First this investment was primarily on C & NW lines. Since the BN introduced unit train rates in 1980, most of the investment has been on its lines since it offers single line service to both Pacific Northwest and Gulf of Mexico export terminals.

These policies have resulted in reduced traffic on stub end branchlines. Railroads have continued their policy of abandoning service on such lines, aided by the provisions of the Staggers Act of 1980. In all, the evolving structure of rates and service has made it virtually impossible for stub end branchline service to be retained by shortline operations.

In South Dakota, these national policies and the state's involvement, combined with the development of BN service on the rehabilitated state owned lines, has led to investment in unit train facilities. While the stub end branchlines were being abandoned, unit train facilities were being built on the Sioux Falls-Canton-Mitchell line and at Yankton, as well as on the BN's own lines to Sioux Falls, Madison, and Huron.

Continental Grain Company has initiated a new grain handling method at Pipestone, MN and at Yankton and Emery on South Dakota's core system. It requires a relatively small investment in a trackside truck dumping pit, a belt loader, and a small mobile home office. When the empty hopper cars are placed at the site, grain purchased from local elevators is delivered to the dumping pit in multiples of four truckloads. Each four truck unit constitutes one hopper carload. Thus, each carload can be identified by the local elevator from which the grain was delivered.

This facility can load a 54 car unit train in 24 hours. The loaded train is then delivered to Continental's port terminal where the grain is graded, and blended or conditioned as necessary. This system's success depends in part on a single entity controlling both the delivery and dumping schedule and the port receiving and grading terminal.

Should Continental's system become generally adopted, it could have an impact on the structure of the grain merchandising industry. Under this system, existing local elevators are used for collecting, cleaning, blending, and storing grain until hopper cars are available. Small local elevators could remain in business but would be dealing with a more concentrated buying industry.

By delaying the assembly of volumes large enough to fill trains, more of the cost of storage and market risk are left with the local elevator. Should the Continental system become widely adopted, these costs will probably be shifted back to producers.

Reduced regulation of service

The Staggers Rail Act of 1980 represents a further step in the direction taken with the 4 R's Act of 1976. The principal goal of both acts was to improve the railroads' financial condition by making it easier to restructure both the physical rail system and the rail rate system.

Restructuring the rail system has been a stated policy goal at least since the passage of the Transportation Act of 1920. Many believe the railroad industry's problems lie in its fragmented nature. They believe that efficiency requires a national rail system composed of a small number of very large regional or transcontinental railroads. Both the 1976 and 1980 acts reflect this philosophy by allowing railroads to abandon light density branchlines more quickly and easily.

Thus smaller regional railroads such as the Milwaukee or C & NW 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. In 1980, the St. Louis-San Francisco (Frisco) was merged into the Burlington Northern (BN) to form a single system reaching from the Pacific Northwest to the Midwest and south to the Gulf of Mexico. In the east the Chessie and Seaboard Coast Line systems were allowed to merge in 1981. The merger of the Norfolk and Western with the Southern was approved early in 1982 and the Union Pacific-Missouri Pacific-Western Pacific merger proposal was approved in October 1982. All of these are mergers of rail systems which are themselves the result of earlier mergers and takeovers.

For South Dakota, the significance of the rail merger policy lies in the fact that the state's rail system has consisted primarily of service provided by regional railroads. The only national railroad in the state is the BN which has approximately 475 South Dakota route miles. As the Milwaukee and C & NW -- the regional railroads which provided most of the state's service -- have been reduced, many South Dakota shippers have lost rail service. Rail competition may also have been reduced, and market access restricted.

Loss of rail service on some branchlines may result, however, in improved traffic and service on other lines. Therefore, having rail service available at fewer locations may well result in more of South Dakota's products moving by rail with better service and lower rates. This is especially likely if the remaining lines are merged into the national rail system with improved market access. The net effect of BN's entry on the state owned system may be to serve fewer shippers with improved service to more markets and to provide more competition for the C & NW.

Reduced regulation of rate making

The new freedoms railroads have to make rates reflect the belief that they are faced with competition from trucks and barges for most of their traffic. The large inroads trucks and barges have made into rail traffic since World War II tend to support this. Depending upon the commodity and the origin and destination of any given shipment, however, trucking may not be technologically or economically competitive. In some situations, railroads may have to compete with other modes of transportation before a shipper location decision is made. After a decision is made, such competition may be economically impossible.

For example, before the power plant at Big Stone City was constructed the utility companies had several alternatives. They could locate the plant at the mouth of a coal mine, truck coal to it, and then transport power by transmission lines. Or, they could carry coal by railroad, truck, or barge from the mine to a plant located elsewhere.

Once the plant was constructed at Big Stone City, it became captive to the Milwaukee's line from the mine at Gascoyne, ND. Every alternative -- other rail routes, trucking, barging, and plant relocation -- became so expensive by comparison that the Milwaukee exercised monopoly power over the utility companies. Recognizing this, the utilities negotiated a coal transportation contract with the Milwaukee before becoming locked into the Big Stone location.

The rate-making freedoms granted railroads by the Staggers Act include the following:

1. A railroad can charge rates up to a maximum based upon the variable costs of providing the service on traffic where it does not exercise "market dominance" (where

other carriers offer potential competition).

2. Railroads can raise rates consistent with increases in a quarterly index of railroad costs.
3. A railroad can reduce rates to meet truck and barge competition as long as rates cover the variable costs of the service.
4. A railroad can levy a surcharge on its share of a rate if its rate does not exceed its variable costs by more than 10%. A railroad can levy surcharges to cover the total cost of service on light density branchlines.
5. A railroad can cancel a joint rate if the rate does not exceed variable costs by more than 10%. To retain joint service, shippers would have to pay a rate or surcharge sufficient to meet this standard.
6. Railroads can contract for service and rates with individual shippers.

These changes may have consequences for South Dakota shippers. Rates for shipping grain have historically been based upon mileage. Thus, South Dakota shippers paid a higher rate to move grain to the Mississippi or Great Lakes than did Minnesota shippers. Rates were also based upon the value of the commodity being shipped. Since 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 short-haul business away from the railroads. Much

of the grain produced in Minnesota and Iowa could be moved to water less expensively by truck.

The above changes will allow railroad rates to reflect the higher variable costs of shipping South Dakota products. They will allow rates to be as low as variable costs where the truck and barge alternatives are tough competitors, and as high as 160-180% of variable costs where they are less competitive. Therefore, for each carload shipped, South Dakota rail shippers might be paying a larger share of railroad fixed costs than they have in the past.

