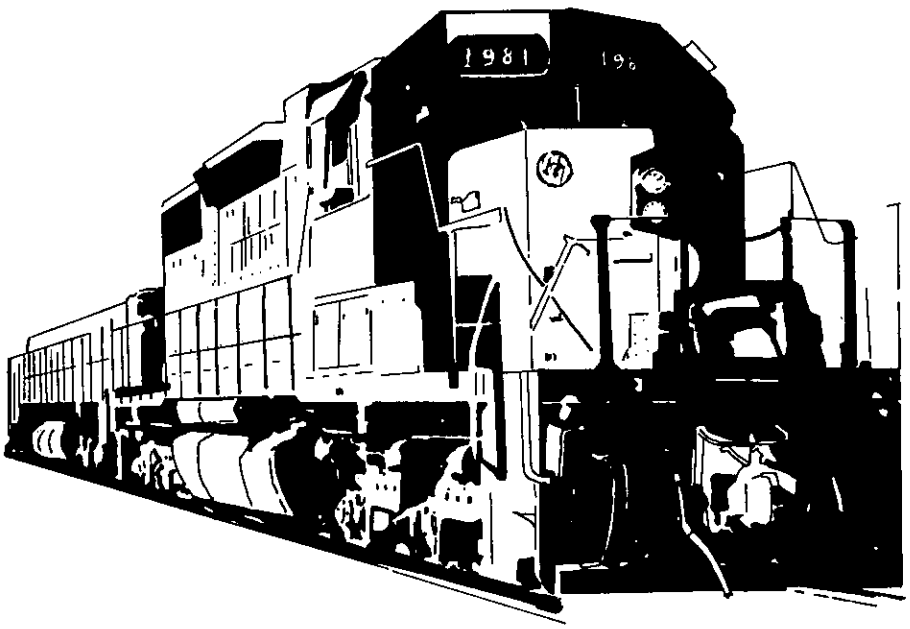
RAILPLAN
SOUTH DAKOTA
-1981-



SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
DIVISION OF RAILROADS
PIERRE, S. D. 57501

SEPTEMBER 1981

RAILPLAN SOUTH DAKOTA

1981

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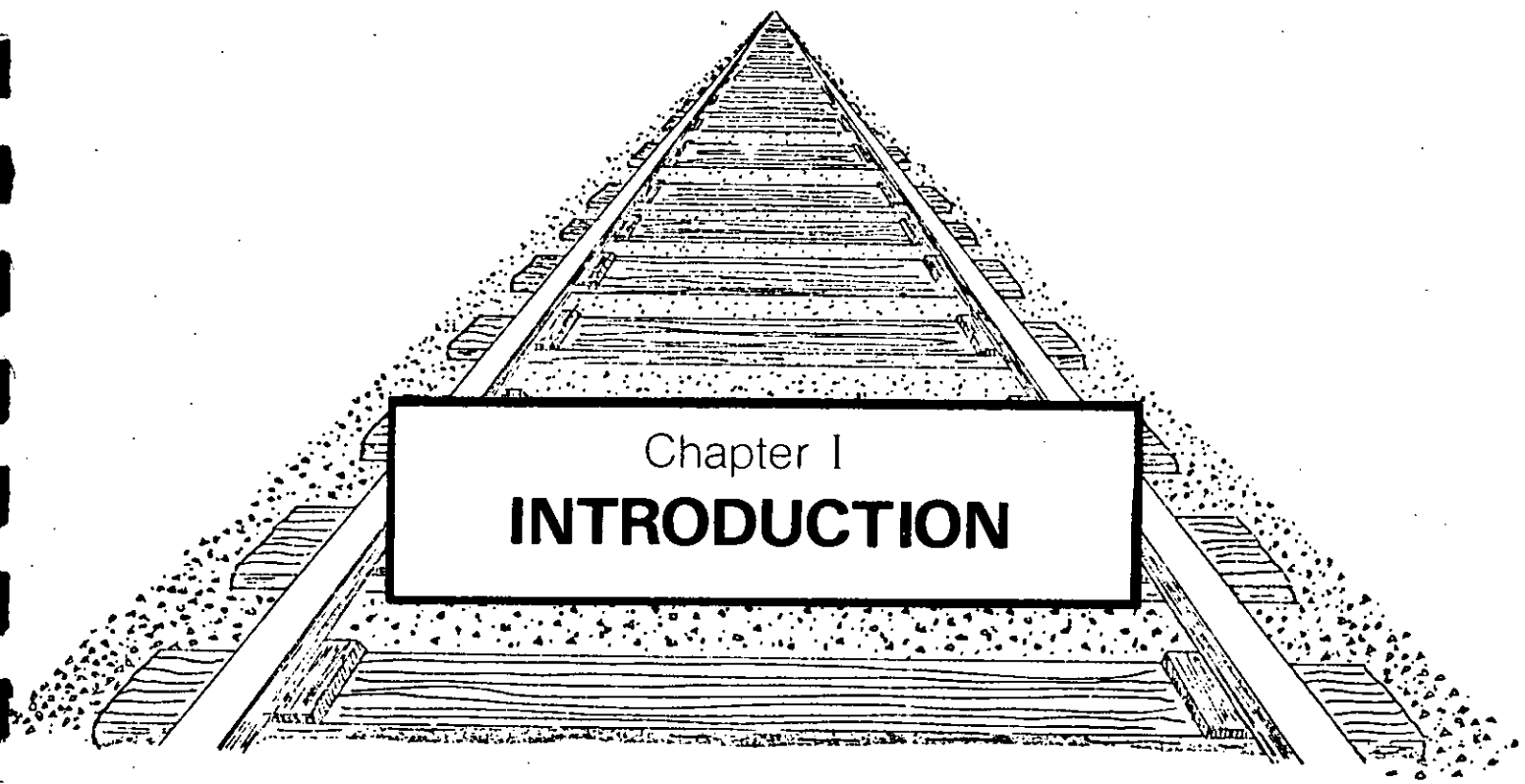
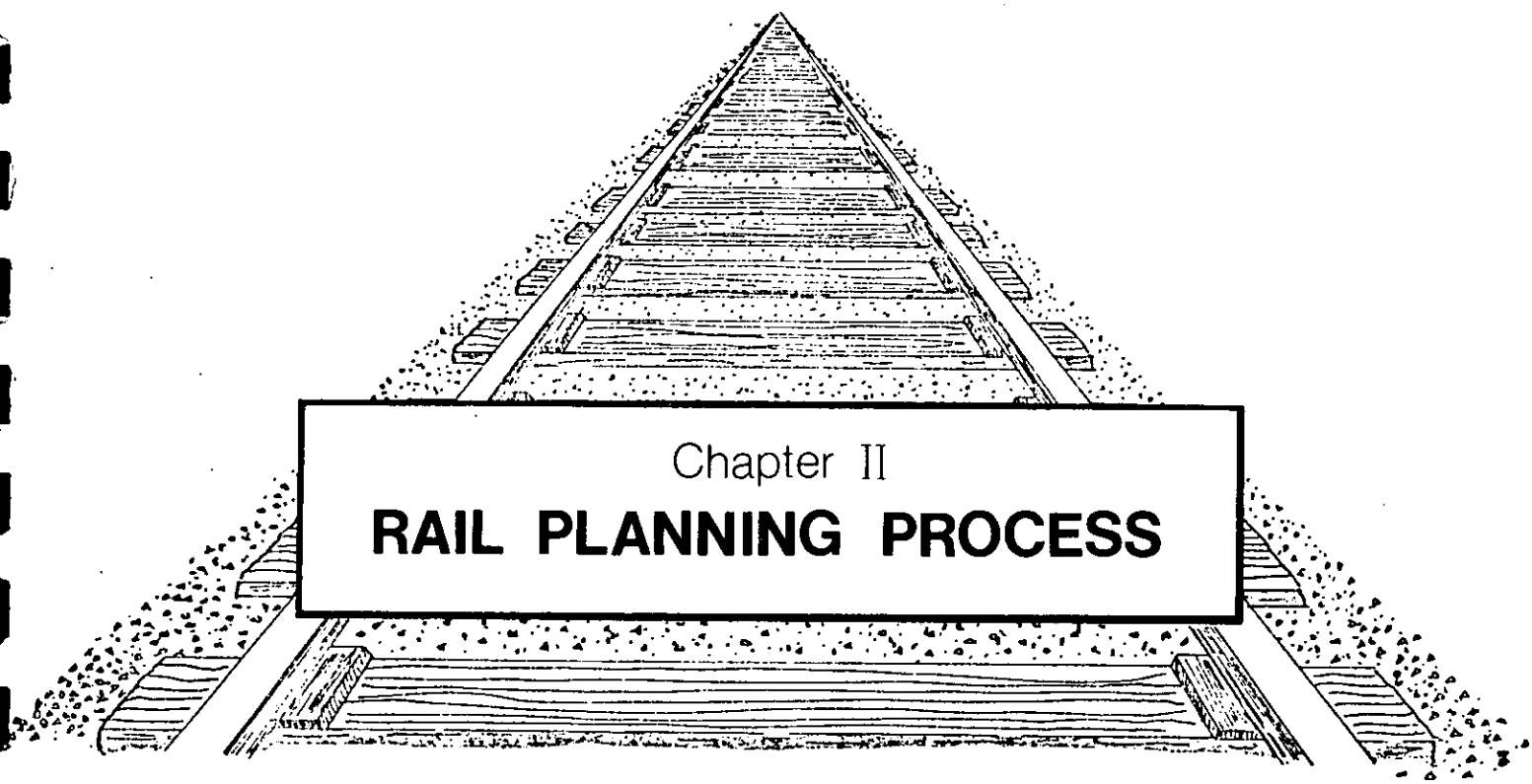


Chapter I

INTRODUCTION



Chapter II

RAIL PLANNING PROCESS

CHAPTER I

INTRODUCTION
[266.15(d)(1)]

This document is the official rail plan for the State of South Dakota. It was prepared by the South Dakota Department of Transportation, Division of Railroads, the designated state agency responsible for rail planning and project implementation. The purpose and objective of this plan is largely four (4) fold:

1. Establish and make known State rail policies, objectives and goals. The annual updating procedure is intended to provide an opportunity for the public to review policies, objectives, goals and their implementation. Further, the annual review and public hearings provide a forum for the public to pass judgment on these policies, objectives and goals.

2. Inform the public as to the State planning process, proposed projects and other areas of involvement. A need exists to accurately document the current rail posture in South Dakota, to review status of abandonments, rail restructuring, to discuss purchases and operations by the State, and increase general awareness of the statewide transportation problems.

3. Qualify the State of South Dakota for federal funds to support projects. Limited federal funds are available to states for assistance programs provided they meet certain criteria and provided that the State has a current (approved) rail plan. The federal government also provides funds to support the rail planning process, including the development of this plan.

4. Establish priorities for the expenditure of federal and state funds. The State has identified and prioritized capital needs (both on the State owned system and lines in the private sector) for rail facilities improvements. These expenditures address the improvement of rail facilities for safety and operating efficiency. Priorities are necessary because the needs are greater than available funding.

This plan is intended to meet the federal requirements to update RAILPLAN SOUTH DAKOTA 1980 and addendums. Railplan updates are required on an annual basis; the 1980 plan expires on September 24, 1981.

This 1981 plan describes the steps that the State is taking to assure its citizens of continued rail service accessibility. The recommended program of projects included in this and prior reports provide an affirmative response to the rail problems which face South Dakota. The numbers and letters in brackets [ ] found throughout this report are references to the applicable Section of the Code of Federal Regulations which sets requirements for state rail planning.

Response to FRA Comments - [266.15(d)(2)(i)]

RAILPLAN SOUTH DAKOTA 1981 also addresses concerns of the Federal Railroad Administration (FRA) regarding RAILPLAN SOUTH DAKOTA 1980. Specifically, the FRA approval letter, dated September 24, 1980, contained two comments:

1. "The methodology calculates lost property tax revenues from elevators that shut down and add these to the benefits. Since taxes are a transfer payment, they are neither benefits nor costs. If such elevator structures are not usable for any other purpose, then the value of the structure itself (less salvage) can be considered a benefit. The property taxes are, however, just a transfer."

2. "Job gains are considered permanent while job losses are temporary in the South Dakota methodology. Since employee income is only a surrogate measure for the economic benefits of labor production, benefits from job gains should be considered permanent only if it results in a permanent reduction in the unemployment rate. This would be the exception rather than the rule and should be specially documented in each case."

The State agrees with the above comments and has since modified its methodology so as to reflect these changes.

CHAPTER II

RAIL PLANNING PROCESS
[266.15(c)(10)]

The railroad planning process in South Dakota has developed in response to a variety of issues and events that have drastically changed the character of rail service within the State. This chapter reviews the past efforts of the State to address rail-related issues in order to provide a better understanding of the current planning process. It also highlights the public participation process associated with the planning process and presents the major rail-related issues affecting South Dakota. These issues form the basis for the policies, objectives, and goals which have guided the development of this RAILPLAN.

PAST ACTIVITIES

The State of South Dakota became actively involved in railroad planning in response to a growing number of line abandonments and the general deterioration of the statewide rail network and service. For years, the State's involvement in railroad matters was limited to the activities of the State Public Utilities Commission, which was responsible for rate regulation and which held limited legal powers related to abandonment proceedings. Recognition of the continuing decline of the Statewide rail network finally resulted in a Railroad Seminar being held in Sioux Falls in September 1973. This seminar attracted representatives from State agencies, railroads, farm organizations, shippers, and citizen groups and permitted the exchange of views concerning rail issues affecting South Dakota. One of the results of this seminar was the appointment of a Railroad Policy Task Force to study rail-related problems and issues.

The Task Force consisted of 19 members with diversified backgrounds, each of whom was interested in and concerned about South Dakota's railroad service. The Task Force was instrumental in initiating studies to explore the effects of rail abandonment on the State and its communities. It also was instrumental in increasing public awareness of the rail problems in South Dakota and set the initial direction for the development of South Dakota's first railplan, RAILPLAN SOUTH DAKOTA 1978.

The Task Force suggested legislation that was adopted in 1975 which created the Division of Railroads within the South Dakota Department of Transportation. The Division was established July 1, 1975, with the Task Force serving in an advisory capacity. On July 1, 1977, the Task Force was replaced by a five-member Railroad Advisory Commission with members appointed by the Governor. They are responsible for providing guidance and assistance to the Division, including input to the rail planning process.

The Division conducts research on basic railroad problems, plans and assists the development of rail transportation, maintains the State/Federal relationship on programs relating to rail transportation, and assists the Department of Transportation or any public and private agency in coordinating railroad services with those of other transportation modes. The Governor, under the Railroad Revitalization and Regulatory Reform Act of 1976 (4-R Act) [1] has designated the Division as the State agency responsible for managing the rail planning process and assistance program.

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[1]Public Law 94-210, 94th Congress, 5.2718, February 5, 1976.

The 4-R Act provides a method and a means for unified nationwide rail planning. It provides for direct loans to railroad companies for line upgrading, purchasing new facilities/equipment, or repairing existing facilities/equipment. The Act also contains the local rail service assistance program, which provides matching funds to states for rail planning and for rail service assistance. Each state is allocated a specific amount of funds annually under a formula which considers the number of miles in the state which have been approved for abandonment and the number of miles potentially subject to abandonment. The assistance funds may be used either to foster continued rail service or to aid in substitute service arrangements after rail service discontinuation. The Federal share of approved projects for rail service assistance is currently a maximum of 70% of total project costs, the balance being provided by user, railroad, and/or state.

The first major charge for the Division under the 4-R Act was the development of RAILPLAN SOUTH DAKOTA, approved by the Federal Railroad Administration (FRA) in March 1978. This RAILPLAN not only addressed major rail-related issues affecting South Dakota, but also reflected South Dakota's frustration that rail lines were not eligible to receive federal assistance under the 4-R Act unless they had been approved for abandonment.

Since the 1978 RAILPLAN submittal, additional rail assistance legislation important to South Dakota was passed by Congress. The Local Rail Service Assistance Act of 1978 (LRSA Act) [2] extends the use of federal (Section 803) funds to rehabilitation or new facility construction on operational light density lines of less than 3 million gross tons annual traffic density (up to 5 million gross tons with discretionary approval by the FRA Administrator).

South Dakota's initial application for project funding under the LRSA Act came in a 1979 addendum to RAILPLAN SOUTH DAKOTA. The addendum provided a benefit/cost analysis in support for a $2.3 million rehabilitation project proposed on the Milwaukee Road line between Jonathan, Minnesota, and Miles City, Montana. This line serves local agricultural shippers as well as the power plant at Big Stone City. The project consisted of replacing ties and adding ballast to the most deteriorated portions of the line using federal (Section 803) funds from the allocations of South Dakota, North Dakota and Minnesota combined with 20 percent user matching funds. The project was approved by the FRA in July 1979 and completed in early November 1979.

A second addendum to the 1978 RAILPLAN was prepared by the Division and submitted to the FRA on September 29, 1979. The proposed project was a $3,574,175 rail rehabilitation of the Blunt to Onida portion of the Chicago & North Western's (C&NW) Blunt to Gettysburg branch line. The cost of the project was to be shared by the State (using 803 funds), shippers, and the railroad. This project was approved by the FRA, but the shippers were unable to obtain financing for their required share.

Legislative action at the state level has provided significant opportunities for coping with the railroad problems affecting South Dakota. The 1978 South Dakota Legislature passed important and timely pieces of legislation to aid railroads. Legislation patterned after the "Iowa Plan" set up a mechanism whereby the state, shippers, and the railroad could enter into a cooperative rehabilitation program, each of the three parties incurring part of the cost. Additional legislation

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[2]Public Law 95-607, 95th Congress, S.2981, January 19, 1978.

provided the mechanism through which local units of government can form Regional Railroad Authorities with necessary powers to enter into projects for the retention of rail service or the provision of substitute service.

The 1979 State Legislature increased the staffing and budget allocation for the Division of Railroads. Further, the Legislature transferred certain railroad regulatory functions involving the statutory authority to intervene in railroad abandonments from the Public Utilities Commission to the Department of Transportation.

In 1979, a detailed analysis was performed called the South Dakota Rail Line Inventory Study. This study evaluated each rail line in South Dakota according to the following criteria: current traffic level and composition, future traffic potential, network connectivity, rehabilitation costs, added shipper costs, and added highway costs. Each line was prioritized according to these criteria to determine which lines offered the greatest justification for service. Waybill data and railroad-supplied data provided the basis for this analysis. The results of this study helped to identify which lines are important to the future viability of South Dakota's rail service and economic development potential.

In order to preserve vital rail lines that would be lost as a result of the Milwaukee Road bankruptcy or other separate abandonments, the 1980 Legislature created the South Dakota Railroad Authority, which has the power to plan, establish, acquire, develop, construct, purchase, enlarge, maintain, equip, and protect railroad facilities deemed necessary to the State. Separate legislation established the eligibility of rail lines that the Authority could purchase within a spending limit of $25 million. The 1980 Legislature also created the South Dakota State Railroad Board as a policy board for the Division of Railroads to assist in managing the rail property.

A third addendum to the 1978 RAILPLAN was submitted to the FRA on August 1, 1980. This presented a benefit/cost assessment of a $2.5 million rail line rehabilitation project on a segment of the Milwaukee Road main line from Gascoyne, North Dakota to Miles City, Montana. North Dakota, Montana, and South Dakota shared their federal funds for the project, and the Milwaukee Road provided matching funds. In addition, the Milwaukee Road expended approximately $1.5 million of its own funds on the line east of Gascoyne, North Dakota. The entire project was completed during the 1980 construction season.

During 1980, several additional planning efforts were undertaken. Most of the rail network in South Dakota, and the Milwaukee Road line from Jonathan, Minnesota, to Miles City, Montana, were inspected and estimates made of the net salvage value, normalized maintenance of way costs, and rehabilitation costs for several conditions of track. Another planning effort assessed the viability of the Jonathan, Minnesota, to Miles City, Montana line under several operating and rehabilitation alternatives. A third effort involved investigation of the costs for relocation of grain elevators from rail lines threatened by abandonment to rail lines that continue in service.

RAILPLAN SOUTH DAKOTA 1980 analyzed fourteen potential projects using a benefit/cost analysis. Of these, seven were recommended for funding, based on the analysis and other pertinent factors. Since the estimated cost of these projects greatly exceeded the funding available, a prioritization process ranked four projects within the 1980 funding limit. The previously mentioned Gascoyne to Miles City project received top priority.

The second priority project addressed tie and ballast inadequacies, a transfer track, and some new rail for the Huron to Pierre rail segment. The Chicago and North Western Transportation Company, owner of this trackage, is presently analyzing terms for a potential project with the State of South Dakota.

A rehabilitation of Burlington Northern's Sioux Falls to Madison branch line was placed third on the priority list. This project is currently being conducted through the funding concept known as the "Iowa Plan". Costs are being shared by the railroad, the State, and the Lake-Minnehaha County Regional Railroad Authority. When the project is completed later in 1981, unit trains of 100-ton hopper cars will be shipped from the line.

The final project to be initially funded was a substitute service arrangement that addressed the Milbank to Sisseton branch line of the Milwaukee Road, a line presently filed for abandonment. Due to the volume of shipping originating on the line, a method was sought to preserve rail service for shippers. A facility relocation project was proposed whereby grain elevators would be relocated to the Milwaukee Road main line a short distance away. Due to filing for abandonment of this line and the indecision of shippers for the acceptance of this project, funding has been deferred until a better assessment can be made by all potential participants.

The deferral of this project allowed the funding of the next priority project, the rehabilitation of the former Milwaukee Road branch line from Britton north to the junction with a Burlington Northern line, a distance of 4.8 miles. This segment, which is owned by the State of South Dakota, will be operated by the Burlington Northern, and the project matching funds will be provided by the Marshall County Regional Railroad Authority.

In addition to railroad-related activities on the state level, Congress enacted legislation in 1980 that may have far-reaching effects on the rail industry at large. The Staggers Rail Act of 1980 significantly eased the regulatory burden imposed on the railroads, altered the method of formulating freight rates, and minimized the delays associated with uncontested abandonments and mergers. A detailed description of the Act, including an abandonment timetable, is further discussed in Appendix B, Basic Provisions of the Staggers Rail Act of 1980.

A summary of important occurrences that have had an impact on the rail system serving South Dakota over the past four years is summarized in Appendix C, Significant Events Relating to South Dakota Railroads.

CURRENT PLANNING PROCESS [266.15(c)(1)] and [266.15(c)(11)]

Rail planning for the State of South Dakota is the responsibility of the Division of Railroads, within the South Dakota Department of Transportation. Figure II-1 shows the organization of the South Dakota DOT, in which the Division of Railroads is one of four divisions. Figure II-2 is the organizational chart for the South Dakota Division of Railroads. The Railroad Advisory Commission provides input to the planning process. The Railroad Authority is a public financing mechanism for the acquistion and improvement of railroad facilities. The Railroad Board, provides policy for the Division in matters relating to the management of State-owned railroad properties.

The Division is responsible for performing planning and analysis functions to maintain an up-to-date State rail plan. This includes the collection, analysis, and evaluation of data pertaining to rail lines and services in South Dakota. Typically such activities include:

- monitor rail traffic flows by railroad, station, and line;
- monitor commodity flow data for the State, particularly agricultural products;
- perform detailed line analysis for lines threatened by abandoment;
- monitor changes in the status, condition, and service of rail lines serving South Dakota;
- continuously evaluate the importance of rail facilities to the State, in light of the current situation and expected developments;
- analysis of State Core operations.

In addition, the Division provides technical support to assist railroads and rail users.

OVERALL PLANNING PROCESS [266.15(c)(11)]

One of the South Dakota Department of Transportation's (SD DOT) goals is to "establish, construct and maintain a viable state transportation system, including both the public and private sectors, which provides a sufficient level of service for the movement of products and people in a safe, economical, timely and efficient manner based upon available resources". An accompanying goal is "to actively work for transportation betterment in the identification and interpretation or transportation needs and to strive for public and legislative support to meet those needs". A major objective of the SD DOT is "to integrate the various modes of transportation in order that they might safely, efficiently and economically supplement and complement each other in the movement of persons and goods".

The SD DOT, through its Division of Railroads, serves as the designated state agency for both rail planning and project implementation pursuant to Section 5, Department of Transportation Act, as amended by the Railroad Revitalization and Regulatory Reform Act of 1976 and the Local Rail Service Assistance Act of 1978. The SD DOT is also the state agency that has the statutory authority to intervene in abandonment cases and other legal proceedings with railroad companies and the ICC.

All planning for rail projects utilizing Federal 803 funds and state financing addresses the highway impact of each project plus the highway impact of all identified alternatives related to each project. The proposed projects are coordinated with the other Divisions within the DOT and are presented to the State Transportation Commission for their consideration.

FIGURE II - 1

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION

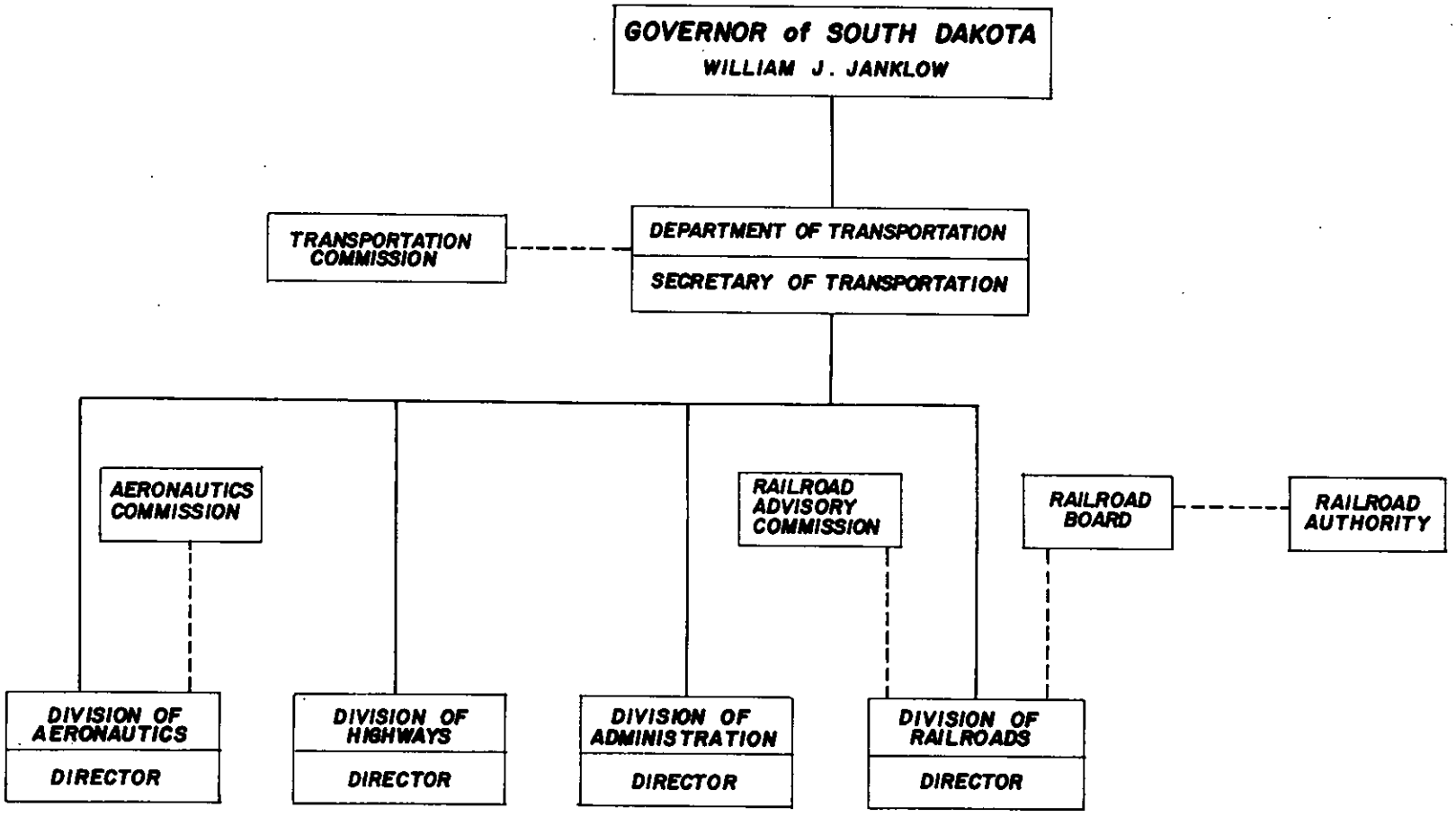
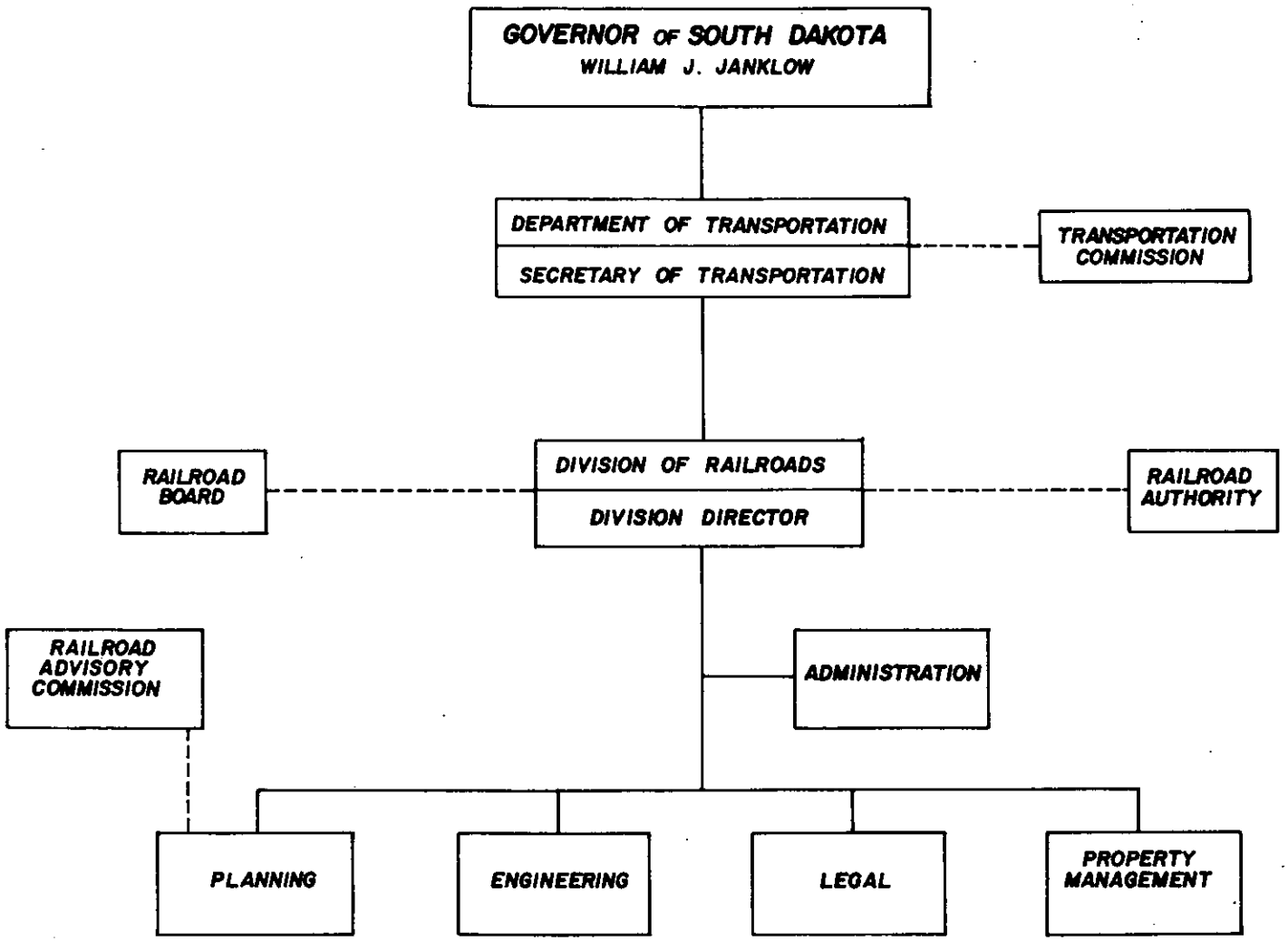


FIGURE II - 2

SOUTH DAKOTA DIVISION OF RAILROADS



The policies, goals, and objectives that follow guide the planning process to ensure that plans and projects are developed which are compatible with all modes and that the potential for significant modal shifts of freight movement are analyzed. Transportation planning, plan development, project selection, and implementation must be on a multi-modal level because decisions in one area or mode can, and in most cases will, affect other modes.

The existing South Dakota Railplan addresses rail planning and the highway impact of rail projects. This plan, together with the Highway and Aeronautics Plans, provides the South Dakota Transportation Commission with comprehensive plans for all modes of transportation with which it is currently involved. The Commission must act upon all transportation projects regardless of mode and is the final approving agency for the expenditure of transportation funds.

PUBLIC PARTICIPATION PROCESS [266.15(c)(10)]

Rail planning in South Dakota grew out of public awareness of the rail crisis facing the State and the public's desire to solve the resulting transportation problems. Public participation in the State's rail planning process began in 1973 during the activities of the 19-member Railroad Policy Task Force. Their actions initiated rail planning and coordinated numerous public meetings throughout the State acquainting local citizens with rail issues.

The Railroad Advisory Commission, successor in 1977 to the Task Force, provides public input to the Division. Additional input is provided through six Planning and Development Districts. Each of these districts is responsive to the citizens of each multi-county area.

Various State departments and agencies also provide input into the rail planning process. These include the following:

- Transportation Commission - has final authority over all expenditures of the Department of Transportation, including the Division of Railroads;
- The Division of Administration of the DOT - as coordinator ot multi-modal transportation planning, is involved in the rail planning process as it relates to the state highway network;
- State Department of Agriculture - is involved in the State's largest industry and largest user of rail service;
- State Department of Water and Natural Resources - provides input and coordination related to the development of natural resources in the State; and
- State Planning Bureau - provides input through the A-95 review process of plan updates.

Direct public participation in the rail planning process is generated through the issuance of news releases, agency mailings, meetings, and seminars. Division of Railroads staff regularly meets with numerous shipper groups and makes appearances throughout the State to inform the public and solicit input to the planning process.

The Division staff also contacts shippers and receivers on rail lines selected for intensive study to conduct surveys. These surveys have provided information on shipper attitudes toward rail service, shipping patterns by mode and commodity, and the effects of changes in rail service. The survey process provides shippers with an opportunity to participate directly in the State's rail planning process. The shipper survey form is located in Appendix A of this document.

The Division maintains close contact with the rail planning staffs of neighboring states. Coordination between states focuses on planning activities, program development, and project implementation.

Public hearings are conducted whenever a RAILPLAN update, revision, or addendum is issued. These hearings provide the State with the opportunity to describe the study rationale and findings and solicit public comment regarding the recommendations contained therein. Public hearings also provide both the Division staff and local citizens the opportunity to exchange ideas and to discuss current issues.

Public participation is essential to meaningful rail planning truly responsive to the needs and concerns of local rail users. Rail assistance projects in particular require the active involvement and committment of those affected by the project(s). Therefore, public participation will continue to be a major component of the rail planning process for South Dakota.

RAIL SERVICE ISSUES

The rail network in South Dakota is primarily light density branch lines. The light density nature of these lines prevents the use of modern jumbo hopper cars, which are more efficient and cost-effective for grain and fertilizer movements than the smaller outmoded boxcar. Because of this inability to efficiently serve rail users, many of these lines have lost significant volumes of traffic to the motor carriers.

The loss of traffic to the motor carriers has severely reduced the revenue production potential of many of South Dakota's branch lines. As a result of revenue losses, railroads have found it necessary to defer maintenance. This has led to further service declines which, in turn, has resulted in further diversion to other transportation modes.

This continuing cycle of track deterioration and traffic diversion, along with the financial difficulties of the Milwaukee Road, led to the abandonment of over 50% of South Dakota's operating rail system mileage during the past five years. These abandonments, along with the threat of additional abandonments, impact the State's agricultural, industrial, and natural resources development. Nearly all of South Dakota's rail freight consists of bulk commodities including grain, coal, fertilizer, gravel, cement, bentonite, stone, and pulpwood. When long distances are involved, these commodities can be moved more economically by railroad than by truck. As will be discussed later, several of the recent abandonments are part of an essential rail network that is necessary to provide access to the national rail network and without which South Dakota's existing industries will be irreparably damaged and future growth severely limited.

One of the root causes of rail decline in South Dakota has been a fluctuating demand for rail service. Drought-related agricultural production shifts have resulted in inadequate traffic levels during certain years. However, as

irrigation becomes more prevalent in South Dakota and farmers increase their on-farm storage, the transportation demand should be stablized. A stable demand will significantly improve the viability of remaining rail lines in the State.

South Dakota will continue to face the prospect of branch line abandonment until the total rail system is stabilized. The Division has identified the lines considered essential to overall State transportation needs. These lines will be the focus of track improvement programs aimed at reversing the deterioriation caused by years of deferred maintenance. Essential lines are those lines that otfer a reasonable expectation for becoming economically viable or that provide an important link to the national rail transportation network. Non-essential lines are being addressed primarily through programs to minimize the negative impacts ot abandonment. Such programs include development of regional terminal facilities that will provide efficient interface between local trucking and essential rail lines.

RAIL SERVICE AND PLANNING POLICIES, OBJECTIVE, AND GOALS [266.15(c)(1) & (d)(2)(vii)]

The content of RAILPLAN SOUTH DAKOTA 1981 is derived from South Dakota's stated policies, objectives, and goals for rail service and planning. These policies, objectives, and goals reflect the rail issues affecting South Dakota and the consensus of the Division of Railroads and the Railroad Advisory Commission.

Rail Service and Planning Policies

The State's policies provide general statements of direction for rail service and planning for South Dakota.

- To coordinate the efforts of rail users, railroad companies, local governments, and the State to solve transportation problems in South Dakota.

- To encourage the continuation of financially solvent, privately owned and operated rail services in the State. Therefore, the South Dakota DOT will not automatically oppose all railroad abandonment applications, but first will consider the potential viability of the line, the social and economic impacts of line abandonment, the local interest in the line, the potential for substitute service and other factors which may be unique to the line or its service area.

- To support essential rail services which are threatened by abandonment through the use of available public and private funds, where the public interest justifies such assistance. Possible assistance includes acquisition, service continuation, rehabilitation, rail banking, operations improvement, or substitute service.

- To foster the coordination and consolidation of rail services in the State where opportunities exist for improving the efficiency of rail operations.

- To strive to increase the public awareness of rail service issues as they affect the State and to facilitate public involvement in the on-going State rail planning process.

Rail Service and Planning Objectives

The State's objectives define more specific courses of action relating to the operation of the South Dakota DOT and the Division of Railroads.

- To foster adequate, safe, efficient and economical transportation services for the movement of persons and goods in South Dakota.

- To integrate the State's transportation system with that of neighboring states and with the national transportation system in order to facilitate interstate and nationwide travel, while also considering state and local needs, desires, and the inherent social, economic, environmental, and land use impacts.

- To integrate the various carriers and modes of transportation in order that they might safely, efficiently and economically supplement and complement each other in the movement of persons and goods, recognizing the inherent advantages of each mode.

- To provide and maintain essential rail services and facilities in South Dakota which serve the public interest but which cannot otherwise be profitably continued by private carriers.

- To provide a coordination medium for the available resources of rail users, railroad carriers, and governments (local, state and federal) for the purpose of maintaining essential transportation accessibility within South Dakota.

Rail Service and Planning Goals

Established, workable goals are necessary for the state rail planning process to outline courses of action and to define the desired future characteristics of the railroad system within the State of South Dakota.

- To identify the essential rail system for South Dakota which is needed to serve the State's current and potential agricultural, natural resource, industrial and energy-related activities.

- To retain a viable core rail system to serve South Dakota made up of essential lines which serve the primary traffic-producing areas of the State and which provide accessibility to State and national markets.

- To encourage the elimination of non-profitable rail lines which are non-essential and whose services could be more economically provided by an alternative rail line or transportation mode.

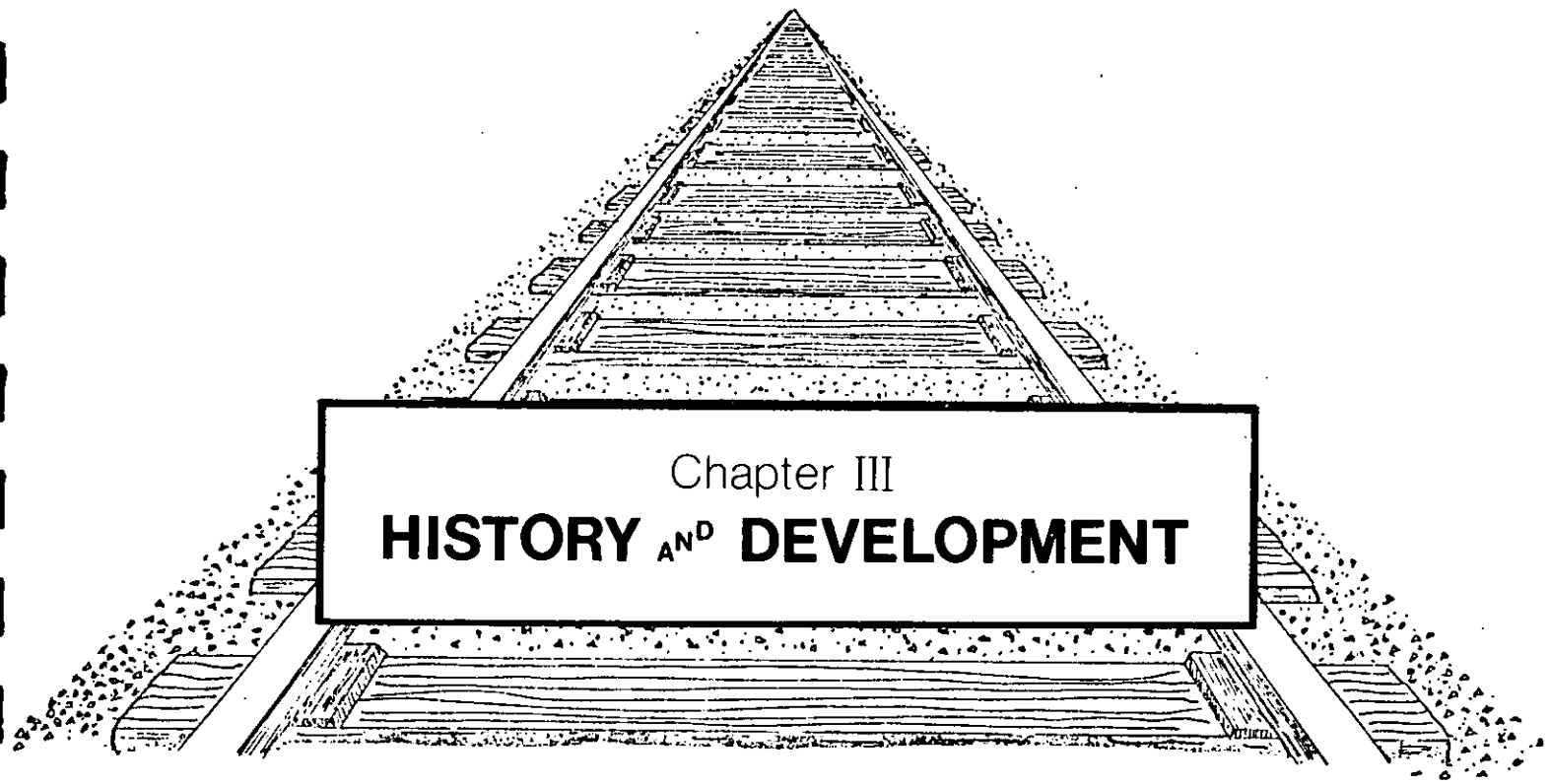
- To develop competitive transportation options for communities where the loss of current rail service will cause severe economic or socio-economic hardships.

- To promote increased use of rail service in those ways in which it is best suited.

- To provide for the transportation needs of communities where the loss of current rail service will cause severe economic or socio-economic hardships.

- To promote financial stability and operational efficiency within the rail system serving South Dakota.

- To develop, maintain, and improve the institutional capability for implementing state railroad policy by legislation, funding program administration, and project implementation.



Chapter III

HISTORY AND DEVELOPMENT

CHAPTER III

HISTORY AND DEVELOPMENT

Railroad construction in South Dakota came late in the westward expansion of the region's rail system. Whereas the construction period for most northern transcontinental lines was 1850-1885, the boom period for laying rails in eastern South Dakota was 1880-1890. As railroads raced westward to develop new markets, the Fort Laramie Treaty of 1868 prohibited railroads from penetrating the vast Indian reservations of western South Dakota. This prohibition remained in effect until 1904, when the Federal government began to implement an agreement signed in 1889 permitting the government to buy unallotted reservation land.

Even before the westward race was delayed in South Dakota, transcontinental lines were completed in 1869 and 1883 that went through Nebraska and North Dakota, respectively. The Federal land grant program, which lasted from 1850 to 1871 and involved these two lines, was responsible for the construction of only 35 miles of the total 4,420 miles laid in the State. The lines later constructed in South Dakota were frequently at one end of the nation's rail system, thus becoming branch lines with little overhead traffic.

The Chicago, Milwaukee, St. Paul, and Pacific Railroad Company finally crossed the Missouri River at Mobridge and completed its transcontinental route in 1910. The company faced the challenge of establishing markets in a region where other carriers had existed for many years. In addition, the completion of the Panama Canal four years prior to the opening of the Milwaukee Road's line altered the routing of European goods to the West Coast, thereby decreasing traffic on the overland rail routes. The ultimate result of these two factors was a further decline to an already limited traffic base which led to the eventual discontinuance of this line as a transcontinental route.

As the early railroads were racing to be the first in a territory to assist in establishing town sites and markets, eastern South Dakota was criss-crossed with competing rail lines every few miles. This offered farmers rail access within a distance he could cover both ways in one day using his horse and wagon. However, as the motor freight industry became well-established in the 1950's, farmers were offered an alternative transportation mode that offered more flexibility in terms of rates, routes, and scheduling. In some instances, a farmer could have his grain hauled from his harvested field directly to a terminal market, bypassing not only the railroad but also the local elevator. The effect of this situation was a gradual decline in rail traffic, which led to infrequent train service, deferred track maintenance, and in many cases, abandonment of the line by the railroad company.

As South Dakota's population increased through the 1920's, the economy that developed was directly related to agriculture. As such, most of the towns that had been established up to 50 years earlier were never able to expand beyond the needs of the immediate five to ten mile area. The communities that did expand served a region by providing goods and services that weren't purchased on a daily basis. The diversified economic base of these larger communities exhibited a larger transportation need than the surrounding smaller communities. Coupled with the highway building boom of the 1940's and 50's, which greatly increased the access to the larger cities by the rural population, services requiring rail transportation in the small town diminished. The Interstate Commerce Commission,

through their regulatory practices, tended to maintain rail service in these communities long after the economics of rail service had disintegrated. Eventually, however, most of these rail lines were abandoned much in the same manner as the shipping had abandoned the rail.

Most of the railroad construction in South Dakota had been completed by 1911. A total of 4,420 miles were built with the last main trackage added in 1948. Figure III-1 shows the time periods of the initial rail construction in different regions of the State. It also shows the dates when the railroads first reached major South Dakota cities. Figure III-2 illustrates the amount of operating rail mileage in ten year increments from 1870 to the present. Figure III-3 uses maps of the State of South Dakota to graphically illustrate the penetration and subsequent decline of the operating rail mileage at 20-year intervals.

Abandonment

A typical reason that a railroad gave for the abandonment of a line in South Dakota is that the line did not generate sufficient revenue to finance operations and maintenance. Some lines that do not generate significant revenue may be continuing to operate because of future transportation demand, possible freight diversions from motor carriers, or the cost of the ICC abandonment procedure when compared to the net salvage value of the line. A line may also not generate sufficient revenue because some routes of the current rail network may be more circuitous than the recently built, publicly maintained highway system, thus causing a higher freight rate for some traffic.

As of January 1, 1981, the operating rail mileage had decreased to 1,735 miles of track, or 40% of the 1919 mileage. Although rail abandonments date back to 1909, 62% of the total mileage abandoned has occurred since 1976. The Milwaukee Road has had the most miles approved for abandonment after 1976. Table III-1 shows that 1,245 miles of the Milwaukee had been approved for abandonment in this time period. The remaining 343 miles that continue to operate have been filed for abandonment and are awaiting the final authority to cease operations. Most of these abandonments have been the direct result of the Milwaukee Road bankruptcy and restructuring effort.

The Chicago and North Western has had an active abandonment program since the mid-1960's when it started to eliminate unprofitable low density branch lines. Since 1976 they have eliminated 422 miles of their 1,146 mile system in South Dakota, leaving a 724 mile system.

Of the remaining rail carriers, the Burlington Northern has abandoned 91 miles of their track, most of which has occurred since 1980. The Soo Line has not abandoned any mileage since 1976. The Illinois Central Gulf has received permission to abandon its one line in South Dakota but it is currently being appealed so operations have continued.

The rail lines that were in place in 1976 are shown on Figure III-4. These lines are broken down by two symbols to illustrate those lines which have received abandonment approval since 1976 and those which continue to operate.

A chart showing the current rail line abandonment timetable is given in Appendix B. The Interstate Commerce Commission has the authority to make decisions in abandonment cases. Their procedures have been amended by the Staggers Rail Act of

1980. This Act served to speed up the abandonment procedure with uncontested abandonments permitted 75 days after filing.

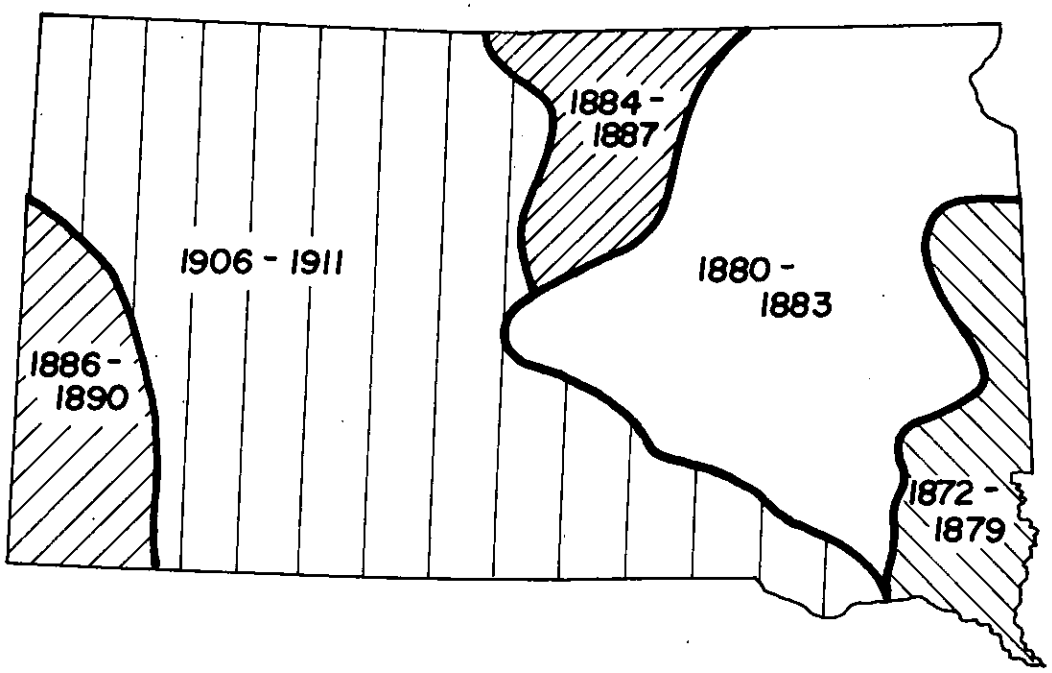
Bankruptcy

The Milwaukee Road filed for financial reorganization on December 19, 1977 under Section 77 of the Federal Bankruptcy Act. This action was taken as a legal mechanism to reorganize into a smaller company by shedding unprofitable lines to improve financial stability. On April 23, 1979, the Court-appointed trustee for the Milwaukee requested permission from the Federal Court to halt service on approximately three-fourths of its system. Although the request was denied, the Milwaukee filed a modified request and received approval to embargo their lines in South Dakota on November 1, 1979. Because an agreement had been reached with South Dakota, Minnesota, and North Dakota where the States would provide $2.3 million for a track rehabilitation project, the line from Jonathan, Minnesota to Miles City, Montana and two connecting branch lines were retained by the Milwaukee. These lines, however, were subsequently filed for abandonment with approval expected during 1981. A further description of the actions taken by South Dakota in response to the bankruptcy is found in Chapter V.

Although many concepts have been suggested as to the reason for the Milwaukee Road bankruptcy, a commonly accepted reason is that they continued to operate too many low density branch lines. Since the Milwaukee had very few abandonments prior to 1976, the large number of lightly traveled branch lines caused a huge burden on their system. Their transcontinental line also presented problems with low traffic volumes west of Minneapolis. The effects of these problems, long ignored by the railroad and shipping interests alike, continued to mount for several years and finally climaxed with the railroad filing for bankruptcy.

FIGURE III-1

Initial Rail Development in South Dakota



DATES WHICH A RAILROAD FIRST REACHED SELECTED SOUTH DAKOTA CITIES –

Vermillion	1872	Redfield	1881
Watertown	1873	Ipswich	1883
Yankton	1873	Bowdle	1886
Sioux Falls	1878	Rapid City	1886
Brookings	1879	Belle Fourche	1890
Huron	1880	Deadwood	1890
Mitchell	1880	Murdo	1906
Pierre	1880	Philip	1906
Chamberlain	1880	Mobridge	1906
Webster	1880	Lemmon	1907
Aberdeen	1881	Winner	1911

FIGURE III - 2

HISTORICAL RECORD OF SOUTH DAKOTA S RAILROAD SYSTEM

YEARS	NEW MILES CONSTRUCTED	MILES ABANDONED	SERVICE REINSTATED	SYSTEM TOTAL
1870-1879	304.21	-0-		304.21
1880-1889	2,134.10	-0-		2,438.31
1890-1899	394.74	-0-		2,833.05
1900-1909	1,161.14	5.30		3,988.89
1910-1919	344.20	31.57		4,301.52
1920-1929	68.60	89.43		4,280.69
1930-1939	-0-	150.91		4,129.78
1940-1949	13.50	184.93		3,958.35
1950-1959	-0-	57.41		3,900.94
1960-1969	-0-	213.99		3,686.95
1970-1975	-0-	345.65		3,341.30
1976-1979	-0-	613.80	7.7	2,735.20
1980-Present	-0-	1,159.30	443.5	2,025.70*
TOTAL	4,420.49	2,852.29	451.2	

* CONTAINS 6.30 ADDITIONAL MILES IN IOWA

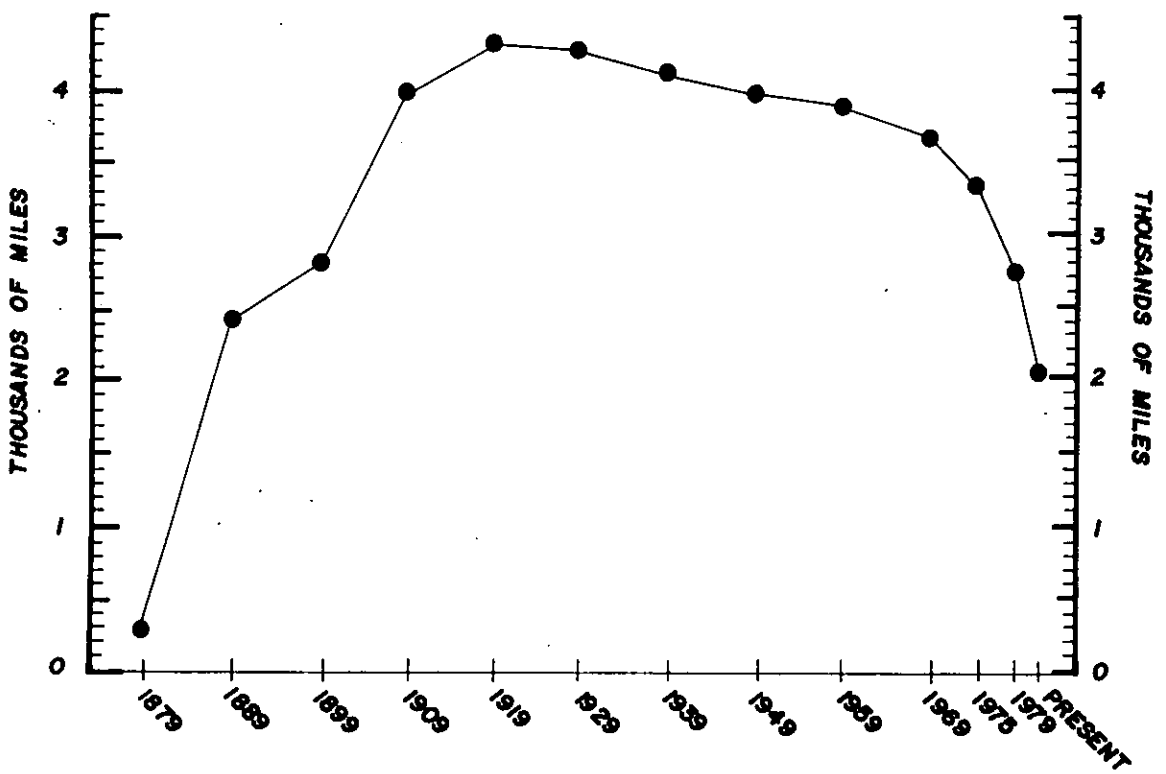
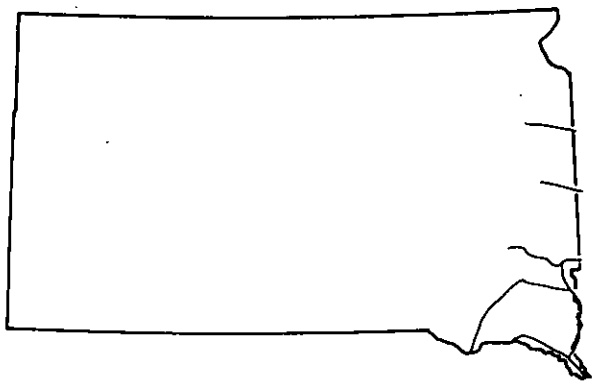
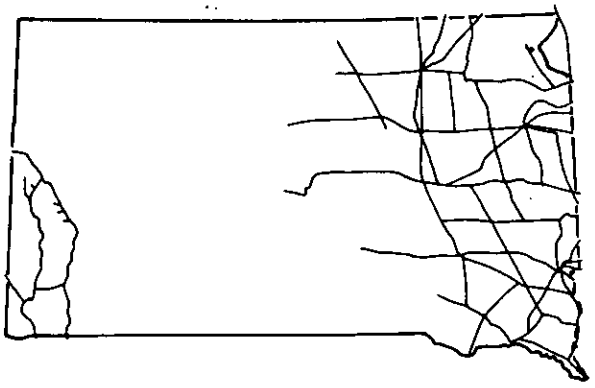


FIGURE III-3

History of Rail Line Development in South Dakota

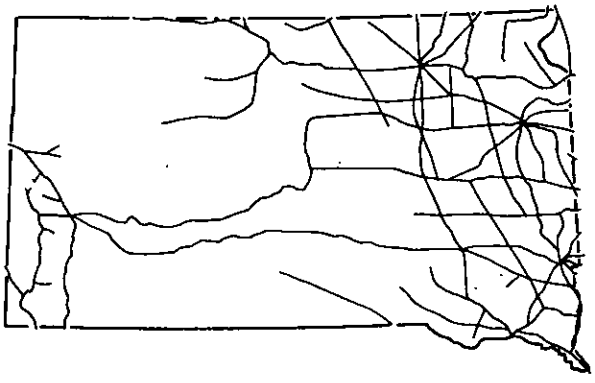


PRE 1880

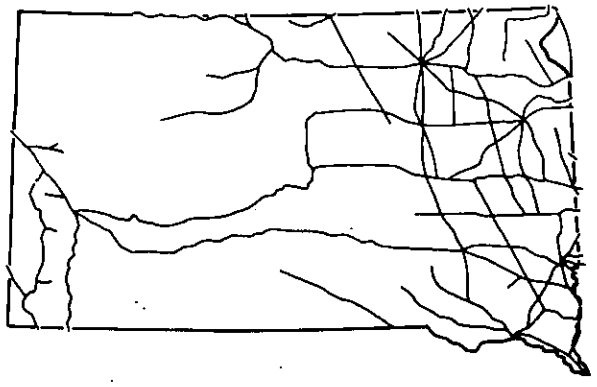


1899

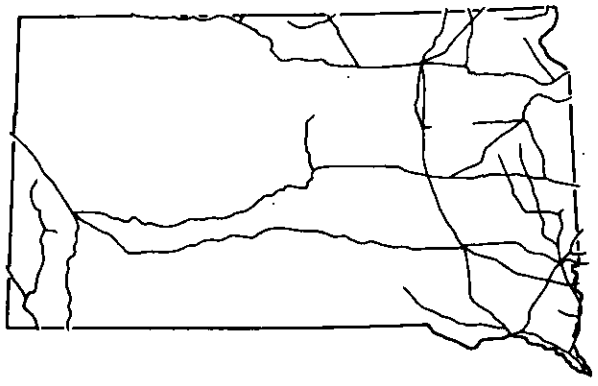
1919



1939



1959



1979

TABLE III - 1

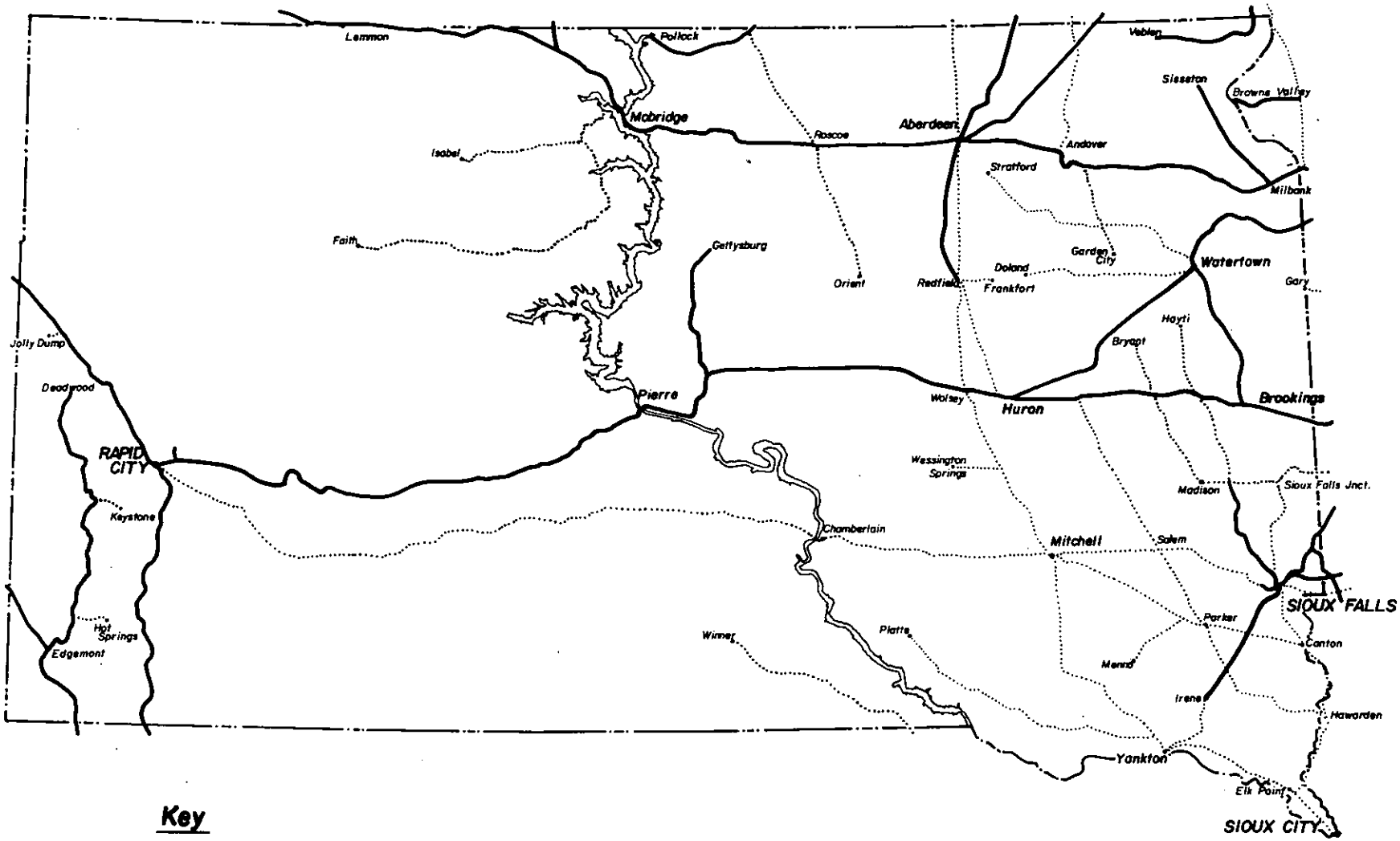
South Dakota Rail Line Abandonments Approved Since 1976

RAILROAD - LINE DESCRIPTION	YEAR ABANDONED	MILES ABANDONED
MILWAUKEE ROAD (1,588.5 miles beginning 1976)		
1. Roscoe to Orient	1977	41.0
2. Trail City to Faith	1979	106.5
3. Woonsocket to Wessington Springs	1979	15.2
4. Bristol to Garden City	1979	28.8
5. Moreau Jct. to Isabel	1979	56.5
6. Marion Jct. to Menno	1978	21.5
7. Jackson, MN to Egan	1979	12.0
8. Andover to Brampton, ND	1980	38.6
9. Roscoe to Linton, ND	1980	40.7
10. Aberdeen to Edgeley	1980	51.8
11. Ortonville, MN to Fargo, ND	1980	1.3
12. Madison to Bryant	1980	47.3
13. Napa to Platte	1980	82.9
14. Mitchell to Rapid City	1980	286.0
15. East Wye Switch to Mitchell	1980	116.5
16. East Wye Switch to Canton	1980	15.3
17. Canton to Mitchell	1980	78.1
18. Sioux Falls to Sioux Falls Jct.	1980	32.3
19. Egan to Madison	1980	26.0
20. Mitchell to Wolsey	1980	54.6
21. Wolsey to Aberdeen	1980	74.0
22. Mason City, IA to Canton, SD	1980	3.0
23. Sioux City to East Wye Switch	1980	14.7
24. Canton to Sioux Falls	1980	20.8
TOTAL		1,245.4
CHICAGO & NORTH WESTERN (1,146.2 miles beginning 1976)		
1. Winner, SD to Norfolk, NE	1978	63.2
2. Watertown to Stratford	1977	71.4
3. Clark to Doland	1977	18.7
4. Wren, IA to Iroquois, SD	1978	125.5
5. Jolly to Jolly Dump	1979	3.7
6. James Valley Jct. to Redfield	1979	33.8
7. Ellis to Mitchell	1980	65.2
8. Redfield to Frankfort	1980	9.7
9. Tracy, MN to Gary, SD	1980	1.0
10. Watertown to Clark	1981	29.5
TOTAL		421.7
BURLINGTON NORTHERN (549.6 miles beginning 1976)		
1. Near Yankton	1976	4.1
2. Minnekahta to Hot Springs	1977	11.9
3. Wentworth to Hayti	1980	49.2
4. Yankton to Irene	1981	17.1
5. Hill City to Keystone	1981	8.8
TOTAL		91.1
SOO LINE (66.3 miles beginning 1976)		
None	-	-
ILLINOIS CENTRAL GULF (14.9 miles beginning 1976)		
1. Cherokee, IA to Sioux Falls	1981	14.9
GRAND TOTAL		1773.1

FIGURE III-4

SOUTH DAKOTA RAIL SYSTEM
1976 CONFIGURATION

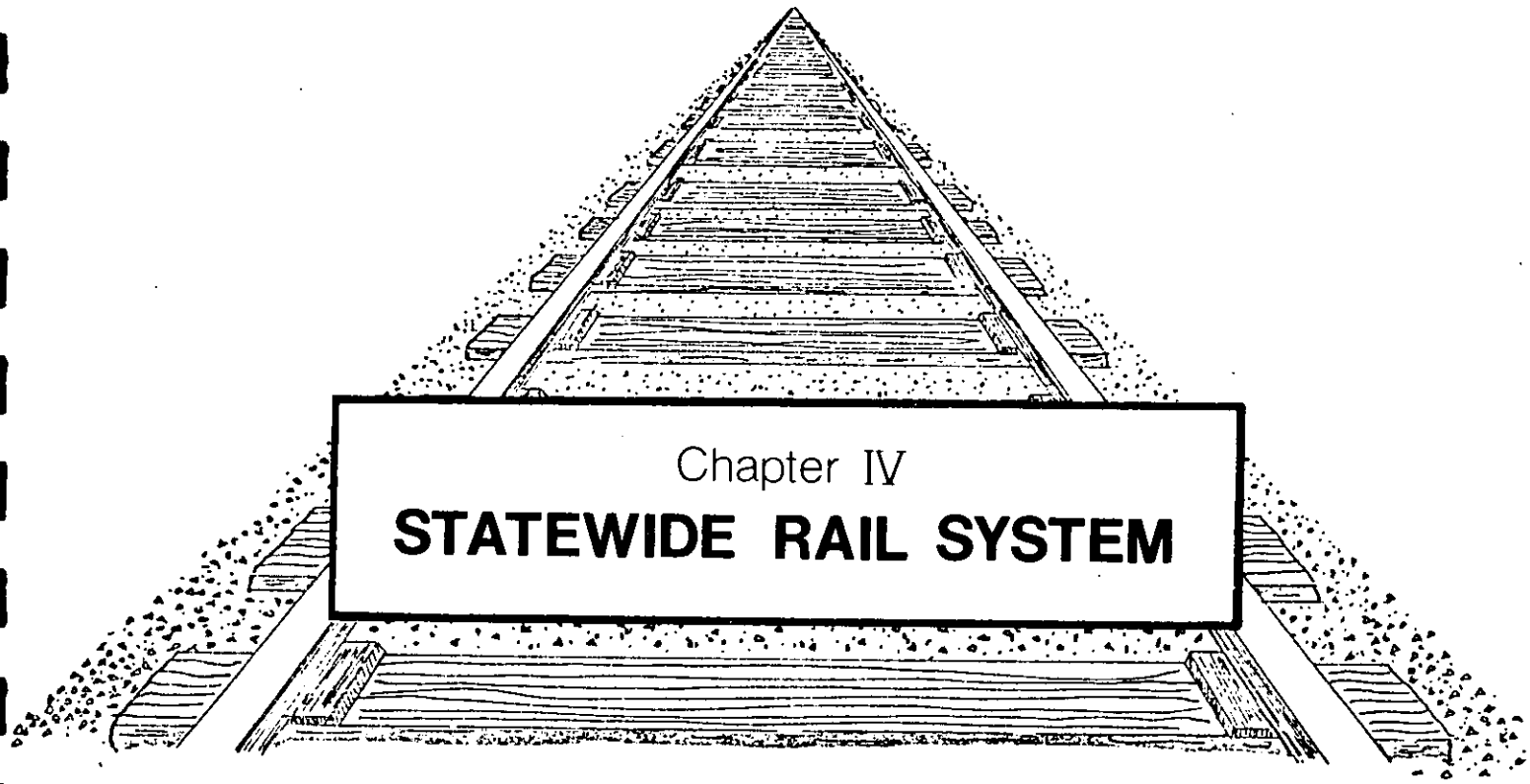
SHOWING DISTRIBUTION OF APPROVED ABANDONMENTS



Key

..... ABANDONED LINES (1976 to PRESENT)

——— NOT ABANDONED



Chapter IV

STATEWIDE RAIL SYSTEM

CHAPTER IV

STATEWIDE RAIL SYSTEM

This chapter documents and illustrates the rail system that exists in South Dakota today, its usage and characteristics, the State's views on a core system concept and a brief description of passenger service.