When a railroad earns less than 110% of its variable costs from its division of a joint rate with another railroad, it can either cancel the joint rate or impose a surcharge. If the joint rate is cancelled traffic would have to move under a combination rate which would cover each of the participating carriers' costs separately. Such rates have historically been higher than joint rates. Imposition of surcharges is limited to achieve revenues up to 110% of variable costs except on light density branchlines. On such lines carrying less than one million gross ton-miles (or less than three million gross ton-miles if the entire railroad company has inadequate revenue) the surcharge can be large enough to cover all anticipated costs of service.

Rate-making freedoms and traffic flows

Canceling joint rates or imposing surcharges can cause branchline traffic to be diverted. Service on those lines may eventually be abandoned if revenues from them are less than 110% of variable costs. This may happen to C & NW's lines in South Dakota. Export grain traffic on these lines must necessarily involve other carriers and joint rates.

The rate increases, surcharges, and cancellations can be employed

selectively to reduce the demand for rail service on lines a railroad wishes to abandon. They can also be used to capture monopoly profits on traffic which is "captive" to the railroad. Other provisions of the Staggers Act allow railroads to induce traffic to lines it intends to retain.

After nearly a century of regulation during which railroads were prevented from charging rates which discriminate between shippers, the Staggers Act now encourages such discrimination through the use of contracts. Railroads can now contract with individual shippers to provide service. Contract terms can specify minimum volumes, service frequency, car supply, mileage allowance, and any other relevant conditions, in addition to rates charged. Reduced rates can be offered to shippers who are willing to limit the railroad's potential liability for loss or damage to freight.

Only minimal information about a contract need be made public. Therefore, it is difficult for a shipper to learn of any disadvantage he may face as a result of a contract a competitor has with a railroad. He also has limited time and basis for complaint.

The provisions of the Staggers Act also tend to give large shippers greater bargaining power in negotiating rail contracts. For example, two grain elevators in a town may ship the same amount of grain. However, if one is part of an international grain firm which ships from many other stations and has the service of sophisticated legal negotiators, it may receive a more favorable contract than the other.

The ability of railroads to contract with individual shippers might work to the disadvantage of South Dakota agriculture in other ways, as well. Contracts are more likely to be made where the largest quantities are available for shipping--where production density is greatest. These

areas (such as Iowa and Illinois) are also where larger shippers such as the major international grain trading firms are located. These large firms will have advantages over small shippers when negotiating contract terms with railroads. They will also have the nearby barging alternative to use as a negotiating lever. South Dakota's shippers, with less to ship and without nearby competitive service, may receive less favorable contracts which would be reflected in relatively lower prices to producers.

The growth of Asian grain markets and grain traffic through the Pacific Northwest ports would appear to offer South Dakota producers an opportunity for greater earnings. Corn and sorghum produced in the southeast and east central regions of the state have been trucked to Minnesota and Nebraska where unit train rates were available from the Burlington Northern and Union Pacific (UP) railroads. Wheat and barley from northern South Dakota have been trucked to Minnesota and North Dakota to take advantage of unit train rates offered by BN. Introduction of BN unit train service in South Dakota should reduce these truck movements and allow South Dakota producers to earn more.

For northern wheat producers the BN will be the only rail route to the Pacific ports. Under the Staggers Act, the railroad might be expected to raise rates to either the maximum allowed over variable cost or to the cost of trucking, whichever is lower. These higher rail rates would be carried through to reduce the net return to producers. The most effective way to limit such rates will probably be to maintain alternative market outlets and alternative access to the West Coast where possible. Even if rates are raised in the long run, South Dakota shippers will probably be better off than with no rail or shortline rail service.

In summary, the Staggers Act allows railroads to try either to

increase net revenues on unprofitable branchlines or to divert traffic and abandon them. It accelerates the abandonment procedure and simplifies the process for merging. Thus, the act's basic purpose is to enhance the railroads' financial status. It encourages restructuring the system--away from being a ubiquitous common carrier system--toward being a long-haul carrier of captive traffic where, except at major traffic locations, inter-railroad competition is largely eliminated through abandonment and merger.

Deregulation has made it more difficult to retain rural rail service. It has also reduced the bargaining power state and local governments as well as private shippers have in negotiating with railroad companies. At the same time, it improves the financial status of railroads, improves service on remaining lines, and increases the overall efficiency of the transportation system.

CHAPTER III

Study recommendations, later developments

Andover to Brampton, ND (Map 9)

The Andover to Brampton, ND line was a stub end branch off the Milwaukee's line between the Twin Cities and Miles City, MT. Shipping points were Pierpont, Langford, Britton, Newark, and Brampton, with Britton being the major community served. The line lay parallel to South Dakota Highway 27 and crossed the BN line to Aberdeen, four miles north of Britton. It consisted of light-weight (56-lb) rail and had been subject to substantial deferred maintenance.

The shortline feasibility study estimated that operating this branch would cost between \$400 - \$550 per carload at optimistic to normal traffic levels. It concluded, "The best prospects for viability can be realized

by construction of an interchange with BN and abandoning the railroad south of Britton..."