CURRENT RAIL SYSTEM

Four Class I railroads currently operate 2,024.2 miles of rail line in South Dakota. Figure IV-1 illustrates the South Dakota operating mileage (as of December 31, 1980) for the companies serving the State as a portion of their total system mileage. The total operating mileage in the State at the end of 1980 had decreased to 1,735 miles, but because of restored service on some State owned lines, as well as abandonments during 1981, the current total now stands at 2,024.2 miles. The Illinois Central Gulf had 15 miles of track into Sioux Falls, but has since received a certificate to abandon this line. The state owned trackage is not shown.

The current rail network in South Dakota is shown in Figure IV-2 and the rail highway system is illustrated in Figure IV-3. These transportation networks provide the primary corridors for surface movement of goods and people throughout South Dakota.

Each year railroad companies must classify their lines into one of five categories prescribed by law and must submit a map called a System Diagram Map to the Interstate Commerce Commission. The filing categories are:

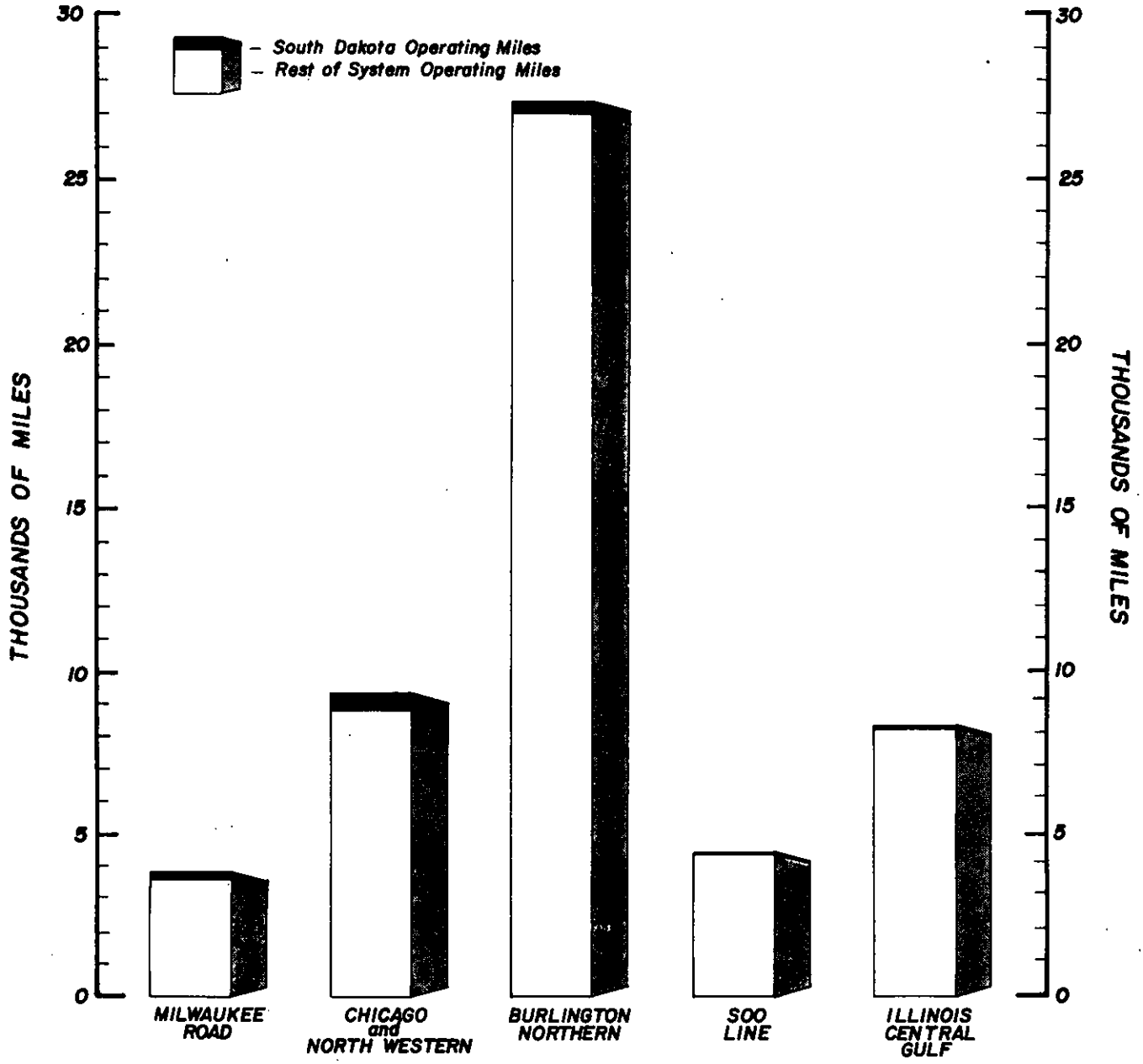
Category	Description
1	Potentially subject to abandonment in 3 years
2	Under study for possible future abandonment
3	Filed for abandonment
4	Operating under subsidy
5	Other rail lines

Figure IV-4 is the System Diagram Map for South Dakota. The Category 5 total contains 433.5 miles of State owned track that is being served by the Burlington Northern. No Category 4 track exists in South Dakota. Table IV-1 is a mileage listing of each company's ICC designation of lines. Also listed are abandoned rail lines purchased by the State of South Dakota which had service restored. As the table indicates, a total of 560.0 out of the current 2,024.2 miles being operated currently have been filed for abandonment or are under study for a possible future filing.

FIGURE IV-1

CLASS I RAILROADS SERVING SOUTH DAKOTA

(as of December 31, 1980)

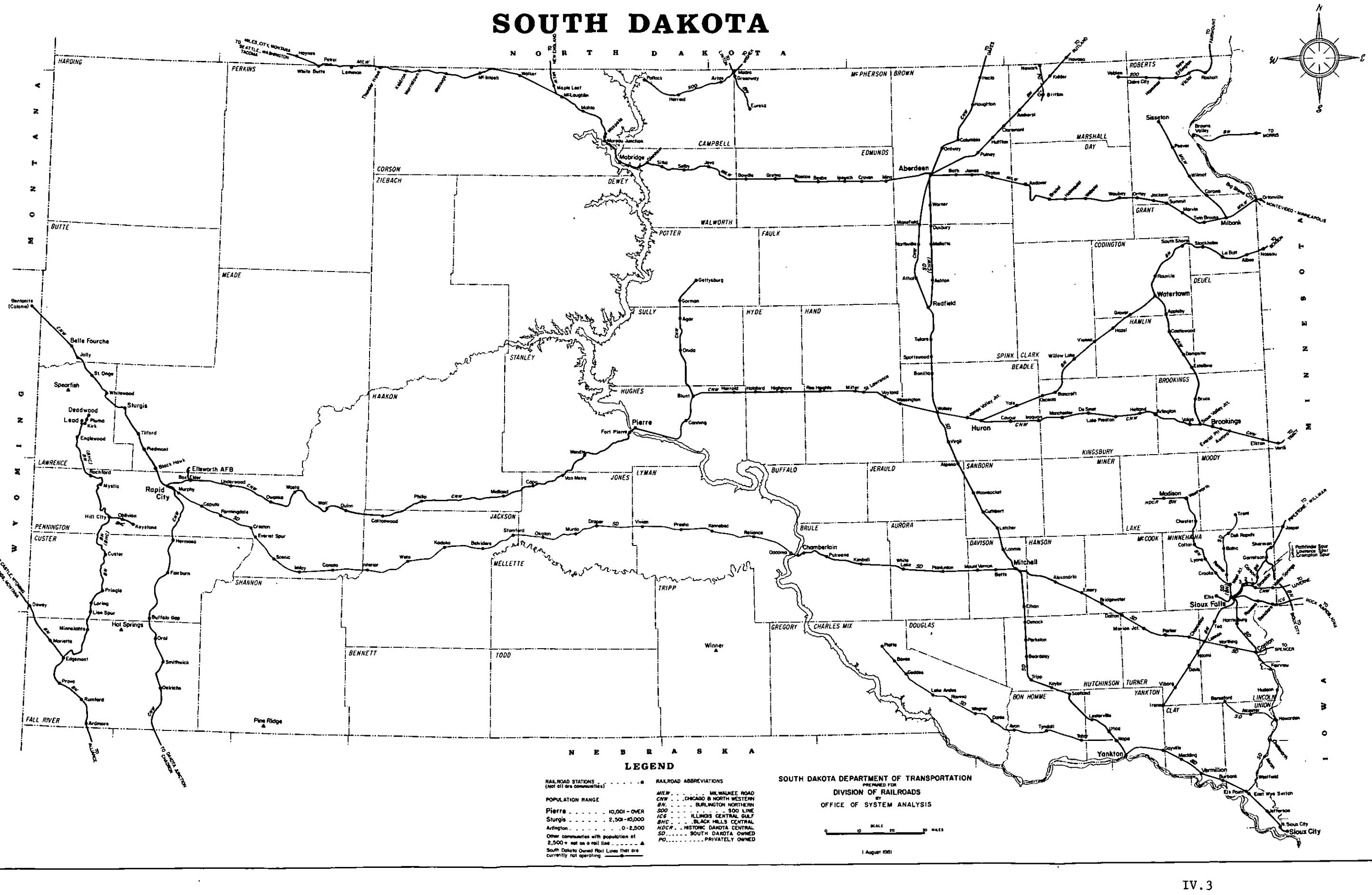


	MILWAUKEE ROAD	CHICAGO and NORTH WESTERN	BURLINGTON NORTHERN	SOO LINE	ILLINOIS CENTRAL GULF
TOTAL OPERATING MILES	3,901	8,417	27,361	4,445	8,366
S.D. PERCENT	9%	10%	2%	1%	<1%
S.D. MILES	343	828	483	66	15

FIGURE IV-2

[266.15(C)(2)]

OFFICIAL RAILROAD MAP
SOUTH DAKOTA



LEGEND

RAILROAD STATIONS (not all are communities) ●

POPULATION RANGE

Pierre . . . . . 10,001 - OVER
Sturgis . . . . . 2,501 - 10,000
Arlington . . . . . 0 - 2,500

Other communities with population of 2,500 + not on a rail line . . . . . ▲

South Dakota Owned Rail Lines that are currently not operating ——●——

RAILROAD ABBREVIATIONS

MILW. . . . . MILWAUKEE ROAD
CNW . . . CHICAGO & NORTH WESTERN
BN. . . . . BURLINGTON NORTHERN
SOO . . . . . SOO LINE
ICG . . . . ILLINOIS CENTRAL GULF
BHC . . . .BLACK HILLS CENTRAL
HDCR. . HISTORIC DAKOTA CENTRAL
SD. . . . . SOUTH DAKOTA OWNED
PO. . . . . PRIVATELY OWNED

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
PREPARED FOR
DIVISION OF RAILROADS
BY
OFFICE OF SYSTEM ANALYSIS

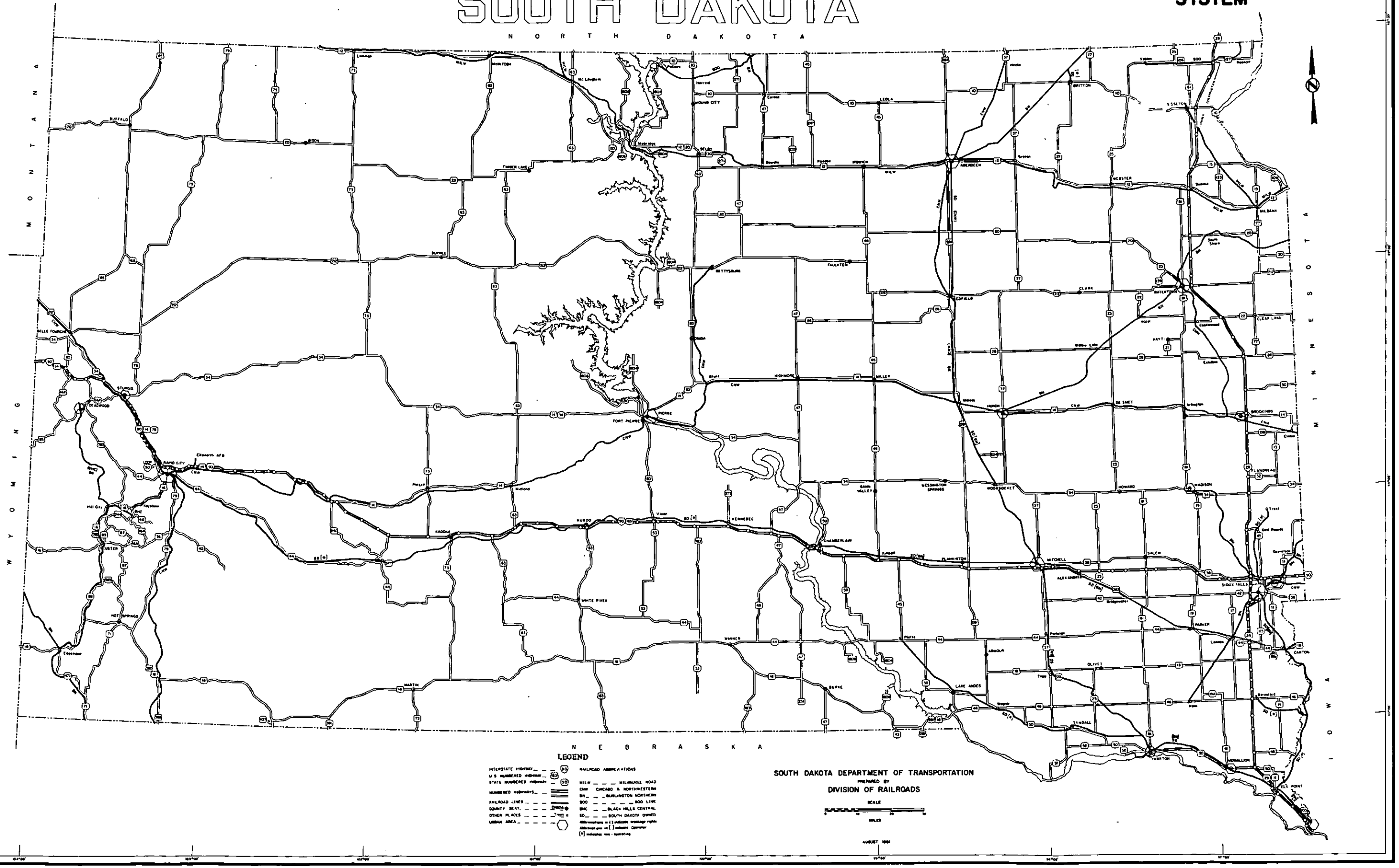
SCALE 0 10 20 30 MILES

1 August 1981

[266.15(C)(2)]

SOUTH DAKOTA

RAIL - HIGHWAY SYSTEM



LEGEND

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
PREPARED BY
DIVISION OF RAILROADS

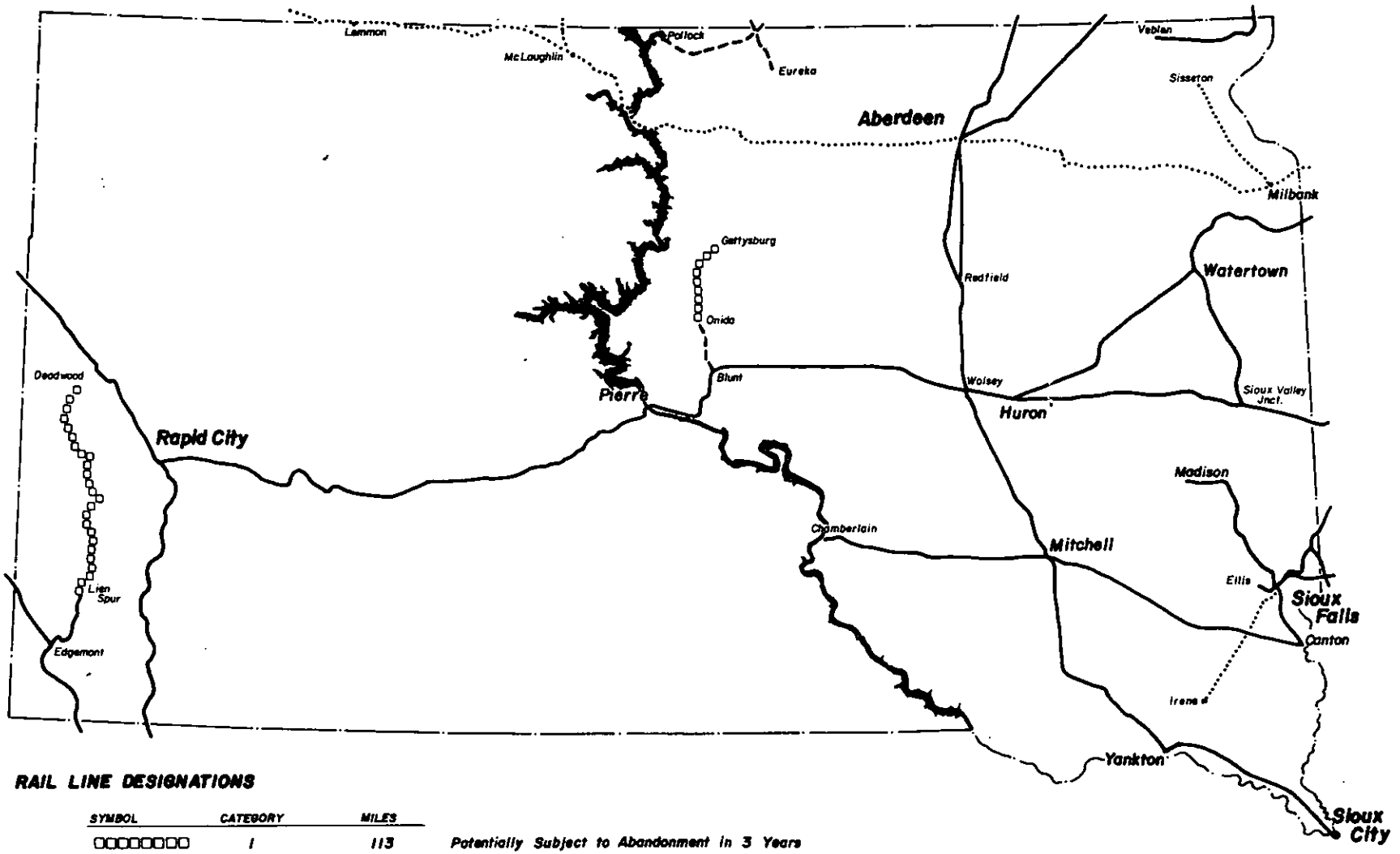
SCALE
0 10 20 30
MILES

AUGUST 1981

FIGURE IV-4

System Diagram Map for Operating Lines

[266.15 (C) (3)(ii)(iv)]



RAIL LINE DESIGNATIONS

SYMBOL	CATEGORY	MILES	
□□□□□□□	1	113	Potentially Subject to Abandonment in 3 Years
— — — — —	2	63	Under Study for Possible Abandonment Filing
.....	3	384	Filed for Abandonment
	4	—	Operating Under Subsidy
———	5	1,464	All Other Lines
	TOTAL	2,024	

NOTE ! Category 5 contains State Owned Lines which are currently being Operated.

TABLE IV-1

RAILROAD MILES BY ICC CATEGORY
SOUTH DAKOTA
[266.15(c)(3)(ii)

RAILROAD	CATEGORY 1 MILES	%	CATEGORY 2 MILES	%	CATEGORY 3 MILES	%	CATEGORY 5 MILES	%	TOTAL STATE MILES
Milwaukee Road	0	-	0	-	343.1	100	0	-	343.1
Chicago & North Western	24.7	3	15.6	2	0		684.2	95	724.5
Burlington Northern	88.0	19	14.8	3	41.0	9	313.0	69	456.8
Soo Line	0		32.8	49	0		33.5	51	66.3
South Dakota (1)	0		0		0		433.5	100	433.5
TOTAL	112.7	6	63.2	3	384.1	19	1,464.2	72	2,024.2

(1) The State of South Dakota owns 834.5 miles of track, but only 433.5 miles are currently being operated by a Class I railroad. Operating track consists of 425.4 core system miles in South Dakota, 6.4 core system miles in Iowa and 1.7 miles between East Junction and West Junction (part of the Burlington Northern operations between Sioux Falls and Madison). The Chicago and North Western is providing service on 72.2 miles (Wolsey to Aberdeen) and the Burlington Northern is serving the remaining 361.3 miles.

RAIL USAGE

Figure IV-5 shows the total tonnage of traffic originating or terminating in South Dakota from 1970 to 1980. The tonnage level has improved significantly since the mid-decade drought. Table IV-2 indicates total carloadings by carrier since 1974. As this Table illustrates, total carloadings has risen from a low of 95,736 in 1977 to 101,910 in 1980. While total tons moved in 1979 far exceeded that moved in 1974, the 1979 carloadings were less than the 1974 level. This interesting fact points out that carloadings are getting heavier because of the greater use of 100 ton grain and coal cars.

Table IV-3 shows that farm products accounted for 41% of car movements in 1980 followed by coal with 28% and stone, clay and glass with 8% of the car originations and terminations within the State. This data is also shown graphically by the pie chart in Figure IV-6. The 1980 carloadings are shown in Figure IV-7 by the rail carrier that originated or terminated the traffic. The Milwaukee Road, even on their smaller system, (964 miles of their system was embargoed or abandoned early in 1980) originated and terminated 43% of the traffic followed by the Chicago and North Western with 33% and the Burlington Northern with 21%. While the 1980 total traffic decreased slightly over the 1979 level, the Burlington Northern traffic increased over 400,000 tons, due mainly to a large increase in grain movements.

One method that railroads use to measure traffic on a line segment is freight density measured in millions of gross ton miles per mile (GT/M). This figure represents total weight that traveled over the line including the weight of cars (whether empty or full), locomotives, caboose, and actual freight hauled. This is not necessarily an indication of tons originating and/or terminating on the line as overhead traffic will also be shown. Figure IV-8 illustrates the traffic density for operating lines in 1980. The heaviest traveled line in the State was the Burlington Northern coal line through Edgemont with slightly over 81 million GT/M. The second heaviest traveled line was the Burlington Northern line through Garretson with 12 million GT/M. The Milwaukee Road line through Aberdeen carried 7-9 million GT/M while the line south of Rapid City carried slightly over 3 million GT/M. The remaining lines in the State carried less than 3 million GT/M with most lines less than 1 million GT/M.

RAIL CHARACTERISTICS

The characteristics of South Dakota's rail system can be described in terms of traffic and the physical plant. Figure IV-8 illustrates that the system is composed mostly of light density lines. Figure IV-6 shows that the traffic is mostly agriculture commodities and coal. Figure IV-9 illustrates that most lines are branch lines according to FRA standards. Two categories of main lines and two categories of branch lines are given depending upon the tonnage on the line during a given year. Because of the low tonnage on most South Dakota rail lines, nearly all of the lines are in one of the branch line categories.

Railroad companies set weight limits on all their lines depending on the physical characteristics of the line. The limits are the heaviest load allowed that will not cause structural damage to the track. Figure IV-10 shows that, due to light rail weights or inadequate bridge design, many lines in South Dakota have a maximum weight restriction below 263,000 pounds. A line must be capable of supporting 263,000 pounds to utilize fully loaded jumbo hopper cars. The hopper cars are

FIGURE IV-5

TOTAL RAIL TRAFFIC VOLUME IN SOUTH DAKOTA
— ALL CARRIERS —

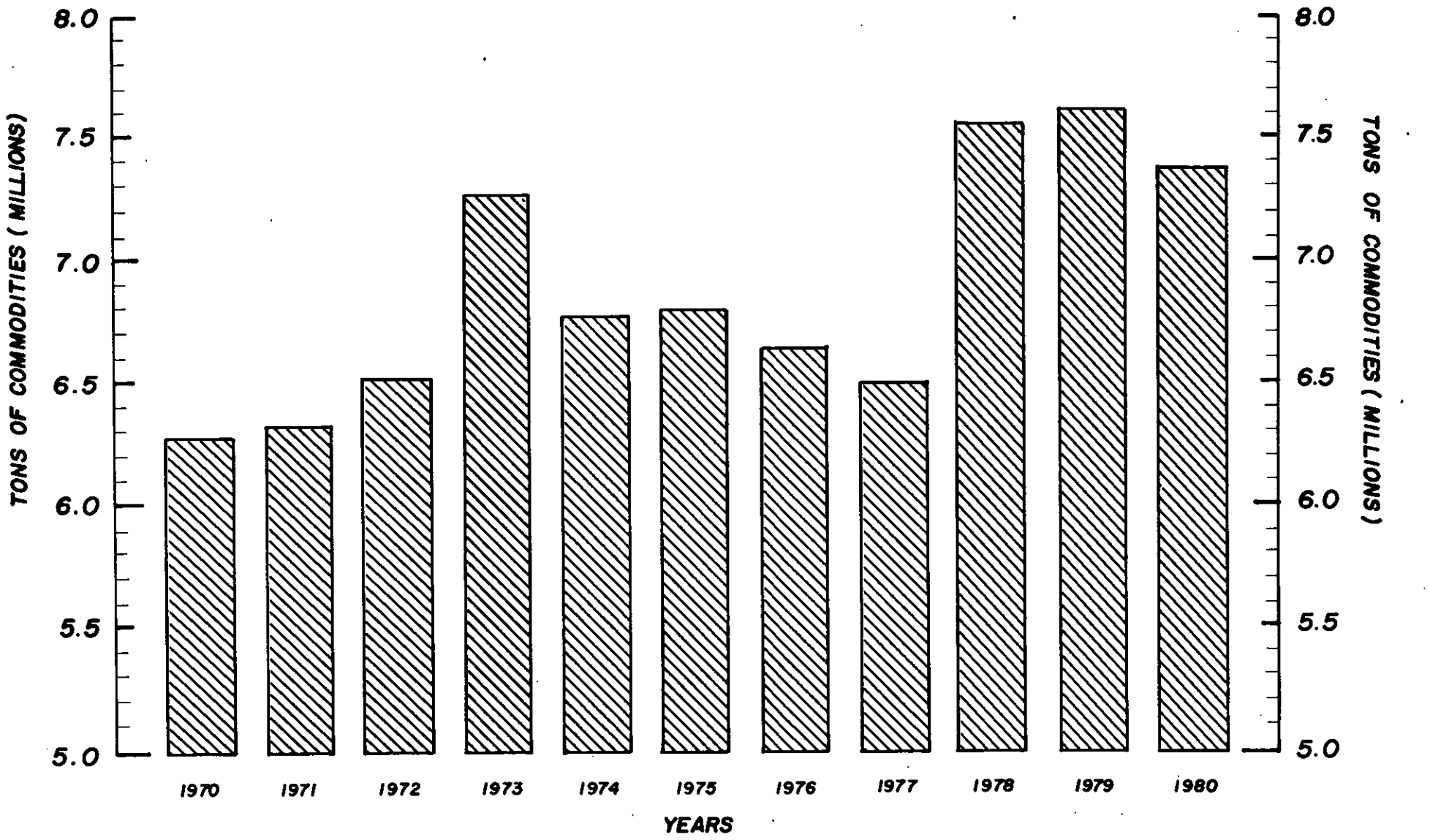


TABLE IV-2

NUMBER OF CARLOADS OF COMMODITIES ORIGINATING
AND TERMINATING IN SOUTH DAKOTA

RAILROAD	1974	1975	1976	1977	1978	1979	1980
MILWAUKEE ROAD							
Originating	27;360	17,951	13,032	15,459	19,623	20,196	15,181
Terminating	12,773	26,492	30,861	30,728	36,823	34,081	28,483
Total	40,133	44,443	43,893	46,187	56,446	54,277	43,664
CHICAGO AND NORTH WESTERN							
Originating	35,389	25,198	21,316	20,247	22,920	24,717	25,593
Terminating	15,829	13,352	11,679	11,184	9,654	9,421	7,779
Total	51,218	38,550	32,995	31,431	32,574	34,138	33,372
BURLINGTON NORTHERN							
Originating	8,977	6,589	5,781	5,355	7,013	7,458	14,542
Terminating	10,419	9,095	9,900	8,496	8,506	8,427	6,578
Total	19,396	15,684	15,681	13,851	15,519	15,885	21,120
SOO LINE							
Originating	2,528	1,954	1,290	1,235	2,171	2,424	2,402
Terminating	95	106	106	107	109	213	157
Total	2,623	2,060	1,396	1,342	2,280	2,637	2,559
ILLINOIS CENTRAL GULF							
Originating	3,625	2,316	1,891	1,346	74	112	74
Terminating	2,389	1,803	1,374	1,579	1,610	1,584	1,121
Total	6,014	4,119	3,265	2,925	1,684	1,696	1,195
TOTAL ALL COMPANIES							
Originating	77,879	54,008	43,310	43,642	51,801	54,907	57,792
Terminating	41,505	50,848	53,920	52,094	56,702	53,728	44,118
Total	119,384	104,856	97,230	95,736	108,503	108,633	101,910

SOURCE: Annual Reports of the Railroads to the Interstate Commerce Commission.

TABLE IV-3

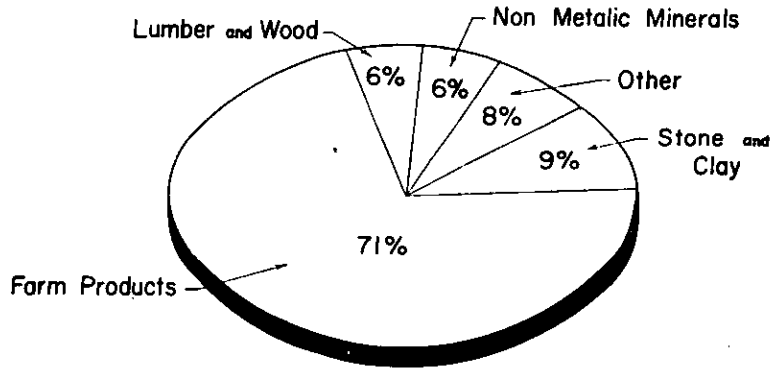
TOTAL NUMBER OF CARLOADS BY COMMODITY AND RAILROAD
ORIGINATING AND TERMINATING IN SOUTH DAKOTA - 1980

STCC CODE	COMMODITY DESCRIPTION	MILW RD	C&NW	BN	SOO	ICG	TOTAL CARS	TOTAL % OF TOTAL
01	Farm Products	13,773	12,422	12,905	2,390	26	41,516	41%
09	Fresh Fish & Marine Products	-	1	3	-	-	4	-
10	Metallic Ores	-	1	-	-	-	1	-
11	Coal	26,864	99	1,804	-	-	28,767	28
14	Non-metallic Minerals except Fuels	501	3,404	627	-	-	4,532	4
19	Ordnance & Accessories	-	1	-	-	6	7	-
20	Food & Kindred Products	210	2,674	1,487	-	56	4,427	4
21	Tobacco Products	-	-	-	-	-	-	-
22	Basic Textiles	79	17	5	37	1	139	-
23	Apparel & Other Textiles	-	-	-	-	-	-	-
24	Lumber & Wood Products	340	3,766	456	1	32	4,595	5
25	Furniture & Fixtures	11	186	101	-	4	302	-
26	Pulp, Paper & Allied Products	118	681	483	-	3	1,285	1
27	Printed Matter	-	-	-	-	-	-	-
28	Chemicals & Allied Products	510	763	956	74	19	2,322	2
29	Petroleum & Coal Products	174	447	437	1	12	1,071	1
30	Rubber & Miscellaneous	4	78	66	-	2	150	-
31	Leather Products	-	-	-	-	-	-	-
32	Stone, Clay & Glass Products	309	7,425	560	-	3	8,297	8
33	Primary Metal Products	49	347	361	32	-	789	1
34	Fabricated Metal Products	45	21	40	1	-	107	-
35	Machinery Except Electrical	122	265	83	5	16	491	-
36	Electrical Machinery & Supplies	4	48	41	-	1	94	-
37	Transportation Equipment	60	9	201	-	11	281	-
38	Instrument Photo & Optical Goods	-	-	-	-	-	-	-
39	Miscellaneous Manufacturing Products	-	16	1	-	-	17	-
40	Waste & Scrap Materials	448	529	102	-	-	1,079	1
41	Miscellaneous Freight Shipments	9	15	15	16	11	66	-
42	Containers	4	25	2	-	-	31	-
44	Freight Forwarder Traffic	-	-	3	-	261	264	-
45	Shipper Association Traffic	10	7	136	-	379	532	1
46	Miscellaneous Mixed Shipments	20	125	245	2	352	744	1
	GRAND TOTAL	43,664	33,372	21,120	2,559	1,195	101,910	98%

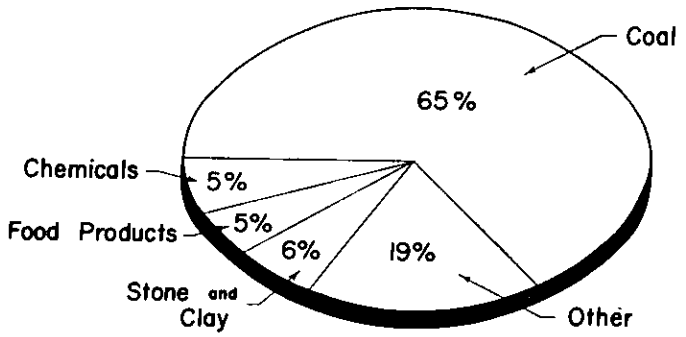
SOURCE: Annual Reports of the Railroads to the Interstate Commerce Commission.

FIGURE IV-6

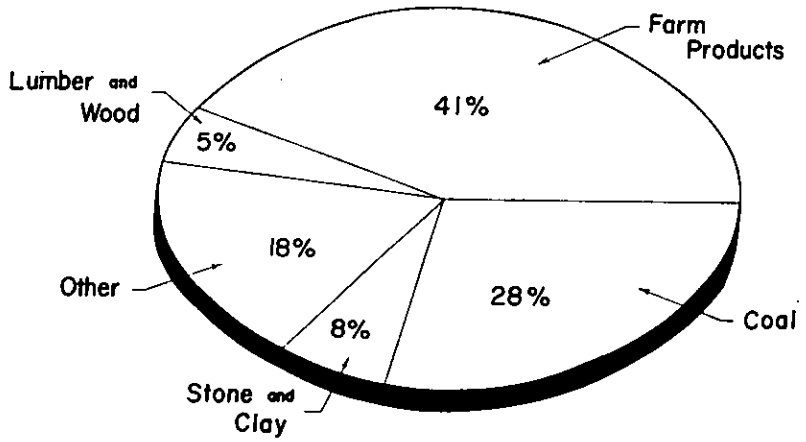
Percentage of Carloadings by Commodity -1980-



ORIGINATING



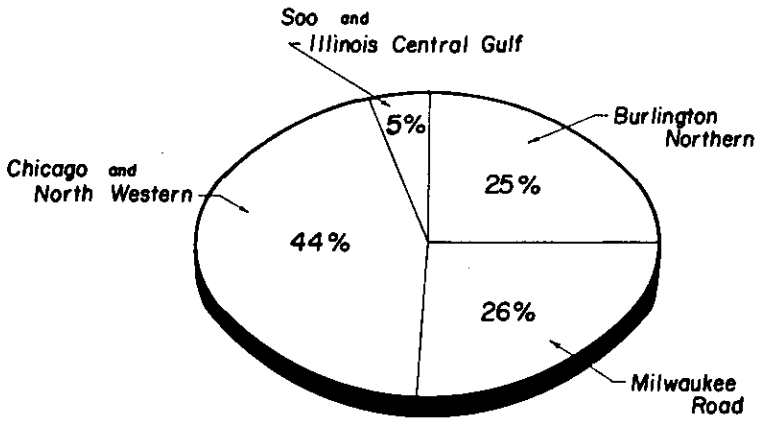
TERMINATING



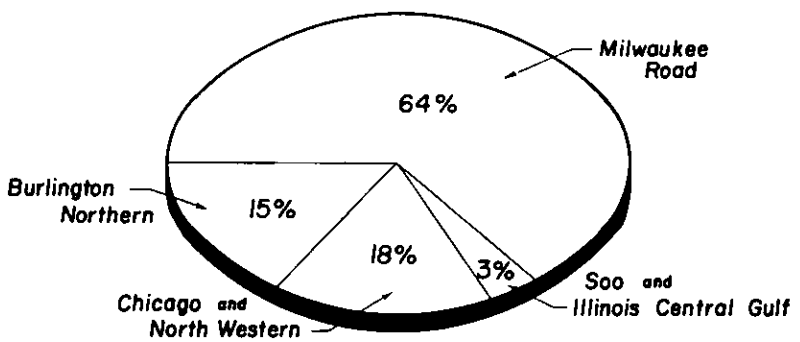
TOTAL

FIGURE IV-7

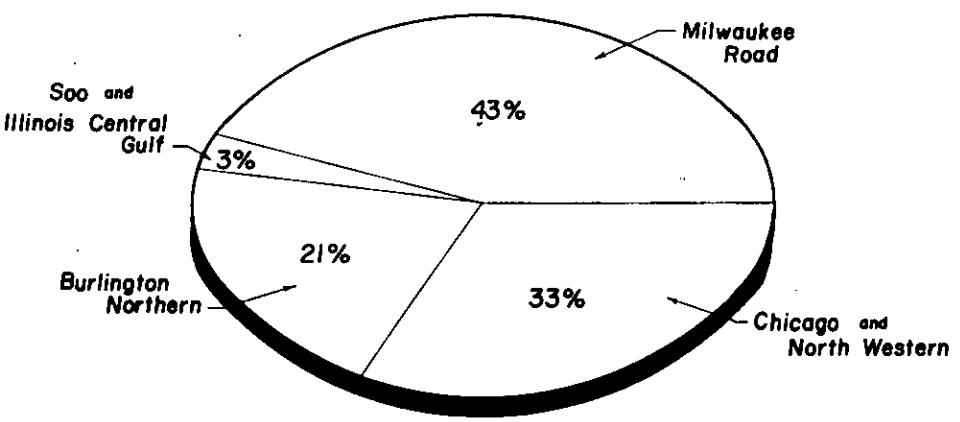
Percentage of Carloadings by Carrier
-1980-



ORIGINATING



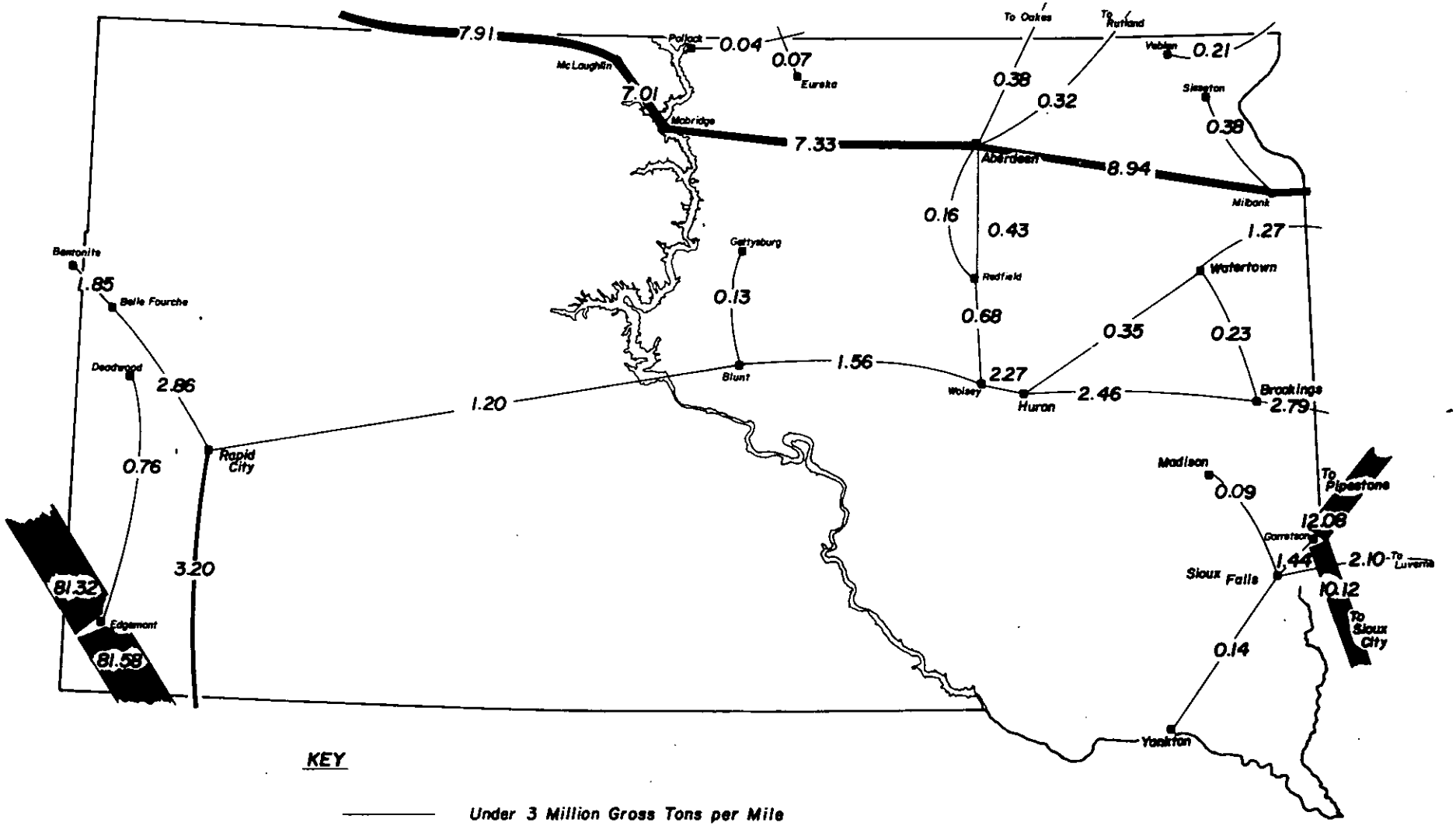
TERMINATING



TOTAL

FIGURE IV-8
[266.15(C)(2)(ii)]

Rail Freight Traffic Density
- 1980 -

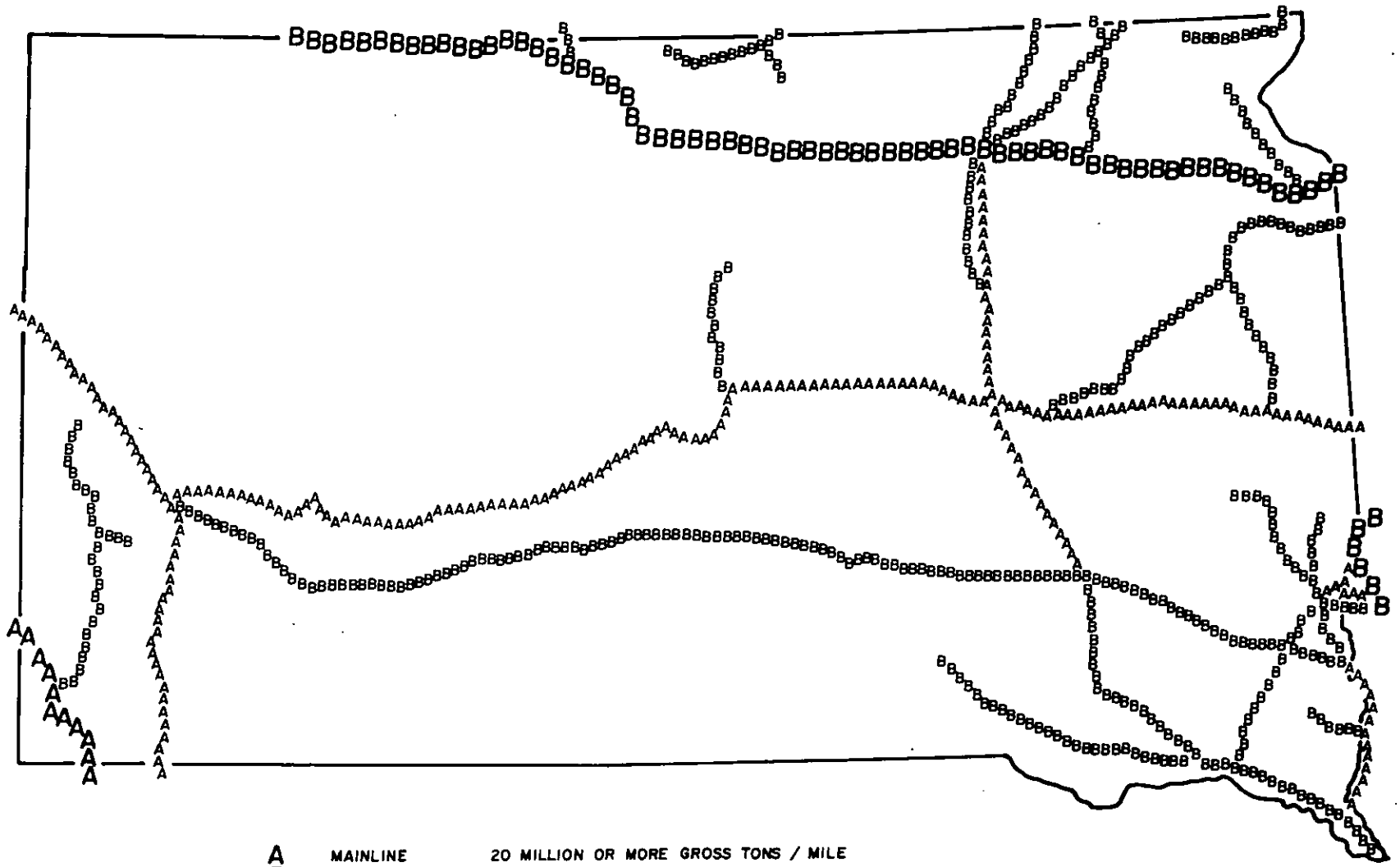


KEY

- Under 3 Million Gross Tons per Mile
- 3 - 5 Million Gross Tons per Mile
- 5 - 10 Million Gross Tons per Mile
- 10 - 50 Million Gross Tons per Mile
- Over 50 Million Gross Tons per Mile

FIGURE IV-9

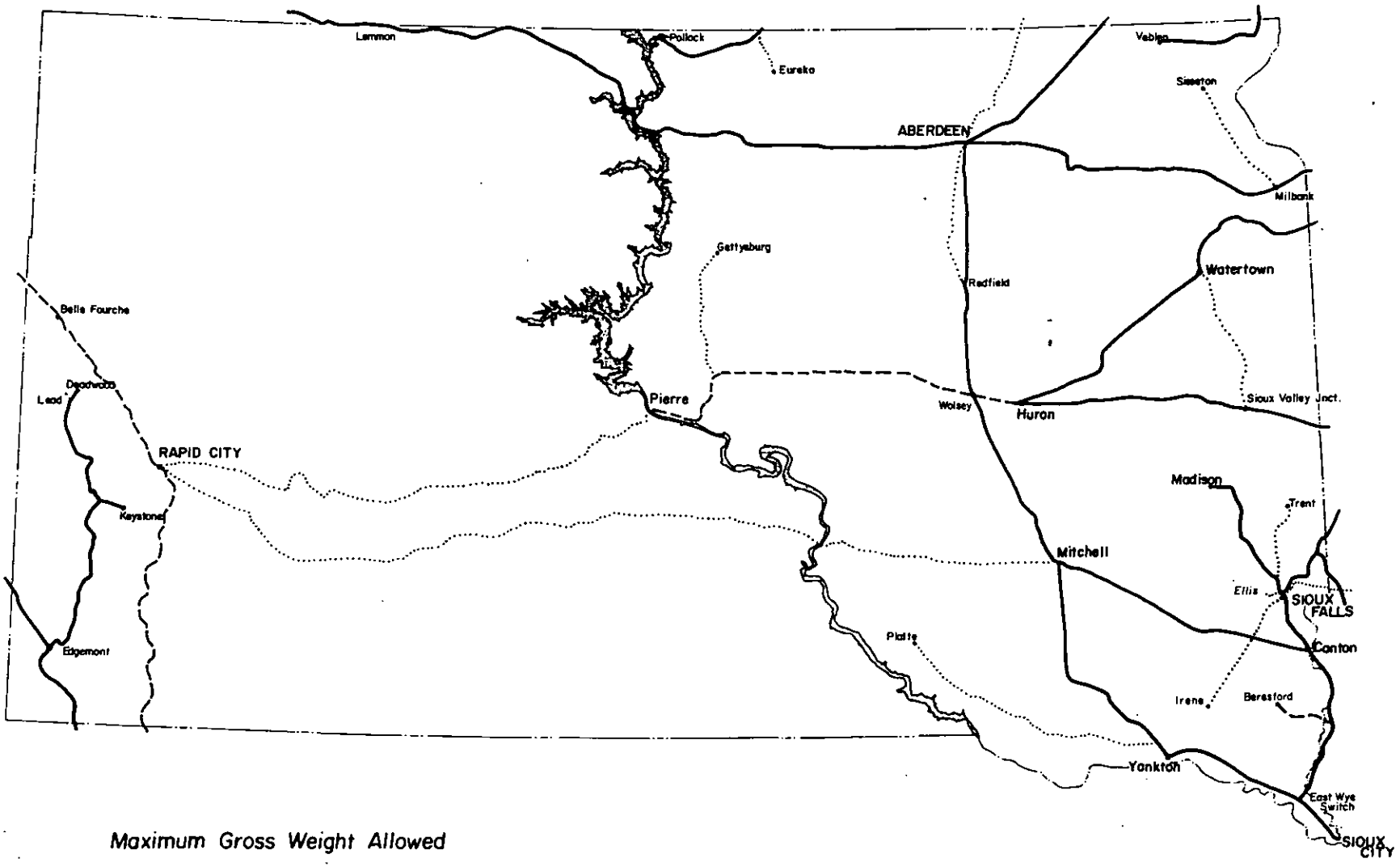
FRA
MAINLINE AND BRANCHLINE DESIGNATION FOR CLASS I RAILROADS
-1979-



A	MAINLINE	20 MILLION OR MORE GROSS TONS / MILE
B	MAINLINE	5 - 20 MILLION GROSS TONS / MILE
A	BRANCHLINE	1 - 5 MILLION GROSS TONS / MILE
B	BRANCHLINE	LESS THAN 1 MILLION GROSS TONS / MILE

FIGURE IV-10

Maximum Allowable Load Limits



Maximum Gross Weight Allowed

——— 263,000 lbs.

– – – – – 251,000 lbs.

..... 220,000 lbs. or Less

better suited to handle grain than box cars, but many lines are restricted to using the box cars because of the weight restriction. The box cars, however, have become a relic of the past as they are labor intensive, time consuming for loading and unloading, and have even been embargoed at some terminal points.

One type of traffic that has demonstrated rapid growth for many railroad companies is trailer-on-flatcar (TOFC). This traffic involves truck semi-trailers that are transported on a specially designed flatcars. However special loading/unloading equipment on a special dock or platform must exist to handle this type of traffic. Consequently, TOFC facilities are located in only five (5) South Dakota cities as follows:

TOFC LOCATIONS

LOCATION	OPERATING RAILROAD
Aberdeen	Milwaukee Road
Mitchell	Burlington Northern
Mobridge	Milwaukee Road
Rapid City	Chicago & North Western
Sioux Falls	Burlington Northern

Many other cities have loading docks located on tracks that are used to load and unload freight and machinery from flat cars.

Figure IV-11 highlights the rail lines in South Dakota that are under transition. These lines have either changed ownership recently or will more than likely be sold or abandoned in the near future. Included here are the remaining Milwaukee Road owned lines in the State which are part of the reorganized Milwaukee system but which have now been filed for abandonment, the State purchased "core" system which is being operated by the Burlington Northern, the State purchased lines which are non-operating at this time, and two other abandoned lines which have been purchased by the Burlington Northern and restored to service.

ESSENTIAL RAIL SYSTEM

The crisis nature of rail issues that are confronting the State of South Dakota makes it imperative that assistance efforts be directed to where the greatest benefit to the State can be achieved. This requires the State to identify the rail lines most essential to its transportation and economic development needs, and to direct available resources to those lines. Based upon traffic levels, rehabilitation expenses are not economically justified on all rail lines in the State. By focusing on a subset of essential rail lines, the State believes that it can more effectively apply its available resources by prioritizing lines that are candidates for assistance.

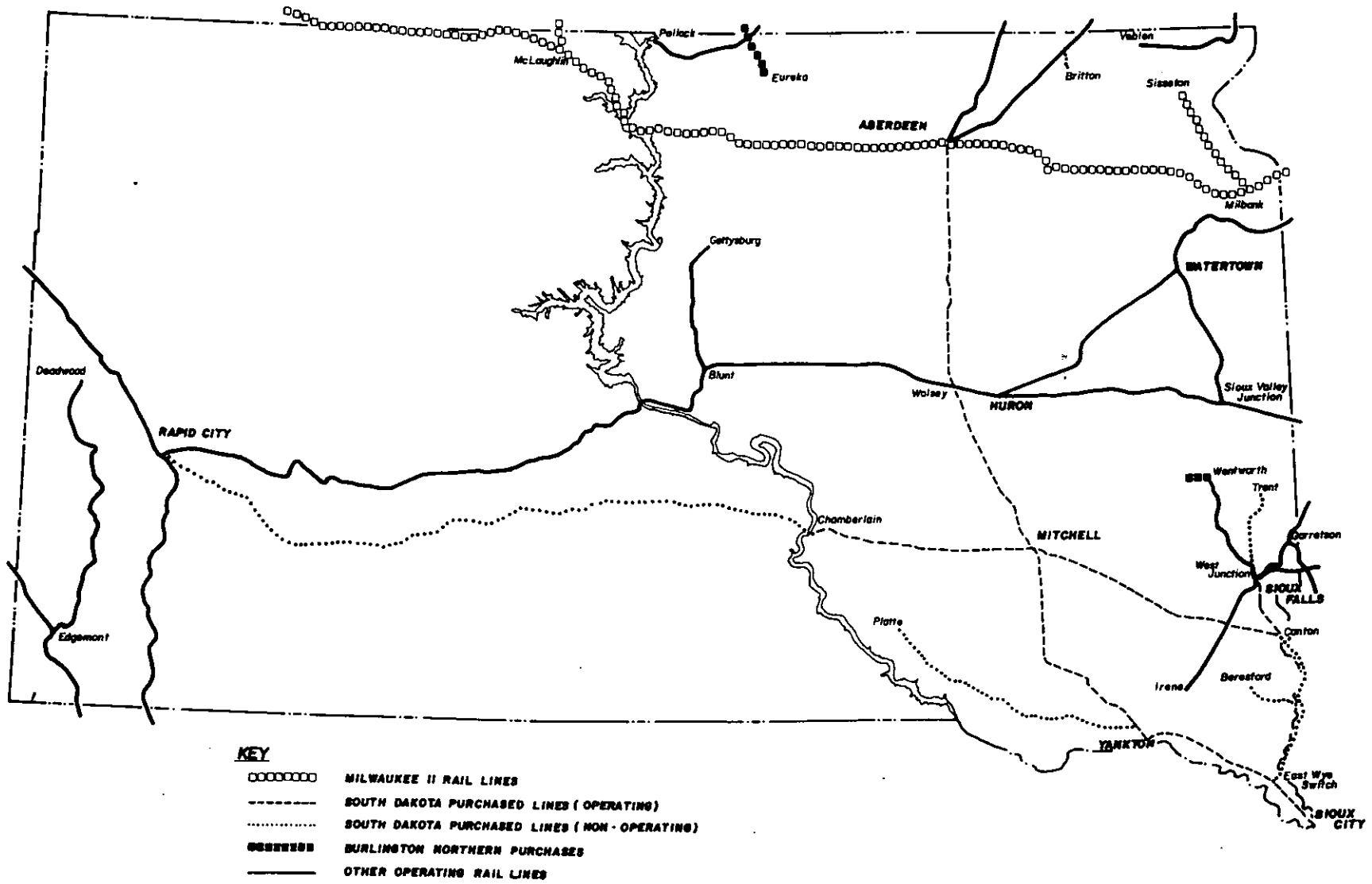
For the purposes of this prioritization, essential rail lines must be classified by several characteristics:

- current and projected traffic volumes;
- access to the major grain producing parts of the State;

FIGURE IV-11

Transition Rail Lines in South Dakota

[266.15(C)(3)(V)]



- access to the national rail transportation network;
- access to natural resource areas, particularly coal deposits; and
- expected local impacts of service loss, including shipper cost, highway cost, and rehabilitation cost.