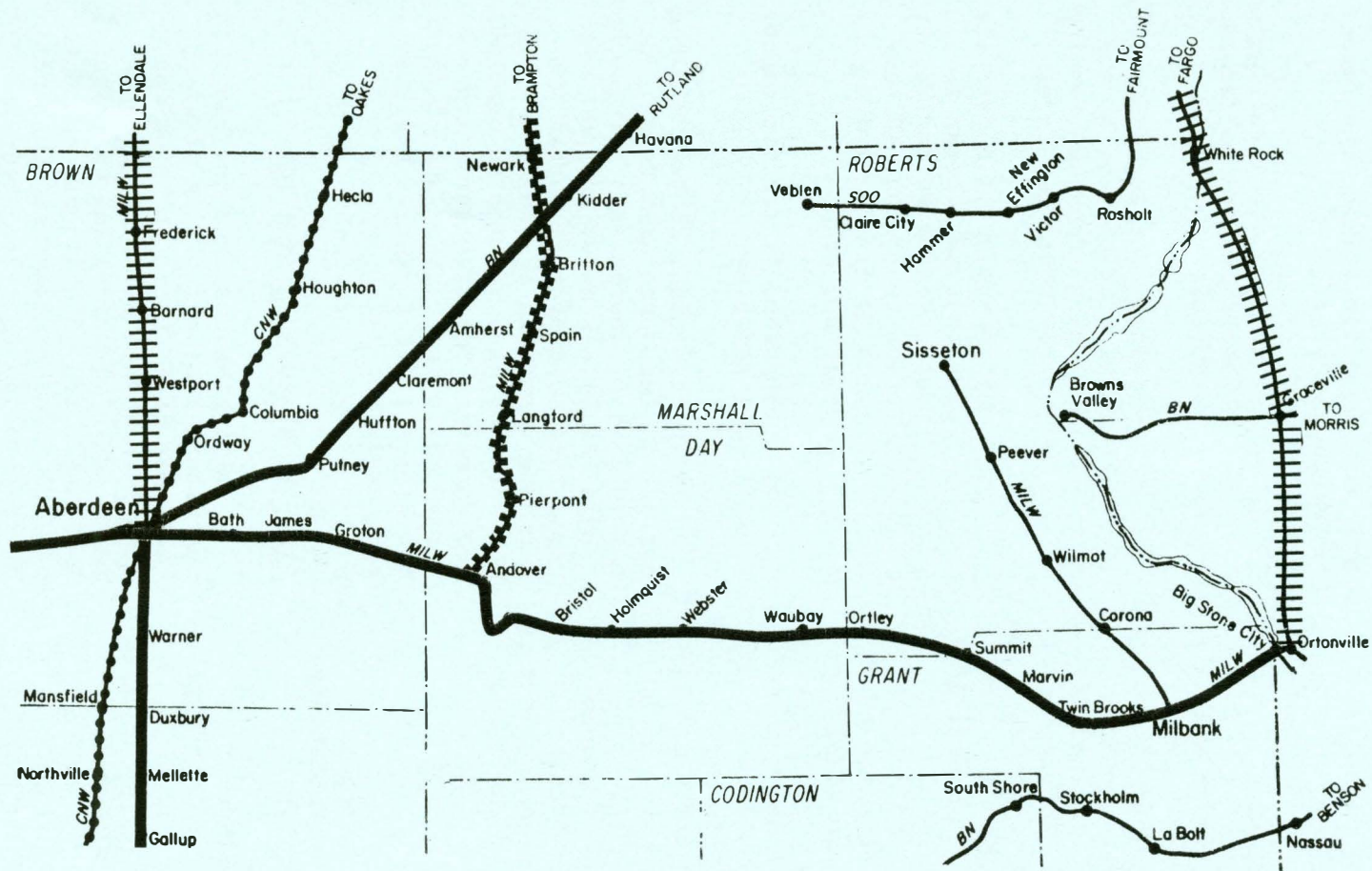
After examining future crop production estimates and costs of potential shipping alternatives, the report recommended:

1. either obtaining Burlington Northern rail service into Britton, abandoning the rest of the line, and trucking to and from rail service at Andover, Britton, and Cogswell, ND; or,
2. abandoning the whole line and trucking to rail facilities at Andover and Cogswell, ND.





Facing loss of rail service, the cooperative elevators at Pierpont and Langford merged and purchased an existing elevator on the Milwaukee mainline at Andover. They expanded that facility and now truck grain from Pierpont and Langford. Since the BN has agreed to incorporate the Milwaukee mainline into its system, elevators on the south end of the former branchline have access to improved, single carrier service to domestic and export markets and unit train rates. Shippers have been able to make better use of their trucks on the short trips to Andover rather than the long haul to the Twin Cities. Their situation is therefore improved with access to more and better markets, better and lower cost rail service, and lower trucking costs.

On the northern end of the branchline, the state purchased the four miles of track between Britton and the BN crossing. BN has constructed an interchange and provides service into Britton. A Regional Railroad Authority was formed and provided matching 4 R's Act federal funds to rehabilitate the four-mile segment. Thus, Britton also has improved rail service as a result of the restructuring process.

The small private elevator at Newark purchased the six miles of line



Map 9
 Andover to Brampton, ND branchline

-  Study line
-  Abandoned line
-  BN line
-  C & NW

from the BN interchange to Newark and operates it privately. The cooperative elevator at Brampton, ND was a small, older structure whose members chose to liquidate. Grain produced in the area is being trucked to nearby elevators.

Roscoe to Linton, ND (Map 10)

The Roscoe to Linton, ND branchline served shippers at Eureka and at Zeeland, Hague, Strasburg, and Linton, ND. At Linton the line interchanged with a BN branchline which reached south from MacKenzie, ND. The principal shipper was at Eureka, 26 miles from the mainline at Roscoe. The line crosses a Soo Line branch at Madra, 12 miles north of Eureka.

The BN acquired the 50 miles of this line from the BN branch at Linton, ND to Eureka as part of a purchase of several of the Milwaukee's western lines. Although BN continues to provide service, the line has been designated as under study for possible abandonment.

The shortline feasibility study considered five possible operating arrangements. All would have required surcharges or additional revenues from other nonoperating sources. The alternatives, ranked in order of efficiency, were:

1. operating from Eureka to Madra and then interchanging traffic with Soo Line;
2. operating from Roscoe to Linton, ND or from Eureka to Linton;
3. operating from Roscoe to Eureka; and
4. operating from Roscoe to Madra.

The study concluded "that none of the options available are desirable for self-sufficient shortline operation, and that even the best case is one

which requires a substantial commitment of capital..., coupled with hefty surcharges or other forms of subsidy."

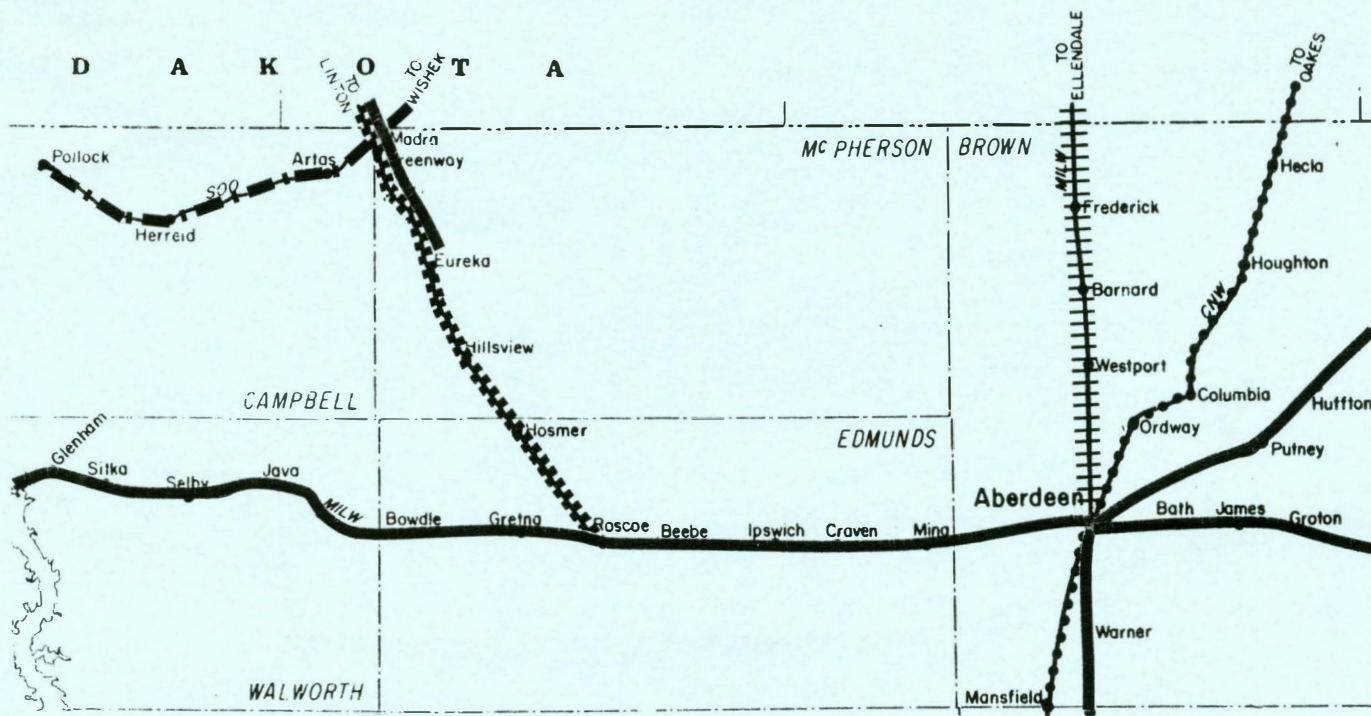
Considering the potential traffic and trucking alternatives, the report recommended either:

1. retaining current Burlington Northern service as far south as Eureka;
2. retaining Burlington Northern service at Linton, ND and obtaining Soo Line service between Madra and Eureka;
3. obtaining shortline service on either the Eureka to Madra, Roscoe to Eureka, or Eureka to Linton, ND segments if traffic can be built up; or
4. trucking, if traffic cannot be built up.

Up to this time, BN has retained service as far south as Eureka. The possibility of losing this service has caused the line's major shipper, the cooperative elevator at Eureka, to purchase elevators at Lehr and Ashley, ND where Soo Line service is available. The potential for reconstructing the former Madra interchange and obtaining Soo Line service to Eureka has also been explored.

Blunt to Gettysburg (Map 11)

The C & NW operates the Blunt to Gettysburg line off of its cross-state line east of Pierre. Principal shipping points are Onida, which has a large grain elevator, and Gettysburg. The line north of Onida was abandoned in 1982. The southern segment from Blunt to Onida is under study for abandonment. The shortline feasibility analysis concluded that operating only the Blunt to Onida segment would require the smallest surcharge. Even this alternative would require a substantial initial capital investment to