During 1979, a special study, called the South Dakota Rail Line Inventory Study, was undertaken by the Division. Outside consulting firms were retained to prioritize all line segments in the State on the basis of the above criteria. The results of this study do not account for the interrelationships between lines in the same area; however, they do provide a supporting basis for developing an essential rail system for South Dakota. Each rail segment in the State received a summary evaluation rating based upon a weighted average of the ratings given for each criterion. This process identified an essential rail system for South Dakota, the results of which are shown graphically on Figure IV-12. These lines form a basic skeletal rail network of feeder lines serving the agricultural producing areas of the State; main lines linking shippers in South Dakota with local, national, and international markets; and secondary main lines which connect the feeder lines to the main lines. Extensions beyond this essential rail system should occur only if the lines can be economically justified.

The State of South Dakota has purchased those parts of the essential rail system that have been abandoned by the owning railroad. The purchase is only one step in the process of insuring long term rail transportation services in the State. Full justification for these purchases and the process of restoring service is expressed in detail in Chapter V.

PASSENGER [266.15 (c)(2)(iii)]

South Dakota does not have AMTRAK passenger service nor any other passenger service provided by a Class I rail carrier. Figure IV-13 illustrates how the AMTRAK system extends around the State but does not penetrate its borders. The only passenger service that exists in the State is a seasonal tourist excursion operation on the Hill City to Keystone line. See line segment BH01 in Chapter VI for more information on this line.

SUMMARY

Thus far we have identified the rail carriers serving South Dakota and their system configuration. Significant commodities moved by those carriers are farm products and coal. These commodities accounted for 69% of the total carloadings in 1980. The traffic levels on many lines have historically been at a level which generated insufficient revenues to maintain or rehabilitate those lines to a level capable of supporting the heavy weights of the modern grain and coal cars. The result was that many lines were either abandoned or a deterioriated track condition materialized. A core system concept has been established which identifies lines essential for continued rail operation. However, many essential lines were abandoned as part of Milwaukee Road restructuring. A private solution could not be found to restore service on essential lines. This problem led to the point where the only way to preserve these lines was for the State to purchase specific lines which were part of the essential system and select other lines to preserve the corridor for possible future use. These actions are documented in Chapter V.

FIGURE IV-12

Essential Rail System for South Dakota

[Core System Concept]

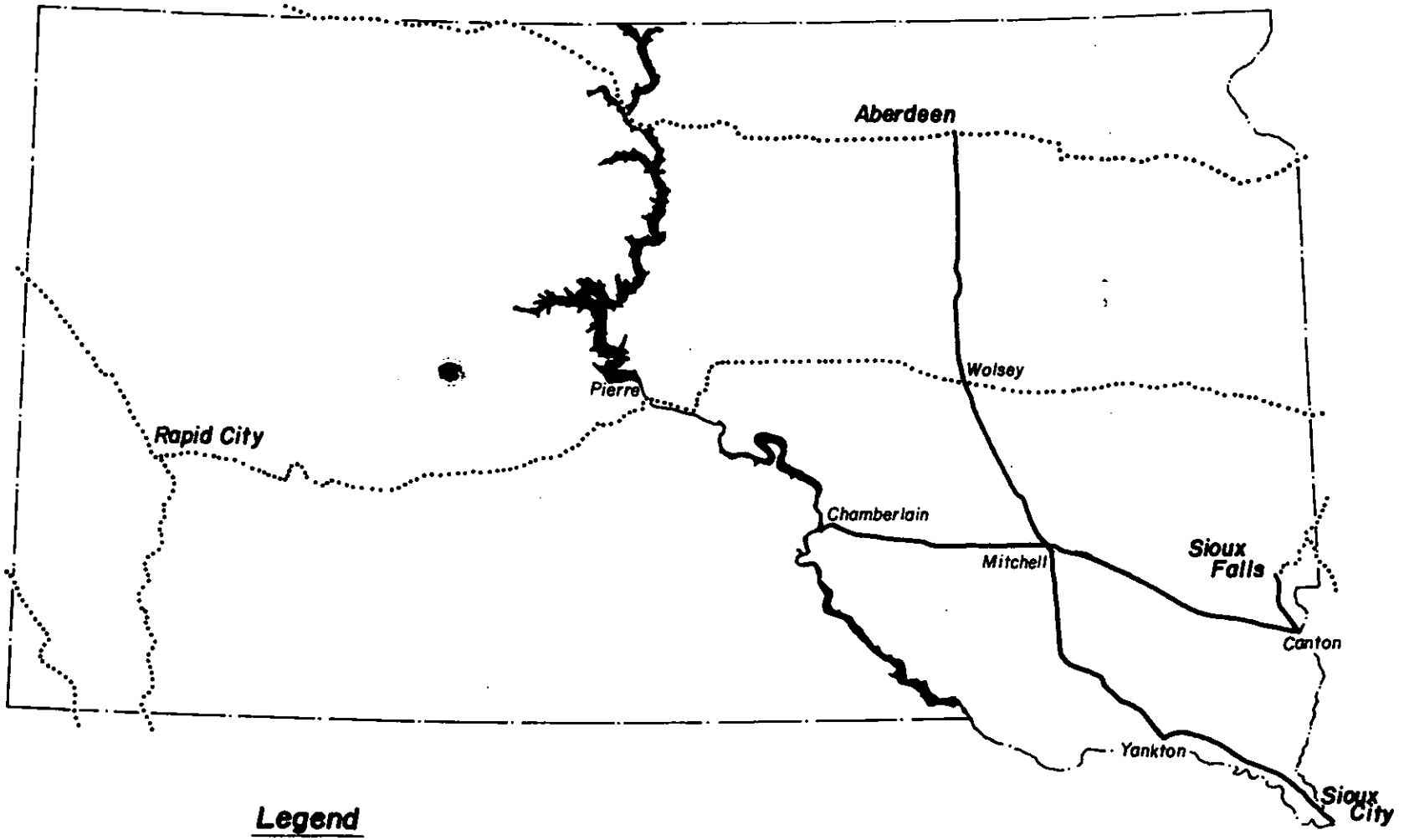
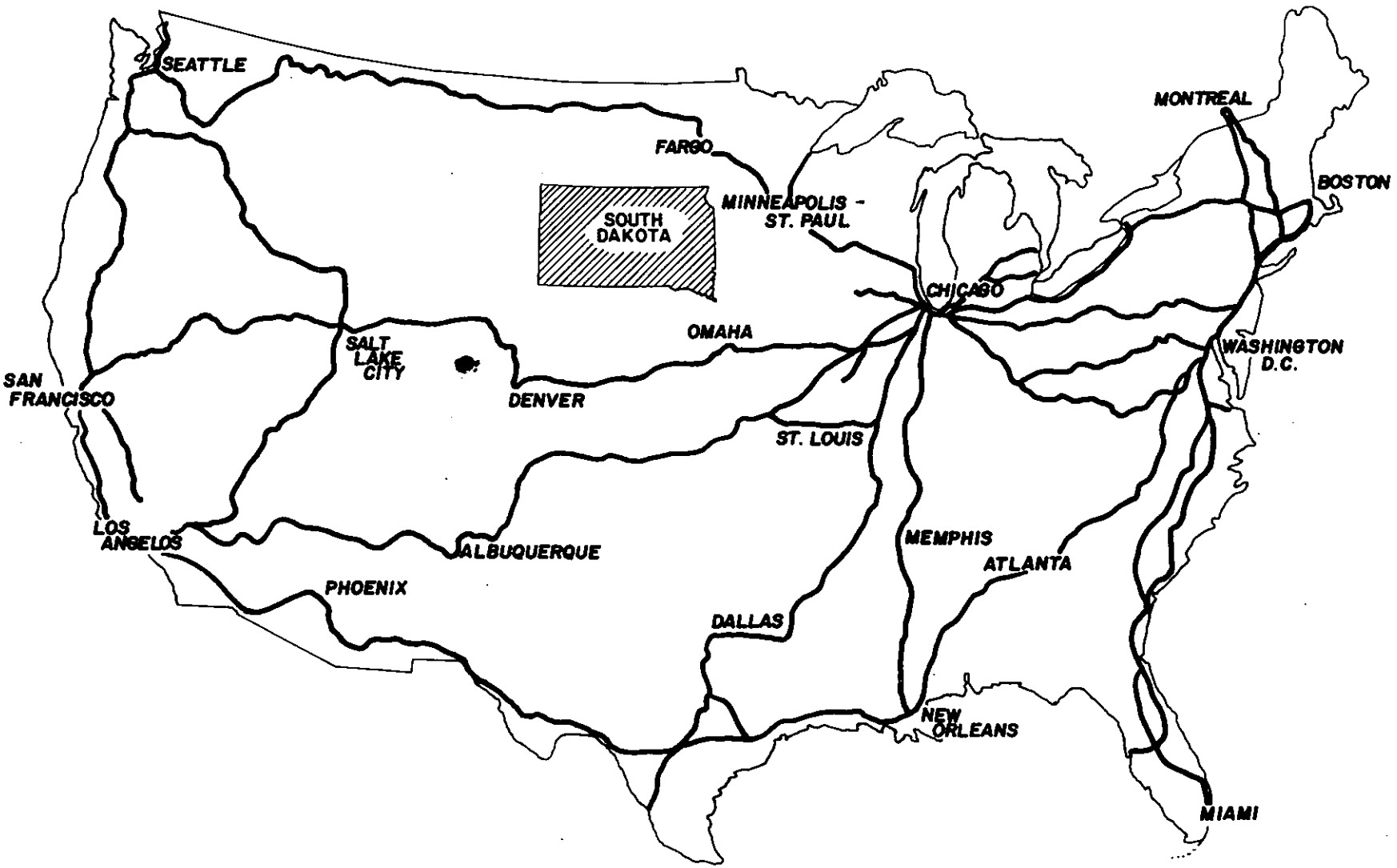


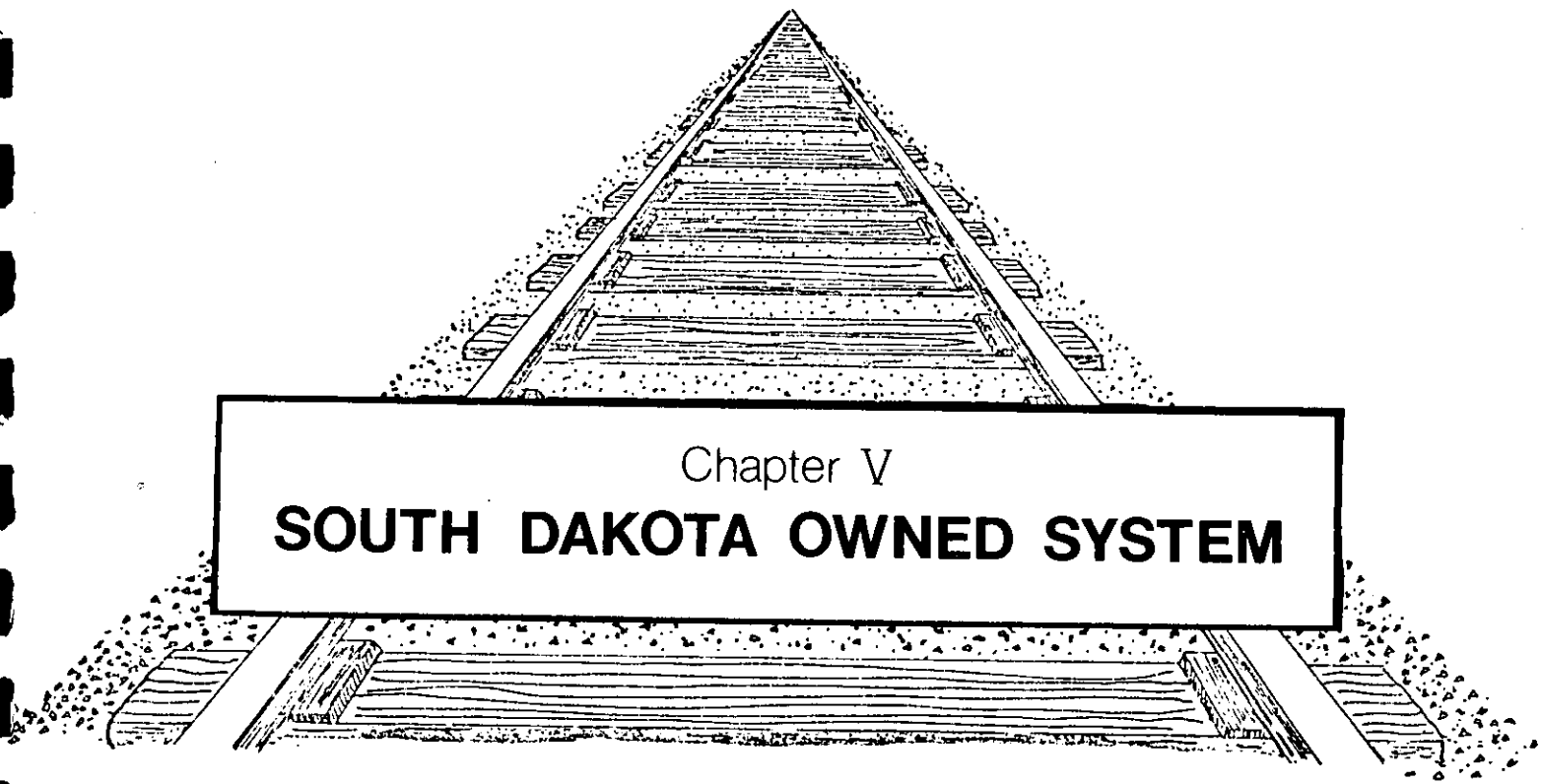
FIGURE IV - 13

Amtrak's Nationwide Rail Passenger System

[266.15(C)(2)(iii)]



JUNE 30, 1981



Chapter V

SOUTH DAKOTA OWNED SYSTEM

CHAPTER V

SOUTH DAKOTA OWNED SYSTEM
[266.15 (c)(1)]

The ownership, operation, and maintenance of railroad facilities has classically been a private sector business enterprise. Despite the existence of aggressive federal legislation dating back to 1976 which was designed to assist the private sector in the revitalization and stabilization of the nation's rail system, critical situations in recent years have caused the federal government and a small number of state governments to become directly involved in railroad operations. Direct federal intervention has taken the form of CONRAIL and AMTRAK.

CONRAIL was formed as a quasi-governmental entity to forestall the impact of bankruptcy proceedings of the Penn Central and six other minor rail carriers upon the northeastern sector of the national freight carrying rail network. CONRAIL owns and operates the facilities of the prior owners, all of whom have ceased independent operations except one. It operates on its own revenues supplemented by federal loan funds. Its link to the federal government is through the Federal Rail Administration, whose representatives sit on, but do not control, the CONRAIL Board of Directors.

AMTRAK was formed as a quasi-governmental entity in recognition of the need to continue passenger rail service throughout the nation despite the fact that most independent carriers were curtailing passenger service for economic reasons. AMTRAK owns and operates its own rolling stock and some terminal facilities. It does not own any trackage, but operates on the trackage on other carriers via right of way agreements. It operates on its own revenues supplemented by government grant funding. Its link to the federal government is through the Department of Transportation, whose representatives sit on and currently have controlling membership of the AMTRAK Board of Directors.

A small number of state governments have also become involved in rail operations for reasons similar to that experienced in South Dakota, namely loss of critically needed rail service resulting from abandonment or bankruptcy. State owned rail facilities are currently found in several other states, including Vermont, New Hampshire, Wisconsin, and Michigan.

The evolution and resulting conditions of the current South Dakota rail system are documented in Chapters III and IV of this RAILPLAN. This chapter will address the following topics relative to the state owned portion of the system.

- Need and Justification for State Ownership
- The Elements of the Acquisition
- Rail Operations and Maintenance
- Directed Service Rehabilitation
- Current Status of the State Owned System
- Objectives for the State Owned System

NEED AND JUSTIFICATION FOR STATE OWNERSHIP

Even prior to the publication of South Dakota's first rail plan, RAILPLAN SOUTH DAKOTA 1978, the potential impact of rail abandonments on the State's economy was recognized. The bankruptcy proceedings of the Milwaukee Road necessitated a further definition of these impacts.

Late in 1977, the Milwaukee Road, owner of 48% of all active trackage within the State, filed a petition for bankruptcy. A decline in quality and frequency of service occurred during the late 1970's which could be attributed, at least in part, to the Milwaukee Road's inability to serve the operating and maintenance needs of their branch line system. The potential for an embargo of the western extremities of the Milwaukee's system was implicit in a study conducted for the Milwaukee Road by Booz, Allen and Hamilton for the purpose of recommending an optimum configuration for a reorganized railroad. This study began in late 1978 and supported the Milwaukee's request later in 1979 to embargo all of its trackage west of Renville, Minnesota. The embargo, had it been approved by the Federal Bankruptcy Court under the original application, would have completely removed Milwaukee service from the States of South Dakota, North Dakota, Montana, Idaho, and Washington. The severe loss of rail service that would have happened in South Dakota is shown on the upper half of Figure V-1.

The State of South Dakota, cooperating with the States of Minnesota, North Dakota, and Montana, entered into discussions with the Milwaukee Road to evaluate the impact of the proposed embargo on specific rail operations affecting the four state area. Of primary concern was the impending loss of the Milwaukee main line from Renville, Minnesota through South Dakota to Miles City, Montana. A major portion of the discussions was devoted to forms of rehabilitation assistance for this line which could be financed by the aforementioned states. After due deliberation, and with the sanction of the Bankruptcy Court, the State of South Dakota and the Milwaukee Road entered into an agreement which would result in a post embargo configuration within South Dakota as shown in the lower half of Figure V-1.

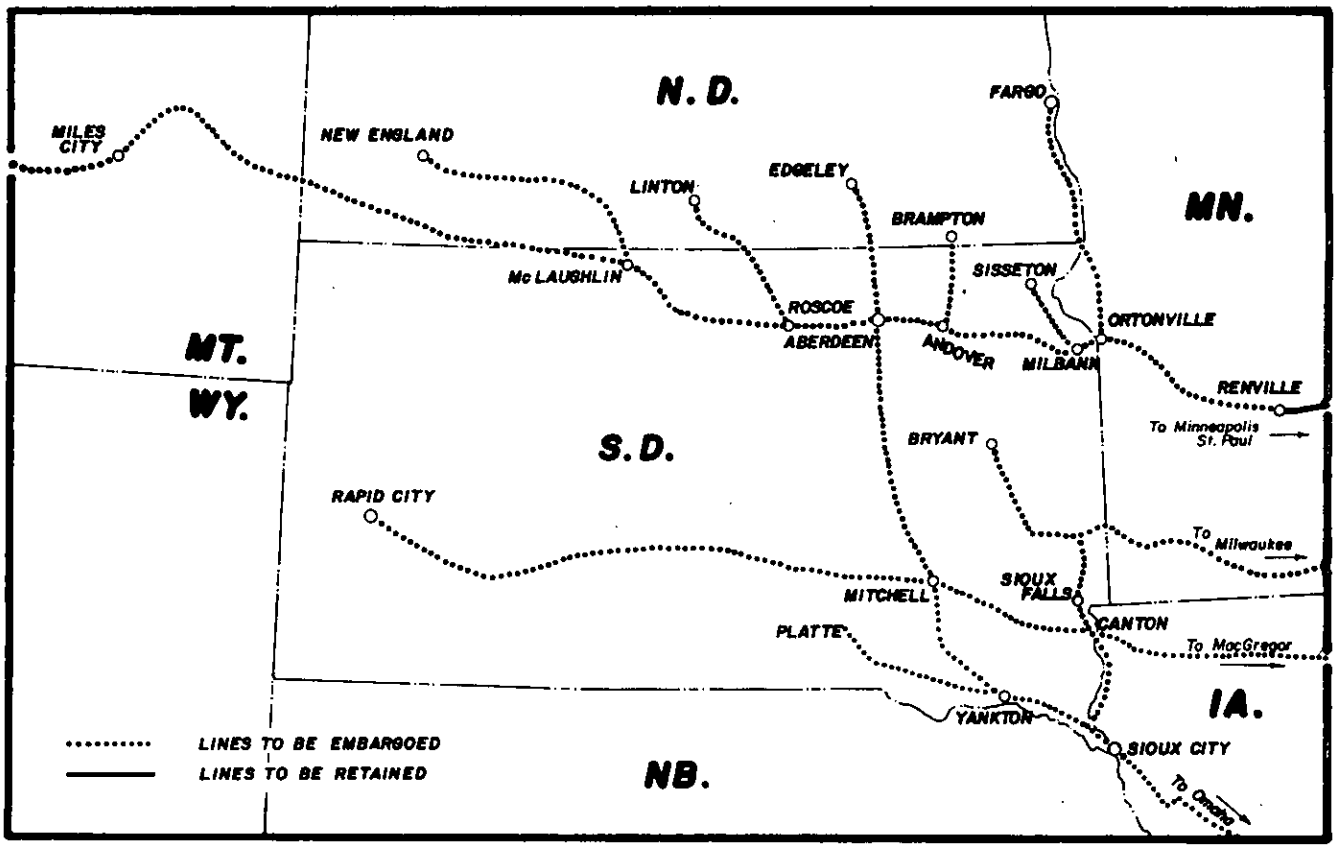
Consequently, the States of South Dakota, North Dakota, and Minnesota appropriated $2.3 million for improving the line, 80% of which was "Section 803" funding from the Federal Railroad Administration and 20% was matching funds from the States. Rehabilitation work was subsequently performed using those funds during the fall of 1979 between Jonathan, Minnesota and Gascoyne, North Dakota.

In March 1980, the Milwaukee's embargo request, as amended by South Dakota's intervention, was approved and the Milwaukee ceased to operate all trackage in South Dakota except for the aforementioned main line, the New England branch line, and the Sisseton branch line. Further, the Milwaukee ceased to operate all of their trackage west of Miles City, Montana in its entirety. Concurrent with the embargo proceedings, South Dakota conducted an extensive analysis to identify, select, and acquire elements of trackage that would preserve an essential rail system within the State.

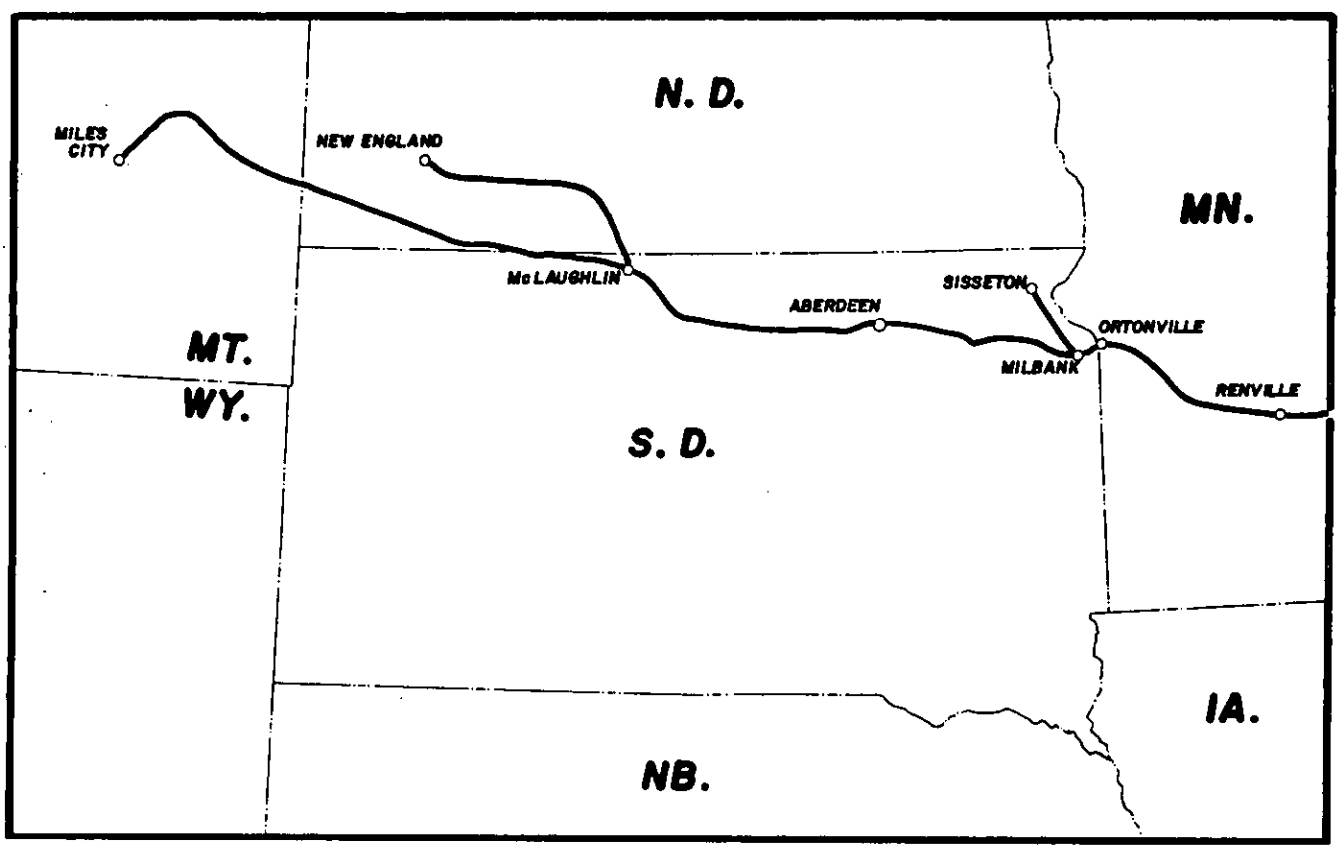
By early 1981, the Milwaukee Road's economic condition had declined further, resulting in their filing to abandon the New England and Sisseton branch lines in March 1981. Subsequently, in May 1981 they filed to abandon the main line between Ortonville, Minnesota and Miles City, Montana; thus leaving an uncertain future for significant volumes of coal and commodity shipments moving on the line.

FIGURE V - 1

MILWAUKEE ROAD TRACKAGE PRIOR TO EMBARGO



POST EMBARGO MILWAUKEE ROAD TRACKAGE AFTER MULTI-STATE INTERVENTION



These latest abandonment applications, in addition to the impact of the embargo, greatly accelerated the already alarming economic impact facing South Dakota shippers. Further, the loss of the main line between Gascoyne, North Dakota and Big Stone City, South Dakota created a potential situation that could result in the closing and relocation of the Big Stone City, South Dakota and Ortonville, Minnesota power plants. If the plants were to cease operations in 1982, the negative economic impact could accumulate to over $1.2 billion.

The most significant justification for continuing rail service in critical areas of the State is a simple matter of economics. In general, agriculture, South Dakota's principal industry, needs an efficient bulk carrier to transport crop production. Grain harvests generate tons of raw food that must be relocated for processing and/or consumption. These commodities, when moving long distances, are typically more cost-effective to move by railroad than by truck. With reliable rail service, profitable markets become more regularly accessible and the price that can be offered by grain elevators to farmers tends to rise.

Products such as coal, non-metallic minerals, lumber and wood products, and stone, clay, and glass materials are most appropriately moved by rail. Without rail accessibility, industries producing these products are severely limited in their shipping options. Their choices are to ship by truck, relocate to remaining railheads, or shut down altogether. A decrease in serviceable rail lines results in decreased opportunities for businesses which are dependent on rail service. Without a modern rail system connected to the national rail network, South Dakota's attractiveness as a future industrial location could be substantially diminished.

South Dakota is experiencing a transportation crisis. The financial stability of some of the rail companies operating in the State is questionable. A heavy pattern of abandonments have tended to discredit rail service among its users. Consequently, traffic that could move by rail is becoming diverted to trucks. In some rural areas, the State highway system was not designed to accept significant volumes of truck traffic. As a result, accelerated deterioration of the highways is occurring in these areas. This deterioration causes a more frequent need for maintenance, in some severe cases, reconstruction. The costs incurred over the long term to support the added truck traffic are usually not economically beneficial to the State and the shippers.

A healthy, competitive, and complimentary transportation system in South Dakota is a necessary catalyst for the State's growth and prosperity. South Dakota's current objective is to establish a system of transportation whereby trucks maximize the benefits they can provide for short hauls and trains provide bulk transportation for the long haul. Several studies have conclusively shown that railroads are more energy efficient than trucks in the transport of large volumes of high-density freight over long distances. [1]

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[1]Eric Hirst, Energy Intensiveness of Passenger and Freight Transport Modes: 1950-1970, National Science Foundation, Oak Ridge National Laboratory
Changes in Energy Intensiveness: 1972-1977, DOT Transportation Systems Center, Kendall Square, Cambridge, Mass., May 1979;
Topical Report on Energy Requirements for Movement of Intercity Freight, Battelle Columbus Laboratories, Columbus, Ohio, December 15, 1972

Continuity of service is another key factor in any decision to retain critical trackage. For South Dakota, no Class I carrier indicated a willingness to own and operate segments of the abandoned rail system. The State was faced with the very real possibility of not having a viable rail system and, as a result, elected to solve its own rail transportation problems for the benefit ot its citizens.

In their 1980 session, the State Legislature carefully reviewed the rail situation, declared that certain rail service was necessary for the well-being of the State, and authorized the purchase of abandoned rail lines.

THE ELEMENTS OF THE ACQUISITION [266.15 (c)(6)(vi)]

The area most directly affected by the initial Milwaukee embargo is also the area of greatest agriculture production - the southeastern area of the State. The initial task facing the State was to conduct a detailed analysis of all abandoned rail lines both individually and collectively to decide exactly what were essential. It was acknowledged and understood at the onset that not every line could be, or should be, saved.

In the 1980 Legislature, authority to purchase up to 1,254 miles of rail facilities was granted under State of South Dakota Senate Bill 249. This critical piece of legislation was signed into law on March 14, 1980.[2] The legislation itself did not express the authority to purchase in terms of track miles but rather in specific identified line segments or locations. A complete listing of the lines authorized for purchase by that legislation, as amended by 1981 legislative action, is provided in Table V-1.

For analytical purposes the available trackage was evaluated in several economic groupings:

a. Those deemed essential to the State's transportation network. (This is now commonly referred to as part of the State "Core System").

b. Those judged to be potentially beneficial to local shippers i.e. local option lines.

c. Those judged not to have a potential future operating value.

d. Those judged to have no value.

The upper half of Figure V-2 shows the geographic distribution within the State of all lines authorized for purchase, coded to the analytical categories just described.

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[2]As amended by House Bill 1371 on March 9, 1981.

TABLE V-1

RAIL LINES AUTHORIZED FOR PURCHASE
BY THE 1980 LEGISLATURE

CARRIER	LINE SEGMENTS	
Milwaukee Road	Roscoe	N.D. Border
	Andover	N.D. Border
	Aberdeen	N.D. Border
	Aberdeen	Wolsey
	Wolsey	Mitchell
	Mitchell	East Wye Switch
	East Wye Switch	Iowa Border
	East Wye Switch	Canton
	Canton	Mitchell
	Canton	Iowa Border
	Canton	Sioux Falls
	Sioux Falls Yard, Side & Spur	
	Sioux Falls	Dell Rapids
	Dell Rapids	Sioux Falls Jct.
	Sioux Falls Jct.	Minn. Border
	Sioux Falls Jct.	Madison
	Madison	Bryant
	Napa	Platte
	Mitchell	Chamberlain
	Chamberlain	Kadoka
	Kadoka	Rapid City
	Rapid City Yard, Side & Spur	
	Minn. Border	N.D. Border (White Rock)
	*Sioux City, Iowa Yard, Side & Spur	
	*Iowa Border	Sheldon, Iowa
	*Sisseton	Milbank
Chicago & Northwestern	Watertown	Clark
	Mitchell	Ellis
	Redfield	Frankfort
	Redfield	James Valley Jct.
	Gary	Minn. Border
	Beresford	Iowa Border
	*Iowa Border	Hawarden, Iowa
Burlington Northern	Wentworth	Hayti
	Sioux Falls	Yankton
Illinois Central Gulf	Sioux Falls	Minn. Border

*Line segments added by 1981 Legislation.

As a result of the analysis, 834.5 miles of the miles scheduled for abandonment were purchased as follows:

SEGMENT	MILEAGE
Beresford to Hawarden	18.6
Napa to Platte	82.9
Sioux City	6.4
East Wye Switch to Canton	49.4
Canton to Mitchell	81.7
Mitchell to Chamberlain	68.6
Aberdeen to Wolsey	72.2
Wolsey to Mitchell	54.2
Kadoka to Rapid City	98.0
Chamberlain to Kadoka	119.6
Britton to BN Interchange	4.8
North Sioux City to Scotland Jct.	83.4
Scotland Jct. to Mitchell	47.4
Trent to Sioux Falls	23.3
Sioux Falls	5.3
Sioux Falls to Canton	18.7
TOTAL	834.5 miles

A graphic representation of the lines actually purchased is shown, using the same classifications as the original analysis, in the bottom half of Figure V-2.

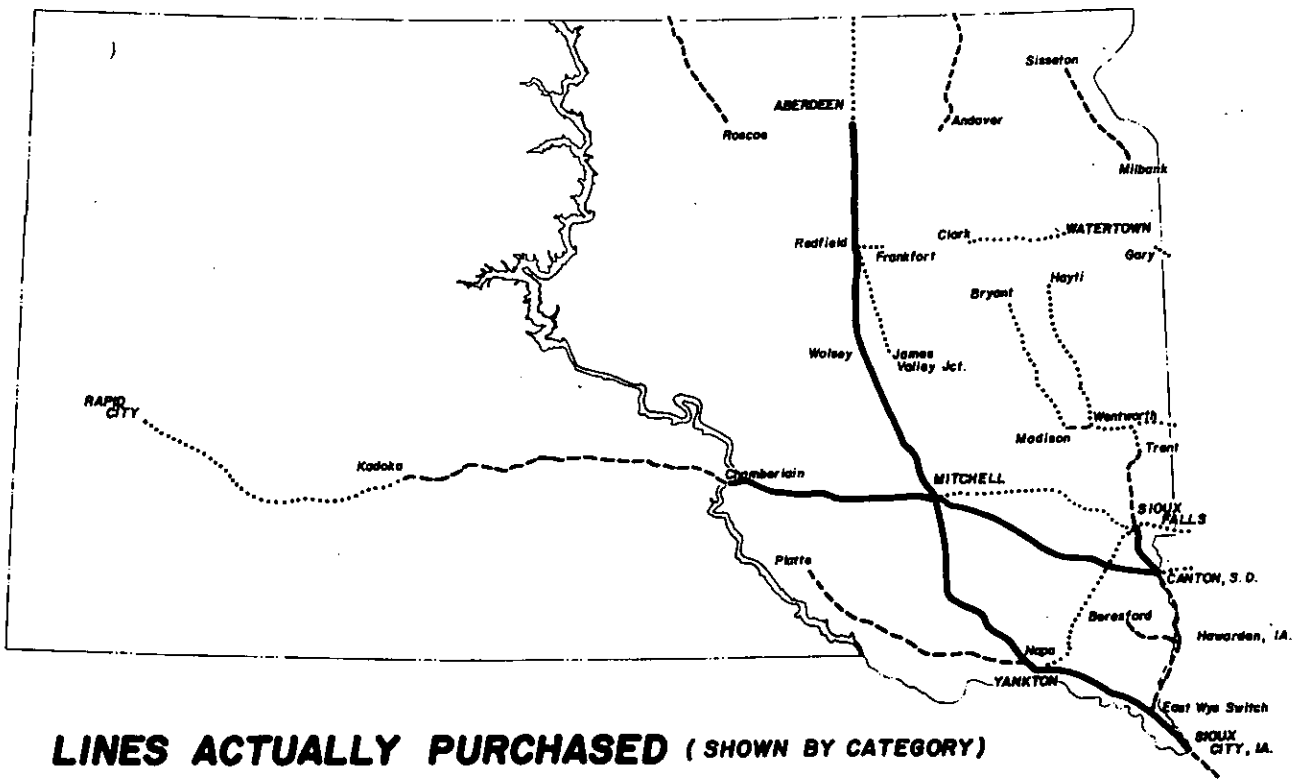
To provide the mechanics for a purchase program, the 1980 Legislature created the South Dakota Railroad Authority to "plan, establish, acquire, develop, construct, purchase, enlarge, maintain, equip and protect railroad facilities deemed necessary to the State." The Legislature appropriated a maximum amount of $25 million which was funded by a temporary $0.01 sales tax increment on all items presently taxed, with the exception of food. The tax was implemented in May of 1980 and, with extensions added during the 1981 Legislative Session, rescinded July 1, 1981. Collections between April 1, 1981 and July 1, 1981 were put into the General Fund.

The primary category of trackage purchased was the 433.5 miles identified as being an essential part of the State's transportation system. The State owned "Core System" is strategically located in the eastern half of the State. It consists of lines extending from Aberdeen south through Mitchell and on to Sioux City, Iowa and from Sioux Falls to Chamberlain via Canton. The entire system, with the exception of the Mitchell to Chamberlain segment, has heavy rail capable of supporting jumbo hopper cars, the modern rail unit used to efficiently transport grain. The core system was also described in Chapter IV and is shown graphically in Figure IV-12.

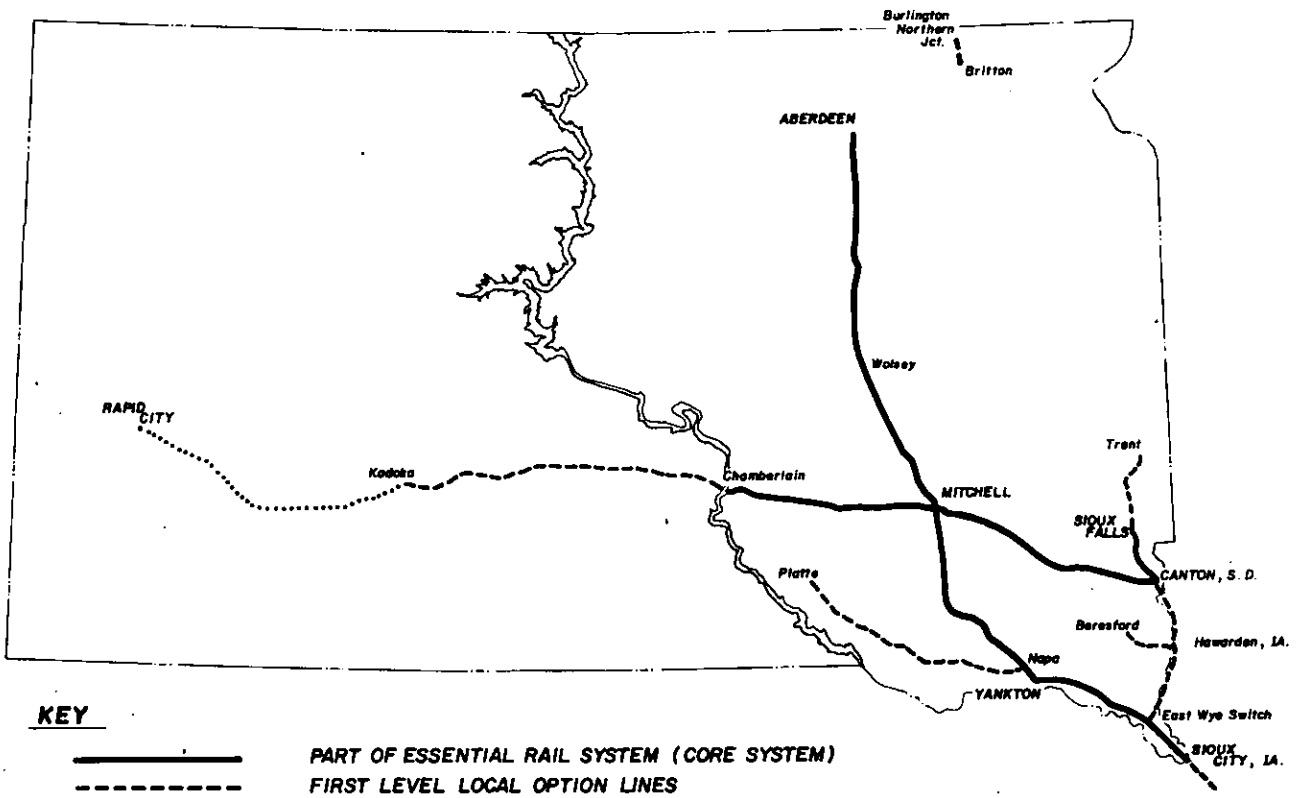
Also purchased were 303 miles of local option lines, all having the potential of being restored to service at some future time. The local option lines purchased are mainly extensions from the core and consist of the Chamberlain to Kadoka, Napa to Platte, Sioux Falls to Trent, Britton to BN Junction and Hawarden, Iowa to Beresford lines. None of the lines in this group are presently capable of supporting jumbo hopper cars.

FIGURE V - 2

LINES AUTHORIZED FOR PURCHASE (SHOWN BY CATEGORY)



LINES ACTUALLY PURCHASED (SHOWN BY CATEGORY)



KEY

PART OF ESSENTIAL RAIL SYSTEM (CORE SYSTEM)

FIRST LEVEL LOCAL OPTION LINES

SECOND LEVEL LOCAL OPTION LINES

The responsibility for operations on local option lines lies with the local area. South Dakota statutes provide that two or more political sub-divisions can form a Regional Railroad Authority (RRA). RRA's have the authority to issue bonds, contract for operations, and can raise funds through the establishment of a mill levy. The State will make local option lines available to regional railroad authorities through leasing arrangements.

The only other line purchased, a 98.0 mile line from Kadoka to Rapid City, will be held intact (railbanked) in the event that it is needed as a connection for the Rapid City commerce area to the State core system if the existing C&NW connection is severed. As long as the C&NW retains its line across the State to Rapid City, this line will not be operated.

RAIL OPERATIONS AND MAINTENANCE

Before the operation of rail service over State owned tracks could begin, specific legislative authorization of an operating plan was necessary. The 1980 Legislation provided for rail system purchases only and did not provide authority for operations. An operating plan was developed by the Division of Railroads and presented to the 1981 Legislature which subsequently approved legislation to define the core system and permit its operation. Section 3 of Senate Bill 236 provided that "The South Dakota railroad board, with the consent of the Governor, shall contract for railroad operations and maintenance over essential state-owned rail lines identified in South Dakota rail plan 1980 approved by the federal railroad administration on September 24, 1980, and approved by the transportation commission on September 25, 1980..."

The Division of Railroads, in presentations to the Legislature, estimated that an operator would need a declining amount of revenue assistance over a four to seven year period to supplement freight charges. The Legislature selected a funding mechanism that applied a one cent per gallon tax increase on all fuel burned in internal combustion engines. From this tax $2.7 million was appropriated to support rail operations in the initial year.

Various organizations disagreed with the use of motor fuel tax collections for railroad purposes, and took the issue before the State Supreme Court. On May 8, 1981, the Court prohibited the funding of rail operations with tax revenues from fuels burned on the highway; however, the Court did not prohibit the use of tax money from fuel used in vehicles for off-highway use, such as farm tractors.

A special legislative session was convened on May 18, 1981 to resolve the railroad funding issue. The Legislature decided to allocate State General Funds to meet rail needs that could not be from the motor fuel tax as proposed during the regular Session. To balance the budget, funds generated by the one cent per gallon motor fuel tax increase were appropriated to the State Highway Patrol and General Funds previously appropriated to the State Highway Patrol were appropriated to the Division of Railroads.

Some citizens who opposed State involvement with railroads began a petition drive to refer the action of the Special Session to a public vote. However, the referendum petition effort fell short of collecting the necessary signatures by the August deadline.

DIRECTED SERVICE REHABILITATION

The core system, primarily due to the Milwaukee Road's deferred maintenance practices, needed significant repair prior to operations. Federal Legislation passed in 1980 provided a mechanism for 30 days of Directed Service Funding on Milwaukee Lines that would be restored to permanent service in South Dakota. The State, therefore, made application to the Federal Railroad Administration (FRA) for funds to perform track repair to Class I (10 mph) safety standards prior to establishing operations.

Because the total amount of rehabilitation to be performed was large, three separate line segments were defined, each relating to a 30 day directed service period as follows:

1.	Sioux Falls to Wolsey via Canton and Mitchell	June 1981
2.	Chamberlain to Scotland via Mitchell	July 1981
3.	Scotland to Elk Point	August 1981

In addition to the directed service rehabilitation to Class I standards, additional rehabilitation to Class II (25 mph) standards is planned.

CURRENT STATUS OF THE STATE OWNED SYSTEM

On June 16, 1981, Governor William J. Janklow announced that the State of South Dakota and the Burlington Northern Railroad Company (BN) had reached an agreement in principle under which the BN would be the core system operator. This agreement with the BN is a departure from the original plan which called for the State to provide operating subsidies. The BN did not request an operating subsidy, but instead requested that funds previously designated for that purpose be used for track improvements. This rehabilitation of the core system will allow unit trains to move at speeds of 25 miles per hour.

The BN began operating an initial segment of the core system on July 6, 1981. By November, 1981 the entire core system will be operational with BN providing service.

OBJECTIVES FOR THE STATE OWNED SYSTEM

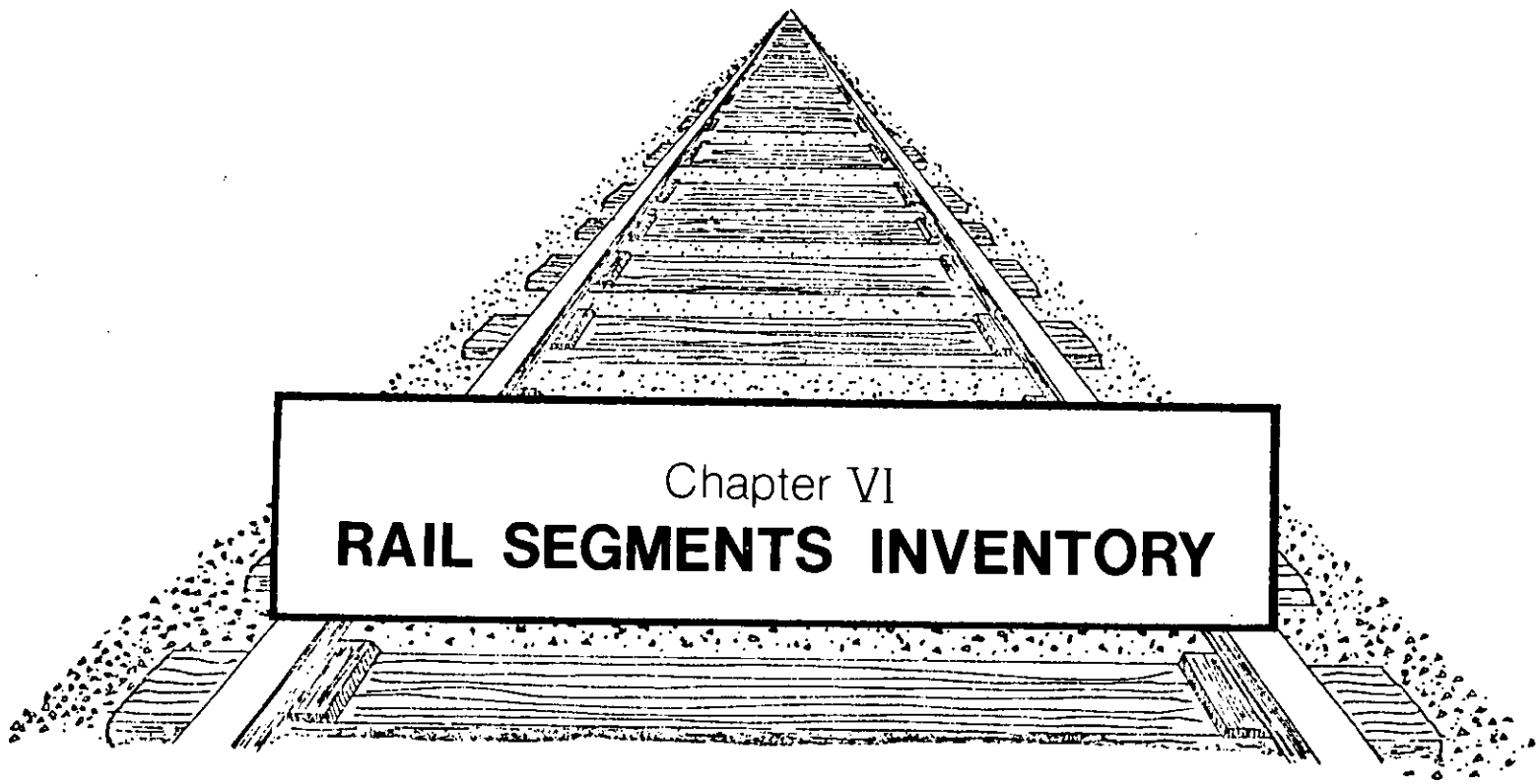
South Dakota's near term objective is to finish rehabilitation of the core system. Adequate freight transportation in a balanced system of highway and rail is the ultimate objective in terms of achieving a measurable improvement in the State's transportation network. The strengthening of South Dakota's economy is the primary goal of the overall rail program.

A reliable core system, providing a reasonable level of service, should serve to spur capital investment along the rail right-of-way. The State's economy can be substantially improved through the stimulation of commodity movements to market as

well as the growth of additional agricultural and heavy industry. Eventually, the objective is to make the State owned trackage an attractive candidate for eventual sale to private industry.

A clear picture is emerging as to the future of South Dakota's rail system. The carriers operating within the State have either already abandoned their uneconomical low density branch lines or declared their intent to do so. To prosper as an economic entity, South Dakota must continue to direct its attention to the retention of a minimum set of essential lines consistent with the core system concept. In this regard, the Milwaukee Road main line which extends between Ortonville, Minnesota and Miles City, Montana, has been filed for abandonment. In a special legislative session in September, 1981, the State Legislature empowered the State Railroad Authority to issue bonds guaranteed by a private entity for the acquisition of the trackage between Ortonville and Terry, Montana.

The State of South Dakota, many of whose settlers arrived in the State by rail, continues that pioneering spirit in the retention and restoration of important rail service, using the State's resources in the interest of its shippers, its industry, and its consumers.



Chapter VI

RAIL SEGMENTS INVENTORY

CHAPTER VI

RAIL SEGMENT INVENTORY
[266.15(c)(2)]

This Chapter provides a capsule description of each rail line segment in South Dakota. There are 46 individual segment descriptions with the following breakdown by owner:

. South Dakota	14 segments (7 non-operating)
. Burlington Northern	13 Segments
. Chicago & North Western	11 Segments
. Milwaukee Road	5 Segments
. Soo Line	2 Segments
. Black Hills Central	1 Segment

Included in each description is a listing of line and service characteristics, a description of the physical characteristics of the segment, a listing of traffic characteristics of the segment, other information pertaining to service over the line or the expected effects of abandonment, and two maps showing the location of the segment relative to both the State highway and railroad systems. Together, these segment descriptions provide a useful inventory of the rail system serving South Dakota.

Data for these segment descriptions were obtained from the railroads owning the lines or reports from those companies plus in some cases on the spot inspection and observations. Line segment descriptions are included for all State purchases whether operating or not. Other segments which have been abandoned and the track materials have been removed are not included in this segment analysis. Table VI-1 lists the line segments whose descriptions are included in this Chapter.

The information contained in the following segment description is continuously monitored and updated. This helps to alert the Division staff to changing conditions in the rail system and therefore facilitates the development of solutions to potential problem areas.

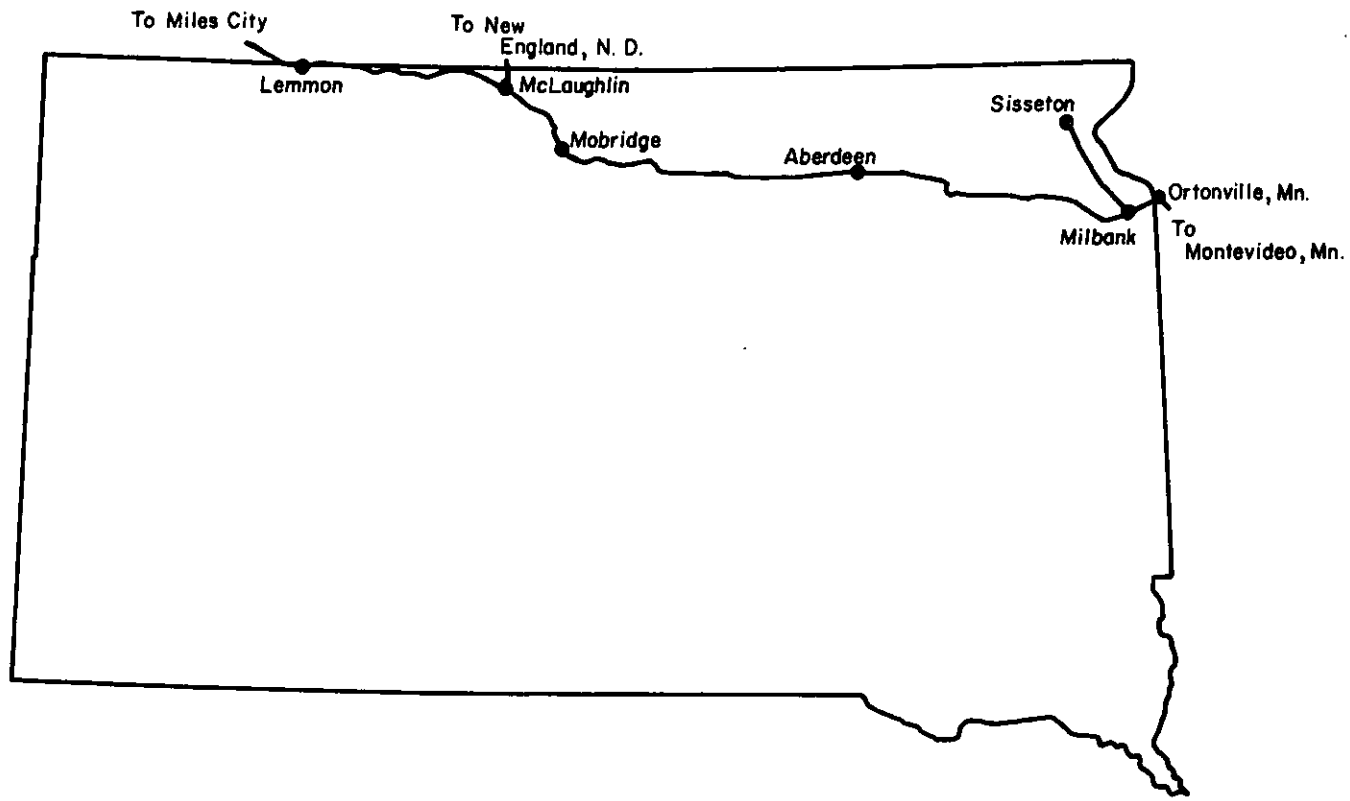
TABLE VI-1
SOUTH DAKOTA RAIL SEGMENTS

SEGMENT NUMBER	LINE DESCRIPTION	TOTAL MILES	SD MILES
Milwaukee Road			
MW01	Ortonville, MN to Aberdeen, SD	107.0	106.3
MW02	Aberdeen to Mobridge	98.0	98.0
MW03	Mobridge, SD to Miles City, MT	315.0	92.0
MW04	Milbank to Sisseton	37.1	37.1
MW12	McLaughlin, SD to New England, ND	133.9	9.7
		691.0	343.1
Chicago & North Western			
CN01	Tracy, MN to Huron, SD	136.4	90.2
CN02	Huron to Pierre	117.7	117.7
CN03	Pierre to Rapid City	170.8	170.8
CN04	Redfield to Aberdeen	42.2	42.2
CN05	Aberdeen, SD to Oakes, ND	52.7	38.6
CN06	Chadron, NB to Rapid City, SD	102.2	84.0
CN07	Rapid City, SD to Bentonite, WY	77.6	71.0
CN09	Worthington, MN to Ellis, SD	68.6	22.5
CN12	Sioux Valley Jct. to Watertown	44.2	44.2
CN16	Blunt to Gettysburg	40.3	40.3
CN19	Box Elder to Ellsworth AFB	3.0	3.0
		855.7	724.5
South Dakota			
SD01	Sioux Falls to Canton	21.9	21.9
SD02	Canton to Mitchell	79.2	79.2
SD03	Mitchell to Wolsey	54.6	54.6
SD04	Wolsey to Aberdeen	74.0	74.0
SD05	Mitchell to Yankton	75.0	75.0
SD06	Yankton to Sioux City, IA	61.5	55.2
SD07	Mitchell to Chamberlain	67.1	67.1
SD08*	Chamberlain to Kadoka	120.7	120.7
SD09*	Kadoka to Rapid City	98.5	98.5
SD10*	Sioux Falls to Trent	26.6	26.6
SD11*	Britton to Burlington Northern Jct.	4.8	4.8
SD12*	Napa to Platte	82.4	82.4
SD13*	Canton to East Wye Switch	49.1	49.1
SD14*	Hawarden, IA to Beresford	17.4	17.4
		832.8	826.5
Burlington Northern			
BN01	Willmar, MN to Garretson, SD	127.9	4.6
BN02	Garretson, SD to Sioux City, IA	94.6	8.1
BN03	Garretson to Sioux Falls	18.5	18.5
BN04	Sioux Falls to Irene	41.0	41.0
BN05	Sioux Falls to Madison	42.4	42.4
BN06	Benson, MN to Watertown, SD	92.0	45.1
BN07	Watertown to Huron	69.8	69.8
BN08	Genesco Jct. to Aberdeen	76.5	53.6
BN09	Alliance, NB to Edgemont, SD	110.6	27.4
BN10	Edgemont, SD to Gillette, WY	121.1	21.4
BN11	Edgemont to Deadwood	106.9	106.9
BN14	Kirk to Lead	3.2	3.2
BN15	Linton, ND to Eureka, SD	49.0	14.8
		953.5	456.8
Soo Line			
SL01	Veblen Jct., ND to Veblen, SD	42.2	33.5
SL02	Wishek, ND to Pollock, SD	69.9	32.8
		112.1	66.3
Black Hills Central			
BH01	Hill City to Keystone	8.8	8.8
		8.8	8.8
GRAND TOTAL MILES		3,453.9	2,426.0

* Local Option Line (Non-Operating)

FIGURE VI-1

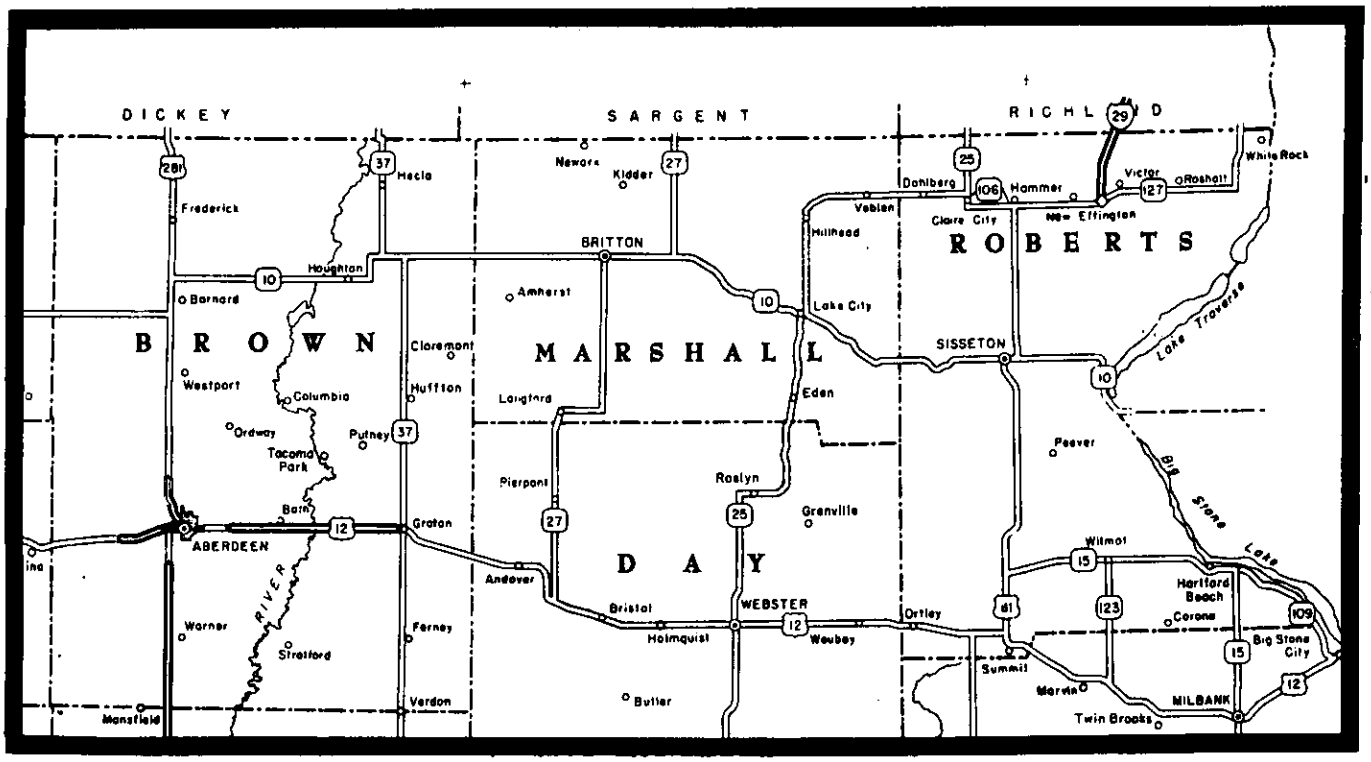
The Milwaukee Road South Dakota Network



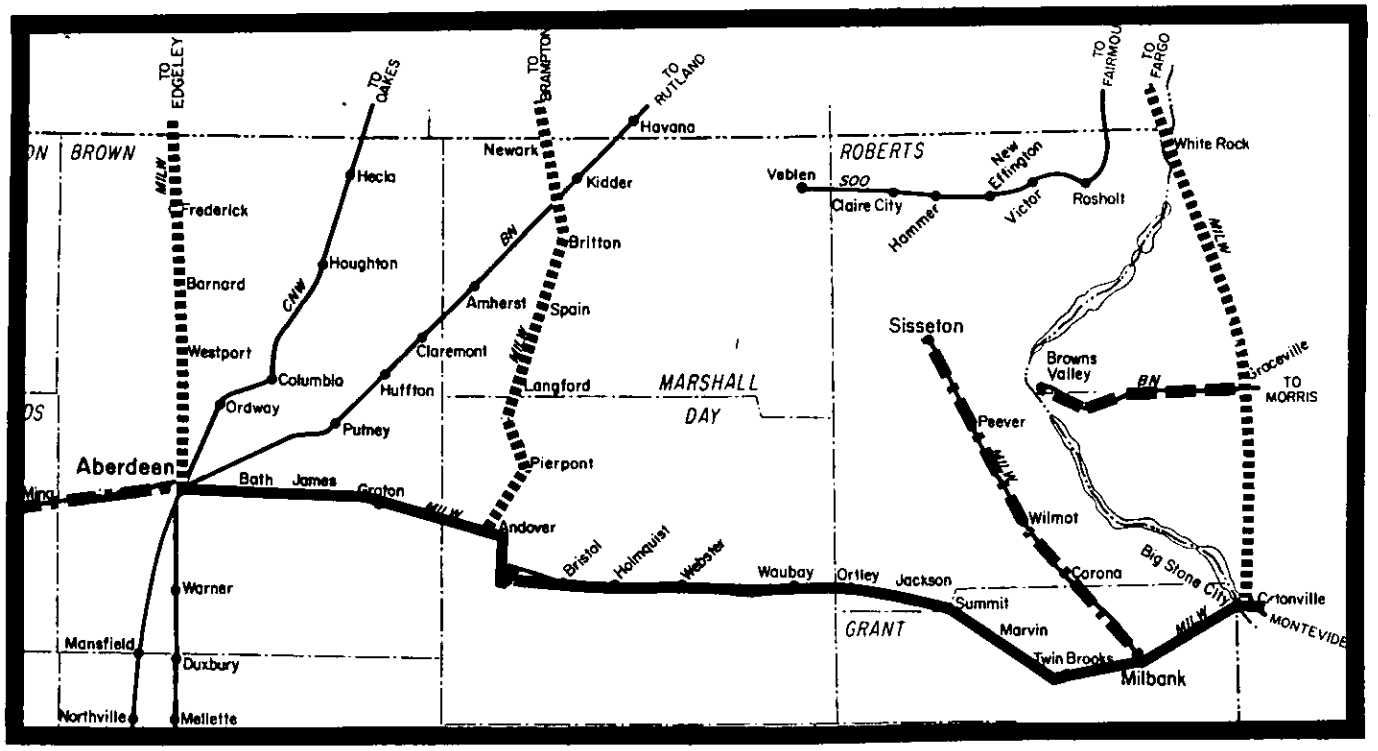
The Chicago, Milwaukee, St. Paul and Pacific Railroad Company (Milwaukee Road), as of December 31, 1980, operated 3,901 miles of railroad in twelve upper midwest states. These miles consist of 1,634 miles of owned and operated main line, 1,605 miles of owned and operated branch line, and 662 miles operated under trackage rights. The company filed for bankruptcy on December 19, 1977 with a 10,000 mile system. The State of South Dakota has purchased over 800 miles of their lines which were abandoned in 1980. The Company currently operates 343 miles in South Dakota all of which have been filed for abandonment. The Company has abandoned 1,245 miles in South Dakota since 1976.

SOUTH DAKOTA SEGMENT MW01
ORTONVILLE, MN TO ABERDEEN, SD

HIGHWAY LOCATION MAP

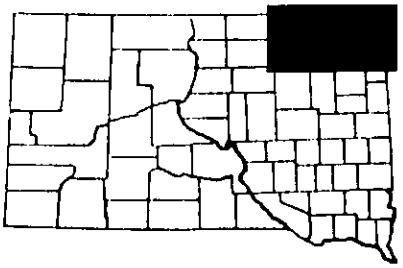


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - MW 01 ORTONVILLE, MN TO ABERDEEN, SD (PORTION OF MAIN LINE)

Line Description

OWNERSHIP – MILWAUKEE ROAD

DIVISION / SUBDIVISION –Minnesota-Dakota Division - 3rd Subdivision

LINE STATUS – Category 3: Pending Abandonment Approval

TYPE OF LINE –Main

LINE LENGTH IN MILES – 107.0 total; 106.3 in SD

MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** –263,000 lbs.

SERVICE FREQUENCY –

YARDS –Milbank and Aberdeen

CONNECTING LINES –Milwaukee Road main line at Ortonville and Aberdeen; Milwaukee Road branch line at Milbank; Burlington Northern at Aberdeen; and Chicago and North Western at Aberdeen.

HIGHWAYS – US 12 parallels this line plus Milbank is served by SD 77, Summit by US 81, Webster by SD 25, Groton by SD 37 and Aberdeen by US 281.

RAIL WEIGHT – 112 lbs. and 115 lbs. Webster to Bristol

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
MN Border to		Summit	31.0	Bristol	66.3
Big Stone City	1.5	Jackson	35.2	Andover	75.9
Big Stone City	0.0	Ortley	39.0	Groton	85.7
Milbank	8.9	Waubay	44.4	James	91.3
Twin Brooks	16.1	Webster	55.0	Bath	96.8
Marvin	23.8	Holmquist	61.4	Aberdeen	104.8

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	13.49 MGT	11.44 MGT	8.94 MGT
TRAFFIC DIRECTION –	66% East	67% East	69% East

COMMODITIES – Primarily coal traffic moving in unit trains east to Big Stone City, SD and Columbia, WI; also forwarded grain & non-metallic minerals, & rec. fertilizer, lumber, stone, glass, clay (1979)

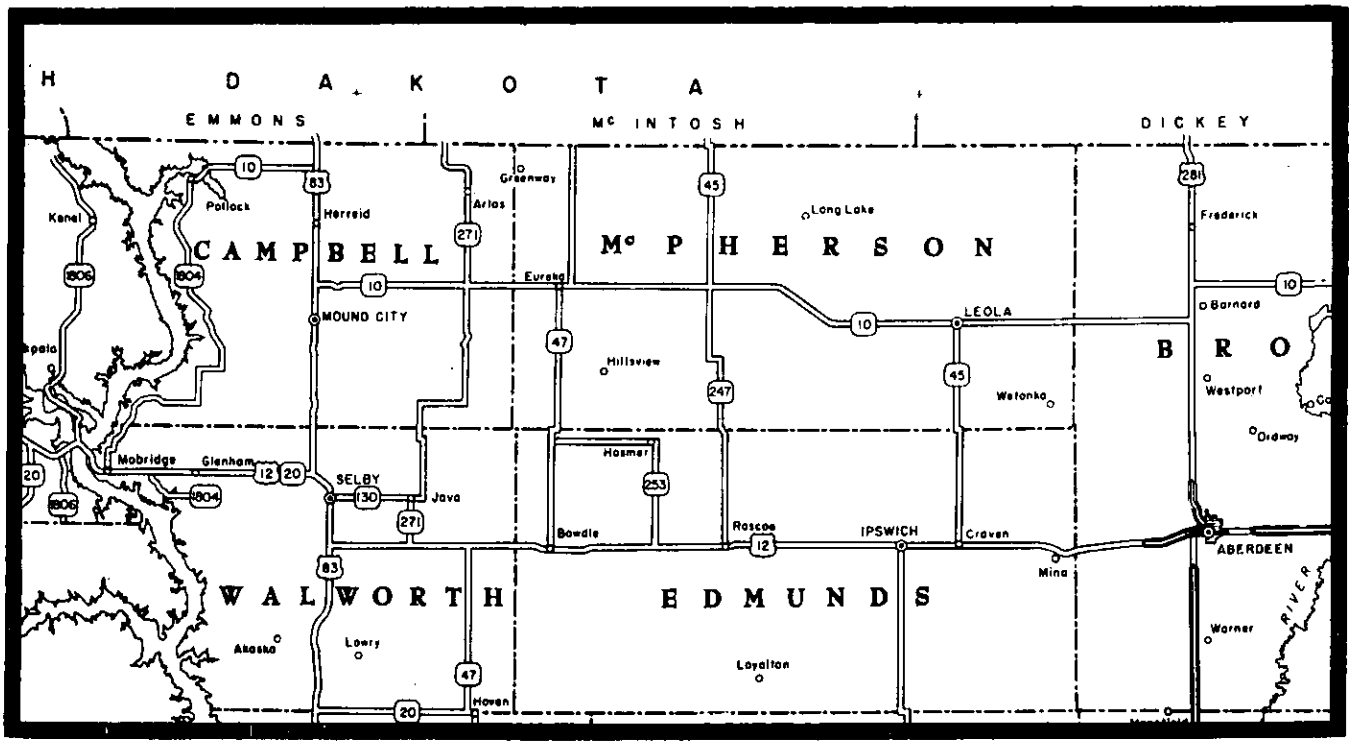
Other Information

Local traffic is uniformly distributed along the segment. Coal traffic is discrete, moving in six unit trains per week from Gascoyne, ND to Big Stone City, SD, and three unit trains per week from Montana and Wyoming mines to Columbia, WI. One local train operates daily round trip service.

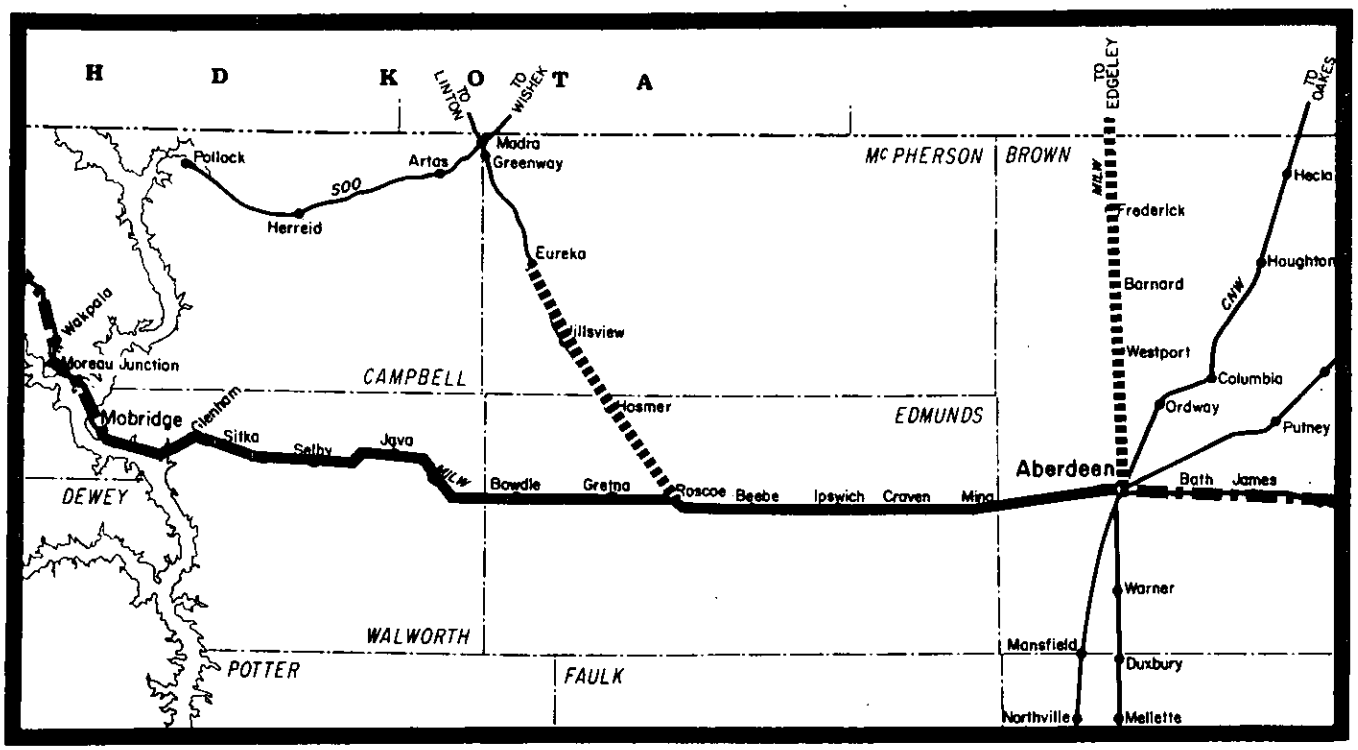
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT MW 02
ABERDEEN TO MOBRIDGE

HIGHWAY LOCATION MAP

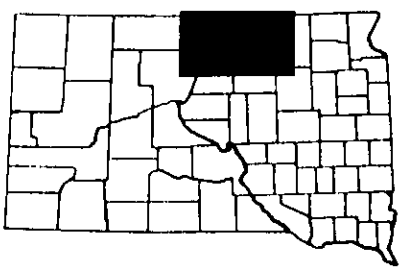


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - MW 02 ABERDEEN TO MOBRIDGE (PORTION OF MAINLINE)

Line Description

OWNERSHIP – MILWAUKEE ROAD

DIVISION / SUBDIVISION – Minnesota - Dakota Division - 4th Subdivision

LINE STATUS – Category 3: Pending Abandonment Approval

TYPE OF LINE – Main

LINE LENGTH IN MILES – 98.0 miles

MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Local-weekly round trip, weekly Mobridge to Aberdeen; Coal - 9 per week

YARDS – Aberdeen and Mobridge

CONNECTING LINES – Milwaukee Road main line at Aberdeen and Mobridge, Burlington Northern at Aberdeen and Chicago & North Western at Aberdeen.

HIGHWAYS – US 12 parallels line. Aberdeen is also served by US 281, Ipswich & Craven by SD 45, Roscoe by SD 247, Bowdle by SD 47, Java by SD 271 and Selby by US 83.

RAIL WEIGHT – 112 lbs. rail except about 5 miles of 115 lbs. rail near Mobridge

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Aberdeen	0.0	Orient Line Jct.	41.1	Java	69.6
Mina	13.1	Roscoe	41.6	Selby	77.2
Craven	21.2	Gretna	50.2	Sitka	85.2
Ipswich	26.3	Bowdle	56.9	Glenham	89.3
Beebe	34.6	Alamo	64.5	Mobridge	98.0

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	12.53 MGT	10.26 MGT	7.33 MGT
TRAFFIC DIRECTION –	63% East	66% East	68% East

COMMODITIES – Primarily overhead unit coal trains operating to Big Stone City, SD and Columbia, WI; also limited forwarded grain and received fertilizer and farm machinery. (1979)

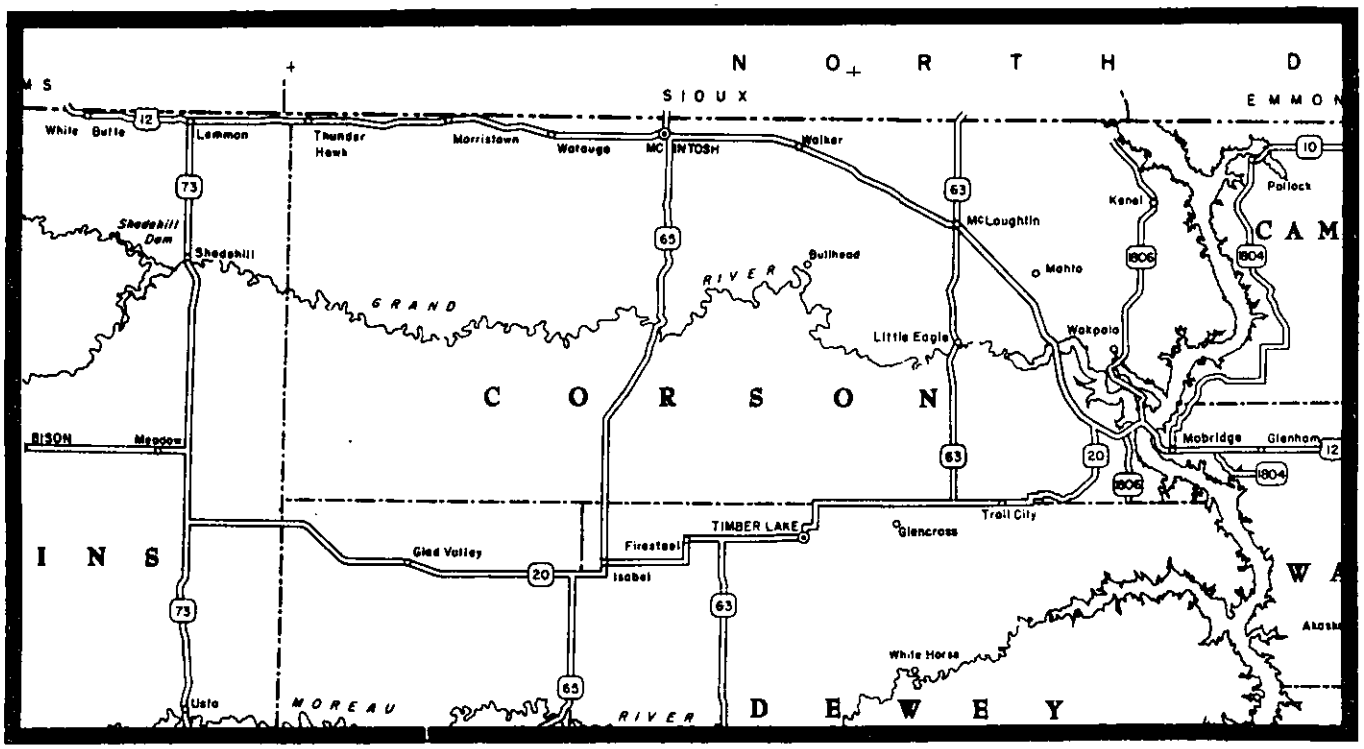
Other Information

Service includes 9 coal trains per week plus one local train per week round trip and one weekly train operating from Mobridge to Aberdeen.

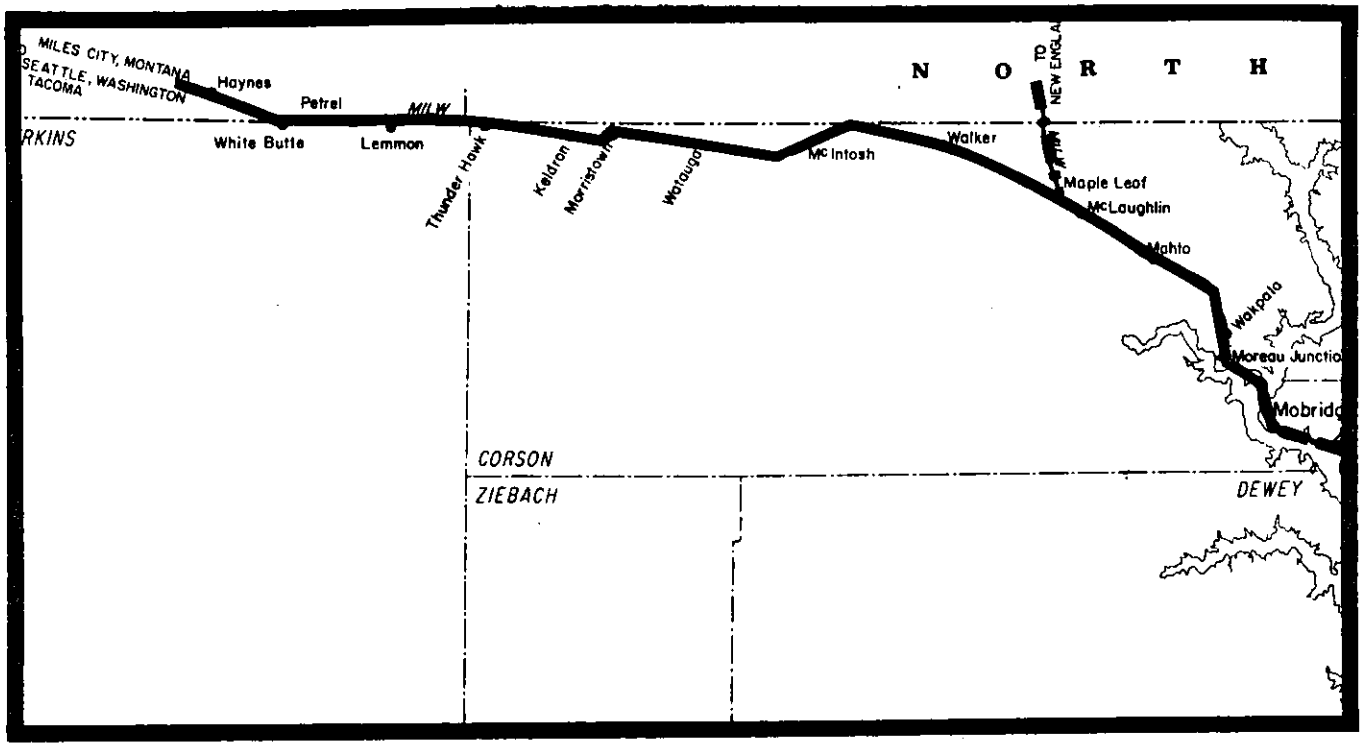
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT MW03
MOBRIDGE, SD TO MARMARTH, ND

HIGHWAY LOCATION MAP

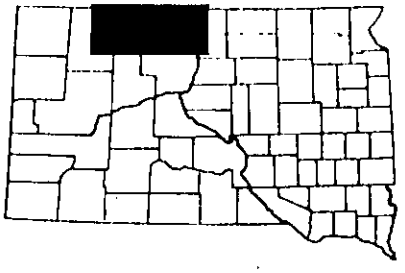


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - MW 03 MOBRIDGE, SD TO MILES CITY, MT (PORTION OF MAIN LINE)

Line Description

OWNERSHIP – MILWAUKEE ROAD

DIVISION / SUBDIVISION – Minnesota - Dakota Division - 43rd Subdivision

LINE STATUS – Category 3: Pending Abandonment Approval

TYPE OF LINE –Main

LINE LENGTH IN MILES – 315.0 Total, 92.0 in SD

MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Local-weekly round trip, weekly McLaughlin to Mobridge round trip; Coal - 9 per week

YARDS – Mobridge, (SD stations only)

CONNECTING LINES – Milwaukee Road main line at Mobridge, Milwaukee Road branch line at McLaughlin, and BN line at Miles City.

HIGHWAYS – Highway US 12 parallels and McLaughlin served by SD 63, McIntosh by SD 65 and Lemmon by SD 73.

RAIL WEIGHT – 115 lbs. rail except about 18 miles of 112 lbs. rail west of Wakpala.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Mobridge	0.0	McIntosh	58.6	White Butte	108.7
Moreau Jct.	8.2	Watauga	68.3	Gascoyne, ND	146.1
Wakpala	12.0	Morristown	77.1	Miles City, MT	315.0
Mahto	22.2	Thunder Hawk	89.6		
McLaughlin	30.4	Lemmon	98.8		
Walker	45.6	Petrel	104.7		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	11.48 MGT	10.03 MGT	7.01 MGT
TRAFFIC DIRECTION –	63% East	66% East	68% East

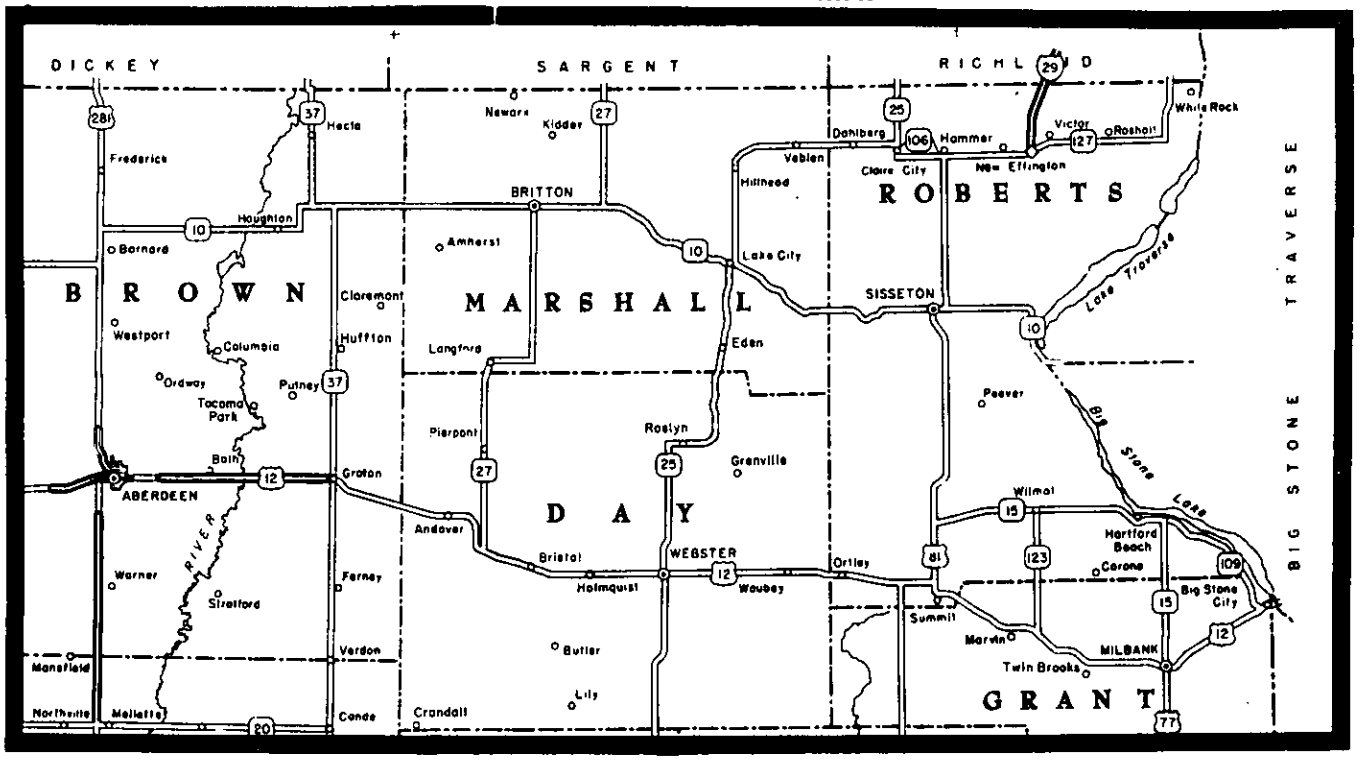
COMMODITIES – Primarily overhead unit coal trains operating to Big Stone City SD & Columbia, WI; also limited forwarded grain & received fer. stone, sand, & gravel, & pet. products. (1979)

Other Information

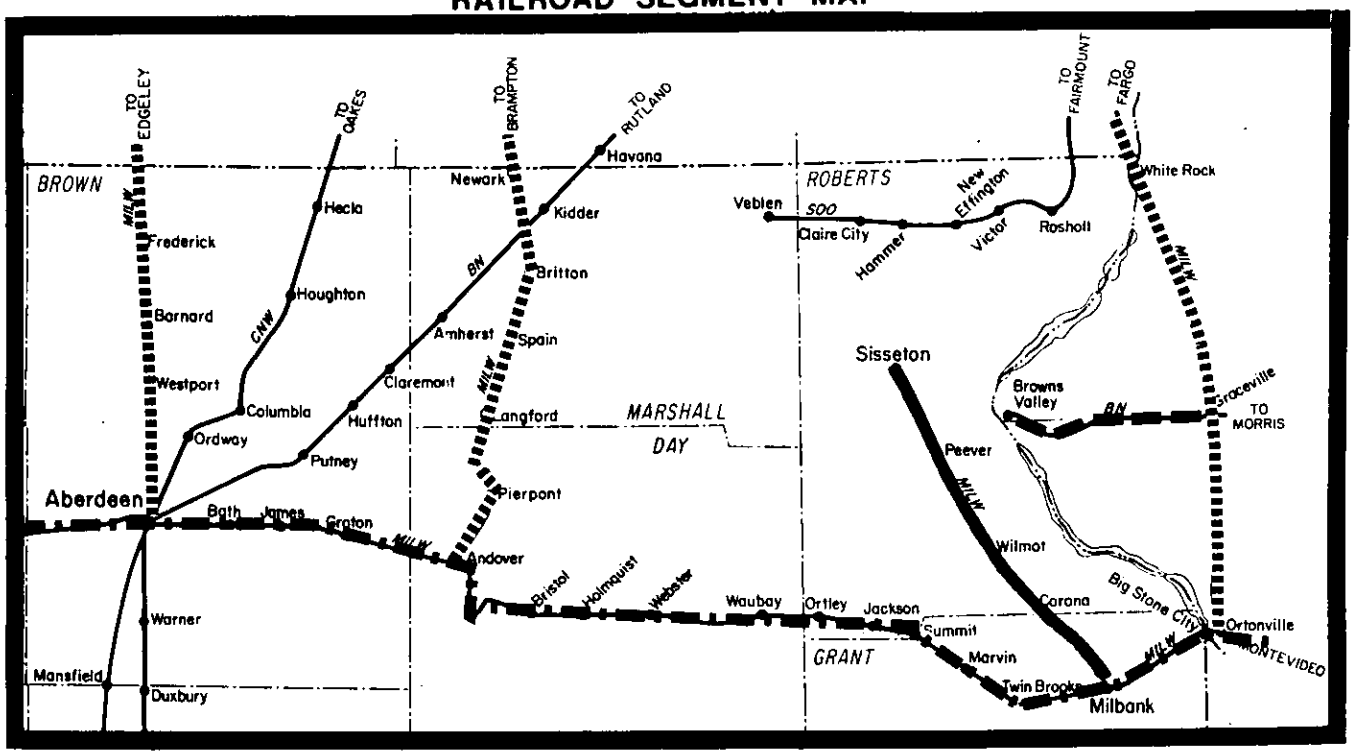
Service includes 9 coal trains per week plus two local trains per week. The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT MW04
MILBANK TO SISSETON

HIGHWAY LOCATION MAP

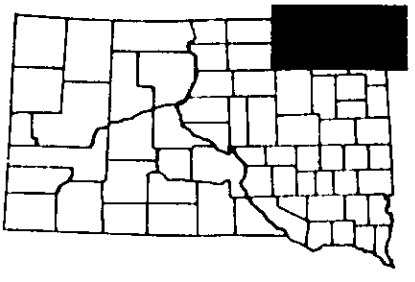


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - MW 04 MILBANK TO SISSETON

Line Description

OWNERSHIP – MILWAUKEE ROAD

DIVISION / SUBDIVISION – Minnesota - Dakota Division - 26th Subdivision

LINE STATUS – Category 3 Pending Abandonment approval

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 37.1 miles

MAXIMUM SPEED LIMIT – 20 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – Two round trips per week, three round trips per week in peak period

YARDS – Milbank and Sisseton

CONNECTING LINES – Milwaukee Road main line at Milbank

HIGHWAYS – Sisseton is on US 81 and SD 10 and near I-29; Peever is on a hard surfaced road and near I-29; Wilmot and Corona are on hard surfaced roads.

RAIL WEIGHT – About 1.5 miles of 75 lbs., mostly at Milbank, balance is 60 lbs. rail

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Milbank	0.0				
Corona	10.1				
Wilmot	17.0				
Peever	27.4				
Sisseton	37.1				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.12 MGT	0.21 MGT	0.38 MGT
TRAFFIC DIRECTION –	88% Orig.	97% Orig.	63% South

COMMODITIES – Primarily forwarded grain (barley) destined for Minneapolis also received fertilizer, petroleum products, lumber, and stone clay, and glass. (1979)

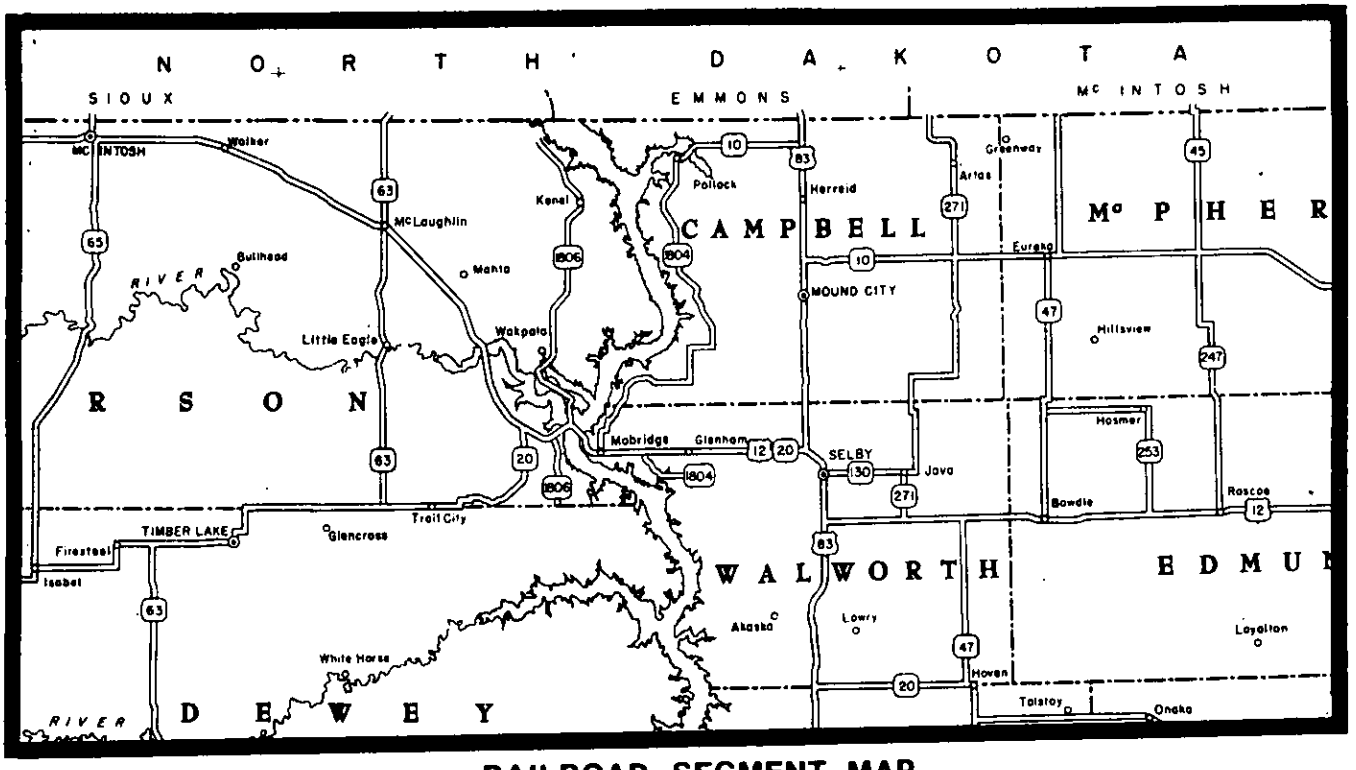
Other Information

Barley is trucked to Sisseton from eastern South Dakota, North Dakota and Minnesota. This traffic enjoys a significant rate advantage over other non-Milwaukee locations or shippers.

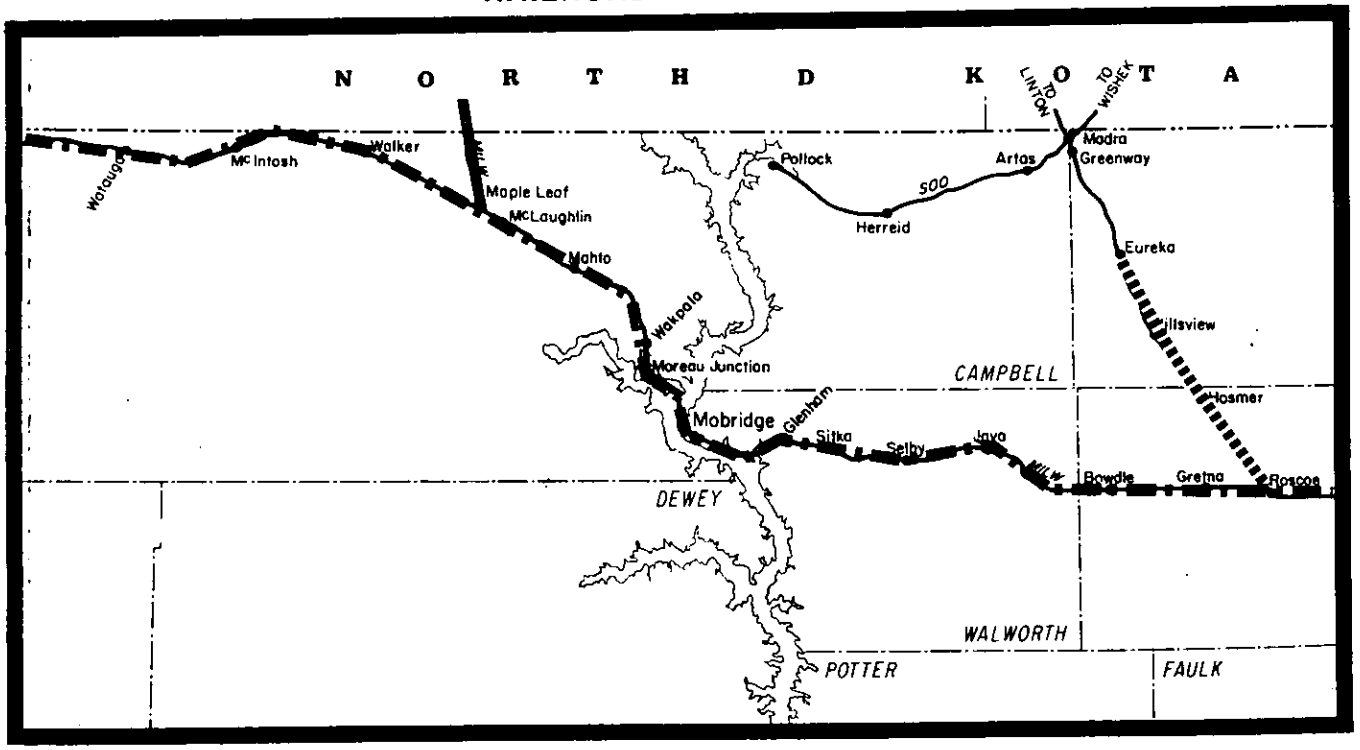
The South Dakota Rail Line Inventory Study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT MW 12
McLAUGHLIN, SD TO NEW ENGLAND, ND

HIGHWAY LOCATION MAP

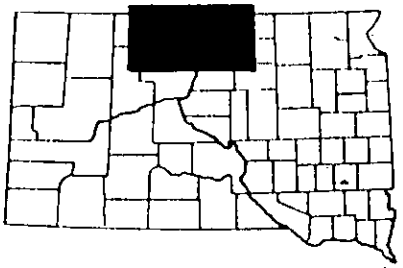


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - MW 12 MCLAUGHLIN, SD TO NEW ENGLAND, ND

Line Description

OWNERSHIP – MILWAUKEE ROAD

DIVISION / SUBDIVISION – Minnesota-Dakota Division - 49th Subdivision

LINE STATUS – Category 3 Pending abandonment approval.

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 133.9 total, 9.7 in SD

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – Weekly

YARDS – None in South Dakota

CONNECTING LINES – Milwaukee Road main line at Mclaughlin and Burlington Northern at Mott, ND

HIGHWAYS – US 12 parallels the portions of this line in SD

RAIL WEIGHT – 65 lbs. rail placed in 1910 except about 3 miles of 85 lbs. rail outside McLaughlin

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
McLaughlin, SD	0.0				
Maple Leaf, SD	8.9				
New Leipzig, ND	83.9				
Mott, ND	104.1				
New England, ND	133.9				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.19 MGT	0.07 MGT	0.10 MGT
TRAFFIC DIRECTION –	N/A	91% Orig. (1977)	60% South

COMMODITIES – Primarily forwarded grain; also received fertilizer and farm machinery. (1979)

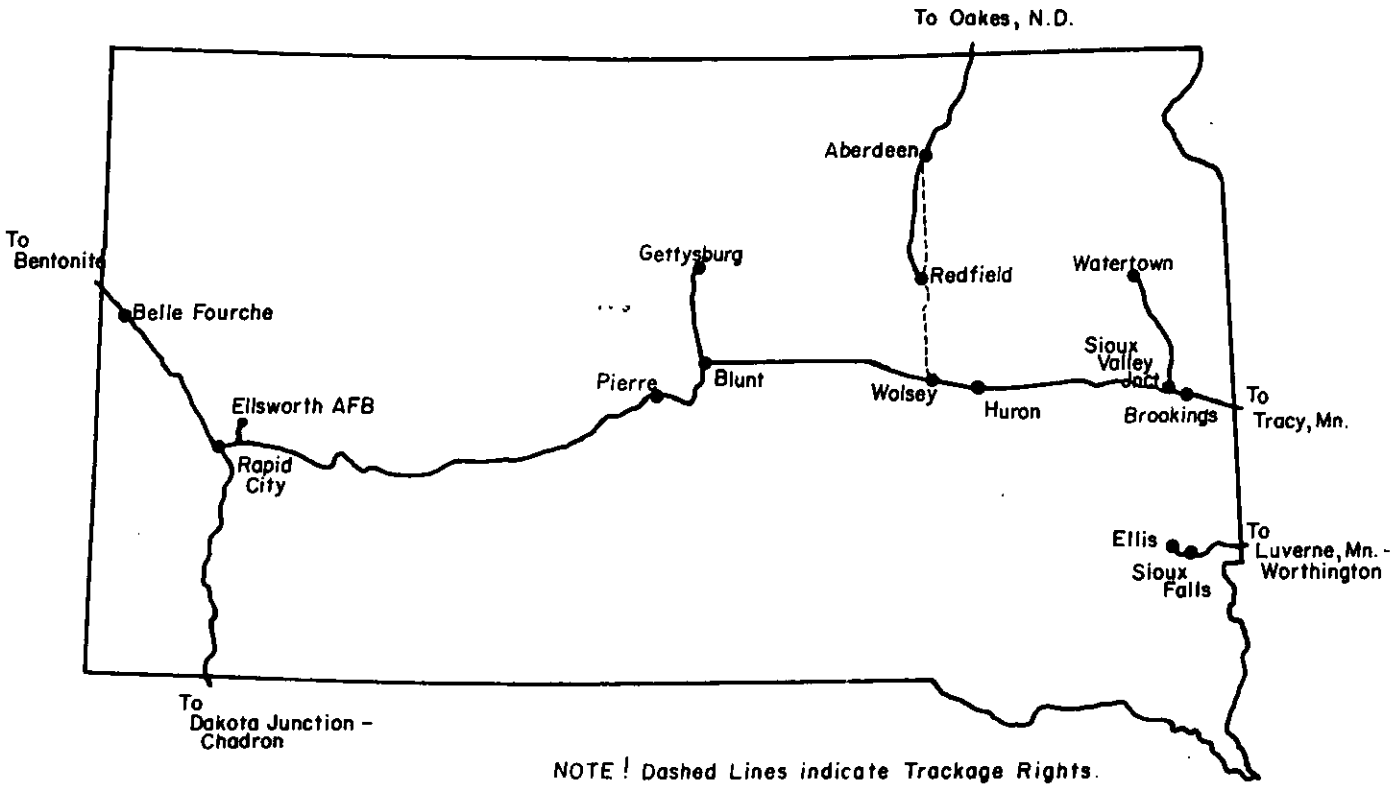
Other Information

All traffic on this line originates or terminates at stations in North Dakota. Therefore, the future of this line will depend on the position taken by North Dakota regarding possible assistance should the line be filed for abandonment.

The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

FIGURE VI-2

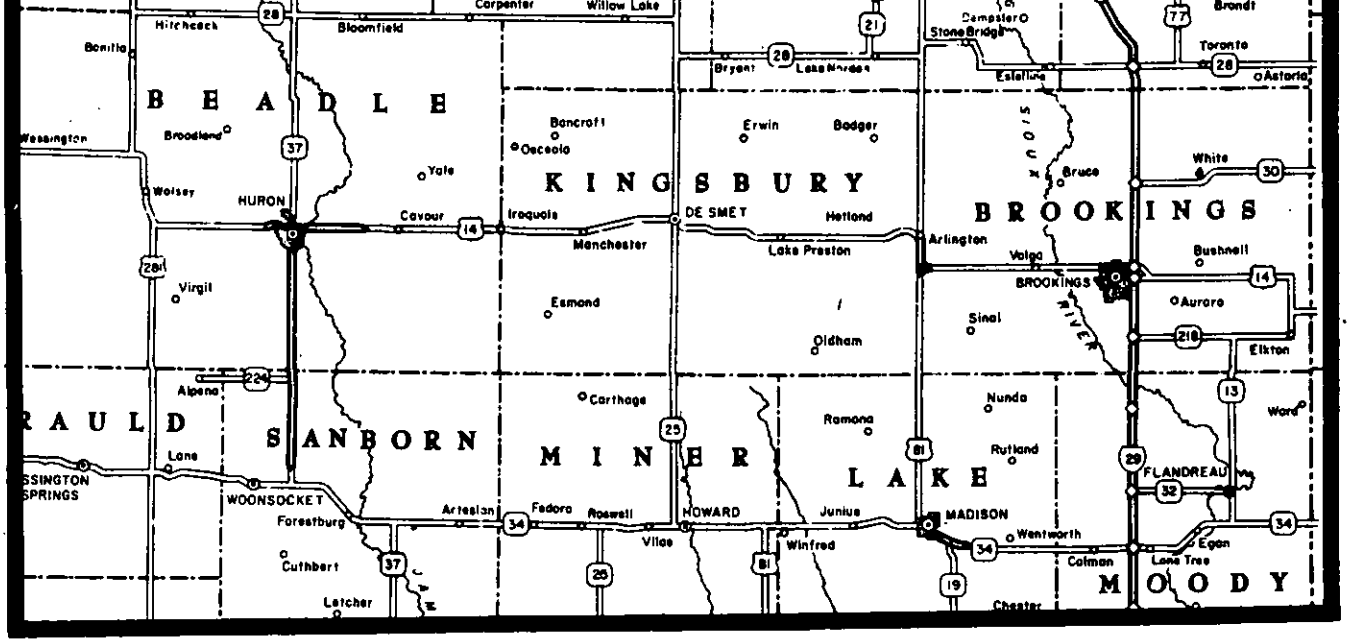
Chicago and North Western South Dakota Network



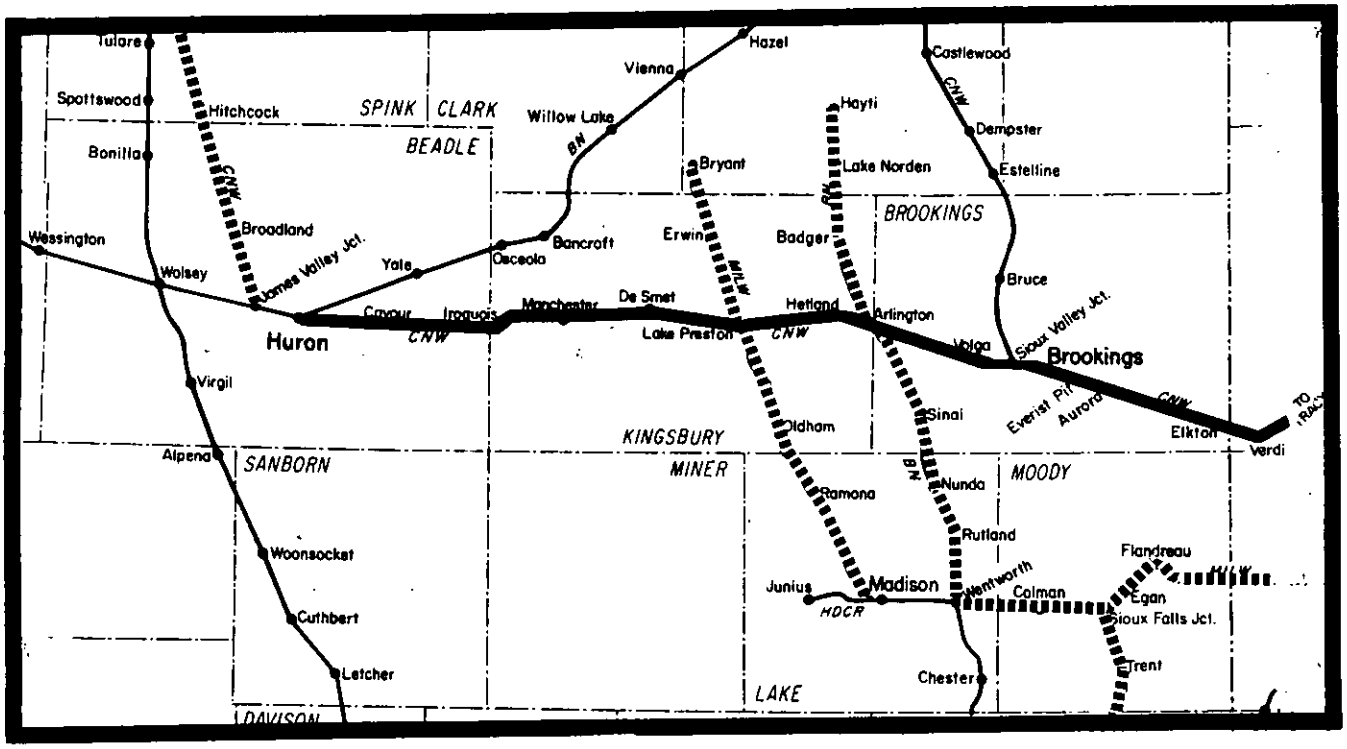
The Chicago and North Western, as of December 31, 1980, operated 8,417 miles of railroad in the eleven states of Illinois, Wisconsin, Michigan, Iowa, Minnesota, Nebraska, South Dakota, North Dakota, Missouri, Kansas and Wyoming. These miles consist of 2,840 miles which are owned and operated main line, 5,018 miles owned and operated branch lines, and 559 miles operated under trackage rights. In addition to its own trackage, it is operating approximately 800 miles of Rock Island track and 150 miles of Milwaukee Road track due to cessation of operations on those lines by those companies. The Company operates 725 miles of its own track in South Dakota plus operates on 74 miles of State-owned track under a trackage rights agreement. The Company has abandoned 422 miles of track in South Dakota since 1976 and currently has listed 40 miles of track as potentially subject to abandonment.

SOUTH DAKOTA SEGMENT CN 01
TRACY, MN TO HURON, SD

HIGHWAY LOCATION MAP

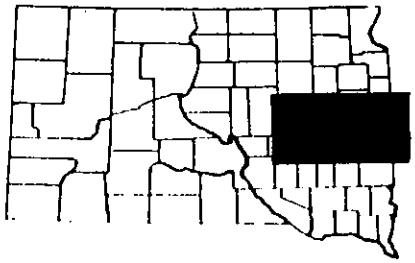


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 01 TRACY, MN TO HURON, SD

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Central Division - Huron Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Main

LINE LENGTH IN MILES – 136.4 total, 90.2 in SD

MAXIMUM SPEED LIMIT – 35 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – N/A

YARDS – Tracy, Brookings, Arlington, Iroquois, Huron.

CONNECTING LINES – Chicago & North Western at Tracy, Sioux Valley Jct. and Huron, and Burlington Northern at Huron, and near Burchard.

HIGHWAYS – Elkton is served by SD 218, Aurora by a local hard surfaced road and the remainder of the stations are served by US 14, plus I-29 served Brookings, US 81 serves Arlington, SD 25 serves DeSmet, and SD 37 serves Huron.

RAIL WEIGHT – 100 lbs. from the Minnesota border to Iroquois and 90 lbs. from Iroquois to Huron.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Tracy, Minn.	0.0	Volga, SD	70.8	Manchester, SD	111.8
Elkton, SD	47.8	(BN Crossing)	80.7	Iroquois, SD	118.1
Aurora, SD	58.5	Arlington, SD	81.7	Cavour, SD	127.4
Brookings, SD	64.3	Hetland, SD	87.2	Huron, SD	136.4
Sioux Valley Jct., SD	67.7	Lake Preston, SD	94.4		
		DeSmet, SD	103.0		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	2.81-2.65 MGT	2.71-2.54 MGT	2.79-2.46 MGT
TRAFFIC DIRECTION –	N/A	47% Orig. (1977)	70% East

COMMODITIES – Forwarded grain, food products, and stone, sand, and gravel; received grain mill products, coal, lumber products, & stone, sand, and gravel. (1979)

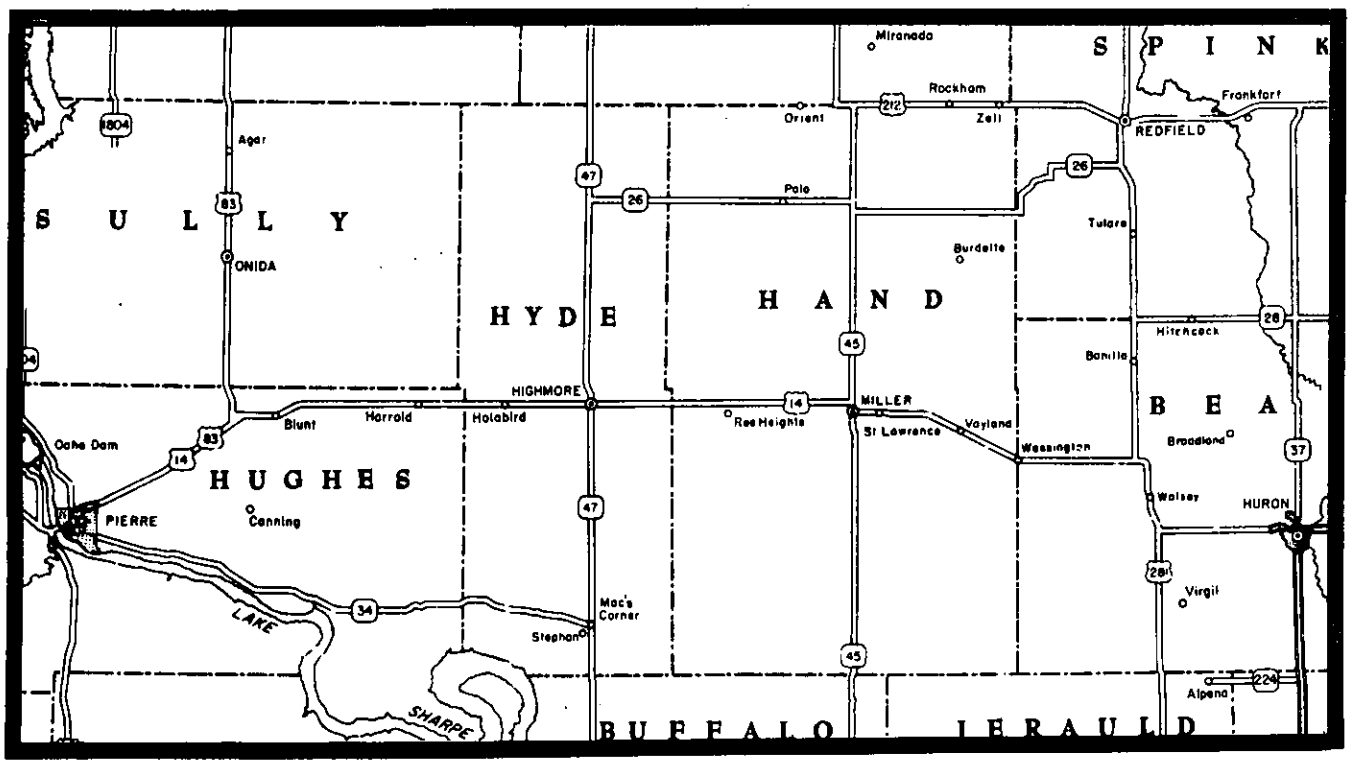
Other Information

This line serves both Chicago & North Western local and overhead traffic from points west and north. Locomotive and car repair shops are located at Huron.

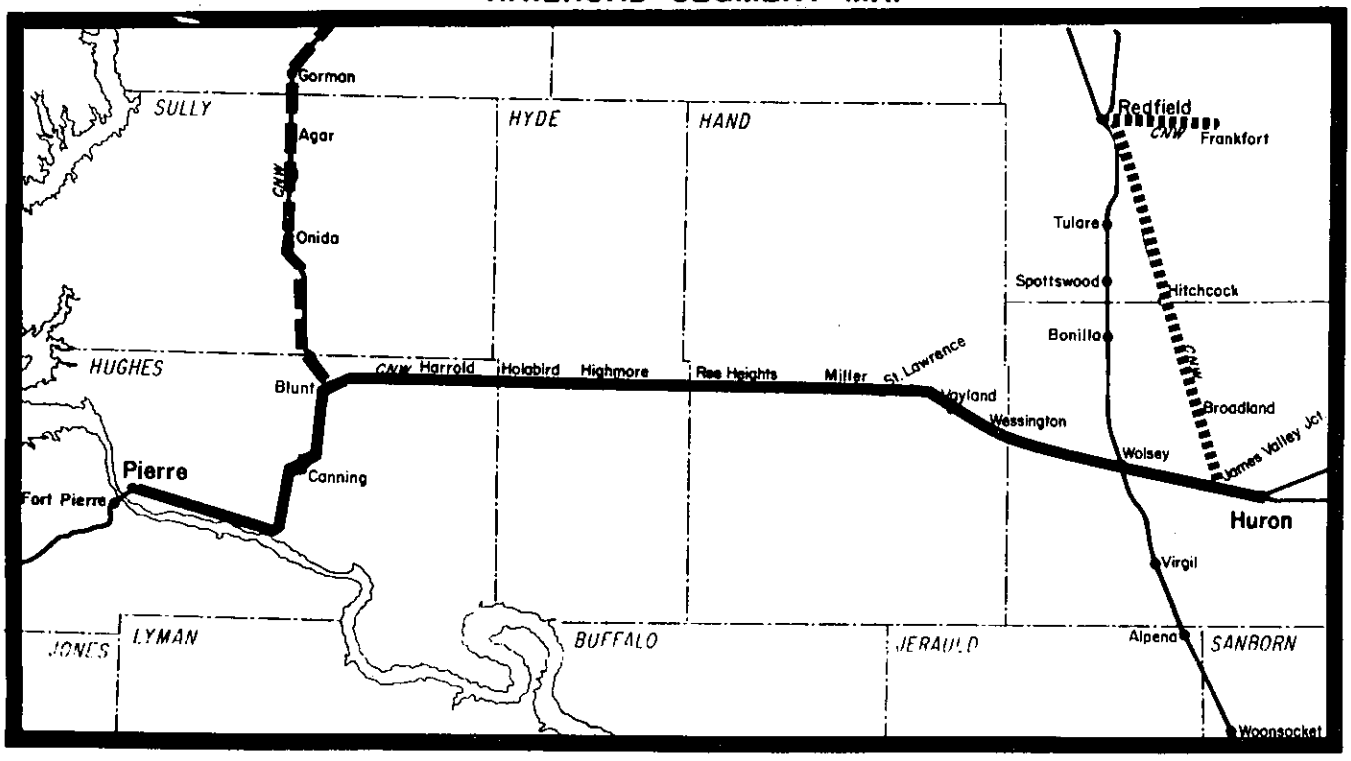
The South Dakota Rail Line Inventory Study found that significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN 02
HURON TO PIERRE

HIGHWAY LOCATION MAP

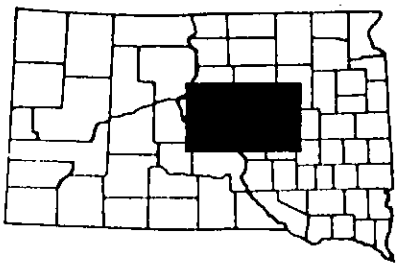


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 02 HURON TO PIERRE

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - Pierre Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Main

LINE LENGTH IN MILES – 117.7 miles

MAXIMUM SPEED LIMIT – 35 mph **MAXIMUM WEIGHT LIMIT** – 251,000lbs.

SERVICE FREQUENCY – Daily, 3 to 7 round trips per week depending on traffic.

YARDS – Huron, Wolsey, Blunt and Pierre

CONNECTING LINES – Chicago & North Western at Huron, Blunt, and Pierre. Burlington Northern at Huron. State owned line at Wolsey

HIGHWAYS – US 14 serves all stations except James Valley Jct. and Canning which are served by local roads. Additionally Huron is served by SD 37, Wolsey by US 281, Miller by SD 45, Highmore by SD 47 and Pierre by US 83 and SD 34.

RAIL WEIGHT – 110 lbs. and 112 lbs. from Huron to James Valley Jct. and the remainder 72 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Huron	0.0	Miller	40.1	Canning	98.2
James Valley Jct.	4.2	Ree Heights	50.6	Pierre	117.7
Wolsey	13.3	Highmore	62.4		
Wessington	24.7	Holabird	70.2		
Vayland	30.4	Harrold	77.2		
St. Lawrence	37.6	Blunt	90.0		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	1.54 MGT	1.82 MGT	1.56 MGT
TRAFFIC DIRECTION –	N/A	45% Orig. (1977)	69% East

COMMODITIES – Forwarded grain; recieved fertilizer, stone, sand, gravel clay, and glass. (1979)

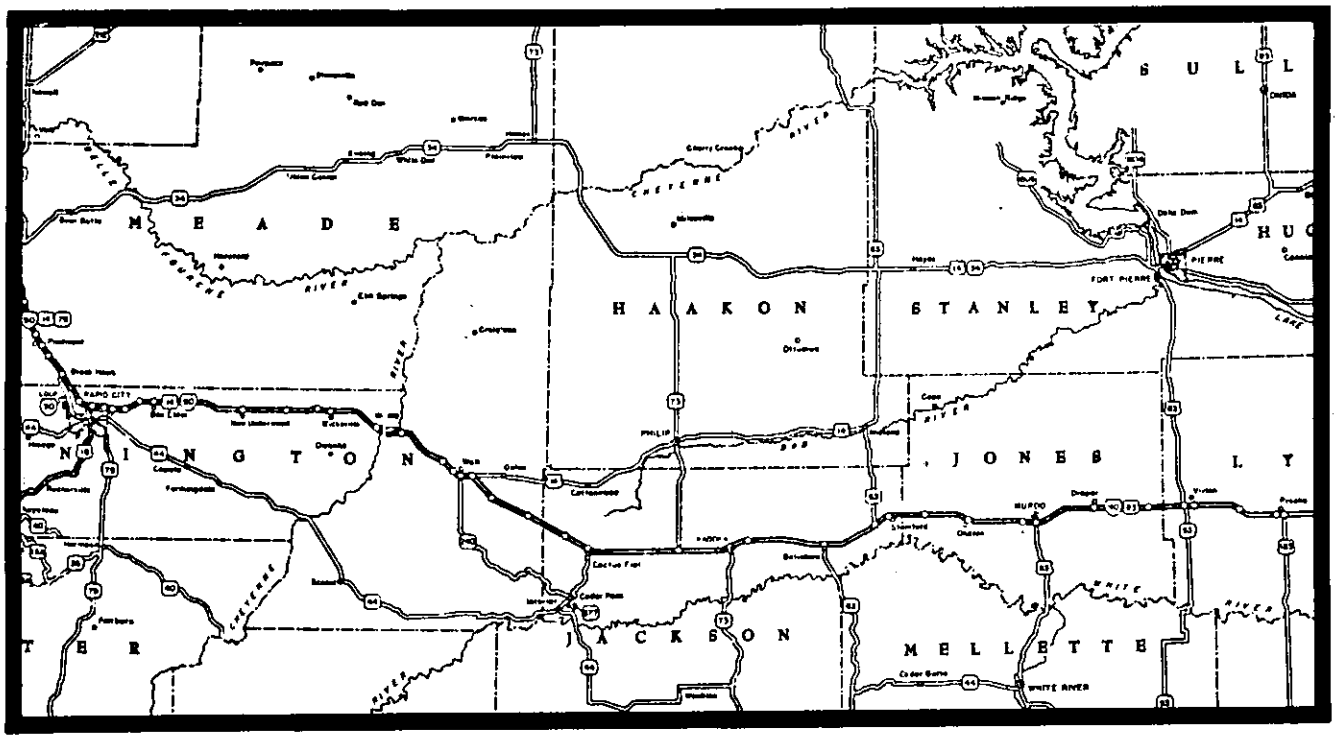
Other Information

This line serves both Chicago & North Western local and overhead traffic from points west and north. Locomotive and car repair shops are located at Huron.