Map 10
 Roscoe to Linton, ND branchline

- ~~~~~ Study line
- ||||| Abandoned line
- BN line
- C & NW line
- - - - - Soo Line

acquire and to rehabilitate the rail line.

Considering trucking and highway costs and potential traffic, the report concluded that "the lowest cost rail alternative appears to be the operation of the entire line to Gettysburg... The ability of any of the rail alternatives to compete with the trucking alternative depends critically upon achieving at least the estimated potential traffic levels on a long-term basis. A loss of traffic due to drought or adverse prices or a diversion of traffic to trucks due to a surcharge, could doom a rail operation."

Significant development of irrigation in the counties served by this branchline has enhanced the long-term prospects for its operation. However, there are several conditions which make it unlikely that the C & NW or a shortline will continue to operate it. As noted before the C & NW has adopted a policy of abandoning rural branchlines in the expectation that traffic will be trucked to and from remaining lines in the region. On the Gettysburg branch, two of the major shippers have elevators on the C & NW line which serves Blunt. These shippers have expressed a preference for trucking to their elevators on the east/west line rather than investing in the Gettysburg branchline.

As a group, shippers on the branchline have been unable to provide the matching funds required to receive 4 R's Act federal monies to rehabilitate. In addition, BN's service on the state owned system and the consequent availability of unit train rates and direct access to West Coast markets may be attracting grain traffic from the region. BN service on the Milwaukee's Miles City, MT extension also competes for traffic from the region served by the Gettysburg branchline and will further reduce the branchline's prospects for successful operation.

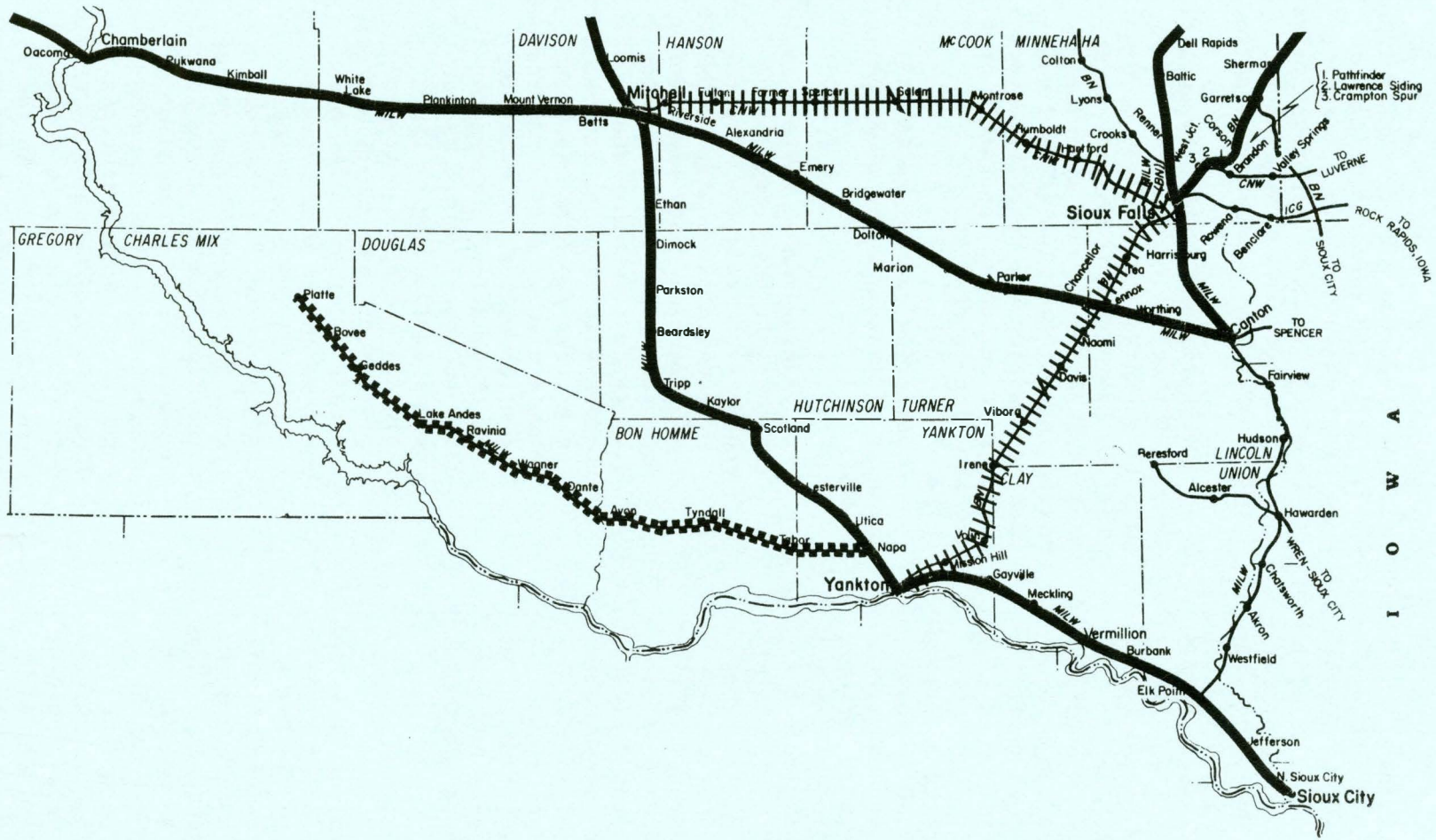
Napa to Platte (Map 12)

The Platte branchline serves shippers at 10 stations along its 82 miles of track reaching northwest from Napa. It is a deteriorated line of light rail which serves a productive region of the state. Potential irrigation in the area is significant and could provide increased grain traffic.




The shortline feasibility analysis concluded that the line could reasonably be operated from Yankton or Napa. This was based upon optimistic potential traffic and revenue divisions estimates. It was also assumed that line acquisition and rehabilitation costs would be funded separately from the shortline operation.

Considering capital costs and trucking alternatives the study concluded:

"Adding annual carload capital costs to operating costs enhances the relative advantage of the trucking alternative. Unless rehabilitation costs are covered under the state rehabilitation program or some other source of nonrepayable funding, it does not appear that the branchline can compete with either of the trucking alternatives. Considering both these direct comparative costs and the indirect factors such as discounting of truck delivered grain and access to Pacific Northwest export markets, the best alternative for most stations on the branchline may be to truck to the core system loading points. If the core system levies surcharges or sets rates significantly above former Milwaukee rates, branchline shippers might find it advantageous to continue trucking to Sioux City and Nebraska terminals. Only if traffic can be increased significantly above both the historic and estimated potential levels does it appear that the branchline could be self-sufficient."



Map 12
Napa to Platte branchline

 Study line
 Abandoned line
 BN line

The initiation of BN service on the Yankton to Mitchell state owned line and the development of unit train loading facilities at Yankton have reduced the competitive potential of any shortline operator on the Platte branch. In addition, such a shortline would need to charge rates sufficient to cover all costs with no BN revenue divisions or joint rates. This means shippers on the lower segments of the Platte branch would find it less costly to truck to Yankton where they could pay unit train rates than to use branchline service.

Although the state included the Platte branch in its acquisition from Milwaukee and would be willing to contribute toward its rehabilitation, the Regional Railroad Authority has not found sufficient support to fund operations. Perhaps the best prospect would be to obtain BN service from the state core system. Such service would still not allow use of 100-ton cars or unit trains unless the line were rehabilitated with heavier rail. The funds which the regional authority would have to contribute might exceed the cost of the trucking alternative. This may be particularly the case for those shippers on the lower end of the line, close to the core system.

Trent to Elk Point (Map 13)

The Trent to Elk Point line is composed of three segments. The northern end, a light rail segment between Trent and Sioux Falls, serves a major rock quarry at Dell Rapids in addition to local grain elevators. The segment was purchased by the state as a local option line and is part of the trackage included in the Sioux Valley Regional Railroad Authority. The quarry shipper operates this northern end as private rail service between Dell Rapids and Sioux Falls under a trackage rights agreement as an industrial spur.

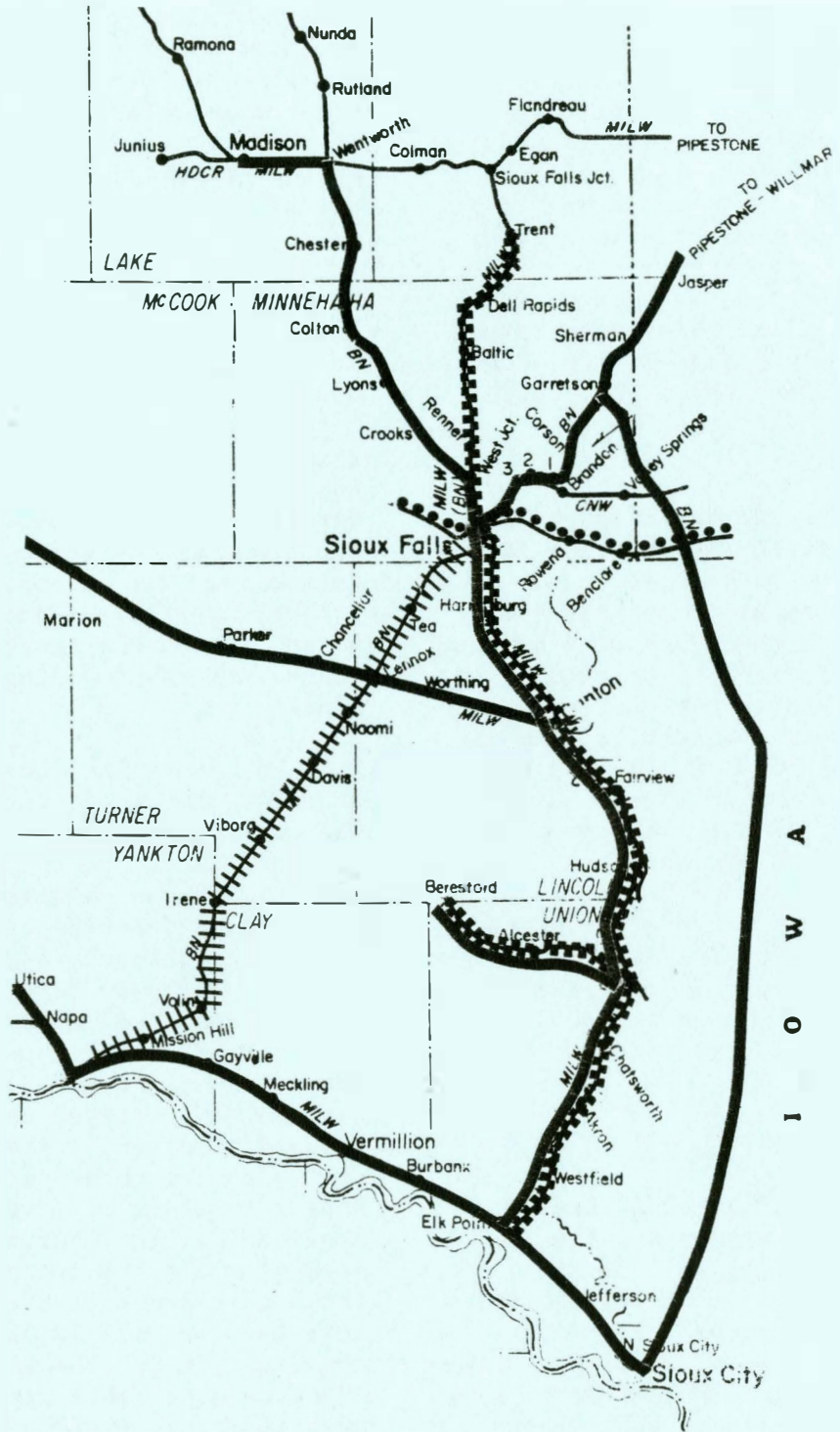
The line segment between Sioux Falls and Canton is heavy rail. The

line has been upgraded and is being operated by BN as part of the core system. The quarry shipper also operates on it as a common carrier of aggregates from Sioux Falls to Sioux City. The Dell Rapids quarry firm operates another quarry at Hawarden, IA.

The lower segment--Canton to Elk Point--was purchased by the state as a local option line. The state also acquired the 17 mile line between Beresford and Hawarden, IA which interchanges with the Trent to Elk Point branch. This line between Beresford and Hawarden is included in the Sioux Valley Regional Railroad Authority. The authority is attempting to put together sufficient funds to match state 4 R's Act rehabilitation funds. BN is providing service on the line.

The shortline feasibility analysis of these line segments was based upon the assumption that they would be operated in conjunction with the core system. It was estimated that the Trent to Dell Rapids segment would require surcharges ranging from \$40 - \$250 per carload, depending upon actual expense and traffic levels. The Dell Rapids to Sioux Falls segment would require a surcharge of up to \$80 per carload. Operations on the Sioux Falls to Canton segment, with bridge traffic from both the core system and the Dell Rapids to Sioux City line, would be profitable. The Canton to Hawarden segment would require cross-subsidization from other segments to allow traffic to move between Dell Rapids or Sioux Falls and Sioux City. The Hawarden to Elk Point segment would approximately break even if bridge traffic were available from operating the entire line south of Dell Rapids.

These conclusions depended critically upon revenue divisions, rate structures of connecting and core system carriers, and traffic volume. Considering potential future grain traffic and trucking costs, the study concluded if "nonrepayable federal or



Map 13
Trent to Elk Point branchline

- ~~~~~ Study line
- ||||| Abandoned track
- BN line
- C & NW line

state funds are used for rehabilitating as well as acquiring the branchline; only operating costs, including normalized maintenance costs, are charged to reinstated service; and, particularly that rates are charged which maximize revenue without diverting traffic, then operation of the line from Trent, Dell Rapids, or Sioux Falls to Elk Point can be self-sufficient. These 'through route' alternatives appear more likely to succeed than operation of just the end-line segments. This is due, of course, to the volume of stone traffic from Dell Rapids to Elk Point at rates equal to the cost of the corresponding truck move."

Mitchell to Rapid City (Map 14)

The Mitchell to Rapid City line is 286 miles long and lies parallel to Interstate 90. It has light rail and has had major deferred maintenance. The line serves seven stations in the mixed agricultural region between Mitchell and the Missouri River at Chamberlain. This 67-mile eastern segment was purchased by the South Dakota Railroad Authority and included in the core system. It is being operated by the BN with 10 mph and 220,000-lb limits after rehabilitation in 1981. Upgrading the line segment to carry 100-ton cars in unit movements will require that the line's 65-lb rail be replaced.

The Railroad Authority also purchased the 219-mile segment from the Missouri River to Rapid City. The 121-mile segment from the river to Kadoka has been designated as a local option line which can be operated if local shippers and governments form a Regional Railroad Authority and provide funding for rehabilitation and operating support. This segment serves eight shipping stations in a productive wheat growing region.