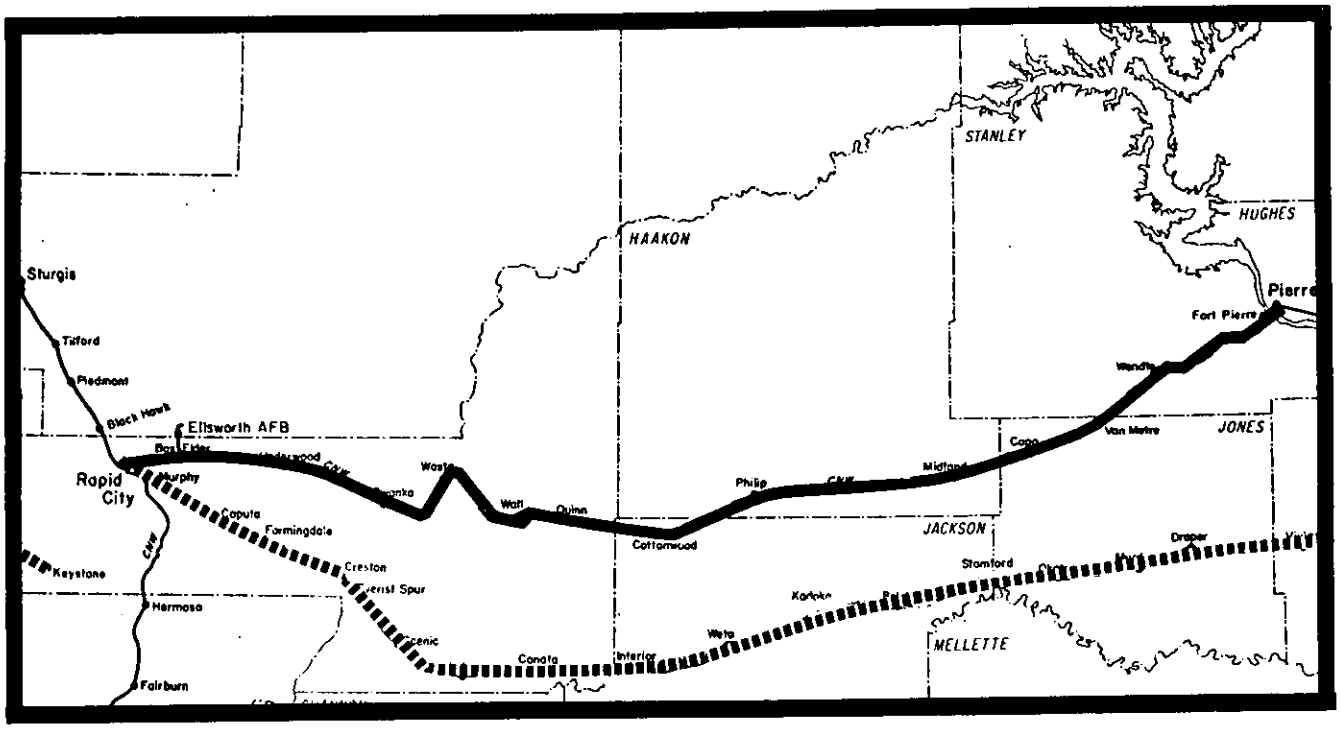
The South Dakota Rail Inventory Study found that significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN03
PIERRE TO RAPID CITY

HIGHWAY LOCATION MAP

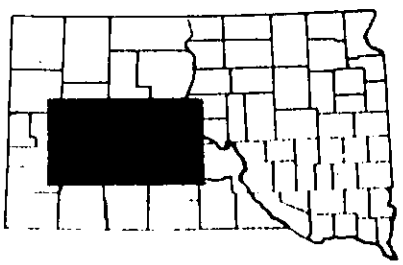


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 03 PIERRE TO RAPID CITY

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - PRC Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Main

LINE LENGTH IN MILES – 170.8 miles

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 210,000 lbs.

SERVICE FREQUENCY – 3 to 7 trips per week depending on traffic

YARDS – Pierre, Wall, Box Elder, and Rapid City

CONNECTING LINES – Chicago & North Western at Pierre, and Rapid City

HIGHWAYS – US 14 serves Pierre, Ft. Pierre, Midland, Philip, Cottonwood, and Quinn, I-90 serves Wall, Wasta, Underwood, Box Elder, & Rapid City; Owanka is served by a local hard surfaced road.

RAIL WEIGHT – 85 lbs. of CWR 90 lbs., 100 lbs. & 112 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Pierre	0.0	Philip	79.2	Underwood	148.5
Ft. Pierre	3.9	Cottonwood	92.9	Box Elder	160.1
Wendt	22.8	Quinn	104.1	Rapid City	170.8
Van Metre	32.4	Wall	110.5		
Capa	42.9	Wasta	124.5		
Midland	52.7	Owanka	134.8		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	1.20 MGT	1.49 MGT	1.20 MGT
TRAFFIC DIRECTION –	N/A	81% Orig. (1977)	68% East

COMMODITIES – Forwarded grain, grain mill products, pulp wood and woodchips stone, sand, gravel, clay, and glass; received grain, food products, and stone, sand and gravel. (1979)

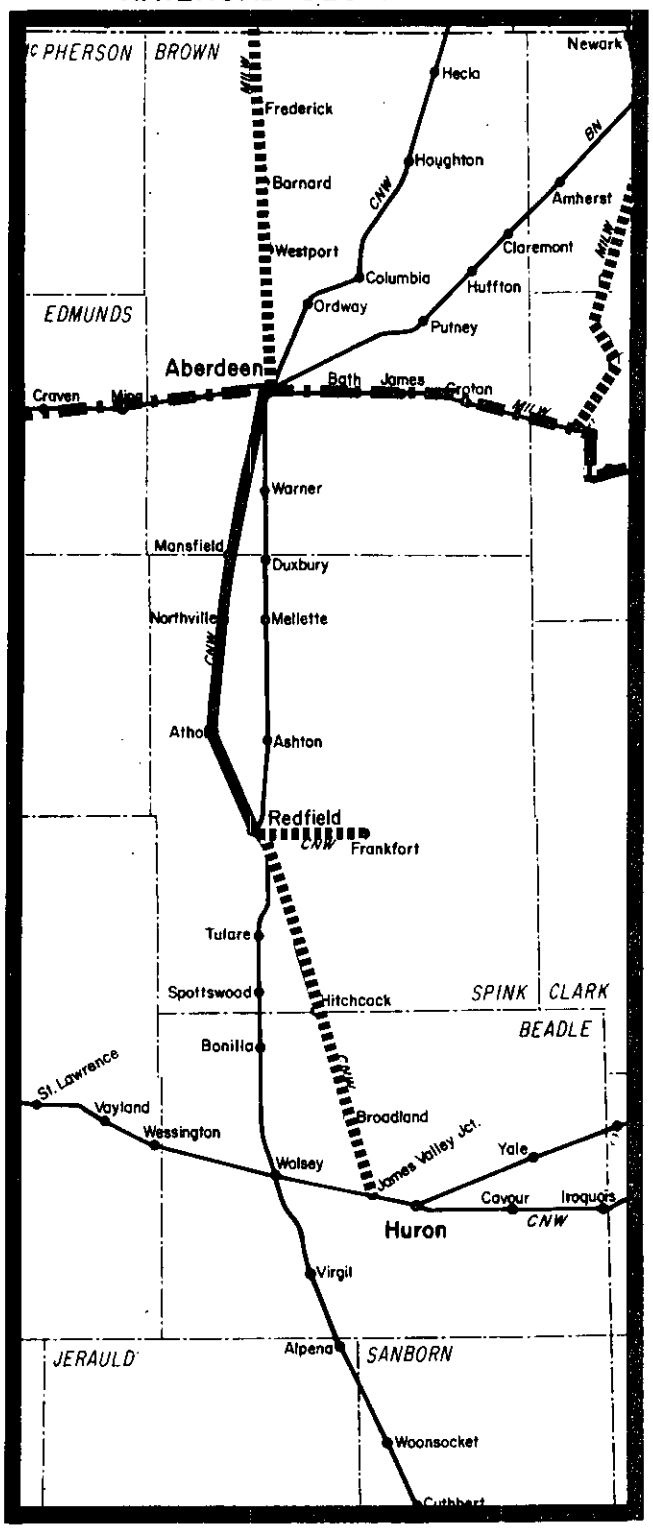
Other Information

This line serves both Chicago & North Western local and overhead traffic from points west.

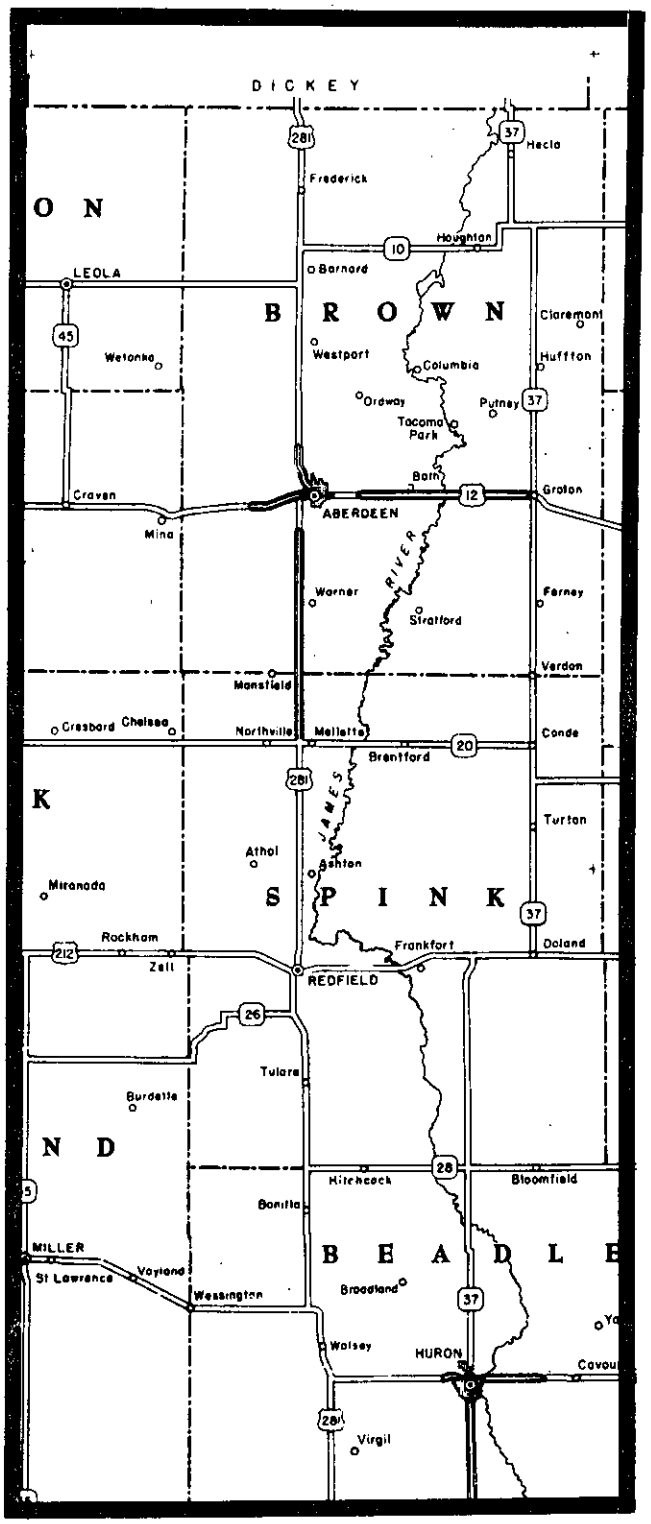
The South Dakota Rail Line Inventory Study found that significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN04
REDFIELD TO ABERDEEN

RAILROAD SEGMENT MAP

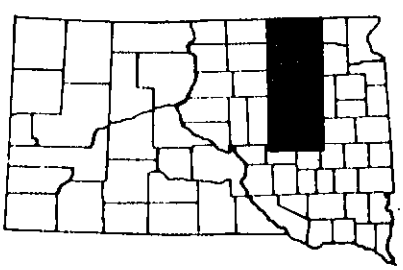


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 04 REDFIELD TO ABERDEEN

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - Oakes Subdivision

LINE STATUS – Category 5

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 42.2 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 210,000

SERVICE FREQUENCY – Two round trips per week.

YARDS – Redfield and Aberdeen.

CONNECTING LINES – State owned line at Redfield, and Chicago & North Western, Milwaukee Road and Burlington Northern at Aberdeen.

HIGHWAYS – Athol and Mansfield are served by local hard surfaced roads, Redfield by US 281 and US 212, Northville by SD 20 and Aberdeen by US 12 and US 281.

RAIL WEIGHT – About 22 miles of 90 lbs., 8 miles of 72 lbs., 7 miles of 80 lbs. and 5 miles of 100 lbs. rail.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Redfield	0				
Athol	10.0				
Northville	20.3				
Mansfield	26.3				
Aberdeen	42.2				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.84 MGT	0.44 MGT	0.43 MGT
TRAFFIC DIRECTION –	Mostly North to South	76% Orig. (1977)	67% South

COMMODITIES – Forwarded grain, and scrap iron and steel; received grain mill products, rubber and plastics, and stone, clay, and glass.

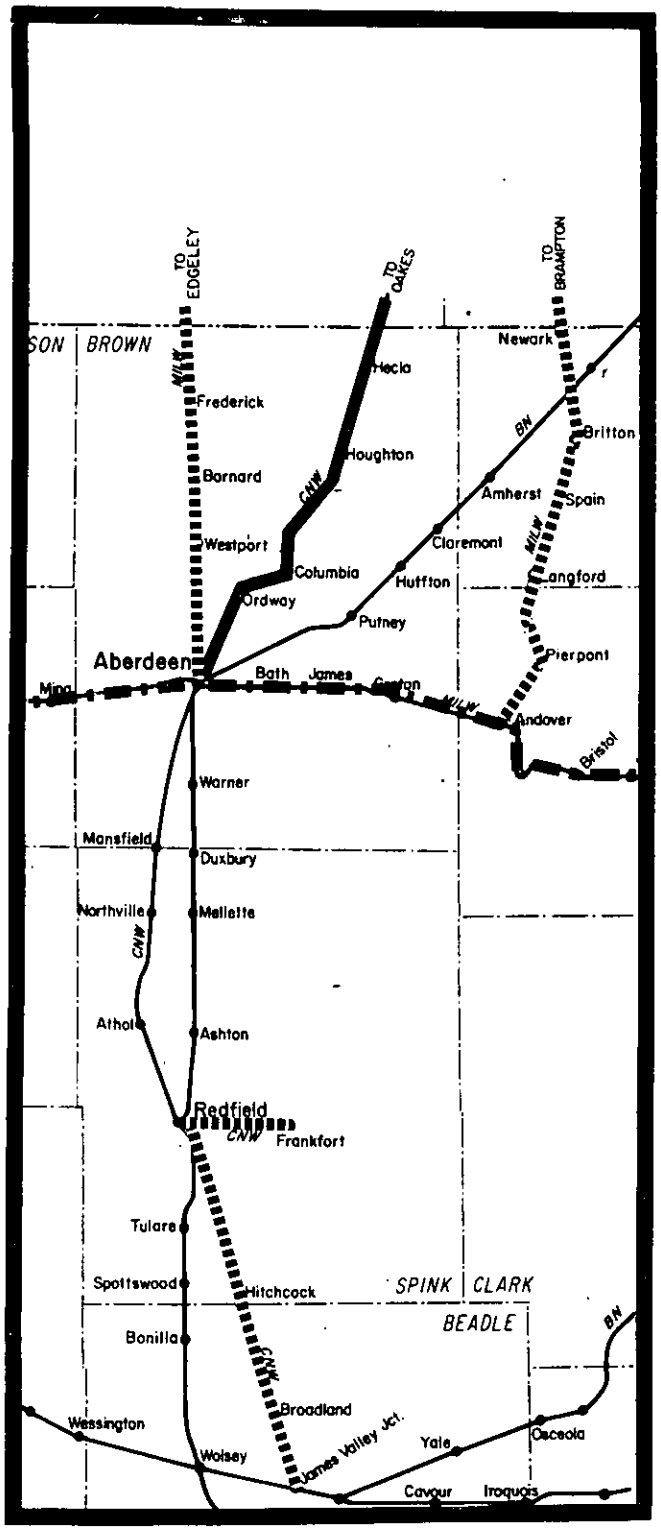
Other Information

The Chicago & North Western operates over the State owned line between Wolsey and Aberdeen through an operating rights agreement; rail service on the C&NW line is limited to the portion between Redfield and Mansfield due to poor track conditions above Mansfield.

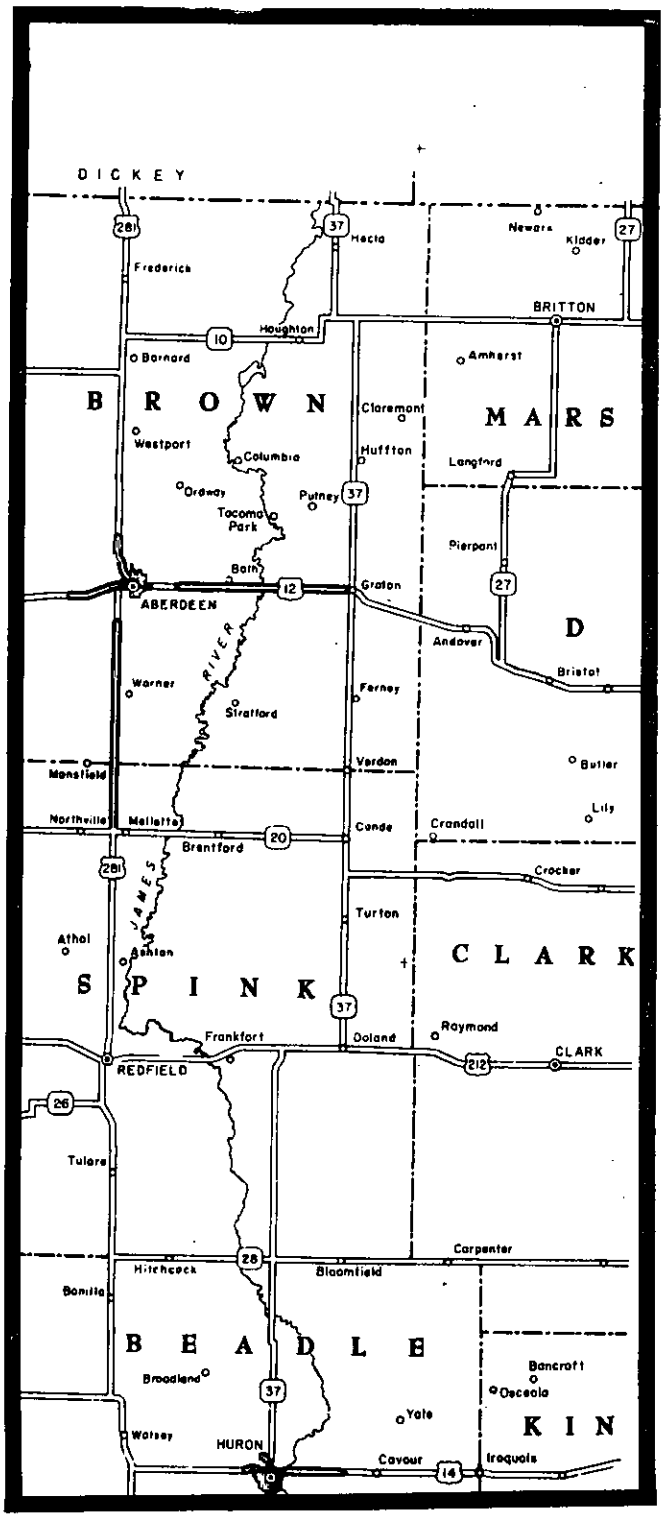
The South Dakota Rail Line Inventory study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN05
ABERDEEN, SD TO OAKES, ND

RAILROAD SEGMENT MAP

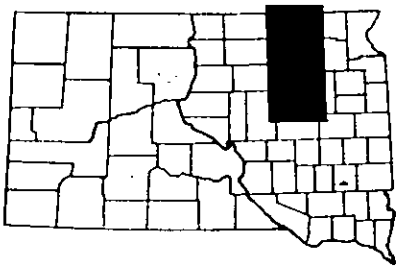


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 05 ABERDEEN, SD TO OAKES, ND

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - Oakes Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 52.7 total; 38.6 in SD

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 210,000 lbs.

SERVICE FREQUENCY – 2 round trips per week

YARDS – Aberdeen and Ludden Jct. - Oakes

CONNECTING LINES – Burlington Northern, Milwaukee Road, Chicago & North Western and State owned line at Aberdeen.

HIGHWAYS – Aberdeen is served by US 281 and US 12, Ordway and Columbia by local hard surfaced roads, Houghten by SD 10, & Hecla by SD 37.

RAIL WEIGHT – 65 lbs. from Aberdeen to Columbia, 60 lbs. from Columbia to Oakes with 5 miles of 85 lbs. of CWR.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Aberdeen, SD	0.0	Hecla, SD	34.7		
Ordway, SD	8.4	Ludden, ND	43.6		
Columbia, SD	14.2	Ludden Jct. ND	45.0		
Houghton, SD	26.0	Oakes, ND	52.7		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.56 MGT	0.51 MGT	0.38 MGT
TRAFFIC DIRECTION –	N/A	79% Orig. (1977)	68% South

COMMODITIES – Forwarded grain; received fertilizer and lumber products through the Oakes, ND gateway.

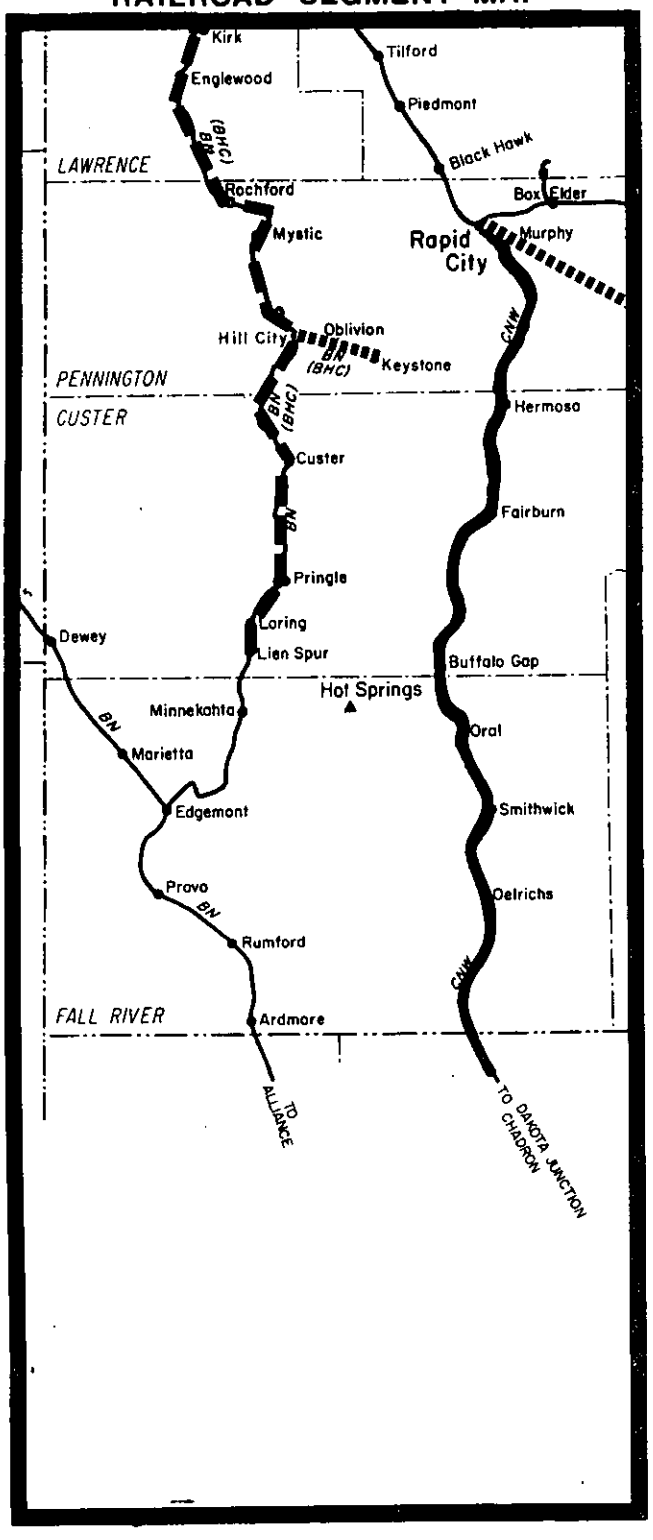
Other Information

This line provides an important connection between the South Dakota rail system and the east-west BN main line paralleling the state border in North Dakota.

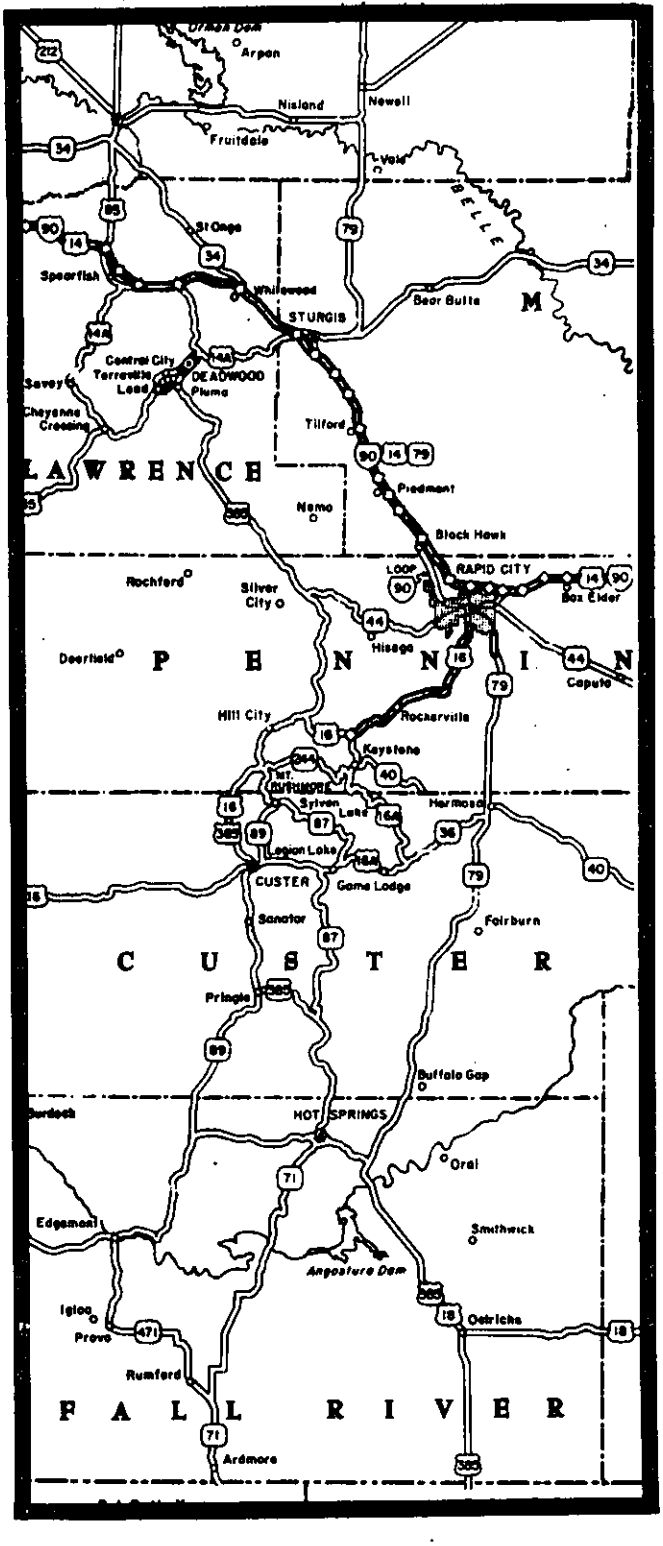
The South Dakota Rail Line Inventory Study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN06
CHADRON, NE TO RAPID CITY, SD

RAILROAD SEGMENT MAP

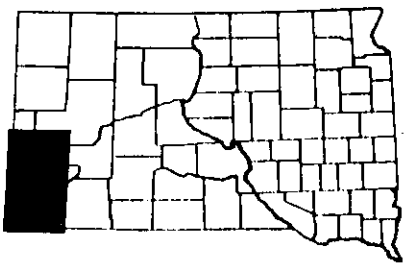


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 06 CHADRON, NE TO RAPID CITY, SD

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - Rapid City Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 102.2 Total, 84.0 in SD

MAXIMUM SPEED LIMIT – 30 mph **MAXIMUM WEIGHT LIMIT** – 251,000 lbs.

SERVICE FREQUENCY – Daily

YARDS – Chadron, Oral, and Rapid City

CONNECTING LINES – Chicago & North Western at Rapid City, Dakota Jct. and Chadron

HIGHWAYS – US 385 serves Oelrichs; SD 79 serves Buffalo Gap, Fairburn Hermosa and Rapid City; local roads serve Smithwick and Oral and in addition Rapid City is served by I-90, by US 16 & SD 44.

RAIL WEIGHT – 72 lbs., 12 miles of 112 lbs. of CWR at Rapid City

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Chadron, NE	0.0	Oral, SD	48.7		
Dakota Jct., NE	5.1	Buffalo Gap, SD	55.7		
Wayside, NE	17.1	Fairburn, SD	72.1		
Oelrichs, SD	31.9	Hermosa, SD	83.8		
Smithwick, SD	41.5	Rapid City, SD	102.2		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	2.71 MGT	3.02 MGT	3.20 MGT
TRAFFIC DIRECTION –	N/A	98% Orig. (1977)	68% South

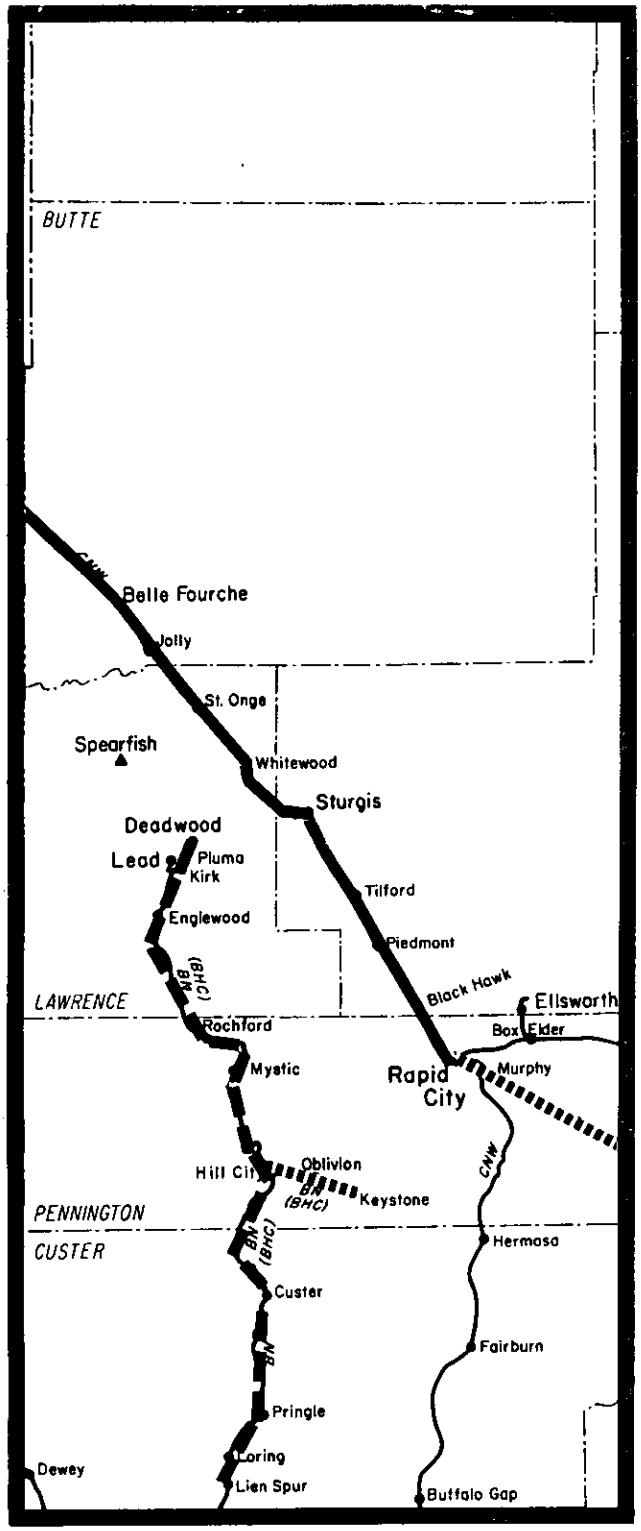
COMMODITIES – Primarily forwarded grain, pulpwood and woodchips, and stone, sand, and gravel. This is the primary route for overhead bentonite traffic.

Other Information

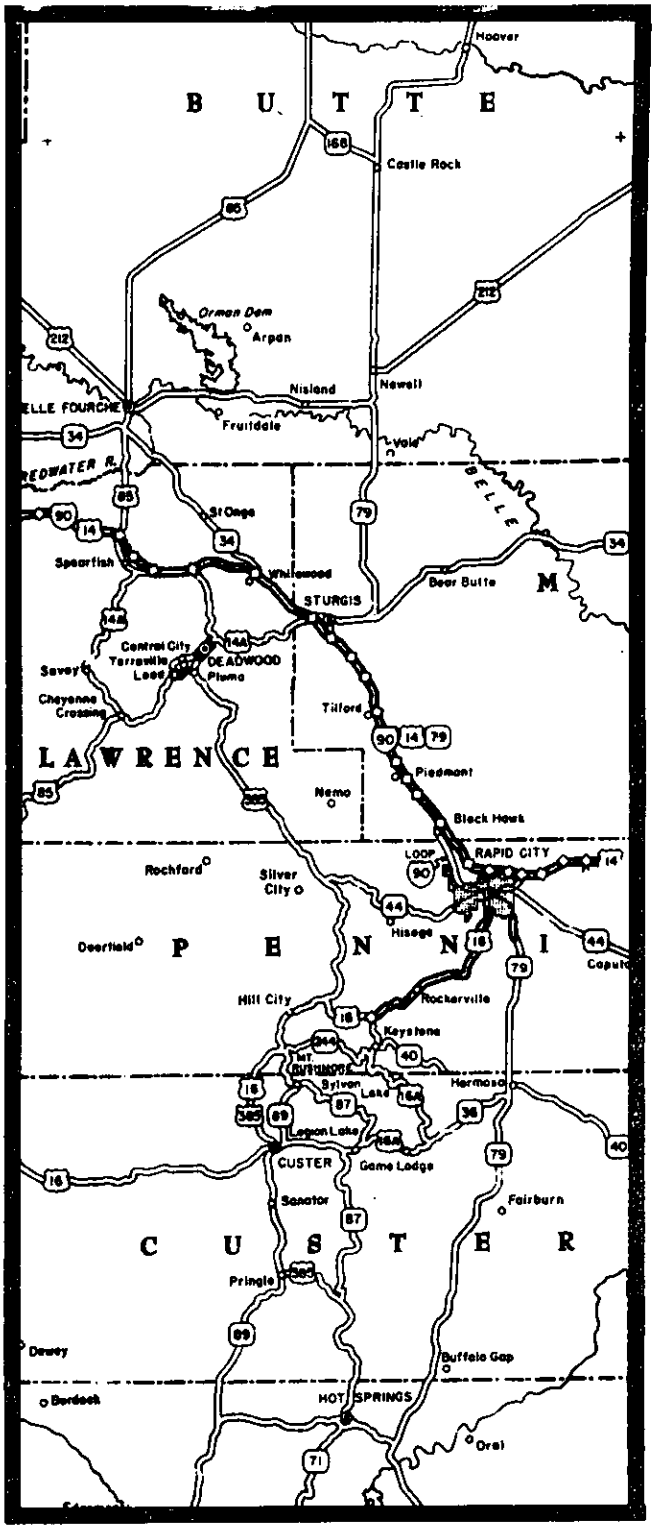
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN07
RAPID CITY, SD TO BENTONITE, WY

RAILROAD SEGMENT MAP

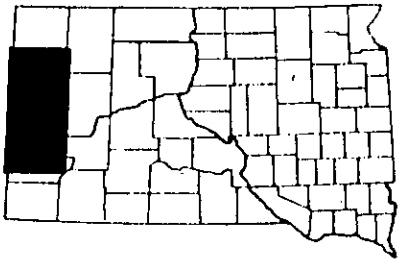


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 07 RAPID CITY, SD TO BENTONITE, WY

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - Rapid City Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 77.6 total, 71.0 in SD

MAXIMUM SPEED LIMIT – 30 mph **MAXIMUM WEIGHT LIMIT** – 251,000 lbs.

SERVICE FREQUENCY – 6 times a week

YARDS – Rapid City, Whitewood, Sturgis, Belle Fourche and Bentonite

CONNECTING LINES – Chicago & North Western at Rapid City.

HIGHWAYS – I-90 serves Rapid City, Black Hawk, Piedmont, Tilford, Sturgis, and Whitewood, SD 34 serves St. Onge and Jolly, US 212 and US 85 serve Belle Fourche, State Highway 24 serves Bentonite. In addition SD 44, SD 79 and US 16 serves Rapid City.

RAIL WEIGHT –

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Rapid City	0.0	Whitewood	38.2		
Black Hawk	9.5	St. Onge	45.6		
Piedmont	16.6	Jolly	53.3		
Tilford	21.8	Belle Fourche	57.0		
Sturgis	31.5	Bentonite, WY	77.6		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	2.71-1.65 MGT	2.97-1.61 MGT	2.86-1.85 MGT
TRAFFIC DIRECTION –	N/A	99% Orig. (1977)	68% South

COMMODITIES – Forwarded pulpwood and woodchips, stone, clay, and glass, and non-metallic minerals; received pulp and paper products, lumber products and farm machinery.

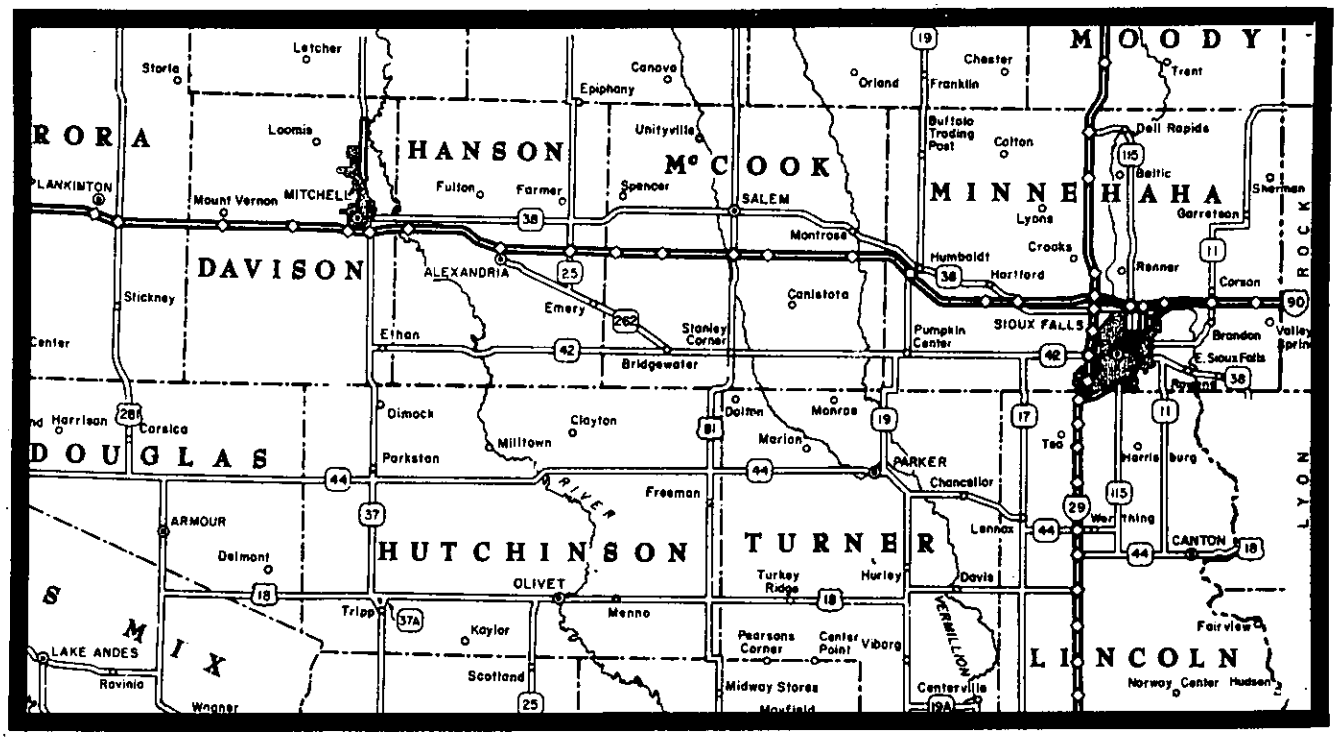
Other Information

This line provides and important gateway for Bentonite and wood products which move either southbound or eastbound from this line.

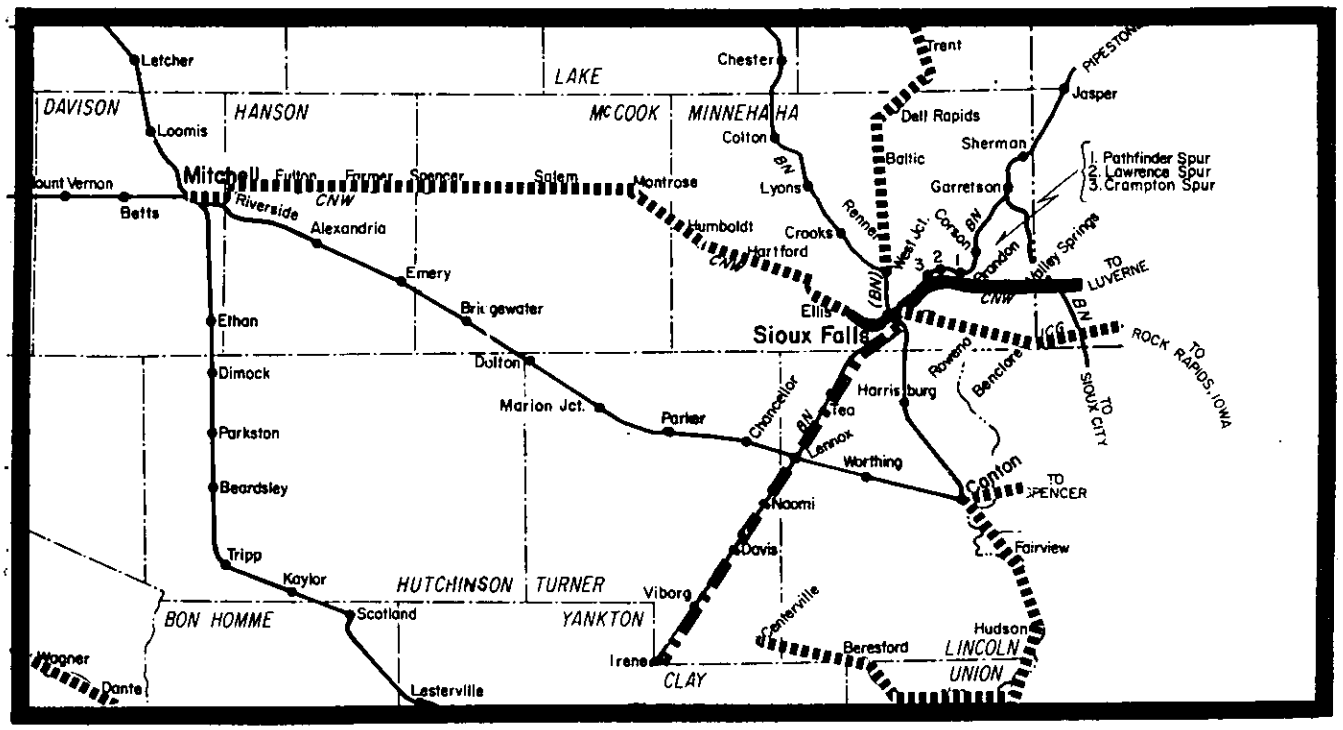
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN09
WORTHINGTON, MN TO ELLIS, SD

HIGHWAY LOCATION MAP

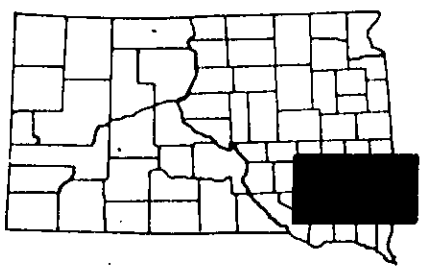


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 09 WORTHINGTON, MN TO ELLIS, SD

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Twin Cities Division - Sioux Falls Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 68.6 total; 22.5 in SD

MAXIMUM SPEED LIMIT – 40 mph **MAXIMUM WEIGHT LIMIT** – 210,000 lbs.

SERVICE FREQUENCY – Daily except Saturday

YARDS – Sioux Falls

CONNECTING LINES – Burlington Northern, Illinois Central Gulf, and State owned line at Sioux Falls.

HIGHWAYS – A local hard surfaced highway serves Valley Springs, SD 11 serves Brandon, and Interstate 90 and 29 plus state and local roads serve Sioux Falls.

RAIL WEIGHT – 90 and 100 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
MN Border	0.0				
Valley Springs	0.7				
Brandon	7.2				
Sioux Falls	15.8				
Ellis	22.5				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.39 MGT	1.25 MGT	2.10 MGT
TRAFFIC DIRECTION –	N/A	67% Orig. (1977)	59% East

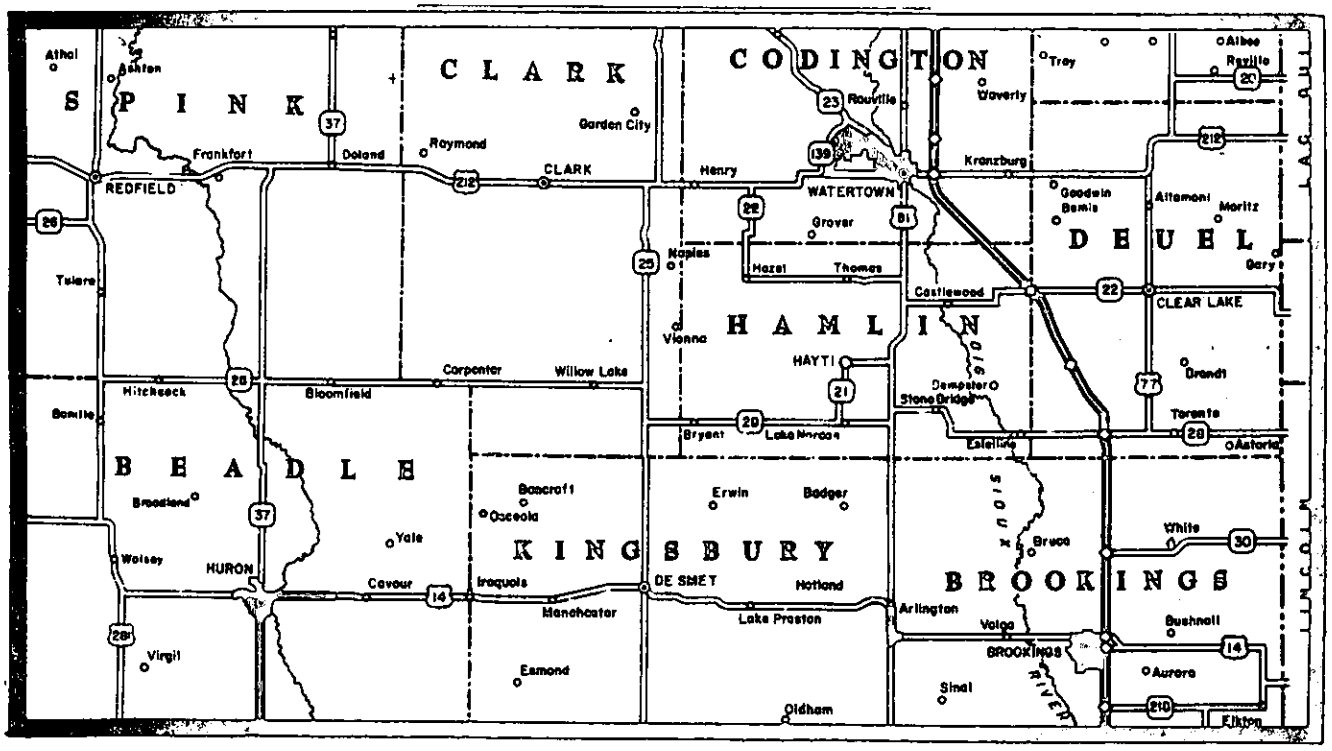
COMMODITIES – Forwarded grain; received lumber products.

Other Information

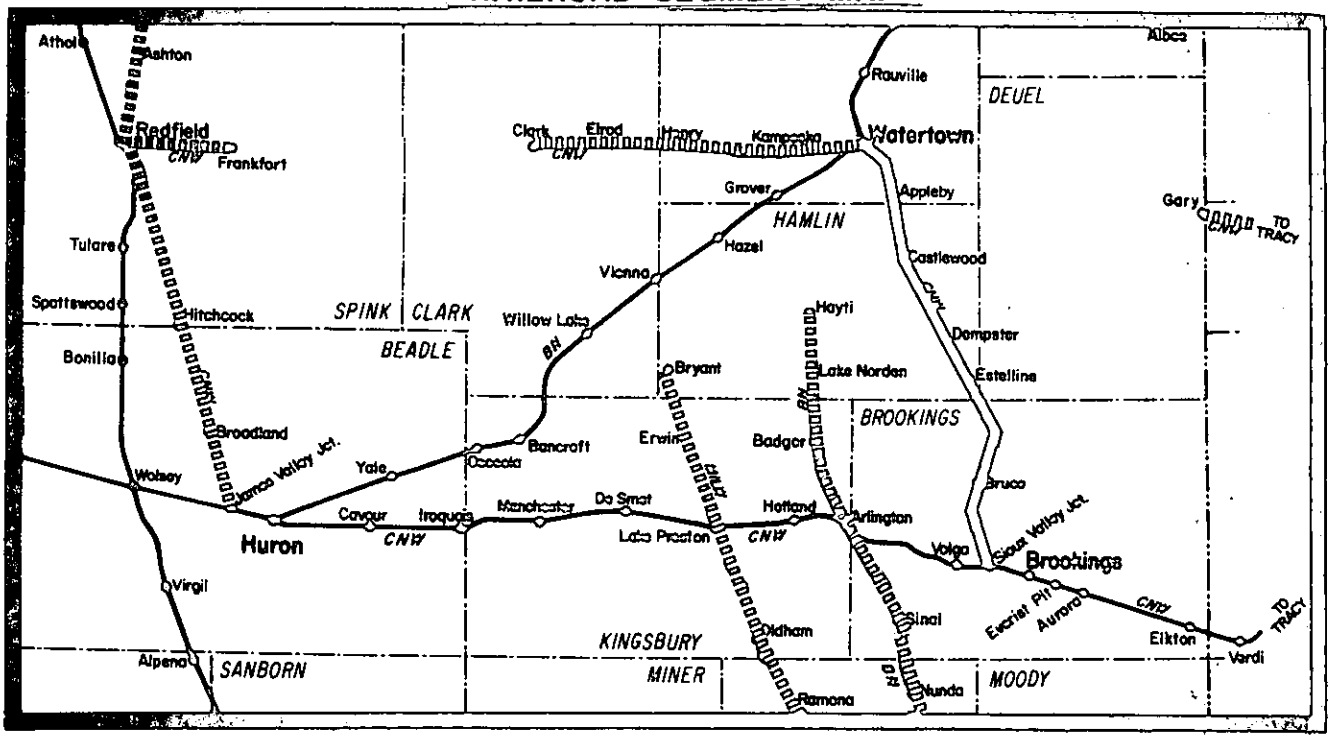
The South Dakota Rail Line Inventory Study found that significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN 12
SIOUX VALLEY JCT. TO WATERTOWN

HIGHWAY LOCATION MAP

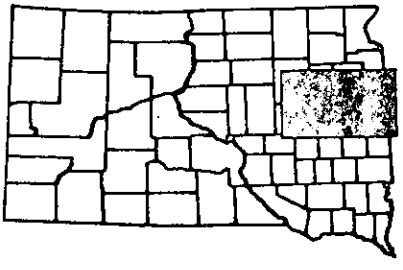


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 12 SIOUX VALLEY JCT. TO WATERTOWN

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Central Division - Watertown Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 44.2 miles

MAXIMUM SPEED LIMIT – 30 mph **MAXIMUM WEIGHT LIMIT** – 210,000 lbs.

SERVICE FREQUENCY – Daily except Sunday

YARDS – Sioux Valley Jct. and Watertown

CONNECTING LINES – Chicago & North Western at Sioux Valley Jct., and Burlington Northern at Watertown.

HIGHWAYS – US 14 serves Sioux Valley Jct.; SD 30 serves Bruce; SD 28 serves Estelline; SD 22 serves Castlewood; a local hard surfaced road serves Dempster; a local road serves Appleby; and Watertown is served by US 212, I 29, and US 81.

RAIL WEIGHT – 72 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Sioux Valley Jct.	0.0	Watertown	44.2		
Bruce	8.2				
Estelline	18.3				
Dempster	23.1				
Castlewood	30.5				
Appleby	37.0				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.39 MGT	0.27 MGT	0.23 MGT
TRAFFIC DIRECTION –	N/A	24% Orig. (1977)	57% South

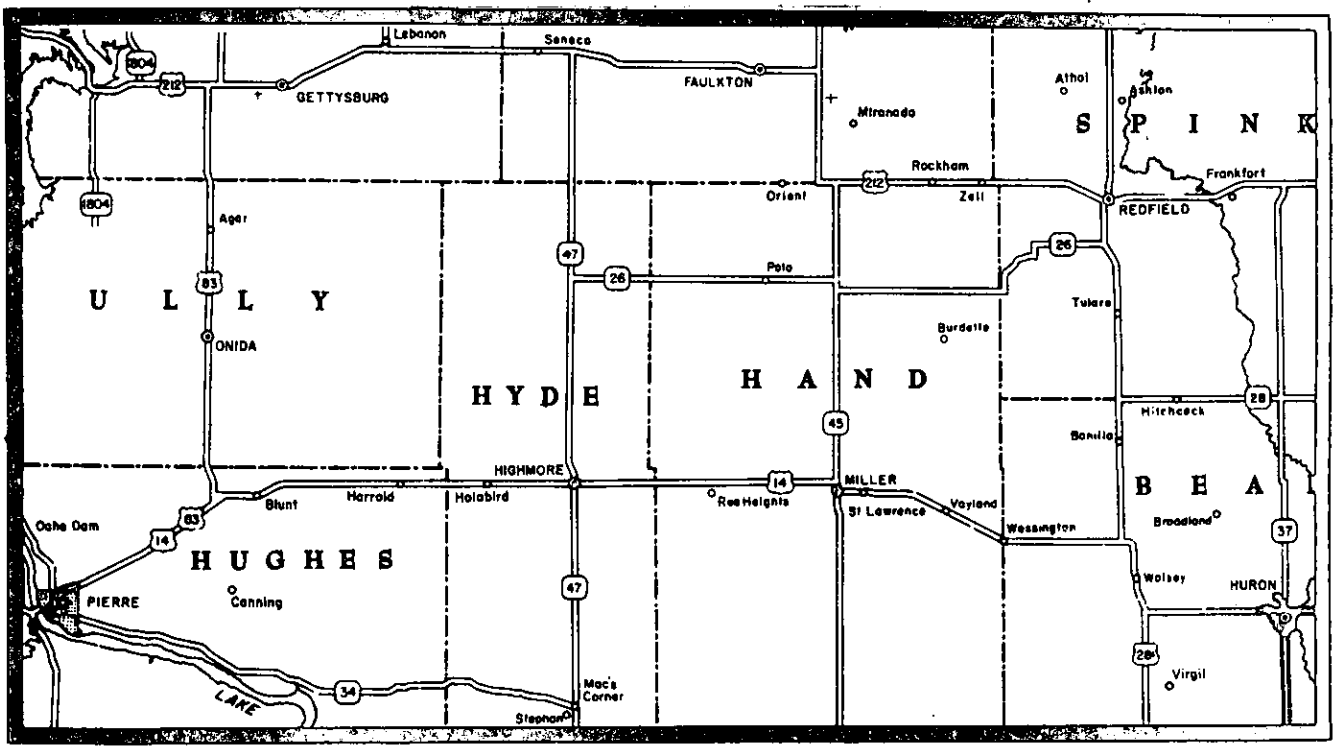
COMMODITIES – Forwarded grain and farm products; received grain mill products, lumber products, stone, clay, and glass.

Other Information

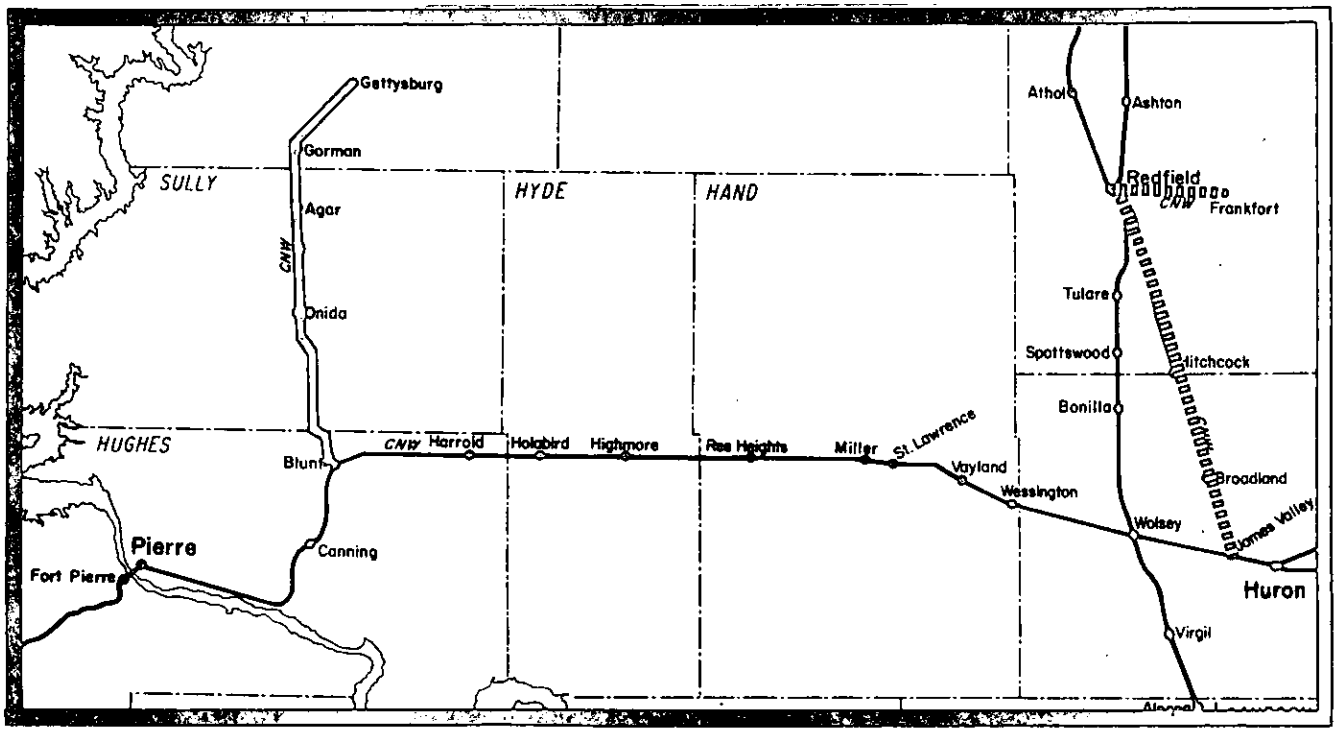
The South Dakota Rail Line Inventory Study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN 16
BLUNT TO GETTYSBURG

HIGHWAY LOCATION MAP

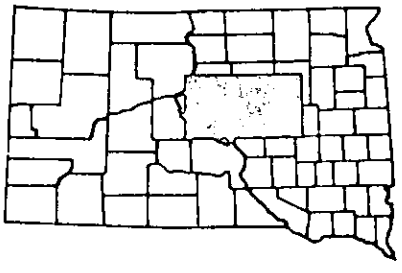


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 16 BLUNT TO GETTYSBURG

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - Gettysburg Subdivision

LINE STATUS – Category 2 to Onida; Category 1 to Gettysburg.

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 40.3 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 178,000 lbs.

SERVICE FREQUENCY – As needed, 0 to 6 round trips per week.

YARDS – Blunt and Gettysburg

CONNECTING LINES – Chicago & North Western at Blunt

HIGHWAYS – Blunt is served by US 14, Onida, Agar and Gorman by US 83 and Gettysburg by US 212.

RAIL WEIGHT – 60 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Blunt	0.0				
Onida	15.6				
Agar	25.3				
Gorman	31.5				
Gettysburg	40.3				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.11 MGT	0.08 MGT	0.13 MGT
TRAFFIC DIRECTION –	N/A	73% Orig. (1977)	69% South

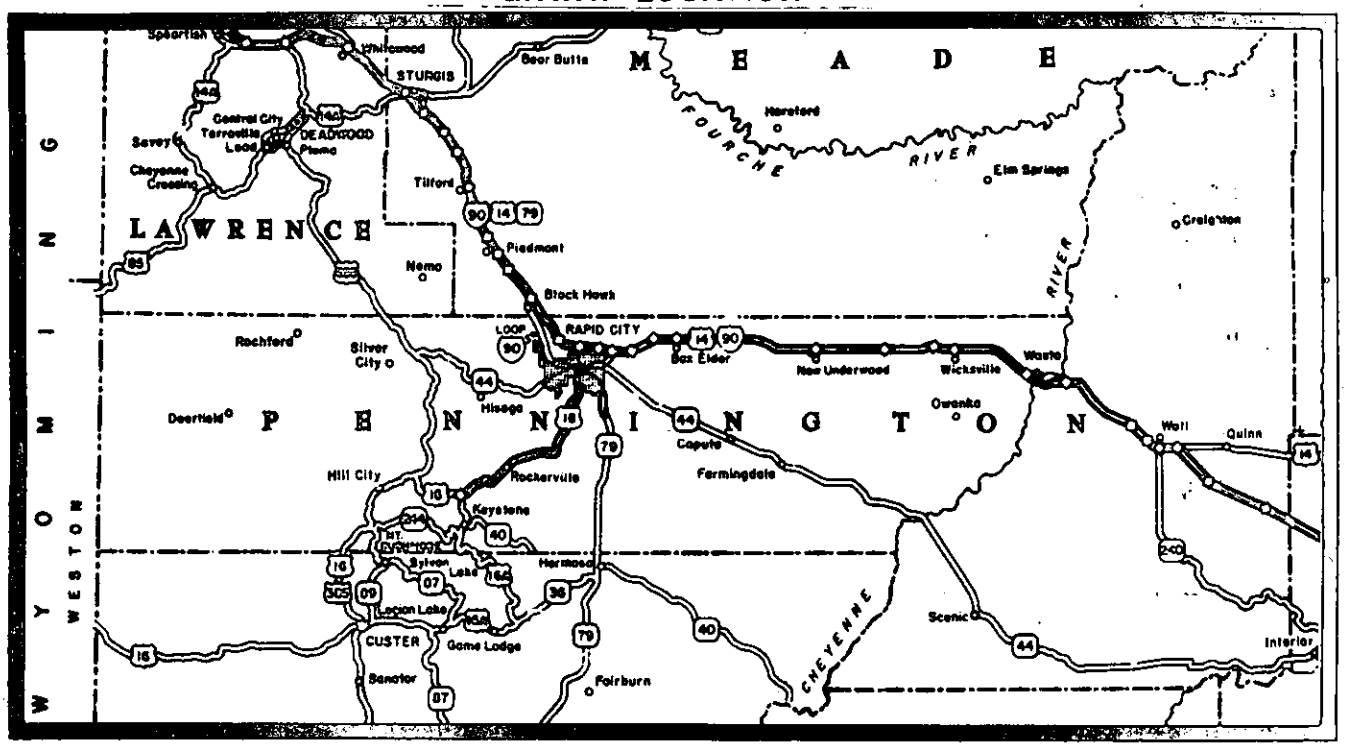
COMMODITIES – Forwarded grain; received fertilizer and farm machinery.