The line west from Kadoka to Rapid City is 98 miles long. It served only the Rapid City station since it lies in

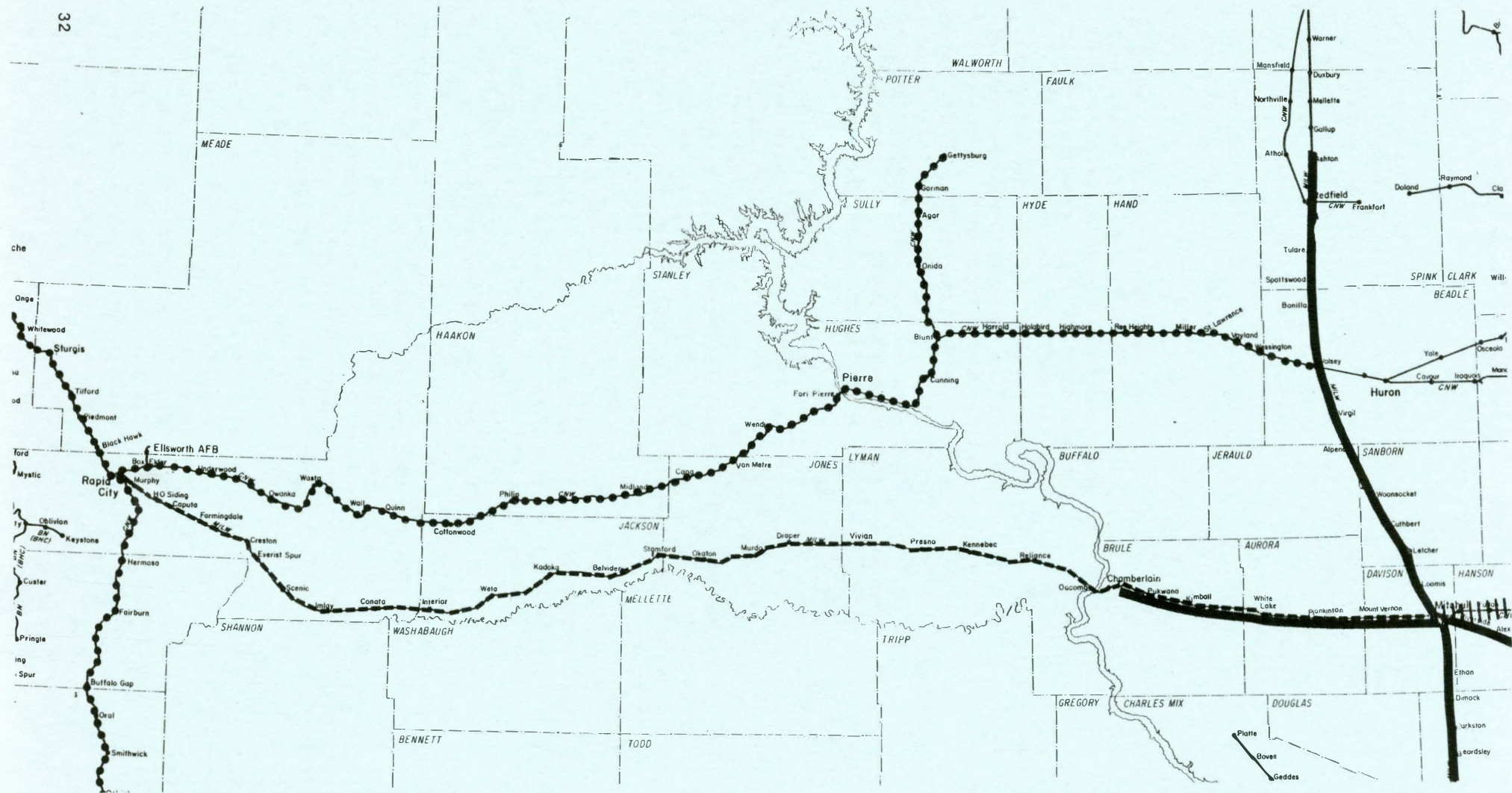
relatively unproductive lands including the Badlands National Monument. When the line to Rapid City was operating, it competed for traffic with the C & NW. The Railroad Authority has placed this line in railbank status. Rehabilitation and operation will only be considered if the C & NW abandons service on its parallel route between Pierre and Rapid City.

The shortline feasibility analysis of this line was based upon historical data and estimates of reasonable interchange and rate arrangements. It was assumed that the line would interchange with the core system and would be acquired separately with no charges made to the operations for investment in track and right-of-way. Under these conditions the general conclusion was that "none of the line segments studied show strong prospects for producing any net income in the near future."

In terms of possible alternative operating arrangements, the analysis found that service on the Mitchell to Chamberlain segment would incur an estimated revenue shortfall of nearly \$800 per carload. Operating a Chamberlain to Kadoka shortline would require a surcharge of more than \$750 per carload, operating the Mitchell to Kadoka line would require a surcharge of \$650 per carload. If a shortline was operated between Chamberlain and Rapid City, a shortfall of \$120 per carload was estimated.

The study also took into consideration several additional factors including potential traffic gains, highway costs, trucking costs, maximum traffic retaining rates, capital costs, and reduced costs of moving traffic from Mitchell to Aberdeen. The study concluded:

"...it appears that no configuration of the line can break even at 1979 traffic levels even with the state covering the capital costs for the Mitchell to Chamberlain segment. With such a capital infusion and an increase



Map 14
 Mitchell to Rapid City branchline

- Study line
- ||||| Abandoned line
- BN line
- C & NW line

in traffic to the estimated potential level, the line operation to Chamberlain could be self-sufficient."

The specific conditions necessary for any operation of the line west of Chamberlain to break even are:

1. an average 56% increase in traffic from the 1979 level for stations between Mount Vernon and Kadoka
2. payments to the South Dakota core system for movements beyond Mitchell which are \$1.12 or less per loaded car mile
3. rates for service on the branchline which are as high as possible without diverting traffic (equal to the cost of trucking)
4. the availability of state and federal funds to purchase the entire line and rehabilitate it at least as far west as Chamberlain.

If any of these conditions cannot be met, it is unlikely that operation of the line can be self-sustaining.

These brief outlines of study results show that subsequent developments on these branchlines have been largely consistent with recommendations. The studies are, however, relatively complex. The conclusions depend upon a variety of assumptions and possible developments. Therefore, before any simplified judgment is made, the reader should examine the studies in detail and recognize the complexities of each case.

CHAPTER IV

Some conclusions from SD's experience

South Dakota's experience in restructuring the rail system serving

the state provides some guidelines for other states facing similar problems. The state's actions can generally be described as well planned responses to economic and institutional realities. The ability to take such actions was derived in part from the unique situation in which the state found itself.

With the exception of the Milwaukee's mainline to the West Coast, virtually all rail service in South Dakota was provided by light density branchlines. These required cross subsidies from other profitable operations. When the plight of the nation's rail system was recognized, such cross subsidization was eliminated and it became easier and faster for railroads to abandon light density lines. Being at the end of branchline systems, South Dakota experienced loss of lines early. Most lines had to originate and terminate sufficient traffic to be self-supporting.

South Dakota never had a rail structure as dense as other states in the Midwest. Much of the rail service it did have was abandoned in the 1960's and early 1970's. Thus, by 1976, many towns and areas were already without rail service or had only poor service. This reduced much of the potential local opposition to a restructuring of the system. In other states with closely parallel branchlines, it may be politically difficult for a state agency to choose to devote resources to retain just one of the lines in a region.

By the latter half of the 1970's the people of South Dakota had begun to view the possibility of retaining service on the entire system realistically. The 4 R's Act of 1976 provided the mechanism for state government to become actively involved in rail system planning. The bankruptcy of the Milwaukee Road in 1977--with the potential loss of one half the remaining track in the state--provided the crisis to which the state was willing to respond.

The congruence of these elements created a situation in which state government was required, willing, and able to play a leading role in resolving the state's rail problems. And, the public was willing to commit resources to save an essential but not redundant set of lines. Even though other states may not be able to play as active a role because of their unique circumstances, their rail planning agencies may be able to benefit from South Dakota's experience.

Private and local actions

Early in the abandonment period, the threat of losing service often led to the creation of shippers' organizations whose purposes were to fight abandonment of single branchlines. Because of federal laws and regulations, though, these organizations inevitably lost their battles. The shippers' groups were unable to raise the capital necessary to rehabilitate lines for continued service or to purchase lines and subsidize shortline service.

Local units of government, while often sympathetic to shippers' desires, were unable to commit funds to such projects which were often perceived as benefiting only a small number of taxpayers. They and private parties were also deterred from investing because of the generally poor record of shortline railroads operating without subsidies and the substantial risk associated with rail operations largely dependent upon agricultural shipping. Local governments also faced jurisdictional problems as branchlines required joint effort by several towns and counties.

State government's role

Perhaps the most important role South Dakota's state government has played in restructuring the state's rail system has been in the rational economic planning of an essential rail system and in communicating the

planning process to the general public in a straightforward manner. The planning effort required that lines be identified which would: (1) help keep South Dakota integrated with the national rail system by interchange points and potential through routing; (2) generate sufficient traffic to be self-supporting if deferred maintenance and rehabilitation capital requirements could be met; or, (3) serve essential socio-economic purposes such as providing access for coal shipments to the Big Stone power plant. Lines which did not economically warrant the use of scarce state resources (primarily stub end branchlines and parallel routes) were not included in the plan.

Communicating the state's rail plan to the public included informing the public of estimates of costs and of the limited availability of federal funds. Groups which wanted to retain service on lines not in the state plan were made aware that they would have to make significant local investments. Although those groups often felt anger and frustration at first hearing this news, those feelings generally subsided as the economic facts became understood. The communication of realities, rather than false hopes of financial or legal salvation by the federal government, contributed to public acceptance of the plan.

The only examples of successful local or private action have occurred where such action has been coordinated and partially funded by the state. It appears that a state role is virtually necessary to save a stub end branchline. This is due, in part, to the inability of local entities to commit enough capital. It is also due to the greater chance of success a branchline project has when it is coordinated with the development of a state rail system and is included in state level negotiations for service by a major carrier.

Even within the framework of the state planning effort, retaining service on a line not in the core system requires significant local leadership

and commitment. Realistic economic analysis is a prerequisite, as is a willingness to make an investment. Local units of government must be convinced of the need for rail service and the feasibility of the project. Leaders must be willing and able to work long and hard on legal and financial details to make them acceptable to their own constituency, state rail authorities, railroad companies, local governmental officials, and lenders.

Another essential element in the role of state government was the willingness to commit state tax revenues to the railroad problem in a major way. Not only did this make money available, but it signaled the support of the people of the state as well. This allowed state officials to gain increased cooperation from the Federal Railroad Administration and the railroads. States which are only willing to devote federally allocated dollars may find themselves short of both the funds and cooperation necessary to succeed.

Public funds have been spent to preserve essential lines rather than subsidize service operations. This has provided an indirect operating subsidy to the BN which charges rates including a return to capital invested by the public. Using this indirect form of subsidy has several advantages. The operating company, whether major railroad or shortline, is relieved of the need to invest substantial capital up front. This makes the business more attractive to potential operators.

Shortline operators usually are forced to perform only the minimum necessary rehabilitation because of their relatively small capital base. Consequently, an unexpected calamity or a shortfall of traffic can lead to a quick cessation of their service. With the track purchase and rehabilitation work funded by the state, the fixed costs of the operating company are reduced substantially. Operations can be continued during adversity and

service over rehabilitated track is faster and more reliable.

These features make shippers more optimistic about long term service and encourage them to use rail service and invest in rail using facilities. Thus, the probability of success is increased -- especially for a shortline operation. Ownership of the lines also means that, should the current operator wish to discontinue service, another operator can be employed without going through the long cycle of deferred maintenance, poor service, and abandonment. This implied threat to employ a competitor railroad may also encourage the current operator to continue serving the system.

Other public contributions

South Dakota's state government has done much to preserve rail lines, reinstate service on those deemed essential, and influence the routing of traffic to support them. To increase the likelihood of having long-term service and a permanently successful rail program, however, reductions in operating costs and growth in rail traffic should be encouraged. There are several ways in which state government can assist.

Costs might be reduced by assigning the responsibility for crossings, signals, and weed control to the state highway department. Purchases of material and equipment might be incorporated with highway purchases. Real estate and other tax burdens might be reduced.

The state might provide legal and administrative assistance to shippers and local governments which want to organize and support continued rail service. State government might also assist in attracting new rail using industry to locate on essential lines and in helping existing shippers to expand their rail use. State industrial

and agricultural development agencies could assist with (1) site location and leasing or acquisition; (2) identification and coordination of potential sources of financing; (3) state and local tax incentives; (4) market analyses and feasibility studies; (5) and negotiation of rail rate and service provisions.

While South Dakota's effort in restructuring its rail system must be judged a success so far, long-term success is not guaranteed. The task of encouraging traffic growth without benefit of a crisis atmosphere may prove more difficult than the work accomplished so far. It may also be more decisive.

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