Other Information

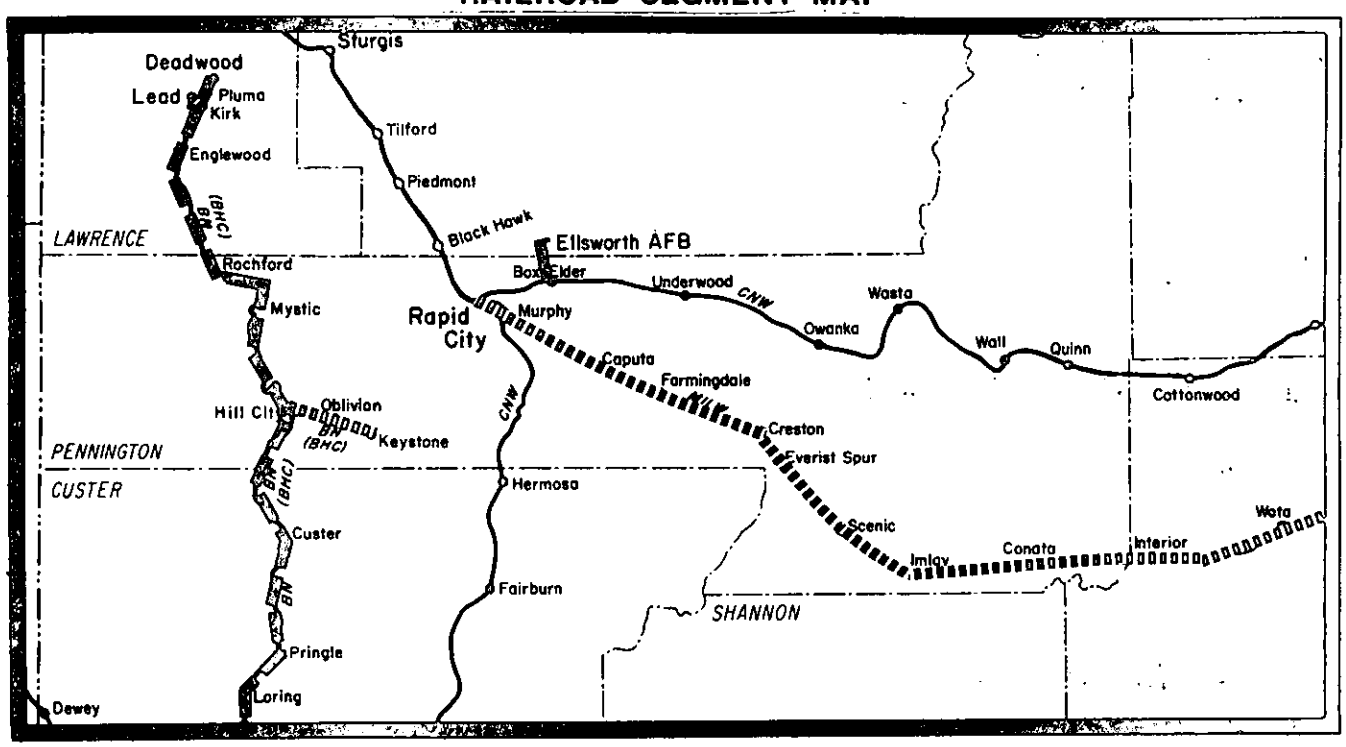
The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line based on 1977 traffic data.

SOUTH DAKOTA SEGMENT CN 19
BOX ELDER TO ELLSWORTH AIR FORCE

HIGHWAY LOCATION MAP

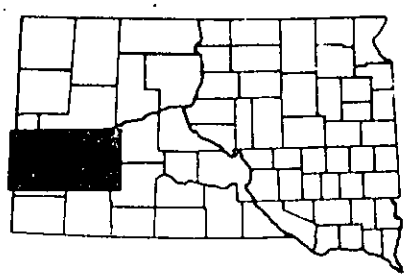


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - CN 19 BOX ELDER TO ELLSWORTH AIR FORCE BASE

Line Description

OWNERSHIP – CHICAGO & NORTH WESTERN

DIVISION / SUBDIVISION – Western Division - part of the PRC Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 3.0 miles

MAXIMUM SPEED LIMIT – N/A **MAXIMUM WEIGHT LIMIT** – N/A

SERVICE FREQUENCY –As needed

YARDS – N/A

CONNECTING LINES – Chicago & North Western at Box Elder

HIGHWAYS – Box Elder is served by I-90

RAIL WEIGHT – 90-100 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Box Elder	0.0				
Ellsworth	3.0				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –		0.03 MGT (1977)	N/A
TRAFFIC DIRECTION –		75% Term (1977)	

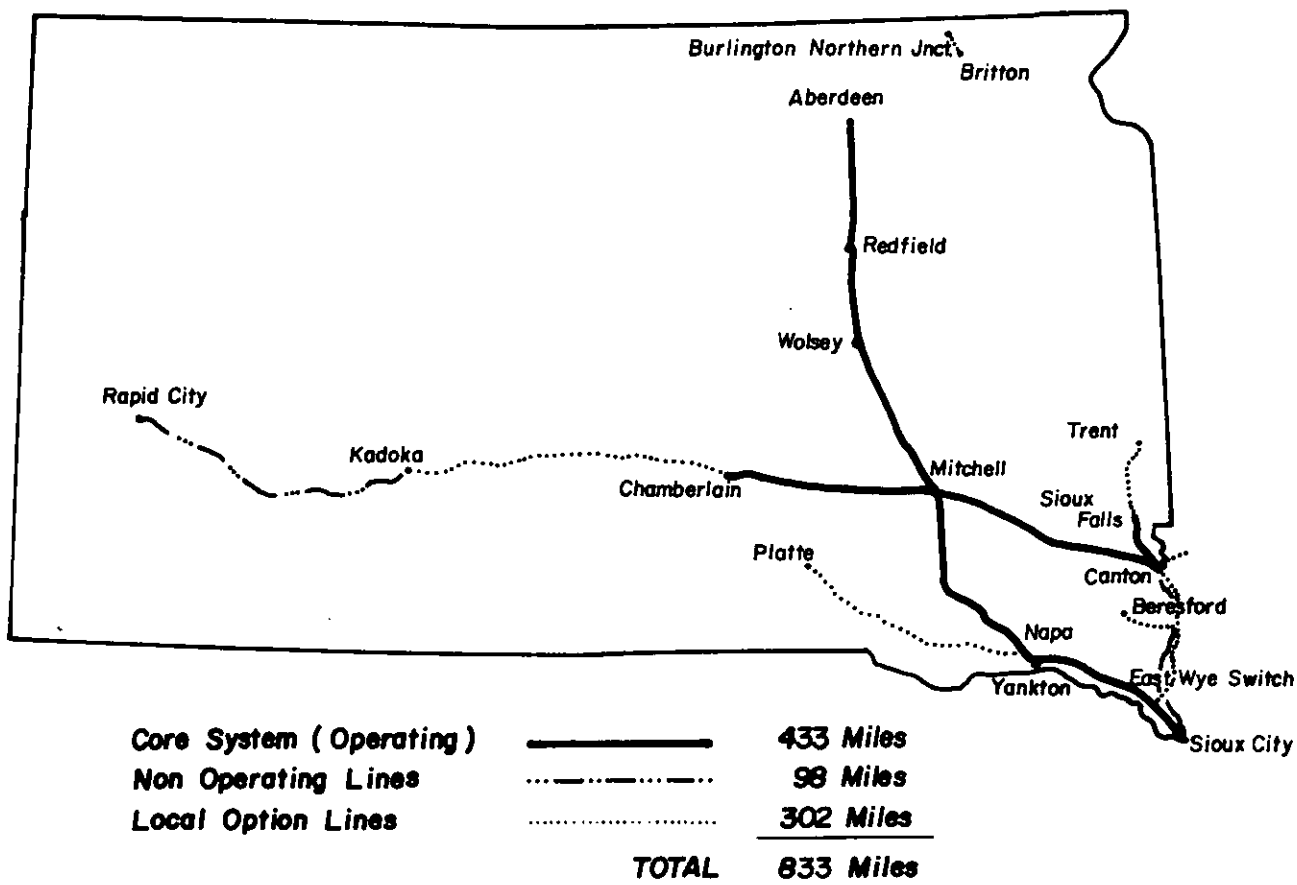
COMMODITIES –Primarily received ordnance and petroleum products.

Other Information

This line serves the Ellsworth Air Force Base and is federally owned for that portion located on the base. This line and CN06 serve as connector lines to the Department of Defense Strategic Rail Corridor Network.

FIGURE VI-3

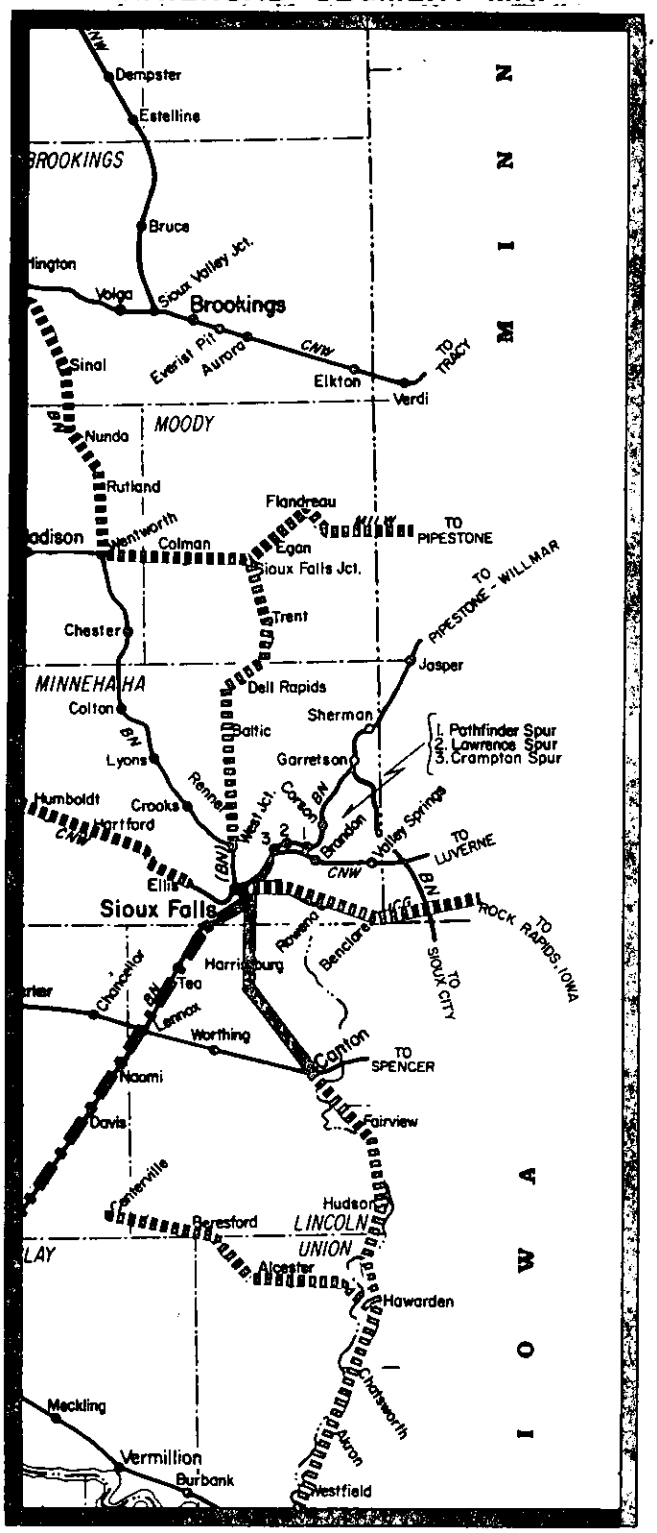
South Dakota Owned Trackage



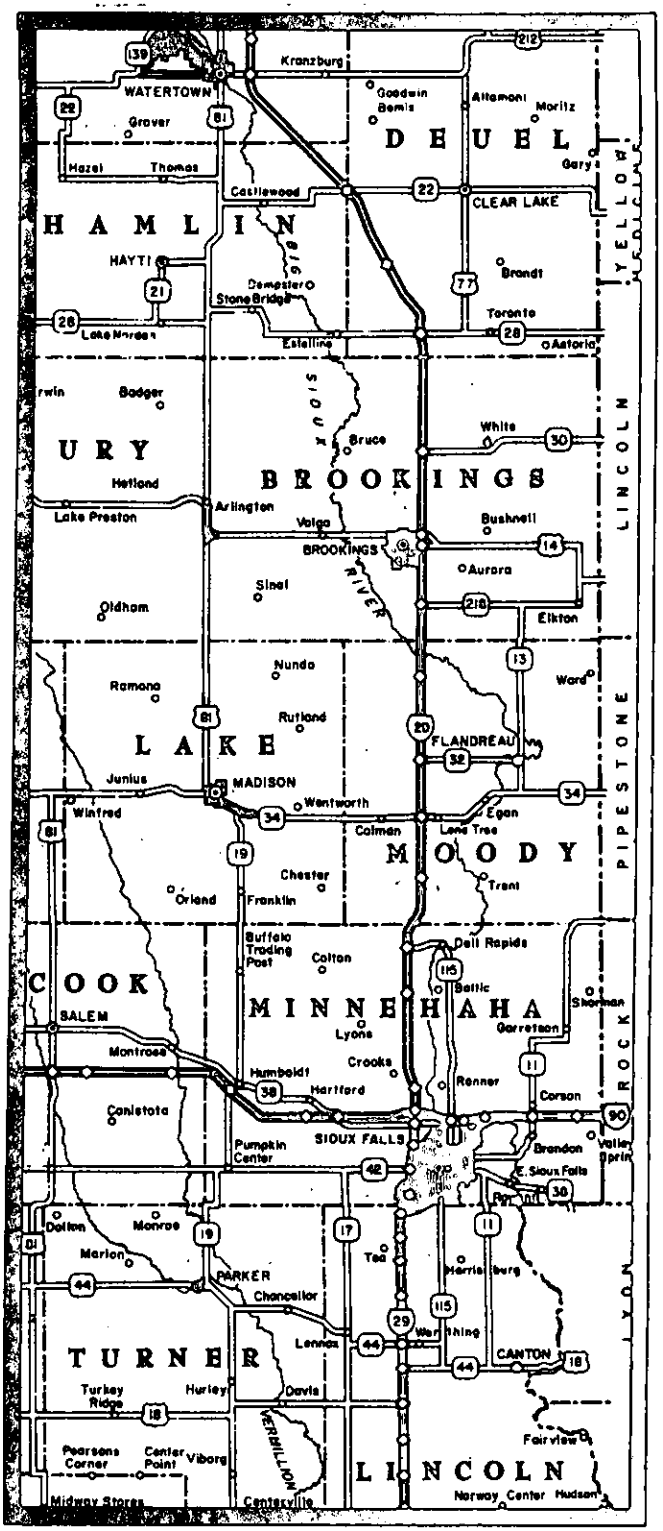
The State of South Dakota currently owns over 833 miles of railroad located in South Dakota and Iowa. These miles consist of nearly 359 miles of core system operated by the Burlington Northern, 74 miles operated by the C&NW, 302 miles of local option lines, and 98 miles which has been labelled as a non-operating purchase (railbanked). All of the miles with the exception of 17 miles were formerly Milwaukee-owned track, and have been approved and abandoned by the former owner.

SOUTH DAKOTA SEGMENT SD01
SIOUX FALLS TO CANTON

RAILROAD SEGMENT MAP

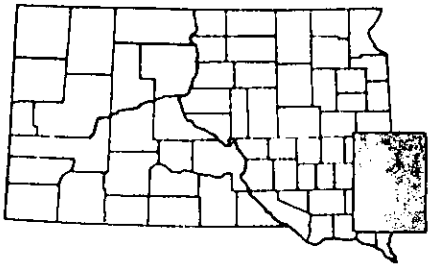


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 01 SIOUX FALLS TO CANTON

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by BN)

DIVISION/SUBDIVISION – Minnesota Division, 24th Subdivision

LINE STATUS –

TYPE OF LINE –

LINE LENGTH IN MILES – 21.9 Miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY –

YARDS – Canton and Sioux Falls

CONNECTING LINES – Chicago & North Western and Burlington Northern at Sioux Falls and State owned line at Canton.

HIGHWAYS – Canton is served by US 18, Harrisburg by a local hard surface road and Sioux Falls is served by I-29, I-90, US 77, SD 42 and SD 38.

RAIL WEIGHT – 90 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Sioux Falls	0.0				
South Yard	1.20				
Harrisburg	9.40				
Canton	21.90				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.75 MGT	0.70 MGT	0
TRAFFIC DIRECTION –	70% Orig./30% Term.	57% Orig./43% Term.	

COMMODITIES – Forwarded grain, food products, stone, sand, and gravel and scrap iron and steel. (1979)

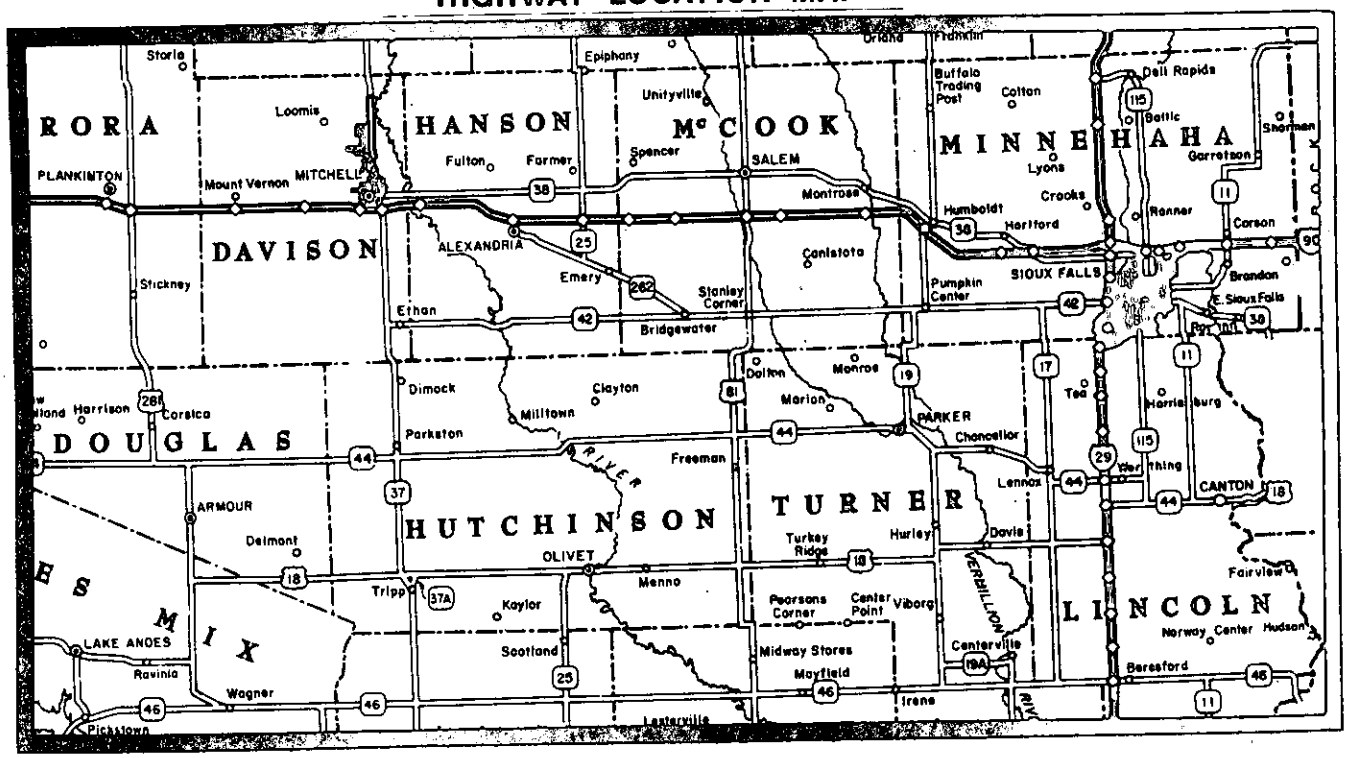
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

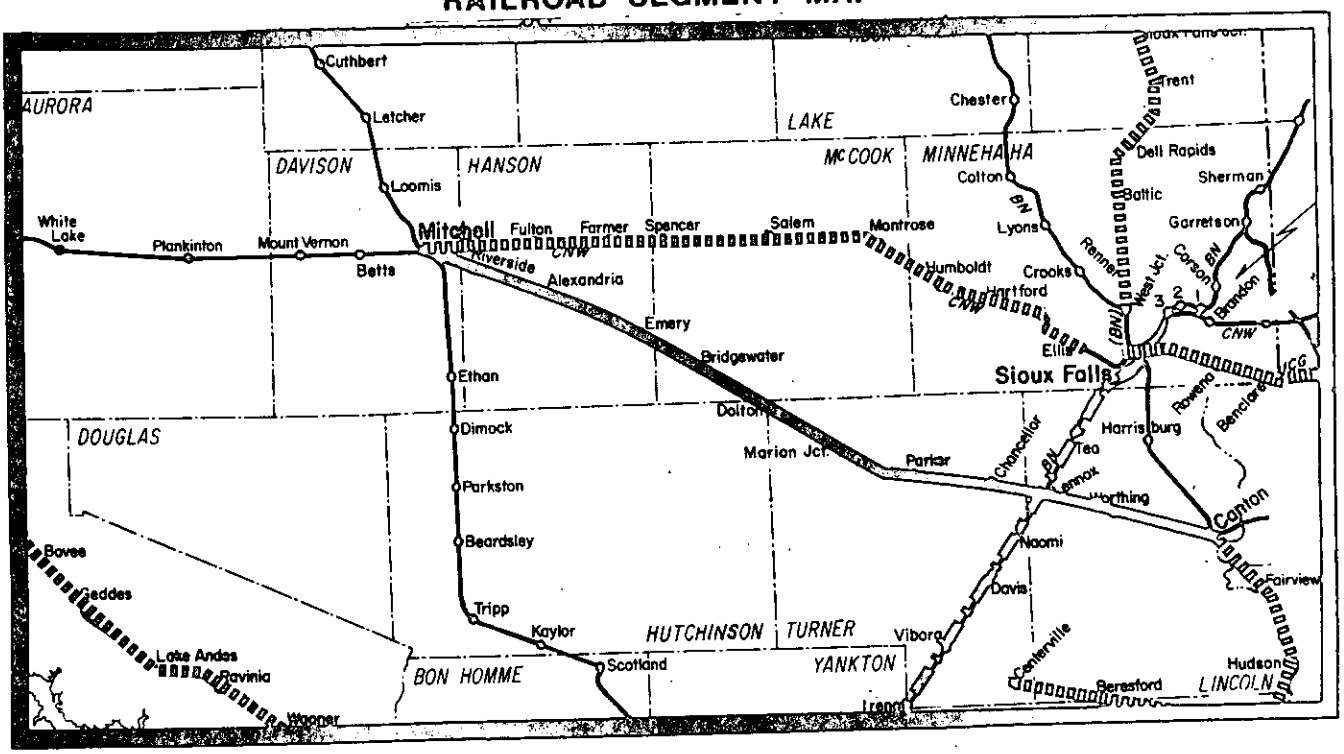
The State of South Dakota has identified this line segment as part of the State Core System. Service continuation on this line is important because of the economic impact of abandonment.

SOUTH DAKOTA SEGMENT SD02
CANTON TO MITCHELL

HIGHWAY LOCATION MAP

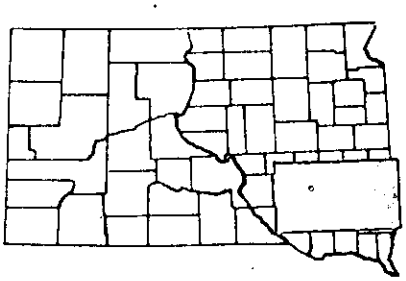


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 02 CANTON TO MITCHELL

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by BN)

DIVISION / SUBDIVISION – Minnesota Division, 24th Subdivision

LINE STATUS –

TYPE OF LINE –

LINE LENGTH IN MILES – 79.2 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY –

YARDS – Canton and Mitchell

CONNECTING LINES – State owned line at Canton and Mitchell, and Burlington Northern at Lennox.

HIGHWAYS – Canton is served by US 18, Worthing, Lennox, Chancellor and Parker by SD 44; Bridgewater, Emery and Alexandria by SD 262; Mitchell by I-90 and SD 37; and Marion Jct. by a local road.

RAIL WEIGHT – 50 miles of 90 lbs. rail and 29 miles of mixture from 75 lbs. to 100 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Canton	0.0	Marion Jct.	35.0	Mitchell	79.2
Worthing	9.0	Dolton	42.9		
Lennox	15.8	Bridgewater	49.9		
Chancellor	20.7	Emery	57.0		
Parker	28.5	Alexandria	65.9		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.62 MGT	0.78 MGT	0
TRAFFIC DIRECTION –	65% Orig.	72% Orig.	

COMMODITIES – Primarily forwarded grain; also received grain mill products, fertilizer, and farm machinery (1979)

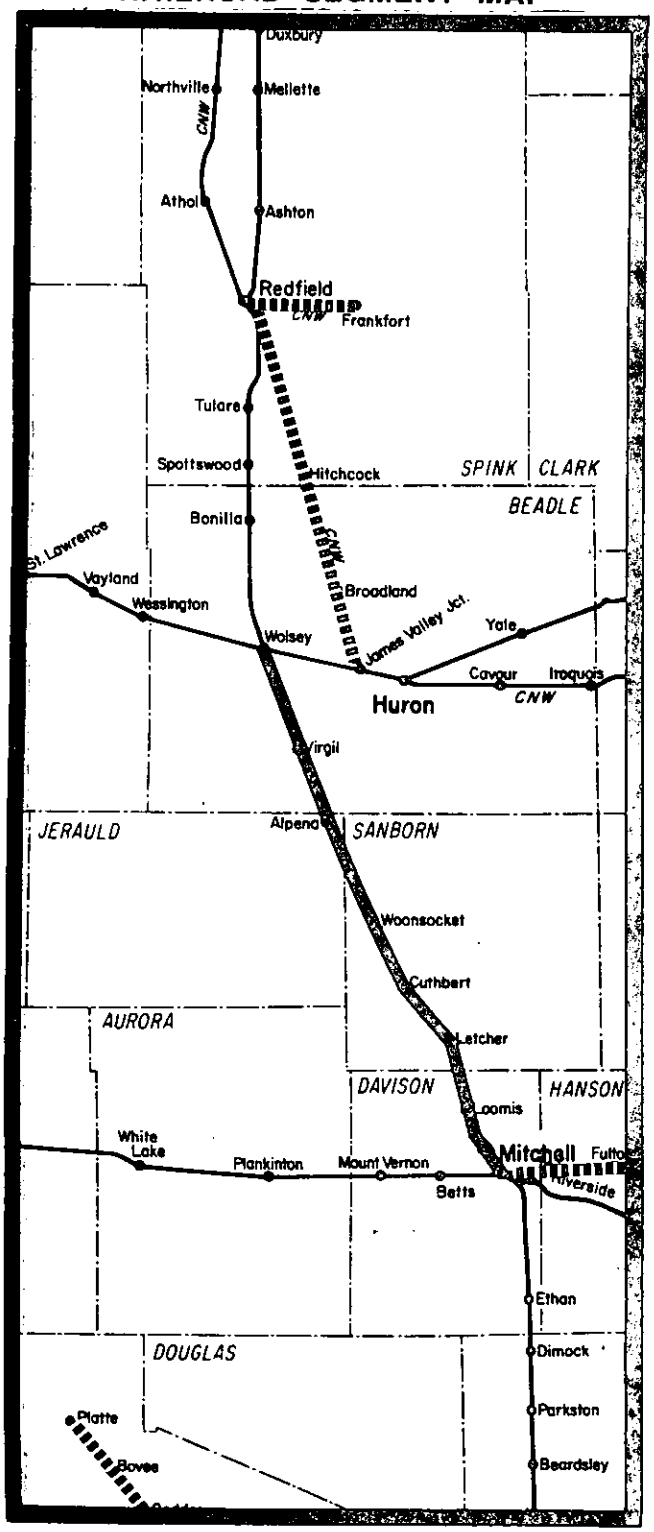
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

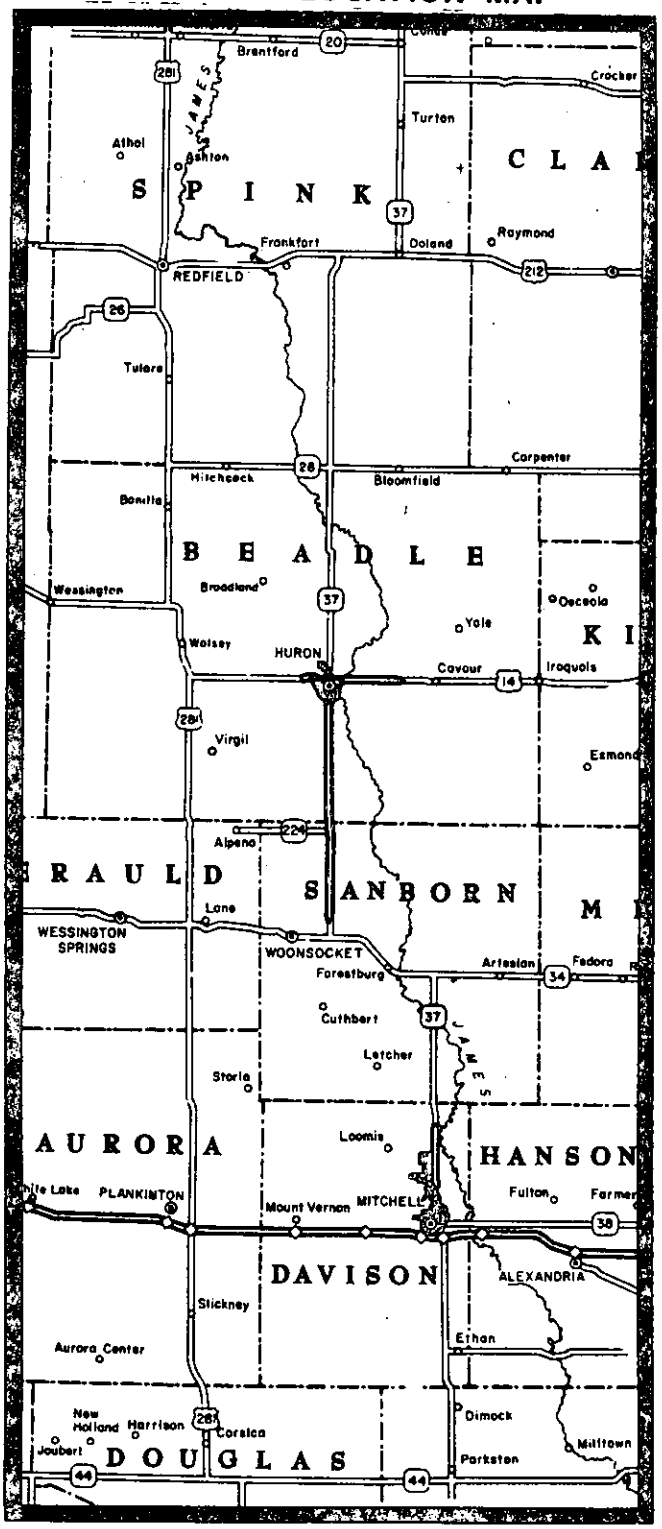
The State of South Dakota has identified this line segment as part of the State Core System. Service continuation on this line is important because of the large economic impact of abandonment.

SOUTH DAKOTA SEGMENT SD03
MITCHELL TO WOLSEY

RAILROAD SEGMENT MAP

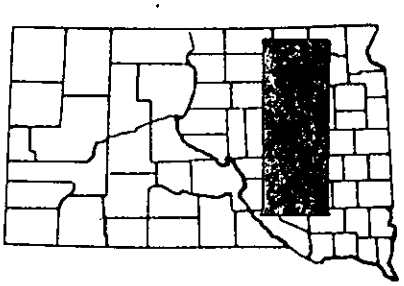


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 03 MITCHELL TO WOLSEY

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by BN)

DIVISION / SUBDIVISION – Minnesota Division, 24th Subdivision

LINE STATUS –

TYPE OF LINE –

LINE LENGTH IN MILES – 54.6 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY –

YARDS – Mitchell

CONNECTING LINES – Chicago & North Western at Wolsey, State owned line at Wolsey and Mitchell

HIGHWAYS – Mitchell is served by I-90 and SD 37, Woonsocket is served by SD 34, Wolsey is served by US 281 and US 14, the other stations are served by hard surfaced local roads.

RAIL WEIGHT – 85 lbs. from Mitchell to Letcher and 90 lbs. on remainder of segment.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Mitchell	0.0	Woonsocket	28.2		
Loomis	7.5	Alpena	37.9		
Letcher	15.0	Virgil	46.1		
Cuthbert	21.8	Wolsey	54.6		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	1.11 MGT	1.34 MGT	0
TRAFFIC DIRECTION –	59% Orig./41% Term	75% Orig./25% Term	

COMMODITIES – Forwarded food products, grain, farm machinery and scrap iron or steel; received coal, lumber products, and petroleum prod. (1979)

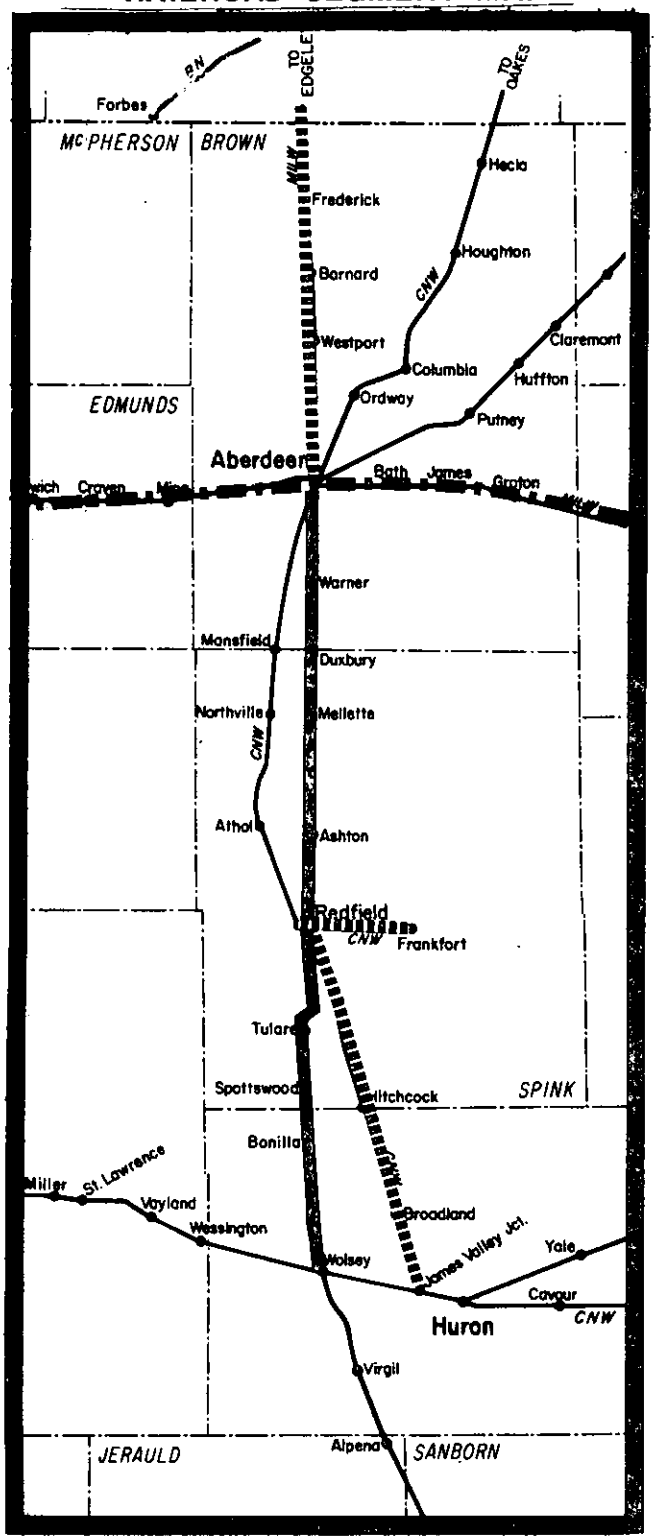
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

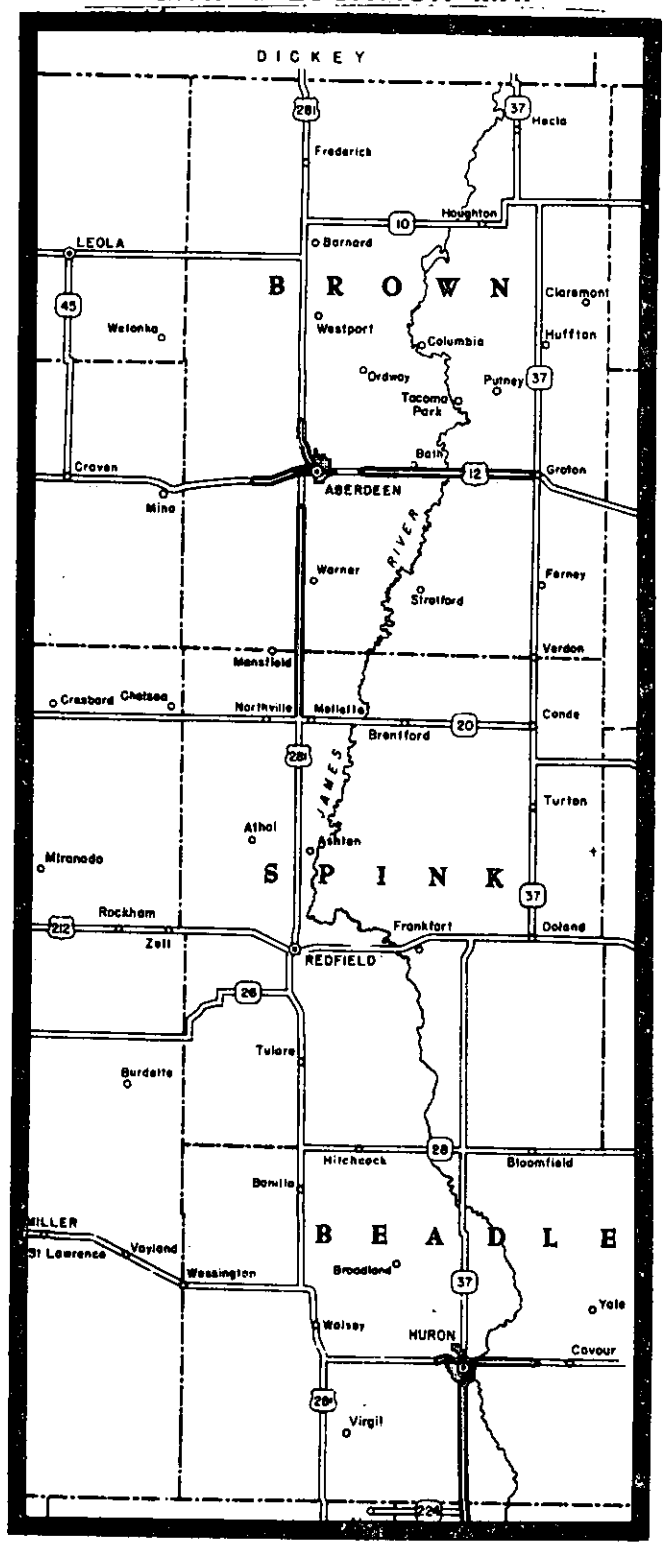
The State of South Dakota has identified this line segment as part of the State Core System. Service continuation on this line is important because of the large economic impact of abandonment.

SOUTH DAKOTA SEGMENT SD04
WOLSEY TO ABERDEEN

RAILROAD SEGMENT MAP

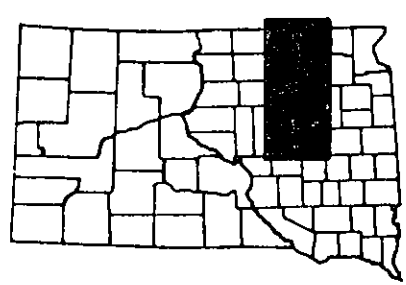


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 04 WOLSEY TO ABERDEEN

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by C&NW)

DIVISION / SUBDIVISION – Minnesota Division, 24th Subdivision

LINE STATUS –

TYPE OF LINE –

LINE LENGTH IN MILES – 74.0 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY –

YARDS – None

CONNECTING LINES –Chicago & North Western at Wolsey, Redfield and Aberdeen; Milwaukee main line at Aberdeen, Burlington Northern at Aberdeen and State owned line at Wolsey.

HIGHWAYS – US 281 parallels this line and, in addition, Wolsey is served by US 14, Redfield by US 212, Mellette by SD 20 and Aberdeen by US 12.

RAIL WEIGHT –90 lbs. rail between Wolsey and Tulare, 85 rail between Tulare & near Redfield, and 90 lbs. rail for remainder of line.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Wolsey	0.0	Ashton	41.4		
Bonilla	12.4	Mellette	52.4		
Tulare	23.1	Duxbury	58.3		
Redfield	33.2	Warner	64.1		
		Aberdeen	74.0		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	1.11 MGT	1.58 MGT	
TRAFFIC DIRECTION –	59% Orig./41% Term	97% Orig./3% Term.	

COMMODITIES – Primarily grain. (1980)

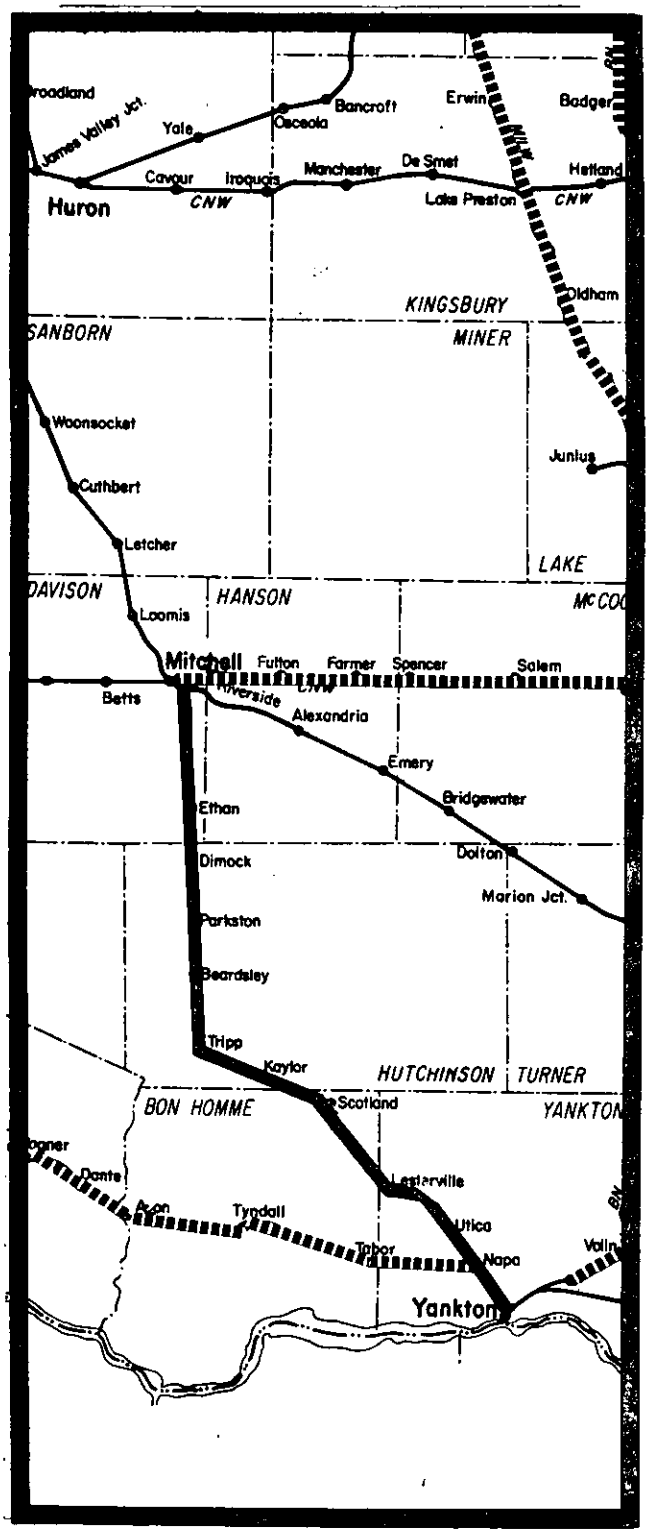
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

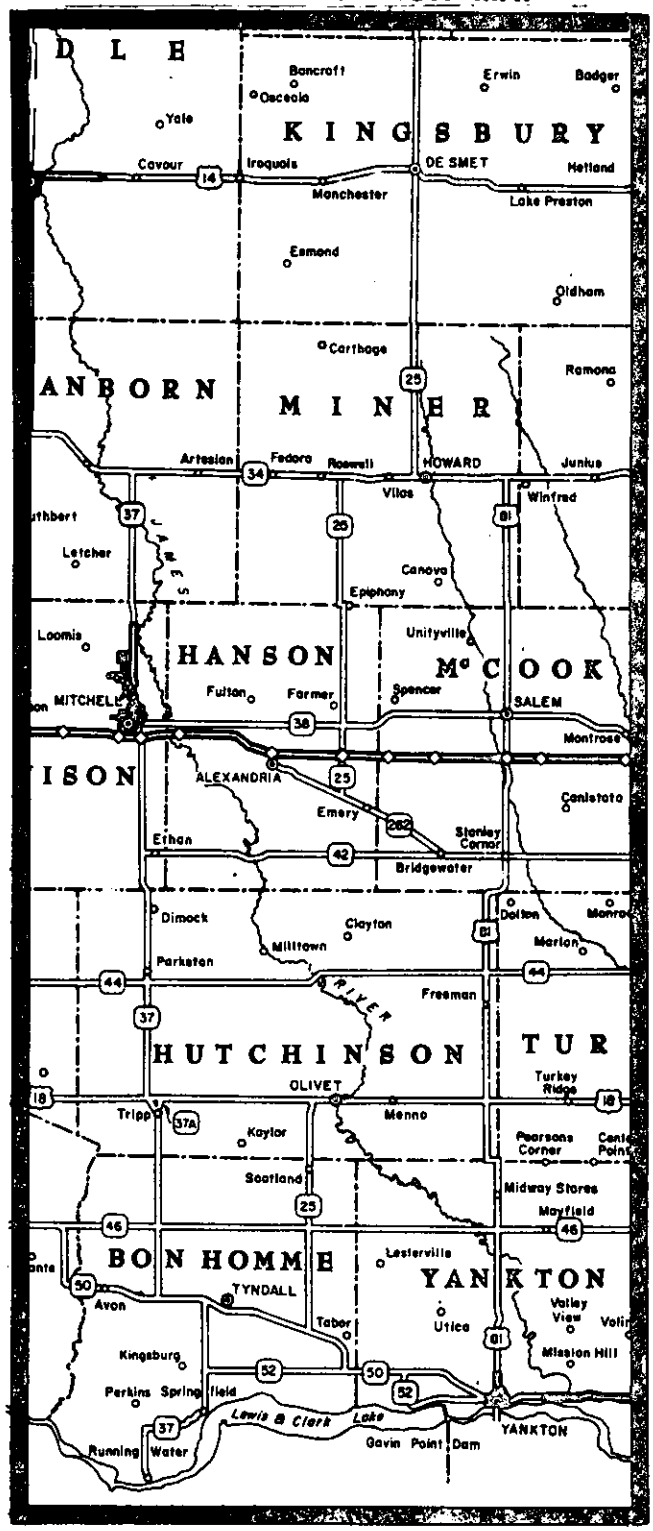
The State of South Dakota has identified this line segment as part of the State Core System. Service continuation on this line is important because of the large economic impact of abandonment

SOUTH DAKOTA SEGMENT SD05
MITCHELL TO YANKTON

RAILROAD SEGMENT MAP

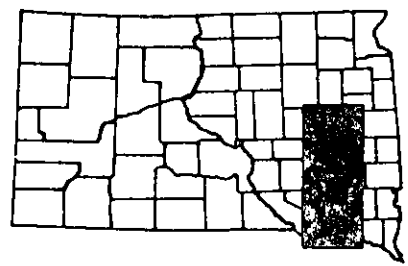


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 05 MITCHELL TO YANKTON

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by BN)

DIVISION / SUBDIVISION – Minnesota Division, 25th Subdivision

LINE STATUS –

TYPE OF LINE –

LINE LENGTH IN MILES – 75.0 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY –

YARDS – Yankton and Mitchell

CONNECTING LINES – State owned lines at Mitchell and Yankton. Non-operating State owned line at Napa.

HIGHWAYS – Yankton is on SD 50 and US 81; Tripp, Parkston and Dimock on SD 37; Mitchell on I-90 and SD 37; all other stations except Beardsley to Napa are on hard surfaced roads.

RAIL WEIGHT – 90 lbs. from Yankton to Beardsley, 85 lbs. from Beardsley to Ethan and 100 lbs. - 112 lbs. from Ethan to Mitchell.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Mitchell	0.0	Kaylor	41.2		
Ethan	11.6	Scotland	47.8		
Dimock	16.7	Lesterville	59.1		
Parkston	22.1	Utica	65.8		
Beardsley	28.6	Napa	69.4		
Tripp	34.2	Yankton	75.0		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.80 MGT	0.41 MGT	0
TRAFFIC DIRECTION –	60% Orig.	74% Orig.	-
COMMODITIES –	Forwarded grain and received fertilizer.		

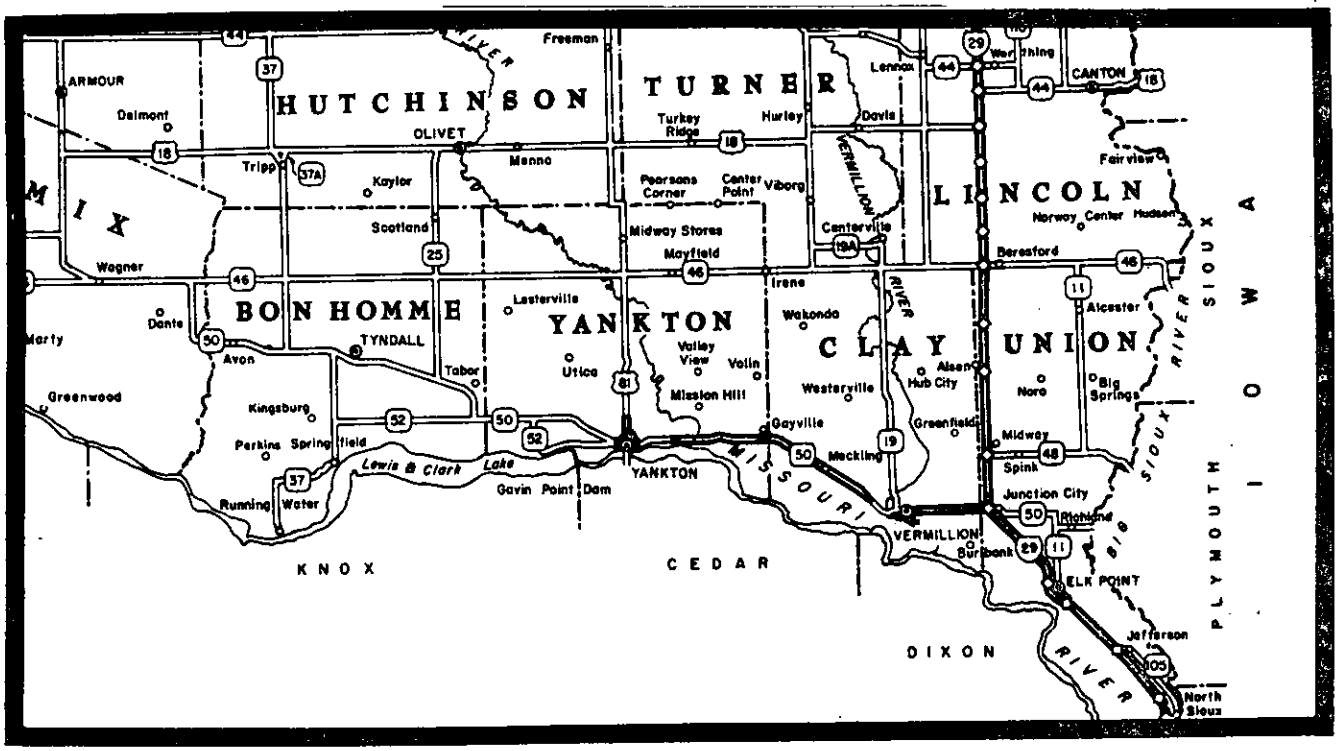
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

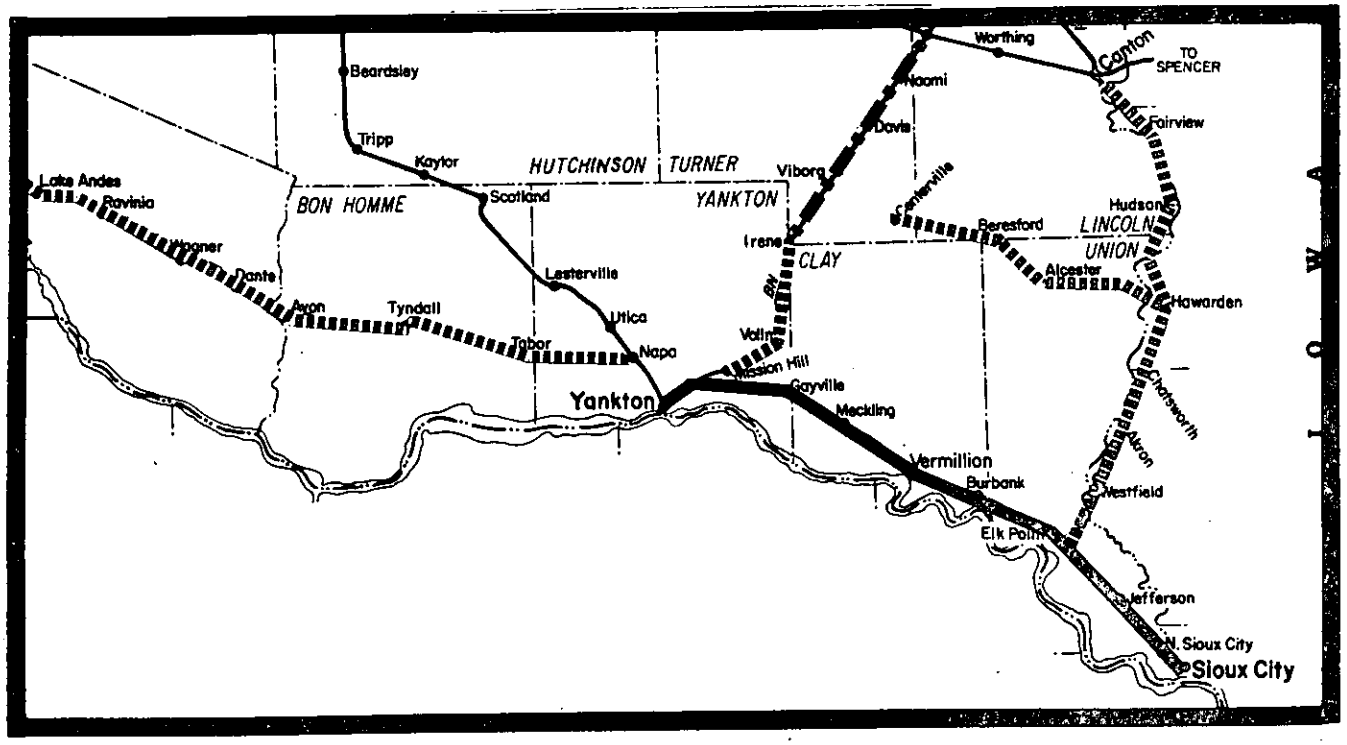
The State of South Dakota has identified this line segment as part of the State core system. Service continuation on this line is important because of the large economic impact of abandonment.

SOUTH DAKOTA SEGMENT SD 06
YANKTON, SD TO SIOUX CITY, IA

HIGHWAY LOCATION MAP

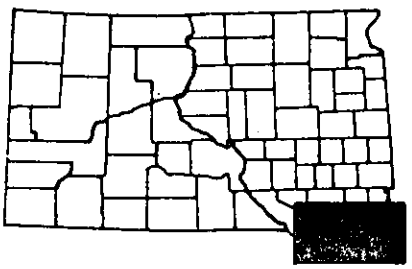


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 06 YANKTON TO SIOUX CITY, IOWA

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by BN)

DIVISION / SUBDIVISION – Minnesota Division, 25th Subdivision

LINE STATUS –

TYPE OF LINE –

LINE LENGTH IN MILES – 61.5 miles Total, 55.2 miles in SD

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY –

YARDS – Sioux City and Yankton

CONNECTING LINES – Burlington Northern, Chicago & North Western and Illinois Central Gulf at Sioux City; State owned line at Yankton.

HIGHWAYS – Yankton is on SD50 and US 81, Vermillion and Meckling on SD 50 Elk Point, Jefferson, North Sioux City and Sioux City are on I-29.

RAIL WEIGHT – 90 lbs. from Yankton to Burbank, 85 lbs from Burbank to East Wye Switch, and 90 lbs. from East Wye Switch to Sioux City.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Yankton	0.0	East Wye Switch	41.7		
Gayville	12.1	Jefferson	49.4		
Meckling	18.3	North Sioux City	55.2		
Vermillion	26.5	Sioux City	61.5		
Burbank	32.4				
Elk Point	41.0				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.94 MGT	0.56 MGT	0
TRAFFIC DIRECTION –	54% Orig.	50% Orig,	-
COMMODITIES –	Forwarded grain and received fertilizer.		

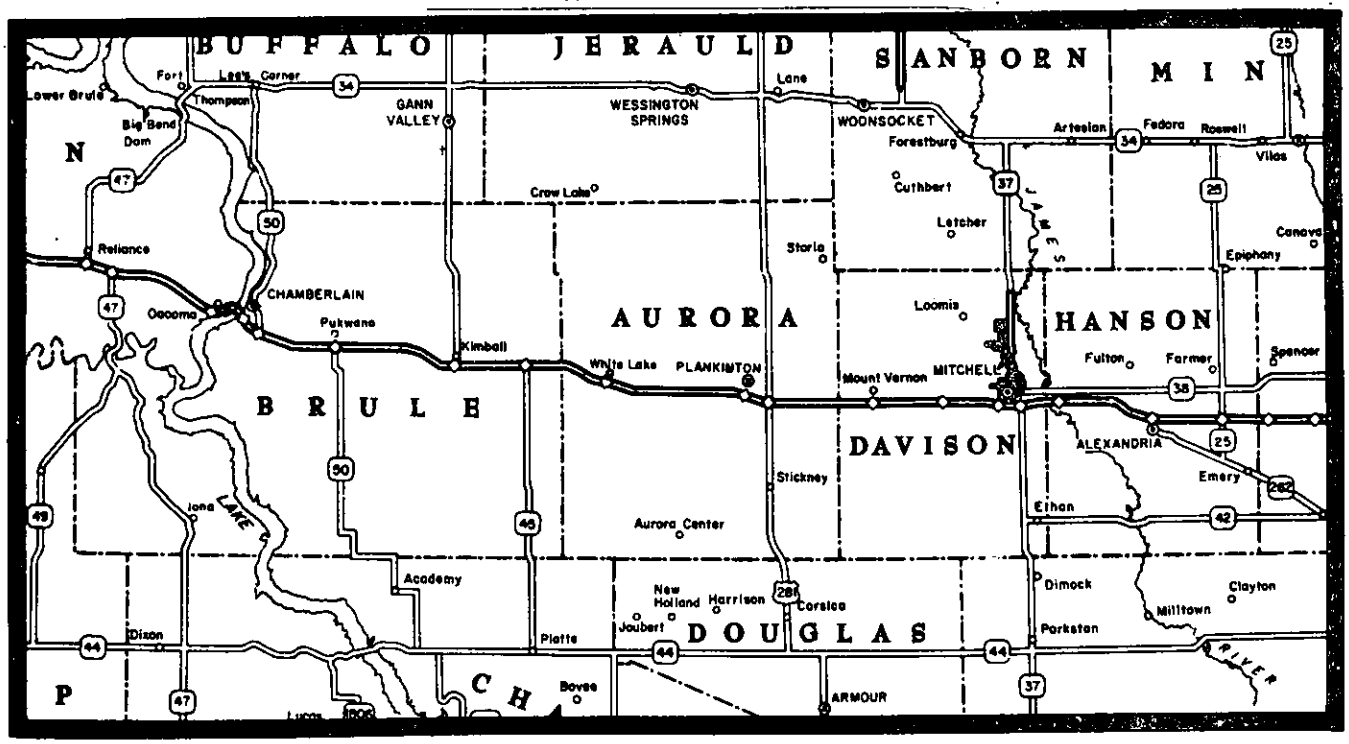
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

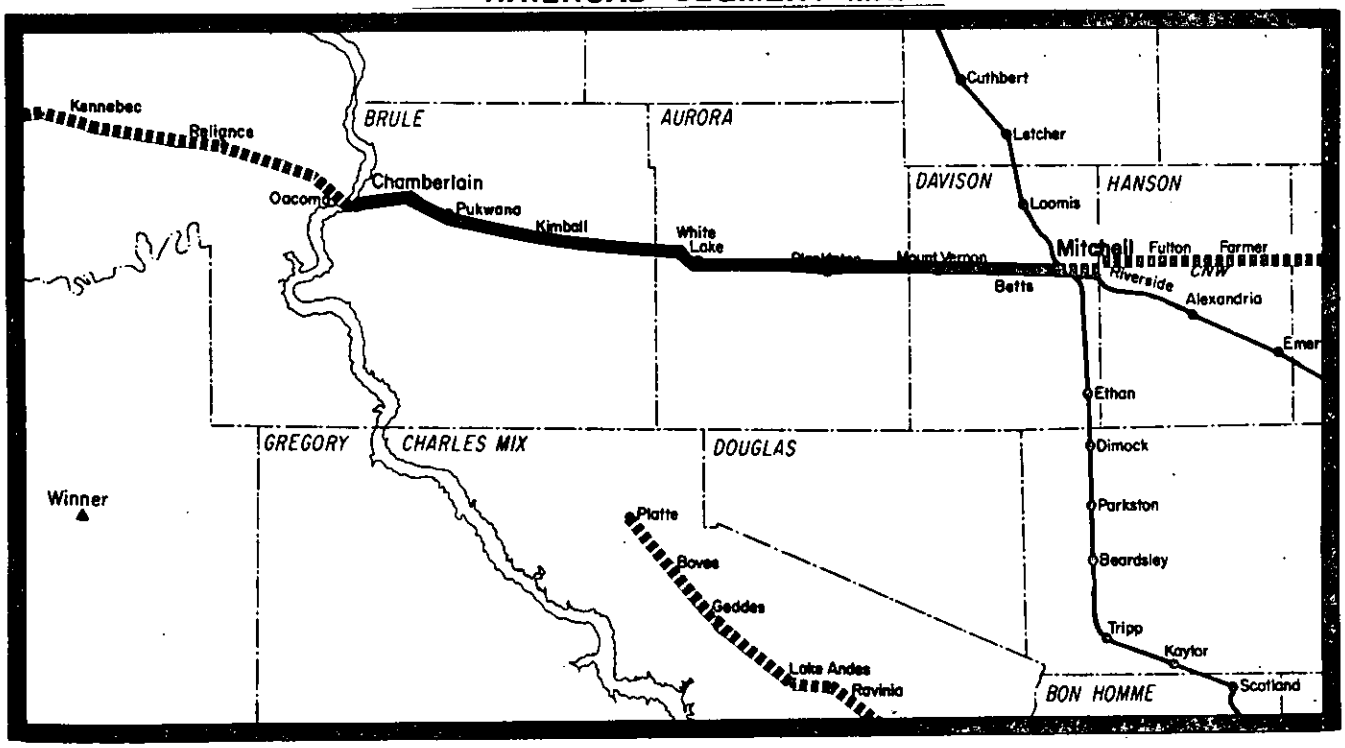
The State of South Dakota has identified this line segment as part of the State core system, which is important for service continuation due to the large economic impact of abandonment.

SOUTH DAKOTA SEGMENT SD 07
MITCHELL TO CHAMBERLAIN

HIGHWAY LOCATION MAP

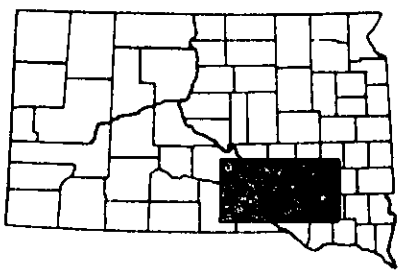


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 07 MITCHELL TO CHAMBERLAIN

Line Description

OWNERSHIP – SOUTH DAKOTA (Service provided by BN)

DIVISION / SUBDIVISION – Minnesota Division, 25th Subdivision

LINE STATUS –

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 67.1 miles

MAXIMUM SPEED LIMIT – 10 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY –

YARDS – Mitchell and Chamberlain

CONNECTING LINES – State owned line at Mitchell, and State owned line at Chamberlain

HIGHWAYS – I-90 parallels this line. Mitchell is served by SD 37, Plankinton by US 281, Kimball by SD 45, Chamberlain by SD 50.

RAIL WEIGHT – 65 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Mitchell	0.0	Kimball	47.0		
Betts	6.1	Pukwana	58.6		
Mt. Vernon	11.8	Chamberlain	67.1		
Plankinton	23.1				
White Lake	34.5				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.52 MGT	0.55 MGT	0

TRAFFIC DIRECTION – 66% Orig./34% Term. 58% Orig./42% Term.

COMMODITIES – Forwarded grain; received stone, clay, and glass, petroleum products, and sand and gravel. (1979)

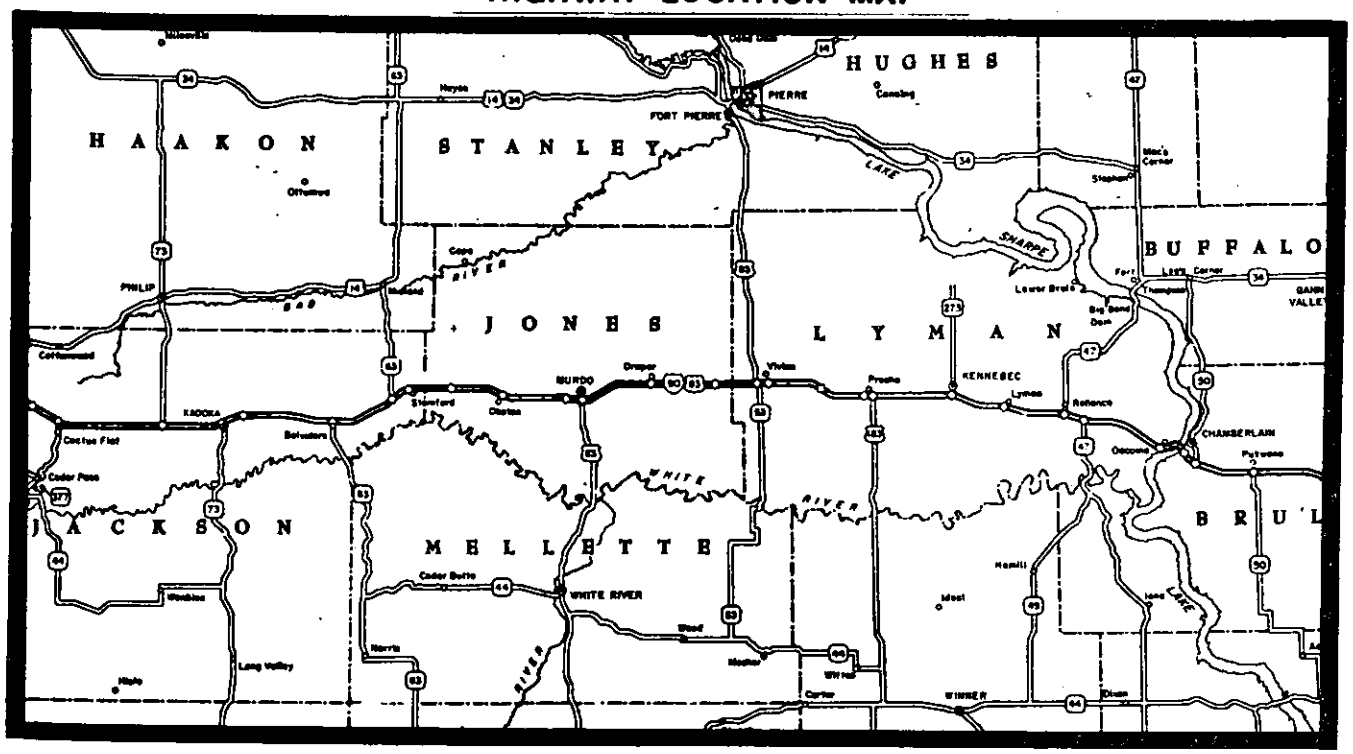
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

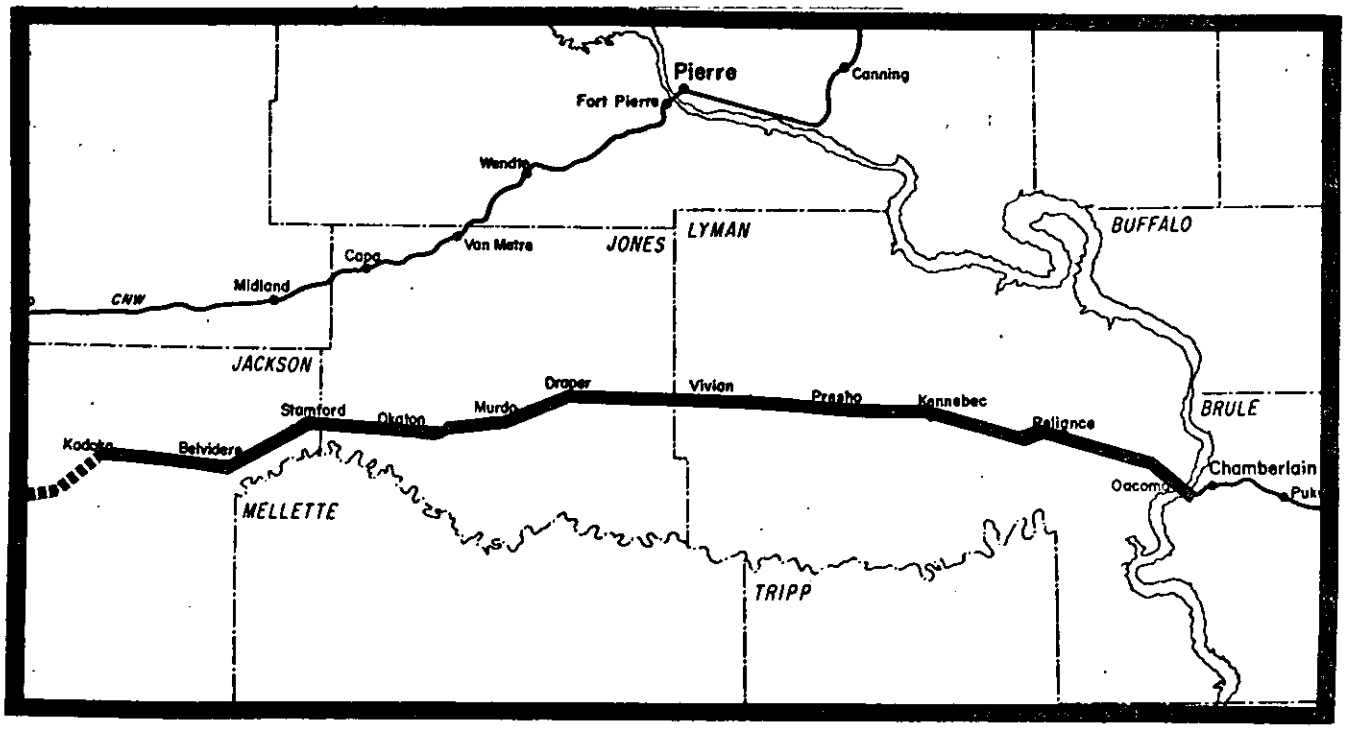
The State of South Dakota has identified this line segment as part of the State Core System. Service continuation on this line is important because of the large economic impact of abandonment.

SOUTH DAKOTA SEGMENT SD 08
CHAMBERLAIN TO KADOKA

HIGHWAY LOCATION MAP

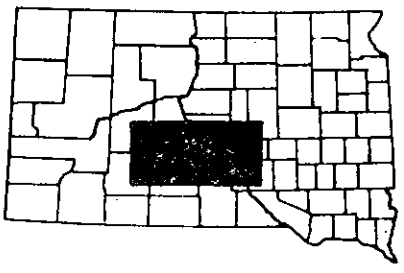


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 08 CHAMBERLAIN TO KADOKA

Line Description

OWNERSHIP – SOUTH DAKOTA

DIVISION / SUBDIVISION –

LINE STATUS – Abandoned

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 120.7 miles

MAXIMUM SPEED LIMIT – Out of Service **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – None

YARDS – None

CONNECTING LINES – State owned line at Chamberlain and non-operating State owned line at Kadoka.

HIGHWAYS – I-90 parallels

RAIL WEIGHT – 65 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Chamberlain	0.0	Vivian	51.9	Belvidere	107.7
Oacoma	3.9	Draper	64.8	Kadoka	120.7
Reliance	16.7	Murdo	75.2		
Kennebec	30.0	Okaton	85.7		
Presho	40.0	Stamford	96.5		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –			0
TRAFFIC DIRECTION –			
COMMODITIES –			

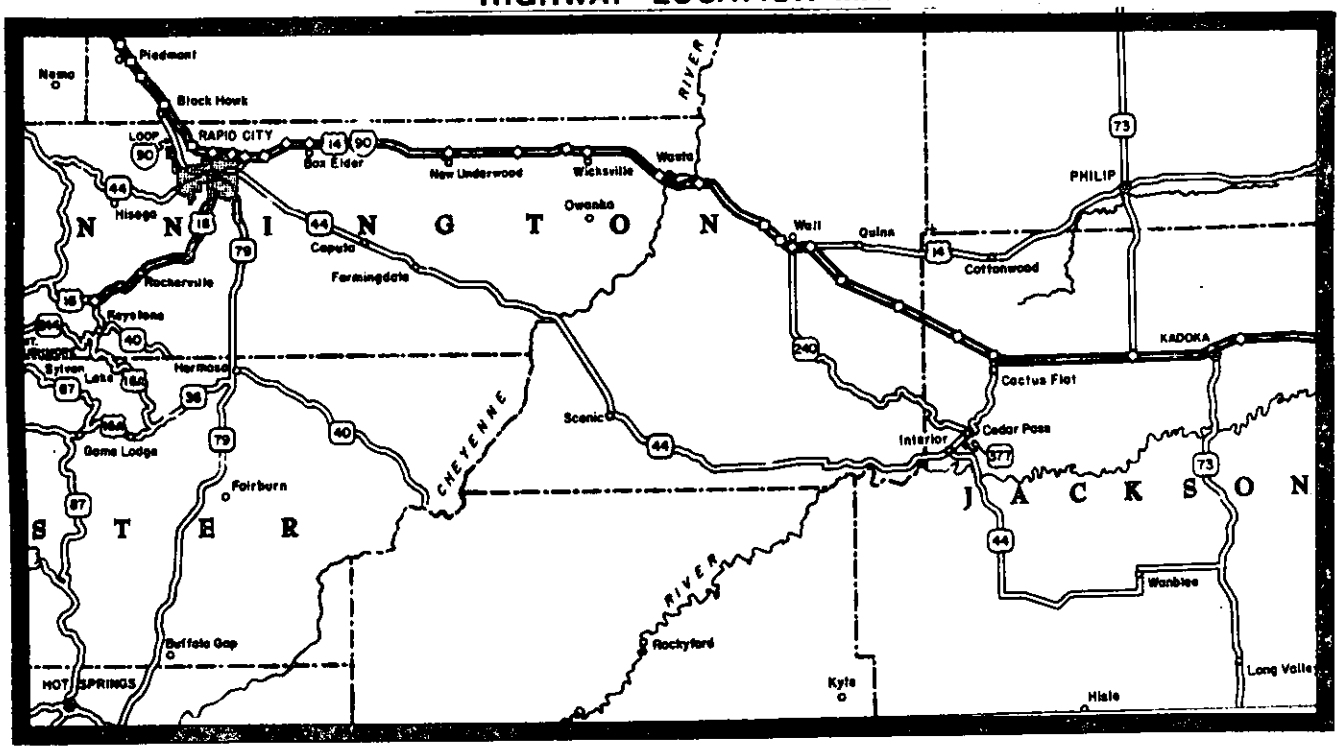
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

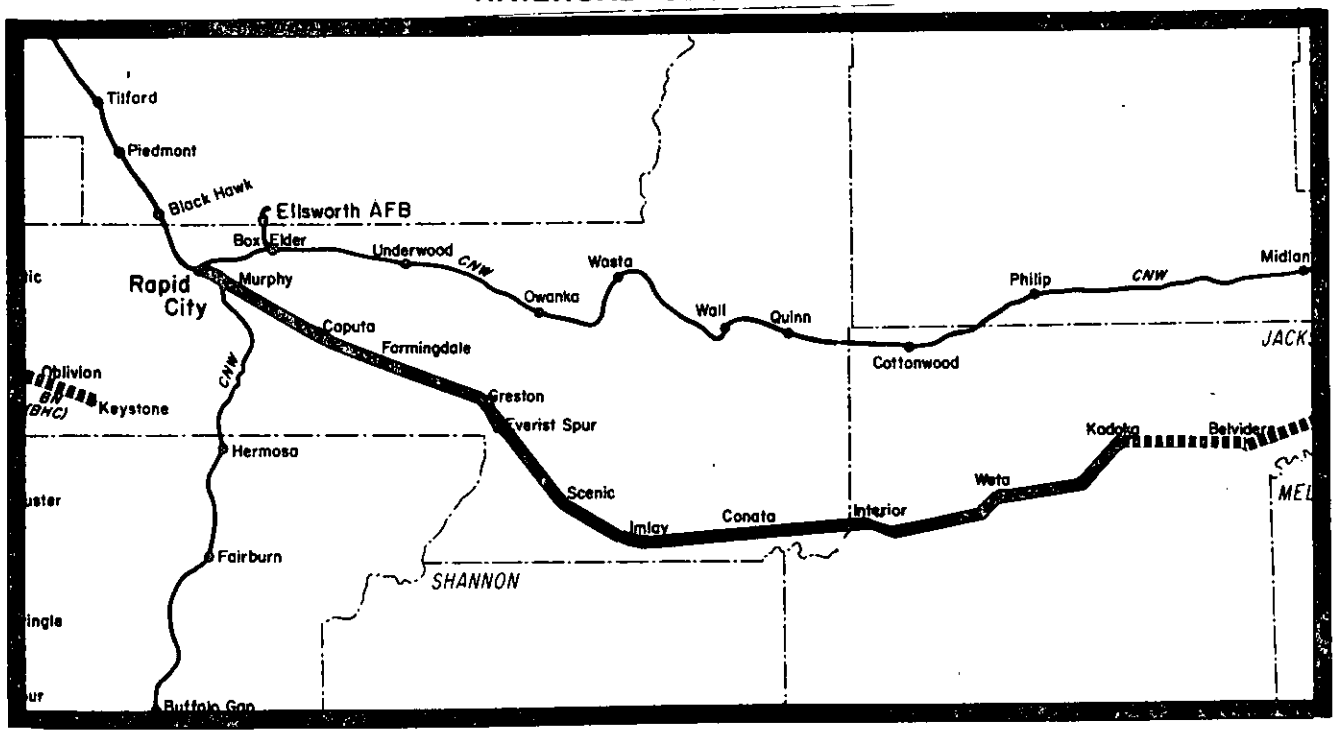
The State of South Dakota has identified this line segment as a local option line, a line with shipper support and one which may be viable at some time if service is restored. Studies show that limited impact would result from abandonment of the line

SOUTH DAKOTA SEGMENT SD 09
KADOKA TO RAPID CITY

HIGHWAY LOCATION MAP

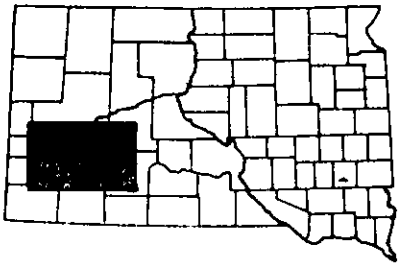


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 09 KADOKA TO RAPID CITY

Line Description

OWNERSHIP – SOUTH DAKOTA

DIVISION / SUBDIVISION –

LINE STATUS – Abandoned

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 98.5 miles

MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – None

YARDS –

CONNECTING LINES – Chicago & North Western to Rapid City and non operating State owned line at Kadoka.

HIGHWAYS – SD 44 parallels

RAIL WEIGHT – 65 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Kadoka	0.0	Creston	69.1		
Weta	11.7	Farmingdale	79.3		
Interior	26.5	Caputa	84.7		
Conata	36.8	Murphy	92.8		
Imlay	47.3	Rapid City	98.5		
Scenic	56.6				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.52 MGT	0.55 MGT	0

TRAFFIC DIRECTION – 66% Orig./34% Term. 93% Orig./7% Term.

COMMODITIES – Forwarded grain, grain mill products, lumber, and stone, clay, and glass; received lumber and stone, clay, and glass. (1979)

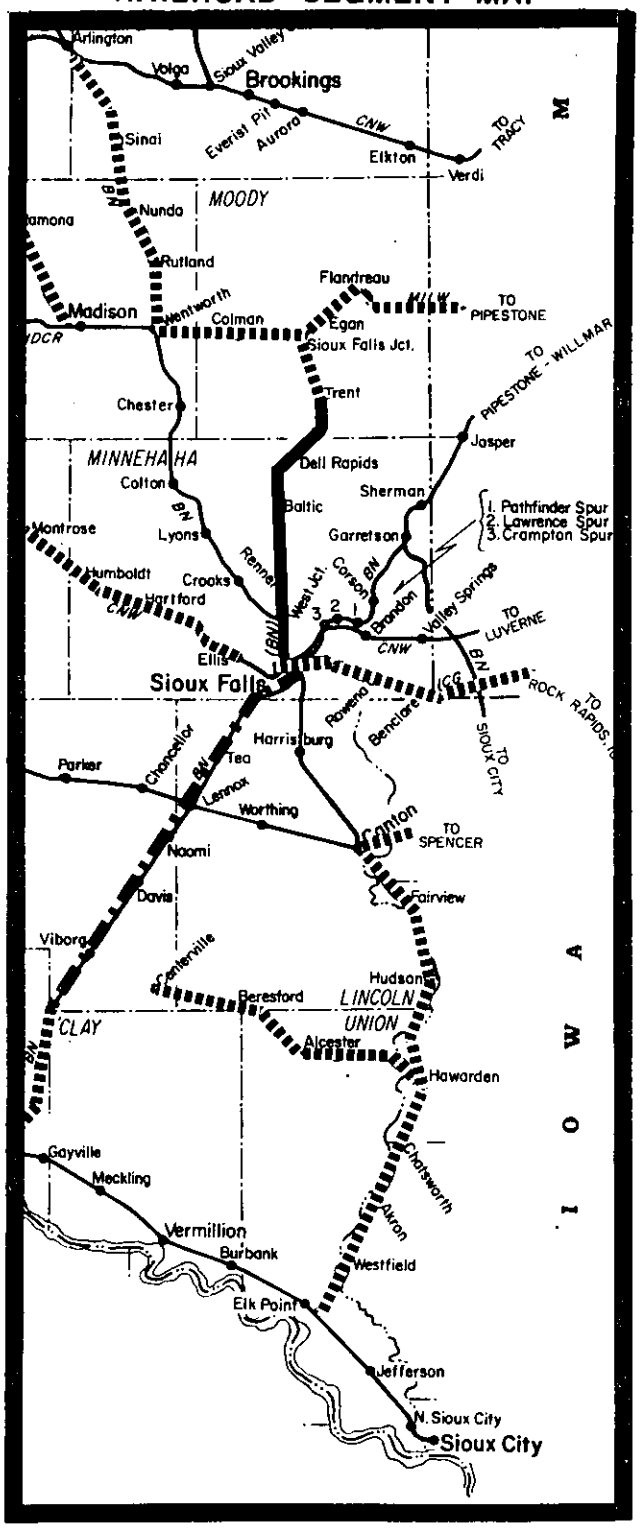
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

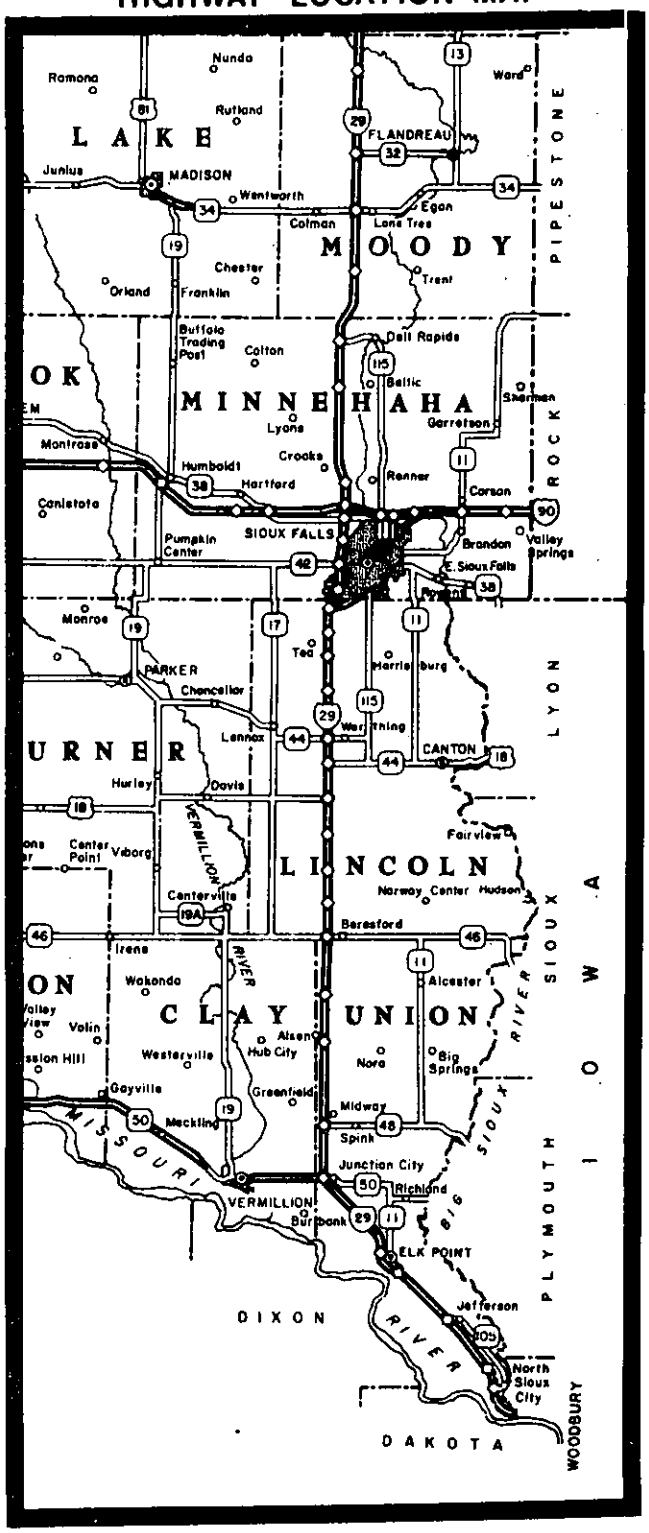
The State of South Dakota has determined that minimal imports would result from abandonment of this line. However, the line should be kept intact in the event that this path may be needed at some future date to connect Rapid City, to eastern points.

SOUTH DAKOTA SEGMENT SD10
SIOUX FALLS TO TRENT

RAILROAD SEGMENT MAP

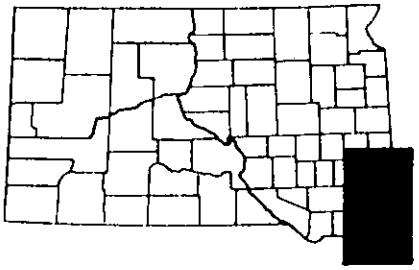


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 10 SIOUX FALLS TO TRENT

Line Description

OWNERSHIP – SOUTH DAKOTA

DIVISION / SUBDIVISION –

LINE STATUS – Abandoned

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 26.6 miles

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – None

YARDS – Sioux Falls and Dell Rapids

CONNECTING LINES – Chicago & North Western at Sioux Falls, Burlington Northern at West Jct. and Sioux Falls and State owned line at Sioux Falls.

HIGHWAYS – Sioux Falls is served by I-29 and I-90, Renner, Baltic and Dell Rapids are served by US 77 and Trent is served by a hard surfaced local road. I-29 and US 77 both parallel this route.

RAIL WEIGHT – 65 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Sioux Falls	0.0	Renner	6.5		
East Jct.	0.8	Baltic	14.4		
Peaks	0.9	Dell Rpaids	19.5		
West Jct.	2.7	Trent	26.6		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.75 MGT	0.70 MGT	
TRAFFIC DIRECTION –	70% Orig./30% Term.	81% Orig./19% Term.	

COMMODITIES – Primarily forwarded stone; grain, clay, glass and sand and non-metallic minerals; received ferilizer, stone, clay and glass. (1979)

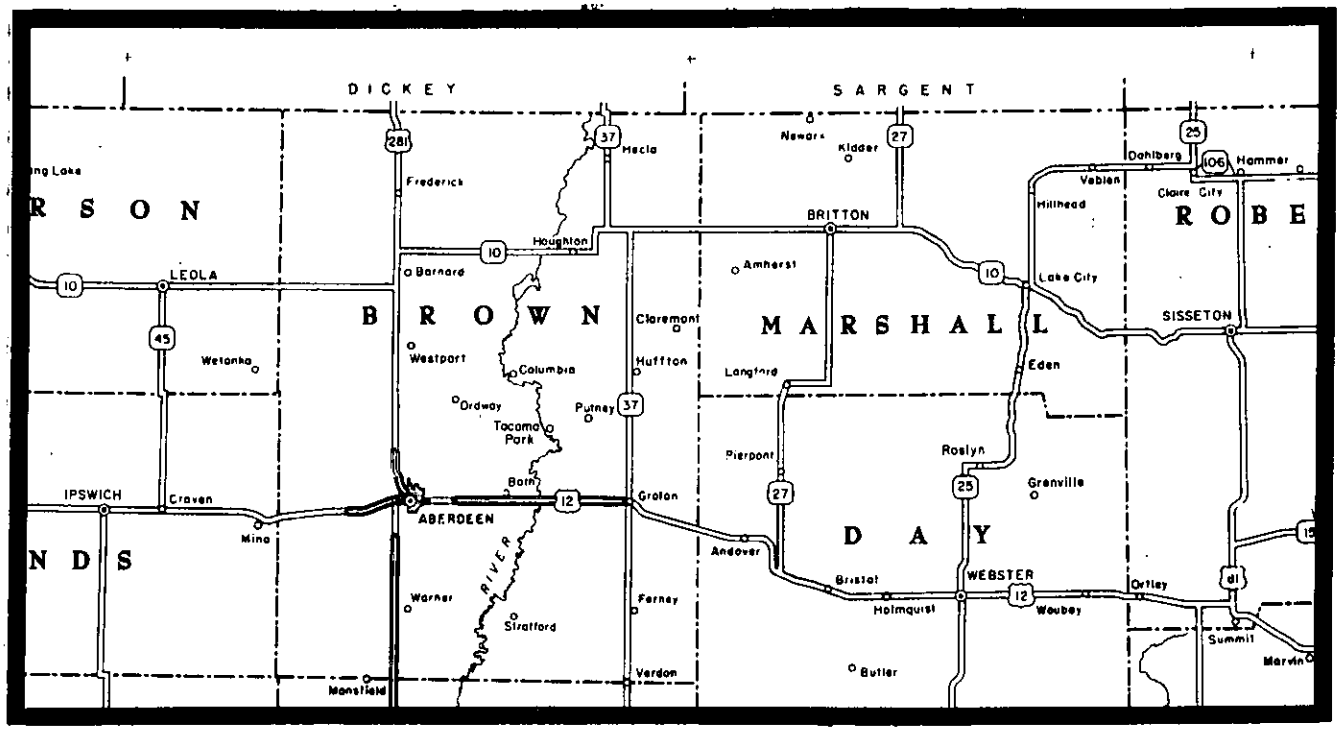
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and approved for abandonment in June 1980. The State of South Dakota has purchased this line.

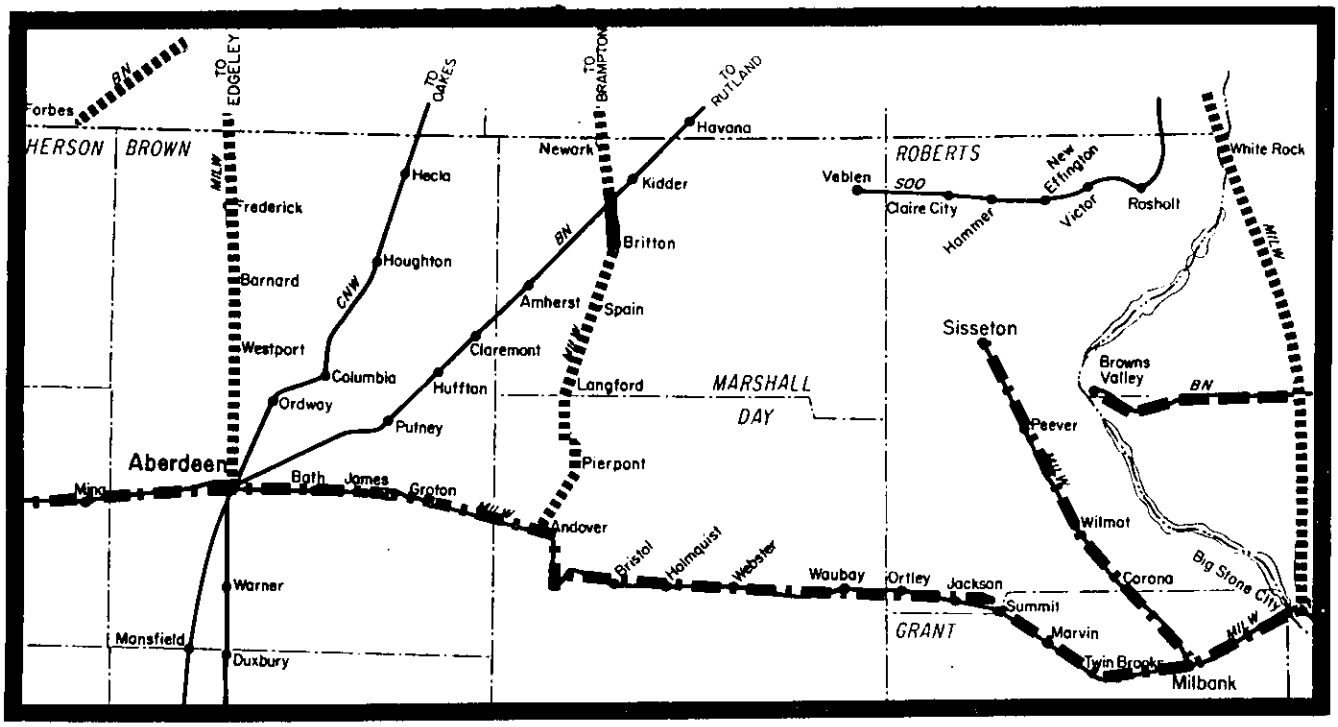
The State of South Dakota has identified this line segment as a local option line, a line with shipper support and one which may be viable at some time if service is restored. Studies show that limited imports would result from abandonment of the line.

SOUTH DAKOTA SEGMENT SD 11
BRITTON TO BURLINGTON NORTHERN JCT.

HIGHWAY LOCATION MAP

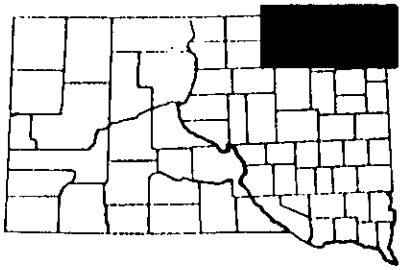


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 11 BRITTON TO BURLINGTON NORTHERN JUNCTION

Line Description

OWNERSHIP – SOUTH DAKOTA
DIVISION / SUBDIVISION –
LINE STATUS – Abandoned
TYPE OF LINE –
LINE LENGTH IN MILES – 4.8 mi.
MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** –
SERVICE FREQUENCY –
YARDS –
CONNECTING LINES –

HIGHWAYS –

RAIL WEIGHT –

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Britton	0.0				
BN Jct.	4.8				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –			0
TRAFFIC DIRECTION –			
COMMODITIES –			

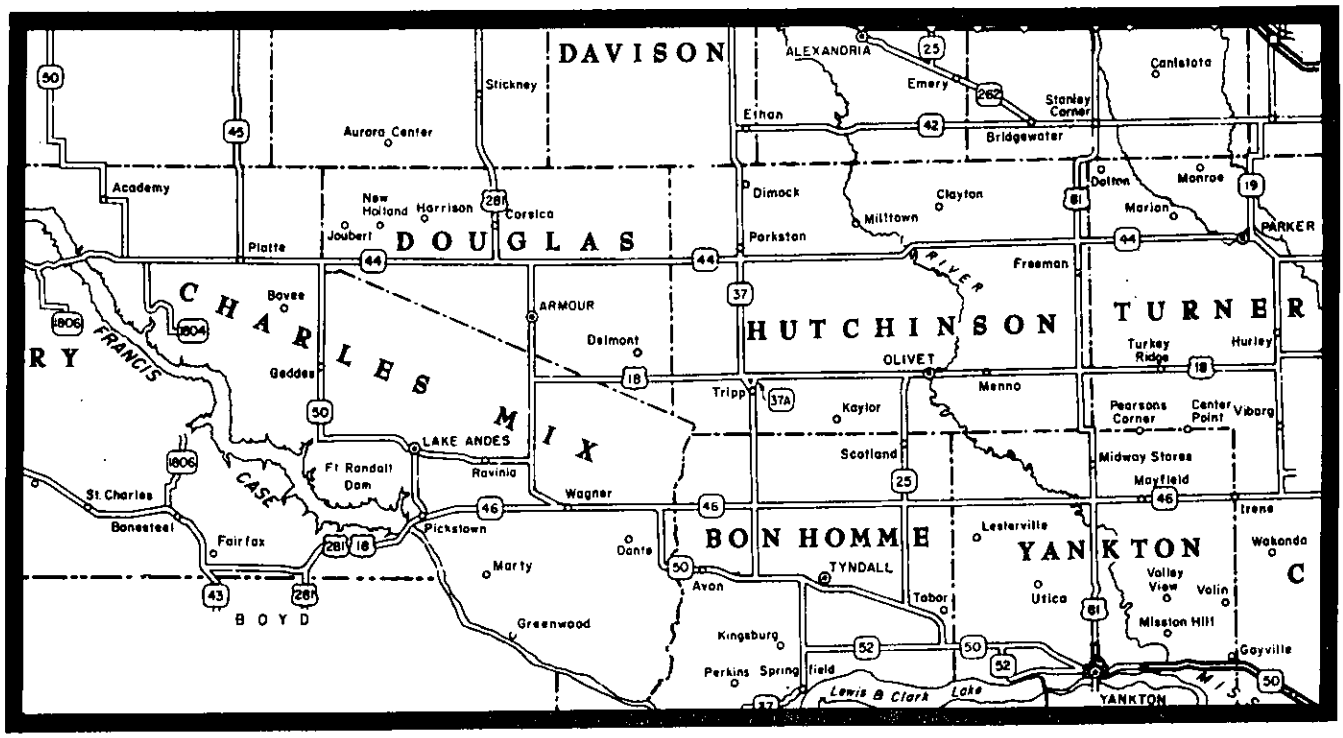
Other Information

This line is a part of the former Milwaukee Road's Andover to Brampton line. There is a rehabilitation project scheduled for this line funded jointly by the State using federal funds and a regional rail authority. Service will be provided by the Burlington Northern. When completed, the line will have a 263,000 lb. status.

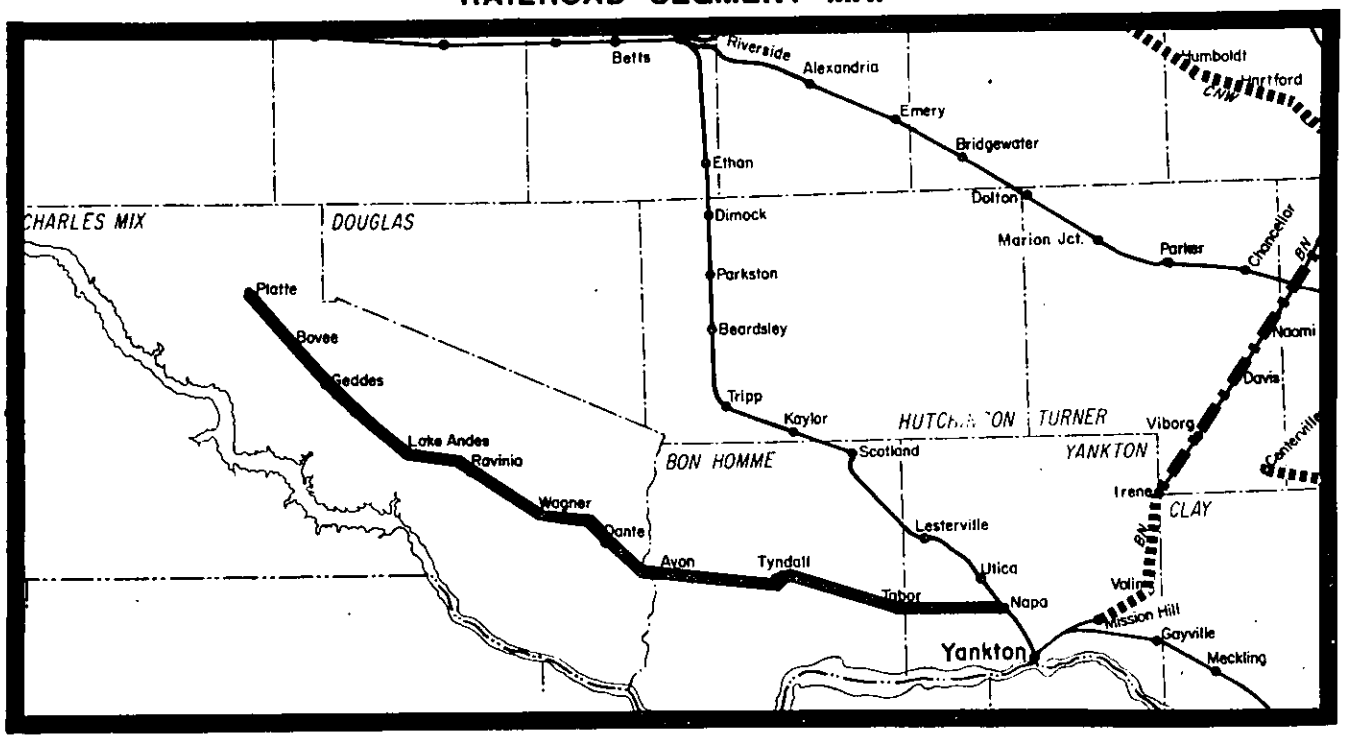
ID Train 6-82

SOUTH DAKOTA SEGMENT SD12
NAPA TO PLATTE

HIGHWAY LOCATION MAP

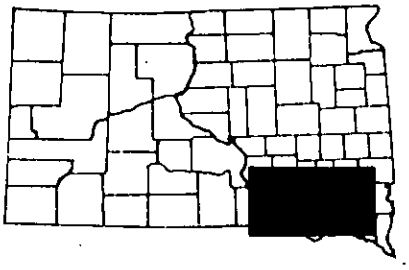


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 12 NAPA TO PLATTE

Line Description

OWNERSHIP – SOUTH DAKOTA

DIVISION / SUBDIVISION –

LINE STATUS – Abandoned

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 82.4 miles

MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – None

YARDS – None

CONNECTING LINES – State owned line at Napa

HIGHWAYS – SD 50 parallels, Platte also served by SD Highway 44; Wagner also served by SD Highway 46.

RAIL WEIGHT – About 8 miles of mixed 75 lbs., 85 lbs. and 95 lbs. rail near Napa; balance is 60 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Napa	0.0	Wagner	46.1	Platte	82.4
Tabor	10.5	Ravinia	54.0		
Tyndall	21.4	Lake Andes	60.0		
Avon	32.5	Geddes	70.5		
Dante	39.5	Bovee	76.5		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.09 MGT	0.09 MGT	0
TRAFFIC DIRECTION –	80% Orig./20% Term.	67% Orig. 33% Term.	

COMMODITIES – Forwarded grain; received fertilizer, lumber products, stone, clay, and glass and farm machinery. (1979)

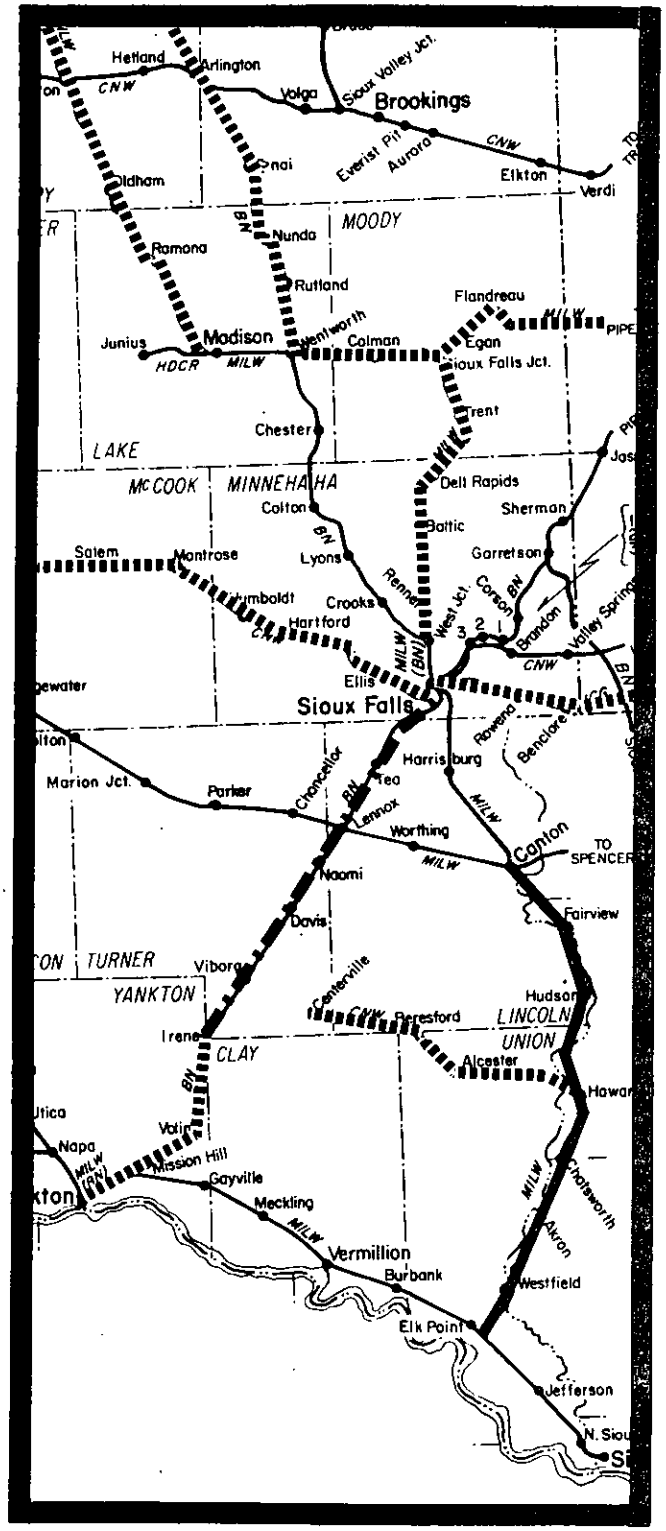
Other Information

This line was embargoed by the Milwaukee Road in March 1980. The State of South Dakota has purchased this line.

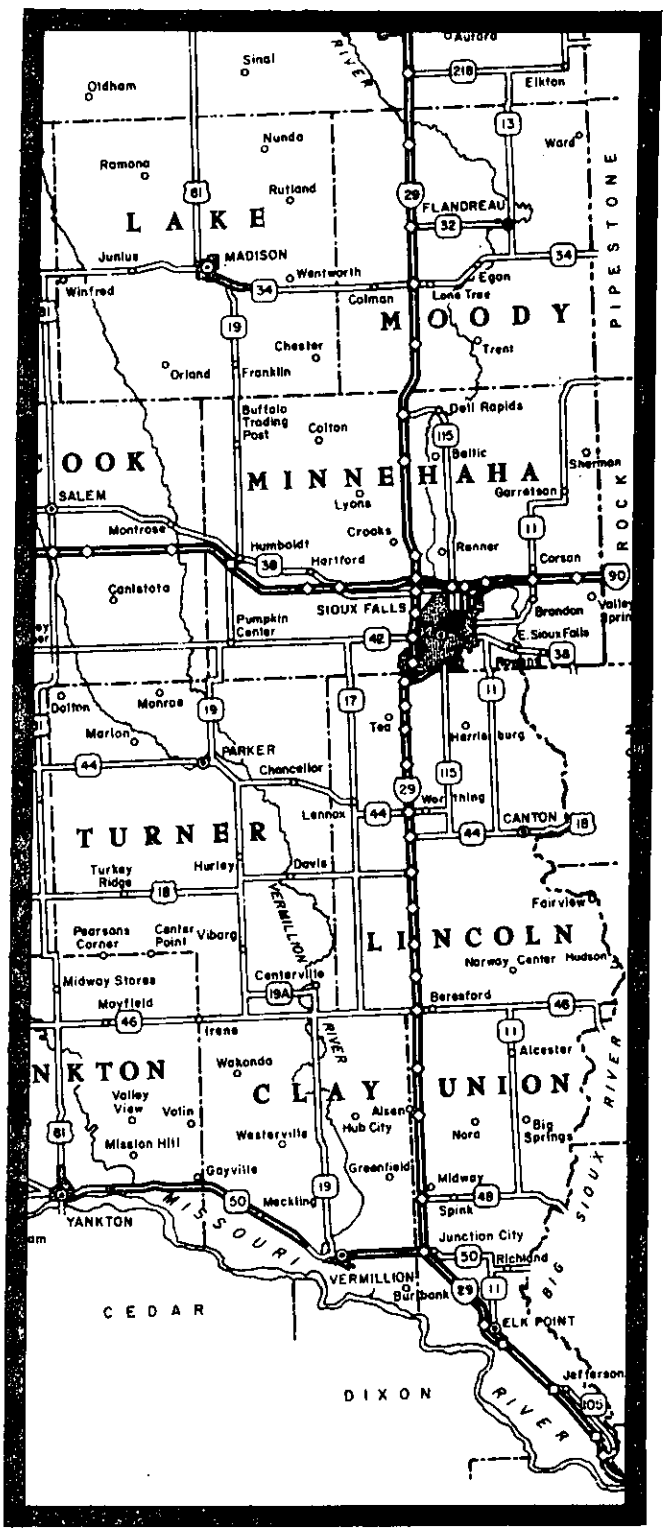
The State of South Dakota has identified this line segment as a local option line, a line with shipper support and one which may be viable at some time if service is restored. Studies show that limited impacts would result from abandonment of the line.

SOUTH DAKOTA SEGMENT SD 13
CANTON TO EAST WYE SWITCH

RAILROAD SEGMENT MAP

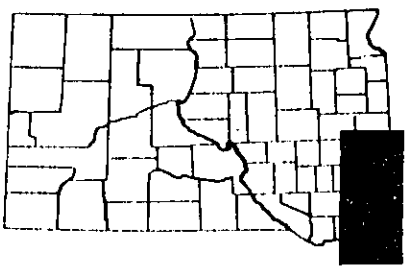


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 13 CANTON TO EAST WYE SWITCH

Line Description

OWNERSHIP – SOUTH DAKOTA

DIVISION / SUBDIVISION –

LINE STATUS – Abandoned

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 49.1 total, 13.6 in S.D.

MAXIMUM SPEED LIMIT – **MAXIMUM WEIGHT LIMIT** –

SERVICE FREQUENCY – None

YARDS – None

CONNECTING LINES – South Dakota owned lines at Canton and East Wye Switch.

HIGHWAYS – Canton is served by US 18, Iowa towns are served by Iowa 10 & 12 and the remainder stations by local hard surfaced roads.

RAIL WEIGHT – 85 lbs. & 90 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Canton	0.0	Chatsworth, Ia	30.8		
Fairview	8.4	Akron, Ia	37.5		
Hudson	15.1	Westfield, Ia	43.0		
Hawarden, Ia	24.7	East Wye Switch	49.1		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	1.16 MGT	1.52 MGT	0
TRAFFIC DIRECTION –	70% Orig.	57% Orig.	

COMMODITIES – Grain, stone, sand and gravel.

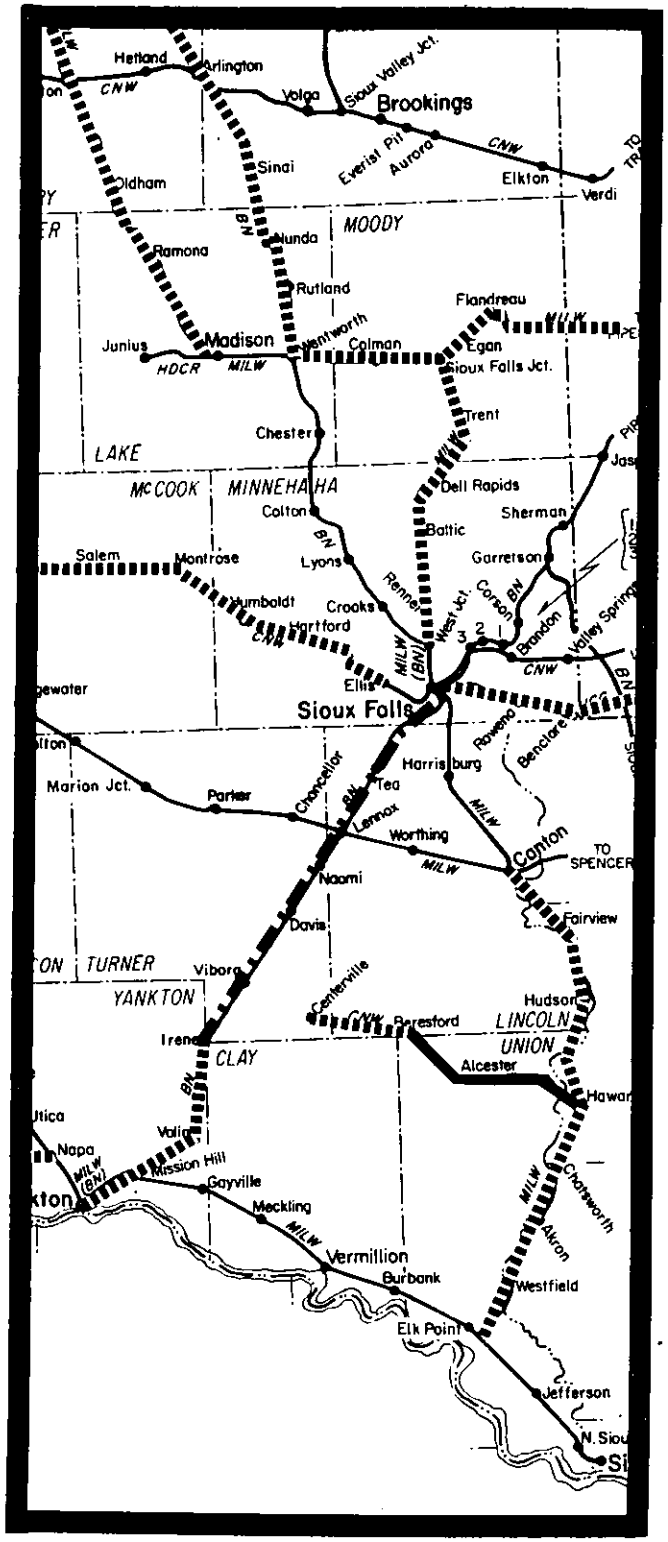
Other Information

This line was embargoed by the Milwaukee Road in March 1980 and abandoned in June 1980. The State of South Dakota purchased this line in 1981.

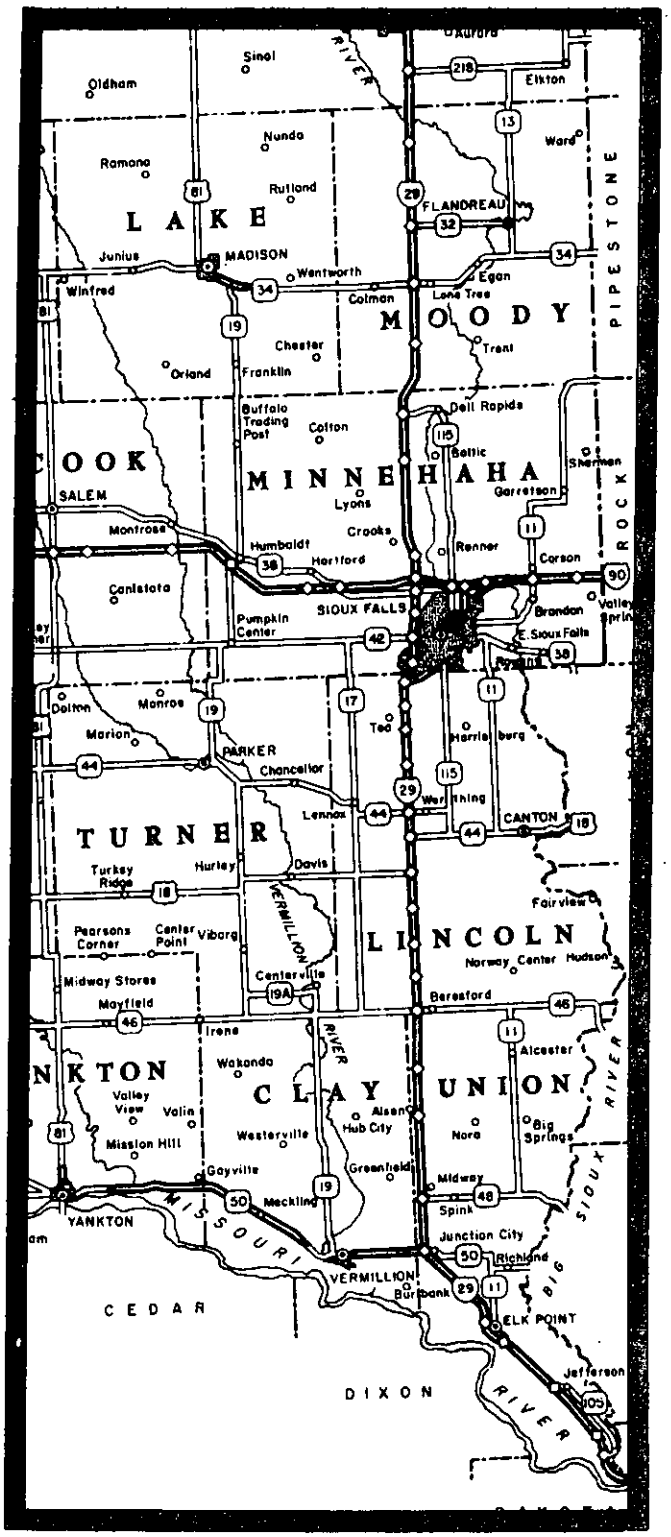
The State has identified this line segment as a local option line, a line with shipper support and one which may be put back into service at some future date.

SOUTH DAKOTA SEGMENT SD 14
HAWARDEN TO BERESFORD

RAILROAD SEGMENT MAP

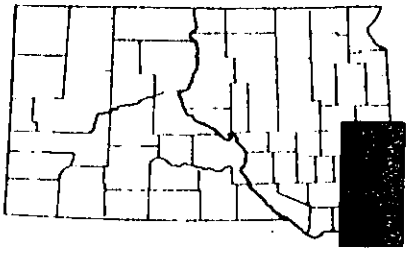


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SD 14 HAWARDEN, IA TO BERESFORD, SD

Line Description

OWNERSHIP – SOUTH DAKOTA

DIVISION / SUBDIVISION –

LINE STATUS – Abandoned

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 17.4 miles, 16.7 in S.D.

MAXIMUM SPEED LIMIT – NA **MAXIMUM WEIGHT LIMIT** – NA

SERVICE FREQUENCY – None

YARDS –

CONNECTING LINES – South Dakota owned line at Hawarden

HIGHWAYS – Hawarden is served by Iowa 10 & 12, Alcester by SD 11 and Beresford by SD 46 and I 29.

RAIL WEIGHT – 110-112 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Hawarden, Ia	0.0				
SD Border	0.7				
Alcester	8.7				
Beresford	17.4				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.08 MGT	0	0
TRAFFIC DIRECTION –	91% Orig.		

COMMODITIES – Grain and Fertilizer

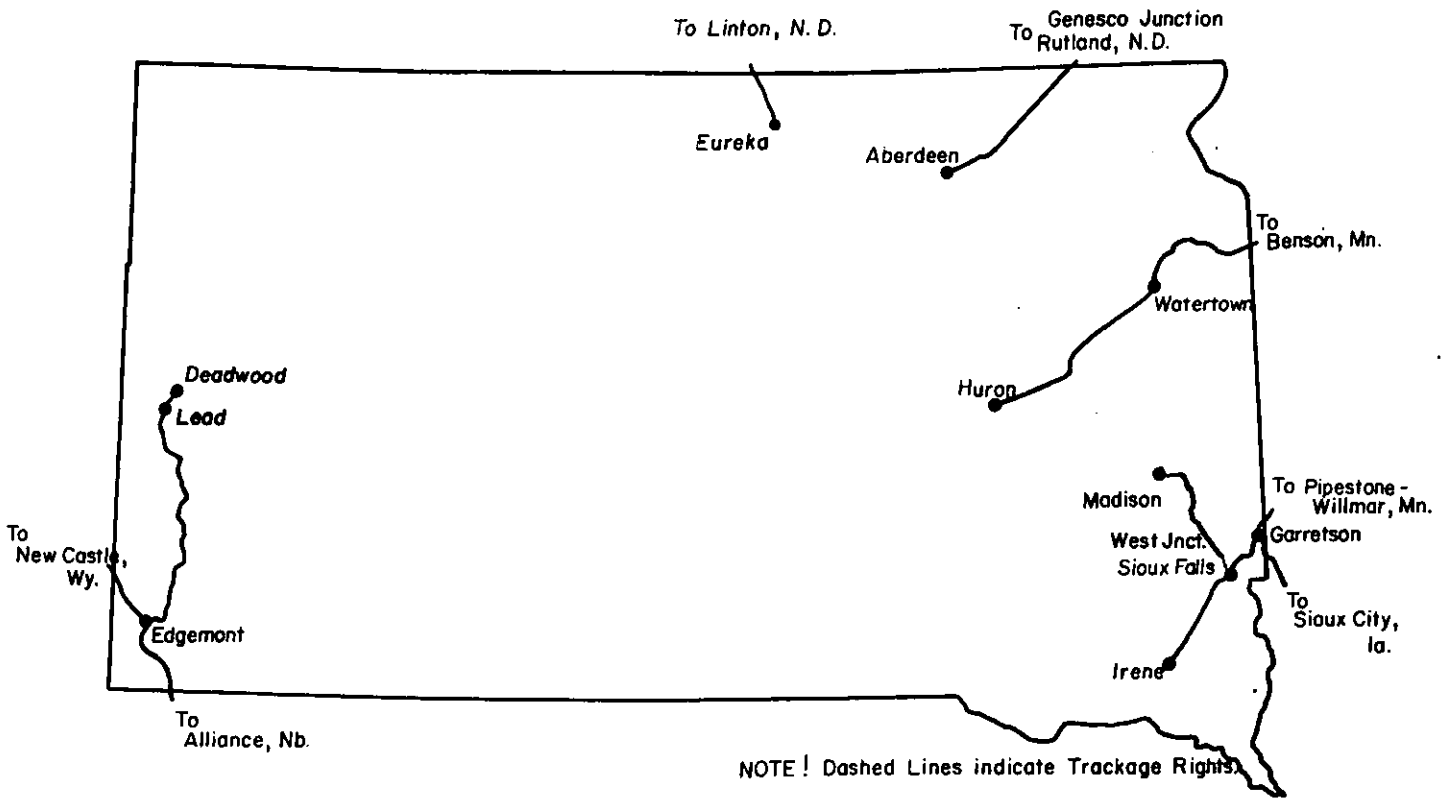
Other Information

This line was abandoned by the Chicago & North Western in 1978. The State purchased the line in 1981.

The State has identified this line segment as a local option line, a line with shipper support and one which may be put back into service at some future date.

FIGURE VI-4

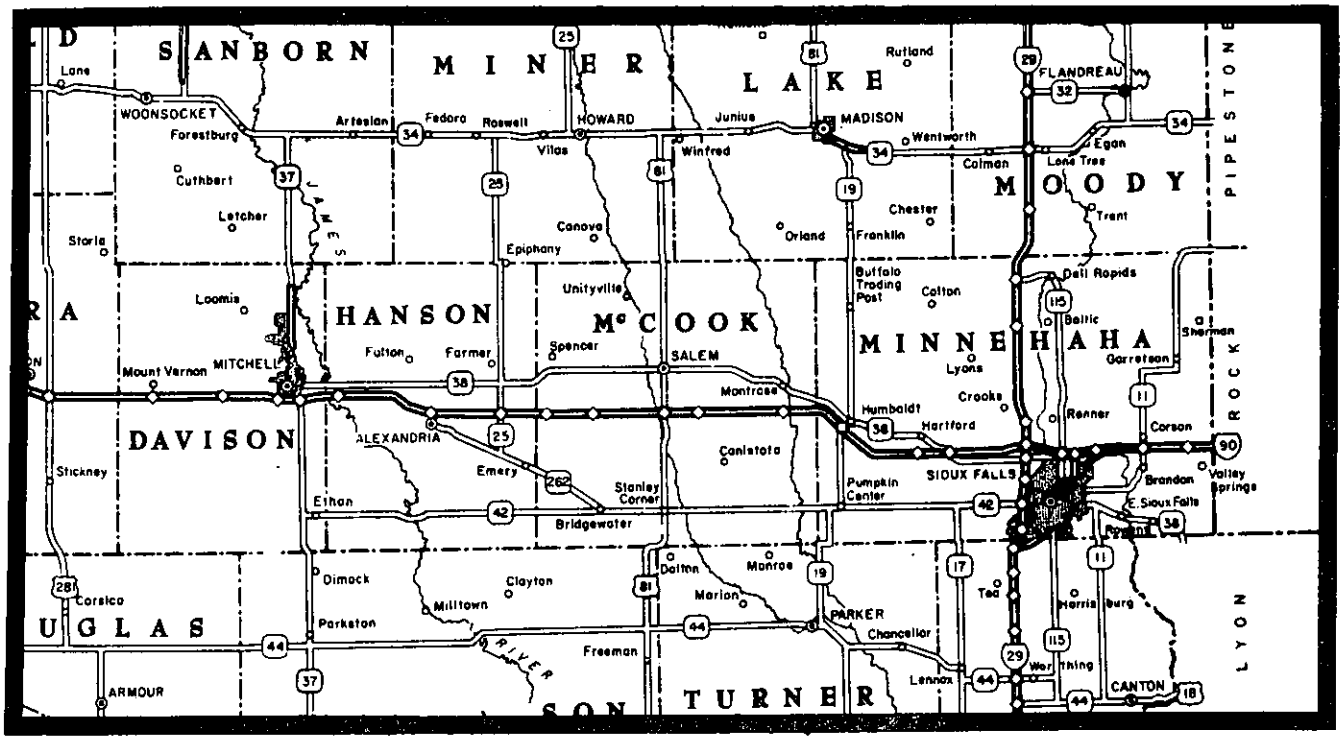
Burlington Northern South Dakota Network



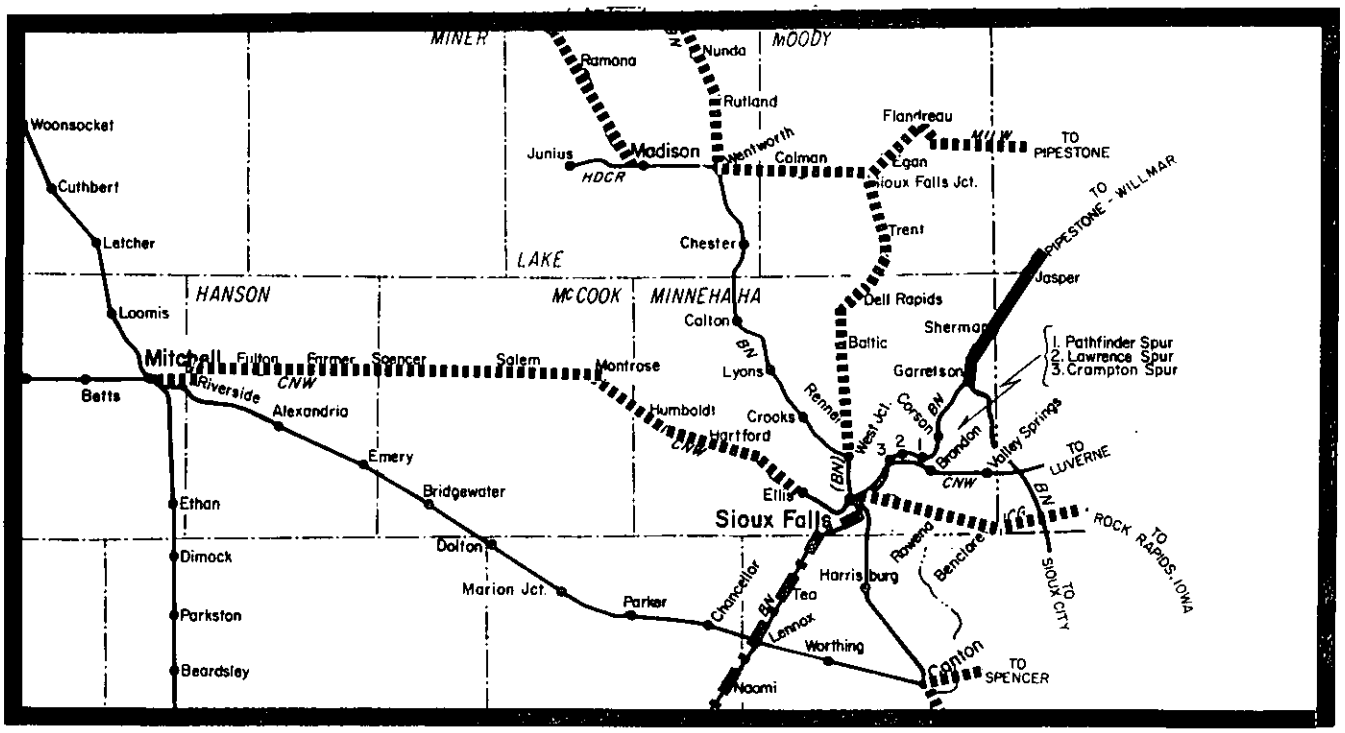
The Burlington Northern, as of December 31, 1980, operated 27,361 miles of railroad in 24 states plus two Canadian Provinces. These miles consist of 15,236 owned and operated main line, 10,010 miles of owned and operated branch lines, 342 miles of proprietory companies, 131 miles operated under lease, 11 miles operated under contract, and 1,631 miles operated under trackage rights. During 1980, the St. Louis-San Francisco Railway, a 4,507 mile system, was merged into the BN system increasing both mileage and territory served from last year. The Company currently operates 457 miles of its own track in South Dakota plus 361 miles of State-owned track. The operations on the State system took place during the year 1981 so are not part of the 27,361 mile system previously described. The BN has abandoned 91 miles of track in South Dakota since 1976 and has an additional 144 miles pending abandonment or under study for abandonment.

SOUTH DAKOTA SEGMENT BN 01
WILLMAR, MN TO GARRETSON, SD

HIGHWAY LOCATION MAP

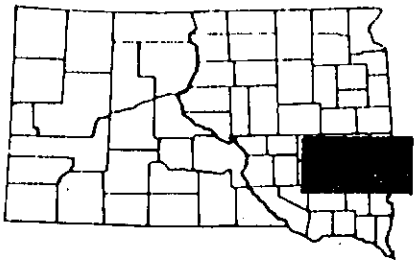


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 01 WILLMAR, MN TO GARRETSON, SD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division - 3rd Subdivision

LINE STATUS –Category 5: Continued Operation

TYPE OF LINE – Main

LINE LENGTH IN MILES –127.9 total; 4.6 in SD

MAXIMUM SPEED LIMIT –49 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – 7 to 10 trains daily

YARDS – N/A

CONNECTING LINES – Burlington Northern at Garretson.

HIGHWAYS – SD 11 serves Garretson and a local hard surfaced road serves Sherman.

RAIL WEIGHT – 110 lbs. and 112 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
SD Border	0.0				
Sherman	1.3				
Garretson	3.3				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	5.85. MGT	10.64 MGT	12.08 MGT
TRAFFIC DIRECTION –	N/A	55% East	57% East

COMMODITIES – Primarily overhead traffic, including grain and fertilizer.

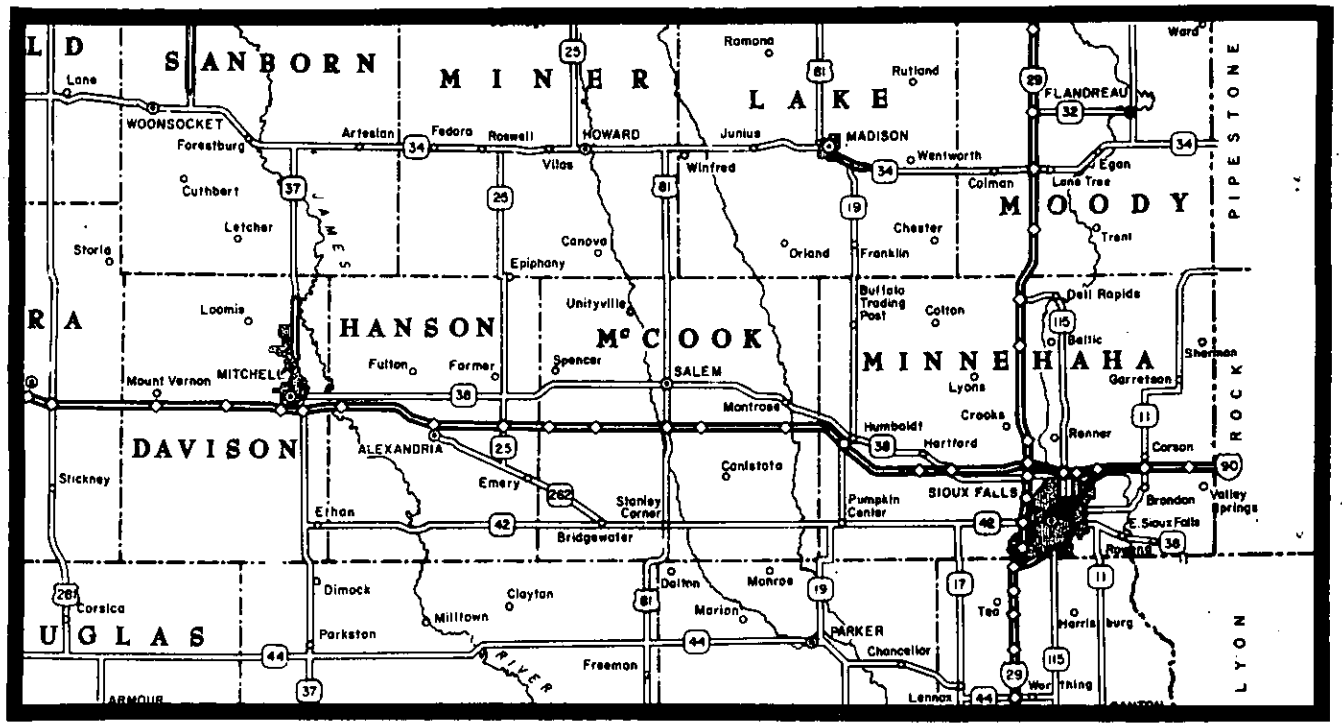
Other Information

This line, along with BN 02, serves as the connecting line for Burlington Northern originating and terminating traffic in southeastern South Dakota and the corridor for West Coast connections to the Sioux Falls area.

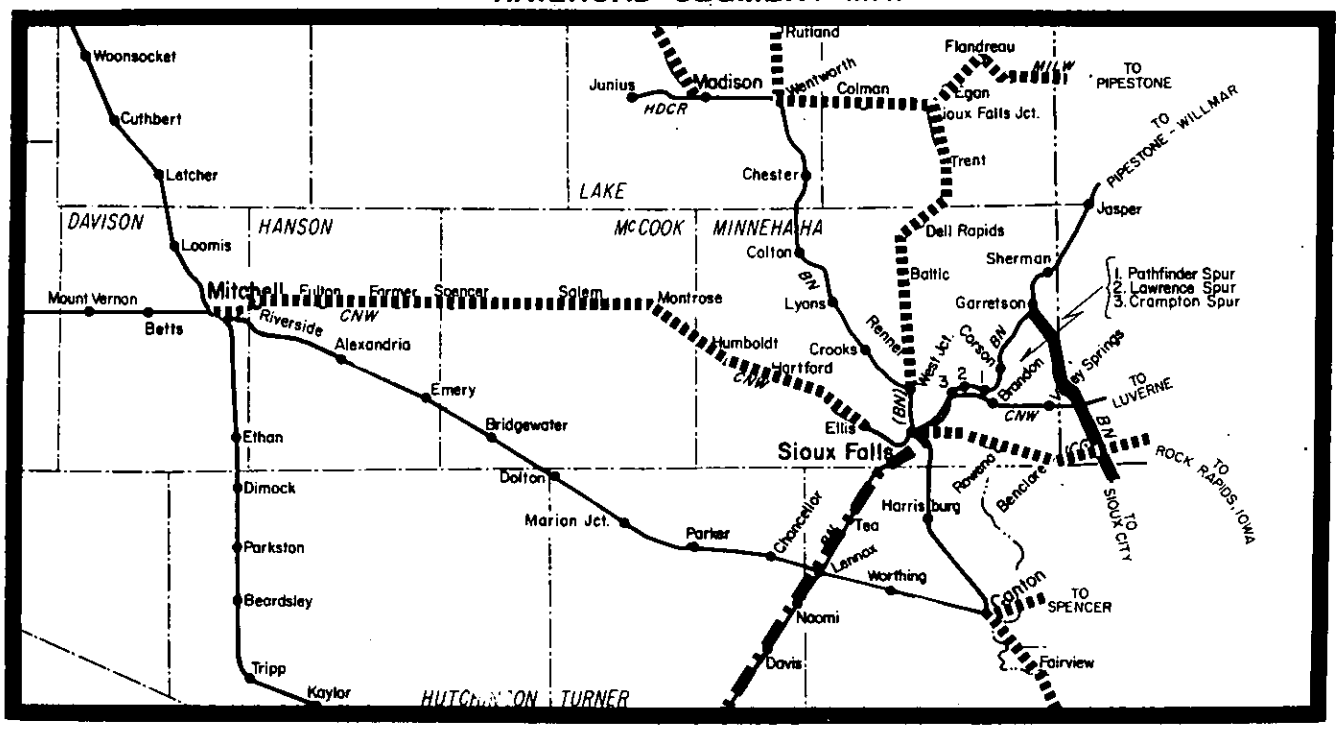
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN02
GARRETSON SD TO SIOUX CITY, IA

HIGHWAY LOCATION MAP

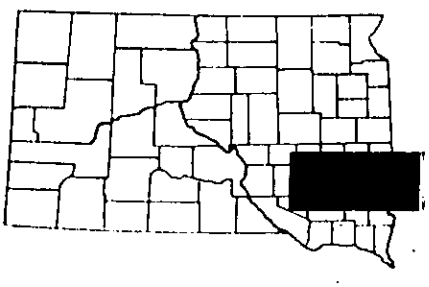


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 02 GARRETSON, SD TO SIOUX CITY, IA

Line Description

OWNERSHIP – BURLINGTON NORTHERN
DIVISION / SUBDIVISION – Minnesota Division - 3rd Subdivision
LINE STATUS – Category 5: Continued Operation
TYPE OF LINE – Main
LINE LENGTH IN MILES – 94.6 total; 8.1 in SD
MAXIMUM SPEED LIMIT – 49 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.
SERVICE FREQUENCY – 7 to 10 trains daily
YARDS – N/A
CONNECTING LINES – Burlington Northern at Garretson.

HIGHWAYS – SD Highway 11 serves Garretson.

RAIL WEIGHT – 110 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Garretson	0.0				
SD Border	8.1				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	5.05 MGT	9.13 MGT	10.12 MGT
TRAFFIC DIRECTION –	N/A	54% North	45% South

COMMODITIES – Primarily overhead traffic, including grain and fertilizer.

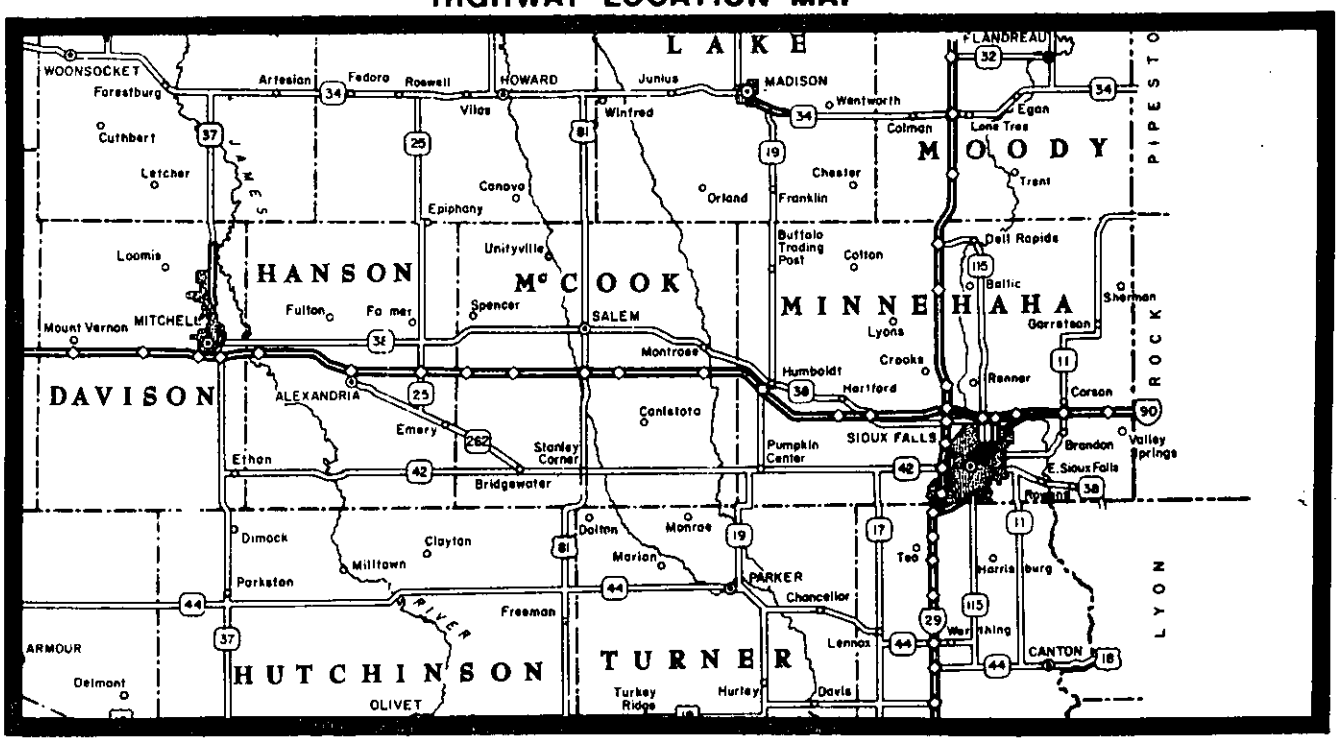
Other Information

This line, along with BN 01, serves as the connecting line for Burlington Northern originating and terminating traffic in southeastern South Dakota and the corridor for West Coast connections to the Sioux Falls area.

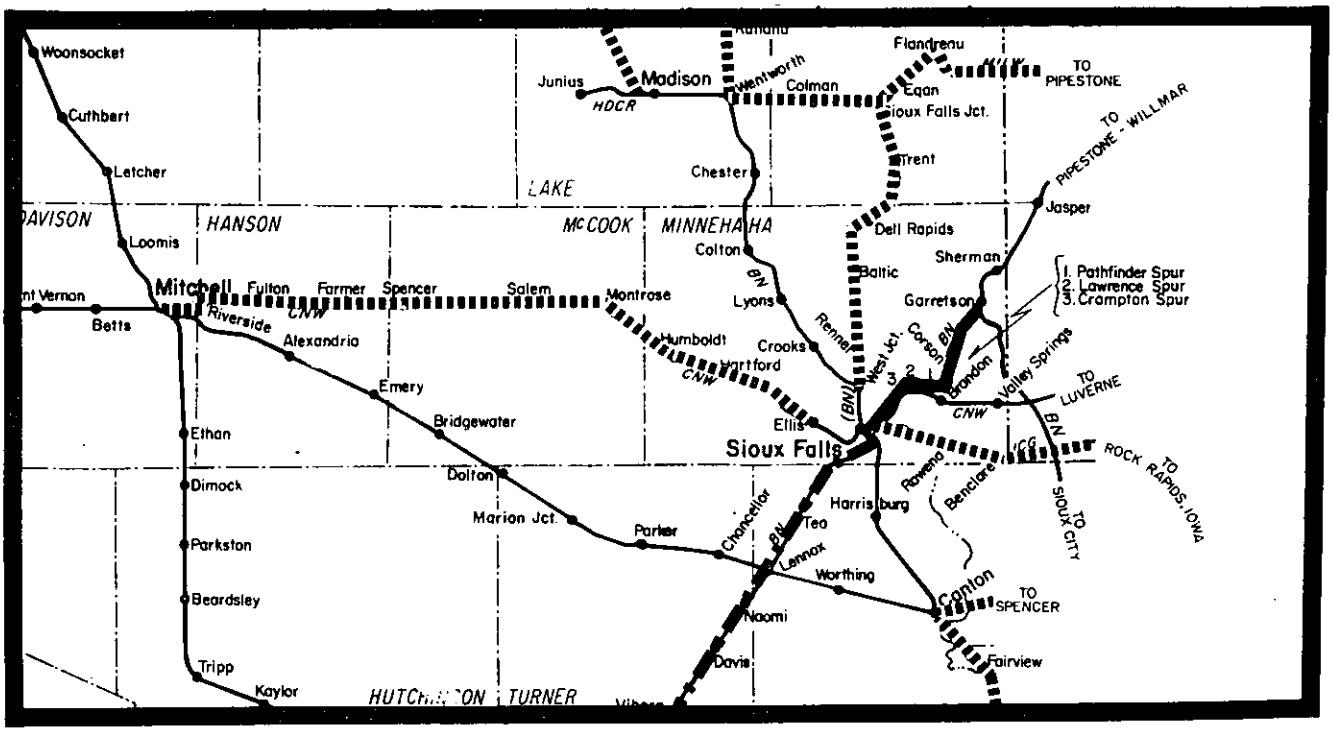
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN 03
GARRETSON TO SIOUX FALLS

HIGHWAY LOCATION MAP

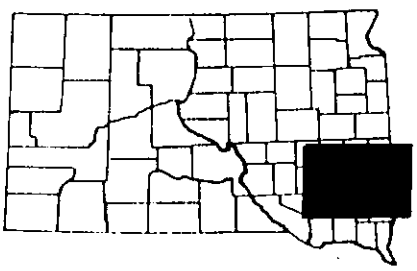


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 03 GARRETSON TO SIOUX FALLS

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division - 15th Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 18.5 miles

MAXIMUM SPEED LIMIT – 30 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Twice daily

YARDS – Sioux Falls

CONNECTING LINES – Burlington Northern at Garretson and Sioux Falls; Chicago & North Western, and State owned line at Sioux Falls.

HIGHWAYS – SD 11 serves Garretson and Corson; I-90, I-29, SD 38, and SD 42 serve Sioux Falls.

RAIL WEIGHT – 90 lbs. except for 2 miles of 112 lbs. near Garretson.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Garretson	0.0				
Corson	8.2				
Pathfinder Spur	12.3				
Lawrence Spur	13.7				
Crampton Spur	15.2				
Sioux Falls	18.5				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	1.01 MGT	1.19 MGT	1.44 MGT
TRAFFIC DIRECTION –	N/A	79% Term. (1977)	57% West

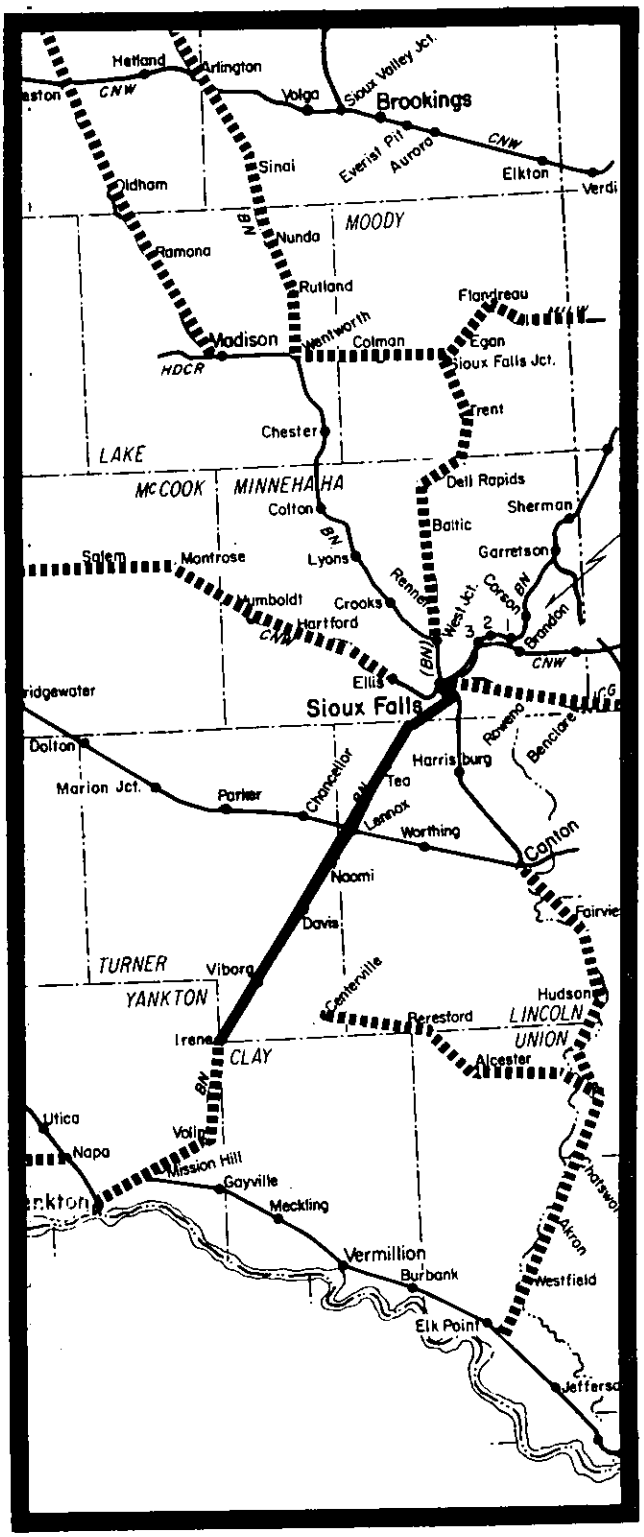
COMMODITIES – Forwarded food products; received food products, lumber prod., petroleum products, & stone, clay, & glass. This segment also serves as an overhead route for ag. prod. originating in SD.

Other Information

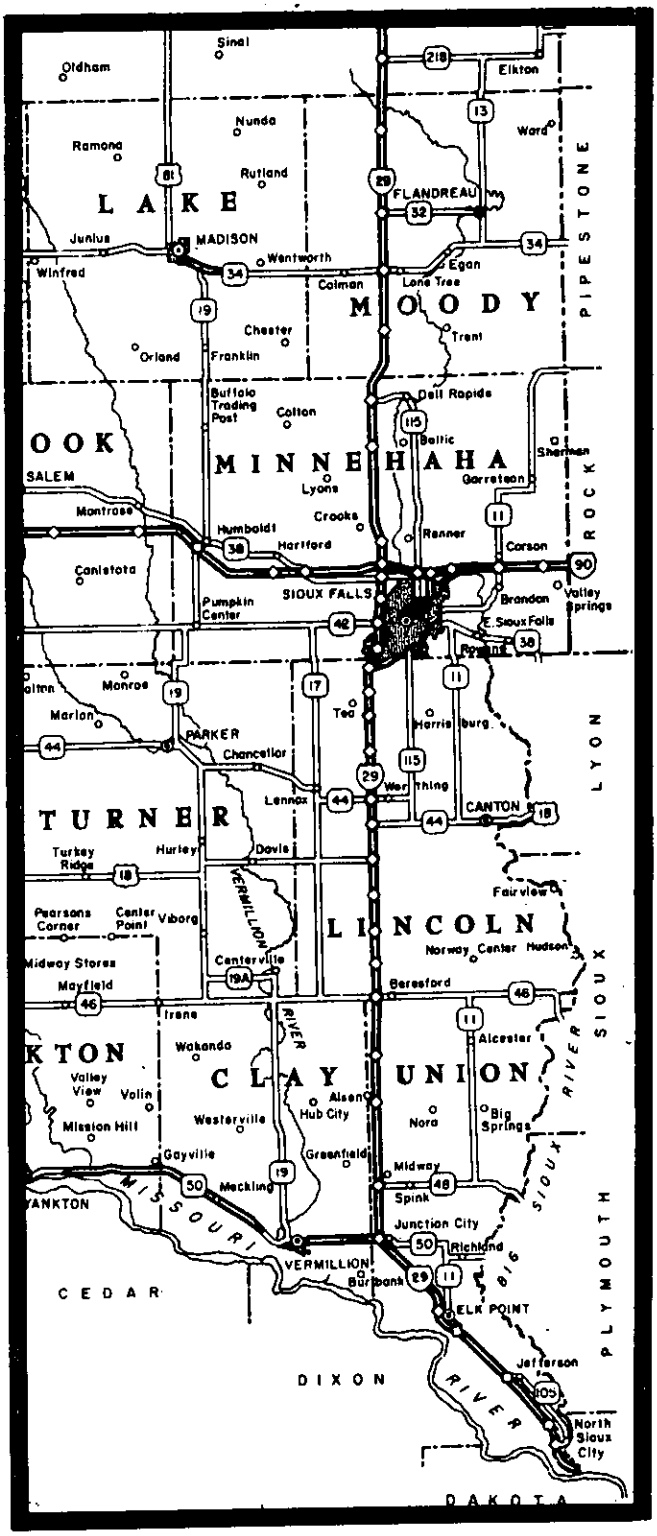
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN04
SIOUX FALLS TO IRENE

RAILROAD SEGMENT MAP

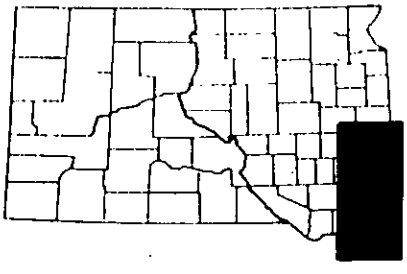


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 04 SIOUX FALLS TO IRENE

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division - 15th Subdivision

LINE STATUS – Category 3: Pending Abandonment approval

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 41.0 miles

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – Weekly

YARDS – Sioux Falls

CONNECTING LINES – State owned line at Sioux Falls, and Lennox , Burlington Northern and Chicago & North Western at Sioux Falls.

HIGHWAYS – Sioux Falls is served by I-90 and I-29, Lennox by SD 44 and SD 17, Davis by US 18, Viborg by SD 19, Irene by SD 46, Yankton by US 81 and SD 50 and the other sations are served by hard surfaced local roads.

RAIL WEIGHT – 56 lbs. except for 1 mile of 75 lbs. and 3 ½ miles of 77 ½ lbs. near Sioux Falls.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Sioux Falls	0.0	Viborg	33.6		
Tea	10.9	Irene	41.0		
Lennox	17.6				
Naomi	20.1				
Davis	26.2				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.10 MGT	0.07 MGT	0.14 MGT
TRAFFIC DIRECTION –	N/A	79% Orig. (1977)	58% North

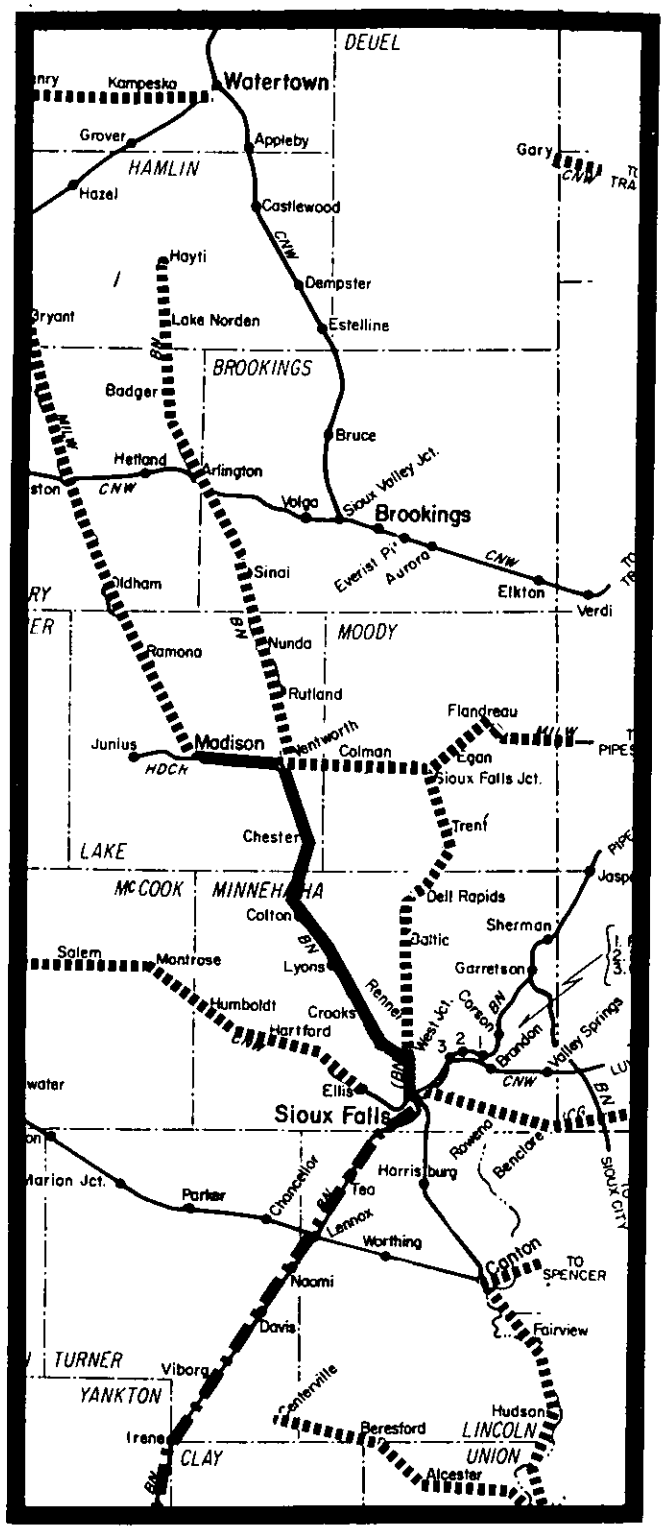
COMMODITIES – Forwarded grain and waste and scrap; received fertilizer and lumber products.

Other Information

The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN05
SIOUX FALLS TO MADISON

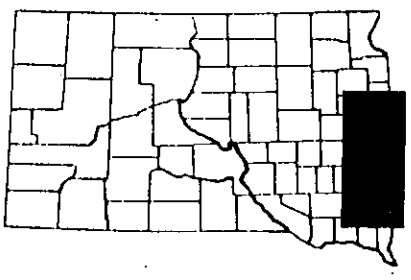
RAILROAD SEGMENT MAP



HIGHWAY LOCATION MAP

KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 05 SIOUX FALLS TO MADISON

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division - 16th Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 44.1; 1.7 miles between East Jct. & West Jct. is State owned

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – Weekly

YARDS – Sioux Falls

CONNECTING LINES – Burlington Northern, Chicago & North Western at Sioux Falls, and State owned lines at Sioux Falls.

HIGHWAYS – Sioux Falls is served by I-29 and I-90, Madison by SD 34 and the remaining stations by local hard surfaced roads.

RAIL WEIGHT – mostly 60 & 65 lbs. (Currently being relaid with 90 lb. rail)

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Sioux Falls	0.0	Chester	28.8		
East Jct.	1.4	Wentworth	36.4		
West Jct.	3.1	Madison	44.1		
Crooks	9.8				
Lyons	15.4				
Colton	24.8				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.08 MGT	0.06 MGT	0.09 MGT
TRAFFIC DIRECTION –	N/A	78% Orig. (1977)	65% South

COMMODITIES – Forwarded grain and food products; received fertilizer.

Other Information

The Burlington Northern has purchased the Wentworth to Madison line from the Milwaukee Road.

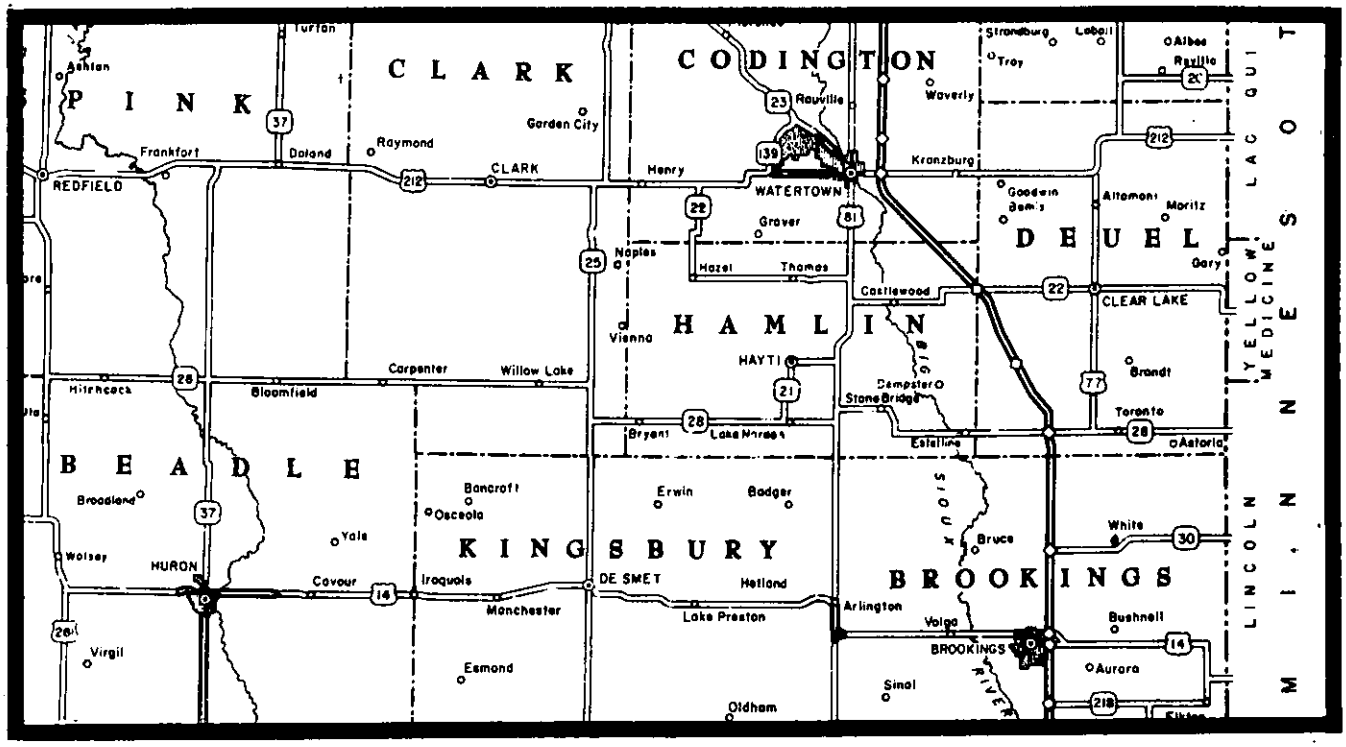
The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

This was part of the Sioux Falls to Hayti line, but the Wentworth to Hayti part was abandoned in 1980.

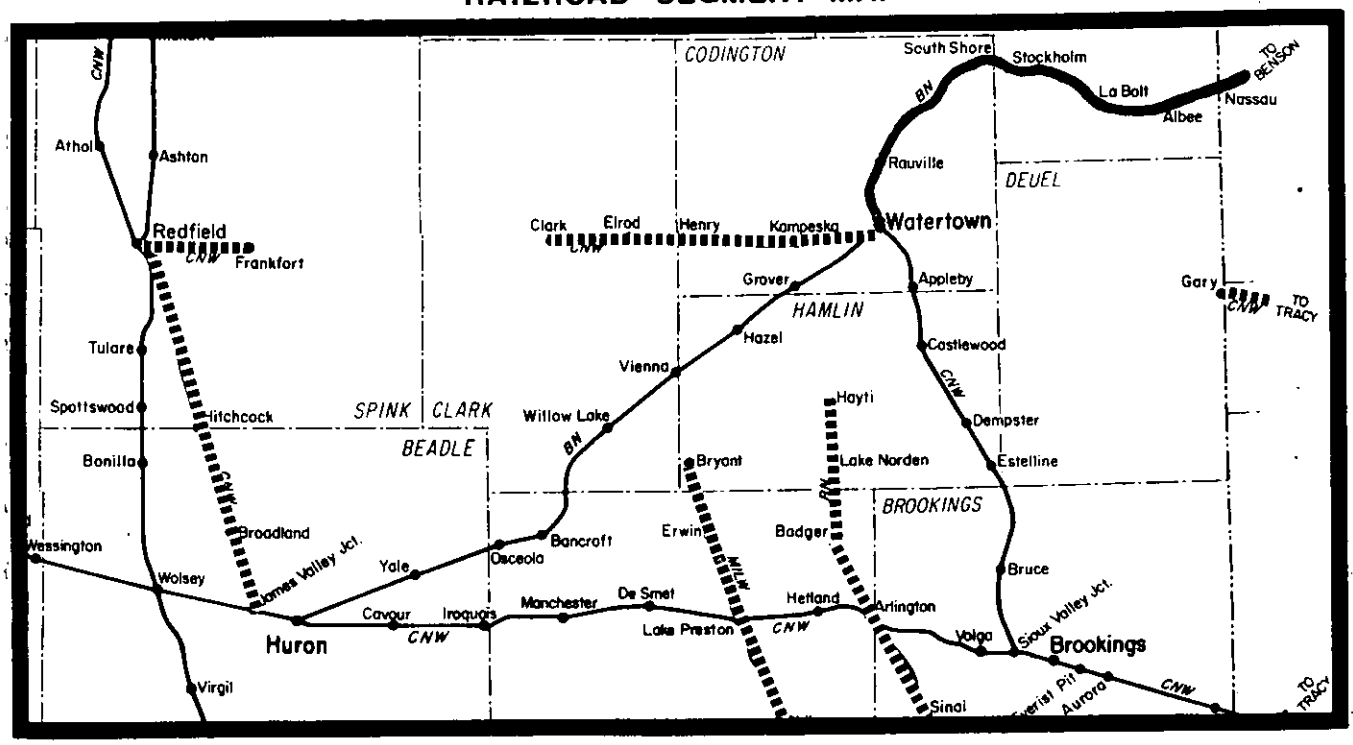
This line currently being rehabilitated to 263,000 lb. line.

SOUTH DAKOTA SEGMENT BN06
BENSON, MN TO WATERTOWN, SD

HIGHWAY LOCATION MAP

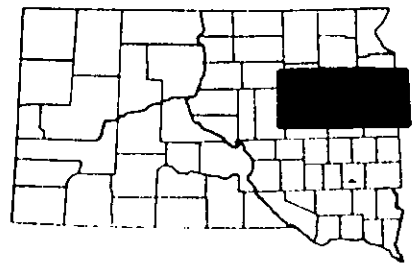


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 06 BENSON, MN TO WATERTOWN, SD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division - 12th Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 92.0 total; 45.1 in SD

MAXIMUM SPEED LIMIT – 35 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Three trips per week

YARDS – Watertown

CONNECTING LINES – Chicago & North Western at Watertown, Burlington Northern continues on to Huron.

HIGHWAYS – Stockholm and South Shore are served by SD 20, Watertown is served by I-29, US 212 and US 81 and the other stations are served by local hard surfaced roads.

RAIL WEIGHT – 75 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Benson, MN	0.0	South Shore	72.8		
SD Border	46.9	Rauville	86.0		
Albee	51.7	Watertown	92.0		
LaBolt	58.0				
Stockholm	65.5				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.57 MGT	0.74 MGT	1.27 MGT
TRAFFIC DIRECTION –	N/A	86% Orig. (1977)	68% East

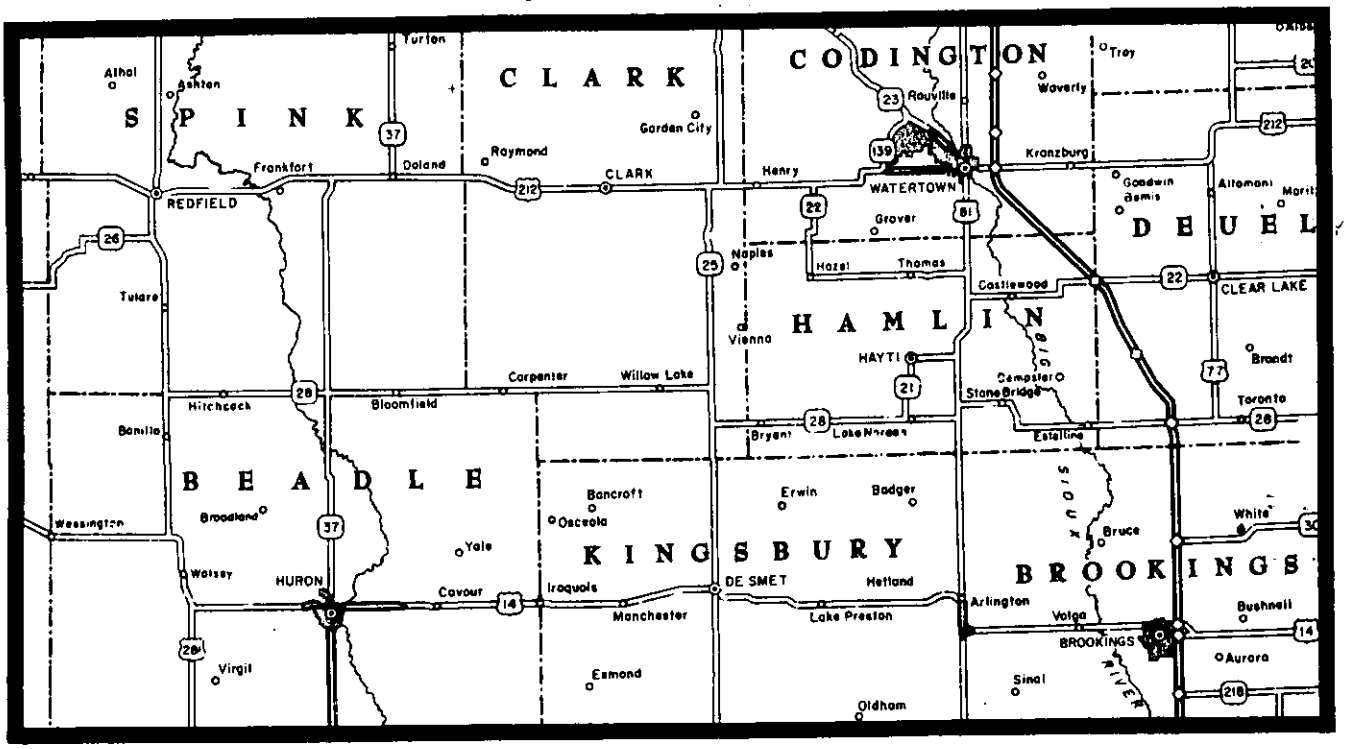
COMMODITIES – Forwarded grain, food products, and non-metallic minerals; received fertilizer, lumber products, and farm machinery.

Other Information

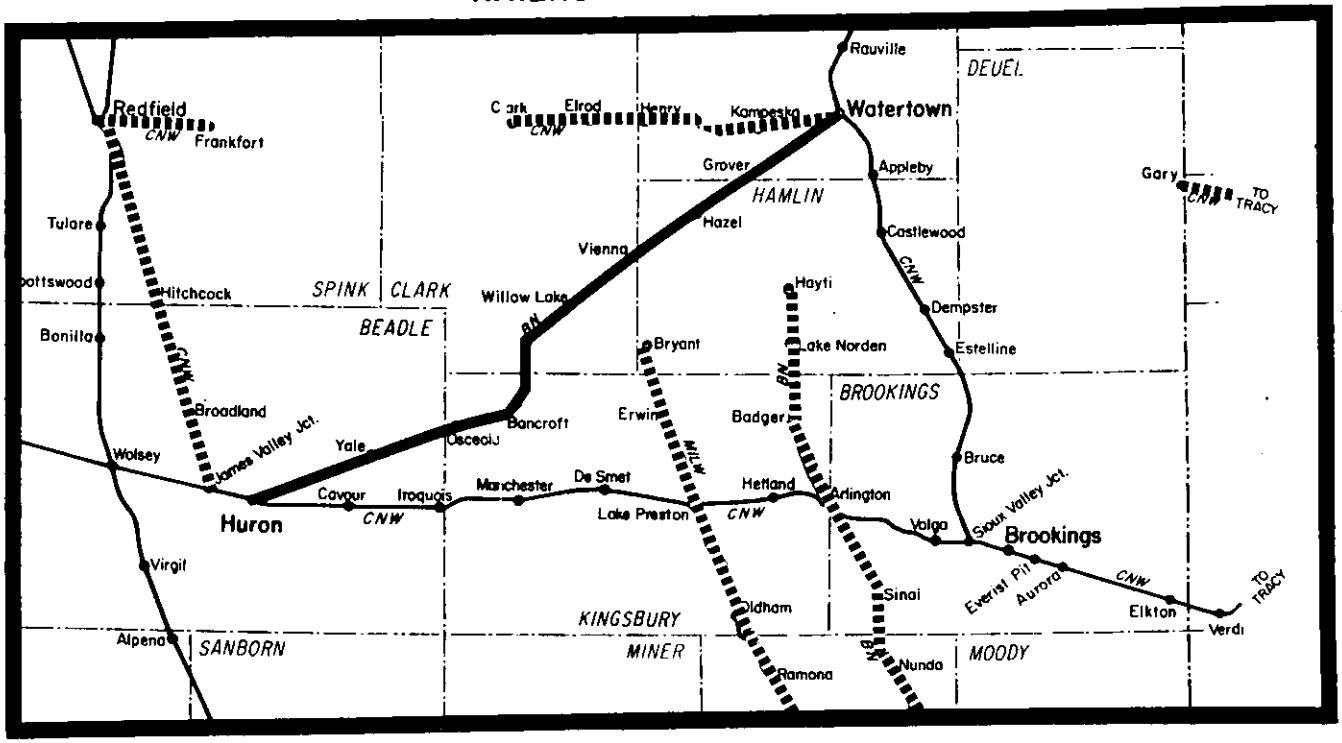
The South Dakota Rail Line Inventory Study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN07
WATERTOWN TO HURON

HIGHWAY LOCATION MAP

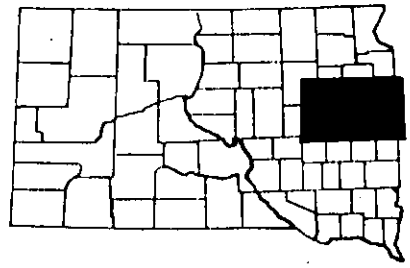


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 07 WATERTOWN TO HURON

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division-12th Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 69.8 miles

MAXIMUM SPEED LIMIT – 35 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Two trips per week

YARDS – N/A

CONNECTING LINES – The Chicago & North Western connects at Huron and Watertown and the Burlington Northern at Watertown.

HIGHWAYS – Watertown is served by I-29, US 212 and US 81, Hazel is served by SD 22, Willow Lake by SD 28, Huron by US 14 and SD 37, and the other stations are served by hard surfaced local roads.

RAIL WEIGHT – 75 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Watertown	0.0	Osceola	48.5		
Grover	9.9	Yale	56.6		
Hazel	16.2	Huron	69.8		
Vienna	23.1				
Willow Lake	32.0				
Bancroft	44.1				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.23 MGT	0.19 MGT	0.35 MGT
TRAFFIC DIRECTION –	N/A	47% Orig. (1977)	66% East

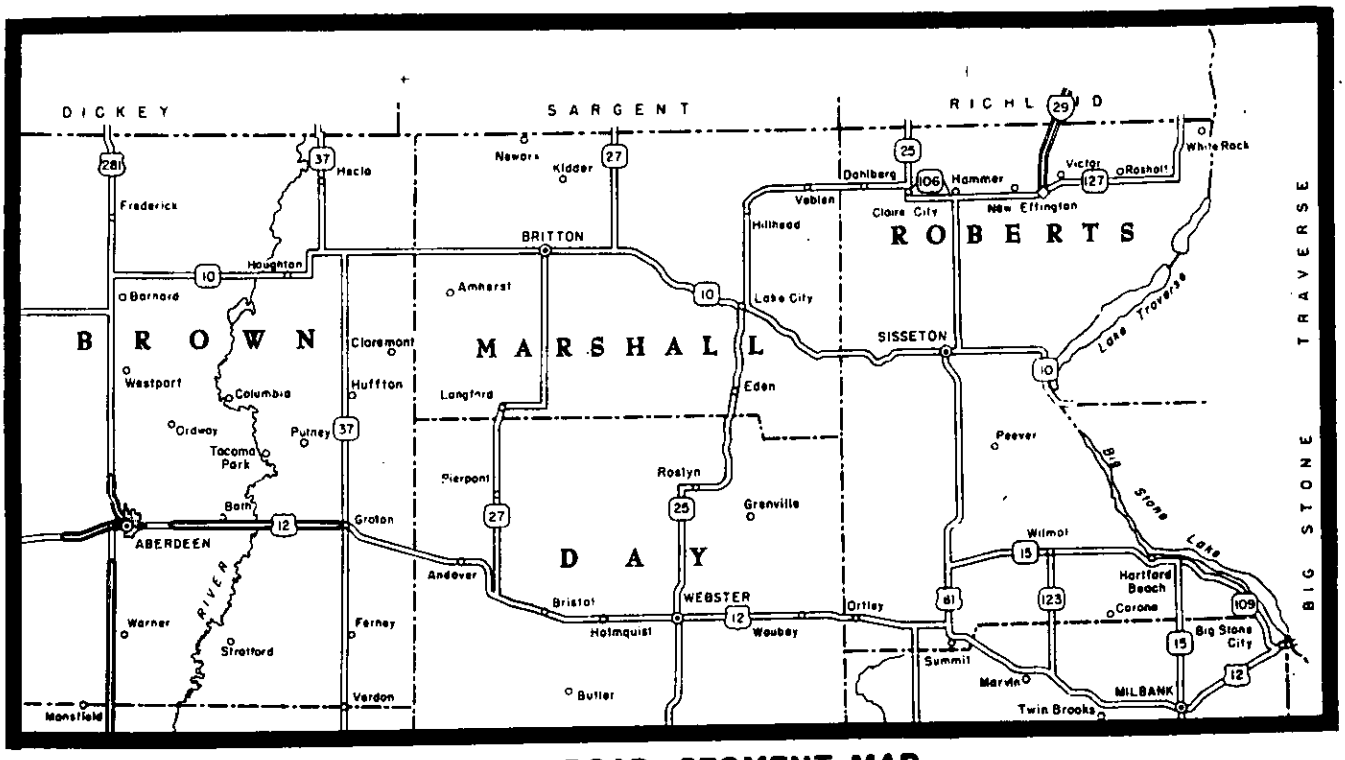
COMMODITIES – Forwarded grain and food products; received food products and non-metallic materials, lumber products, petroleum & coal products, and fertilizer.

Other Information

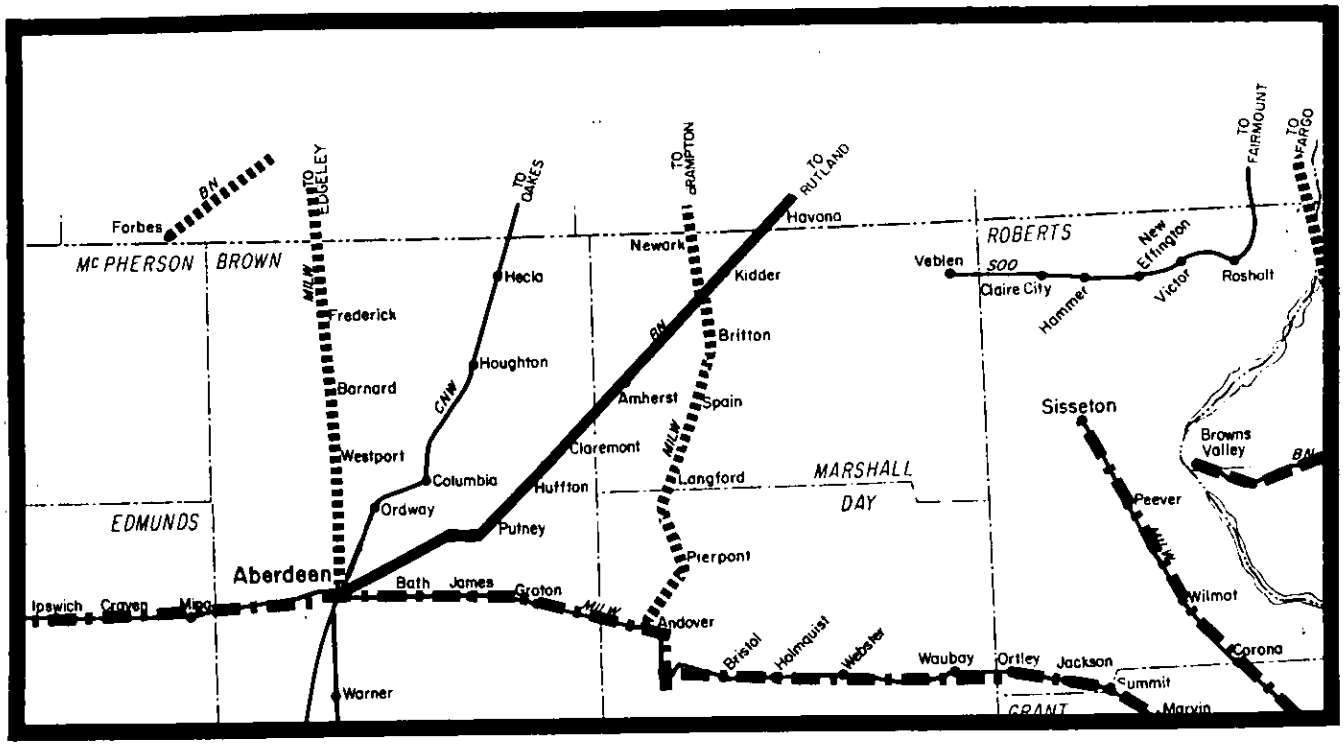
The South Dakota Rail Line Inventory Study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN 08
GENESEO JCT., ND TO ABERDEEN, SD.

HIGHWAY LOCATION MAP

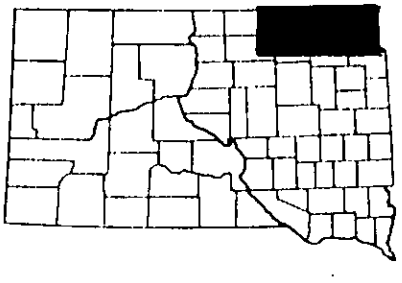


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 08 GENESEO JCT., ND TO ABERDEEN, SD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Minnesota Division - 14th Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 76.5 total; 53.6 in SD

MAXIMUM SPEED LIMIT – 35 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Twice weekly

YARDS – N/A

CONNECTING LINES – Milwaukee Road in Aberdeen intersects with State owned line near Britton, and Chicago & North Western and State owned track in Aberdeen.

HIGHWAYS – Aberdeen is served by US 12 and US 281 and the other stations are served by hard surfaced local roads.

RAIL WEIGHT – 77½ lbs., 90 lbs. and 110 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Geneseo Jct. ND	0.0	Kidder, SD	28.1	Aberdeen	76.5
Geneseo, ND	0.9	Amherst, SD	42.4		
Cayuga, ND	6.1	Claremont, SD	46.8		
Rutland, ND	12.2	Huffton, SD	54.1		
Havana, ND	21.6	Putney, SD	59.6		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.19 MGT	0.23 MGT	0.32 MGT
TRAFFIC DIRECTION –	N/A	74% Term. (1977)	68% South

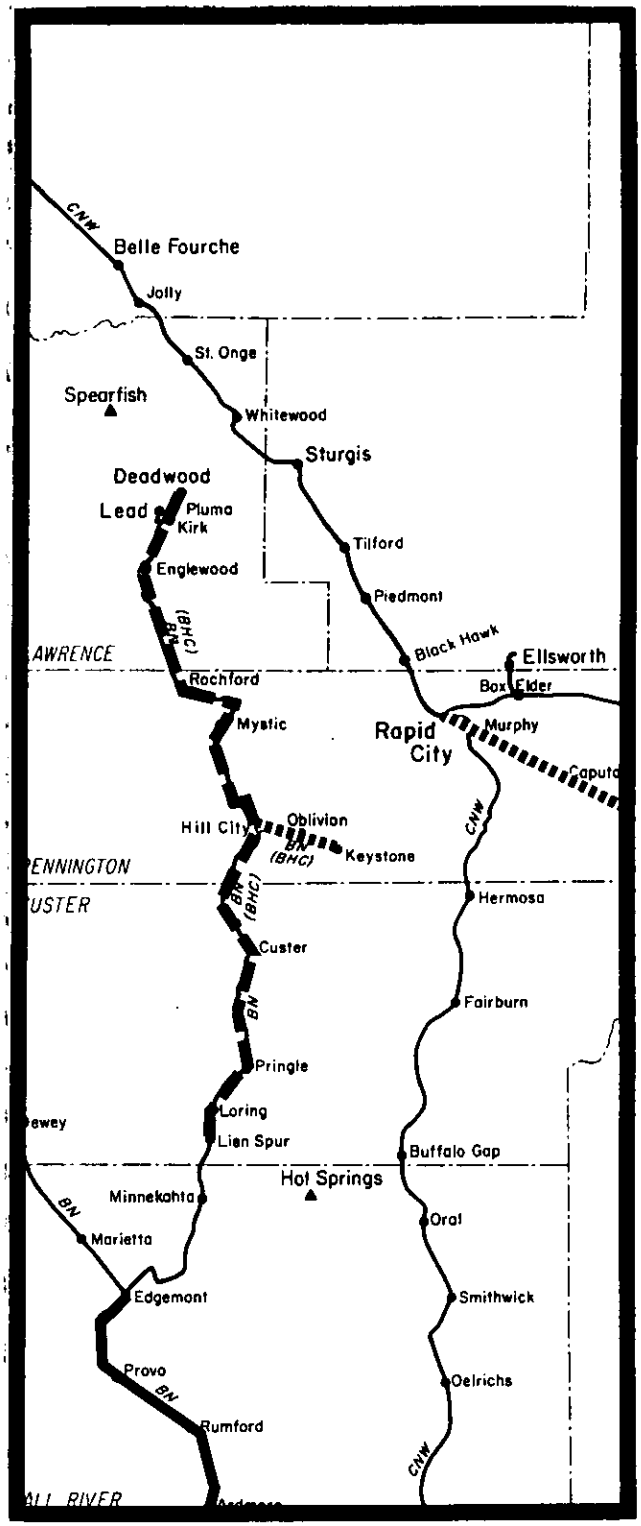
COMMODITIES – Forwarded grain and lumber products; received coal, lumber products, and petroleum products.

Other Information

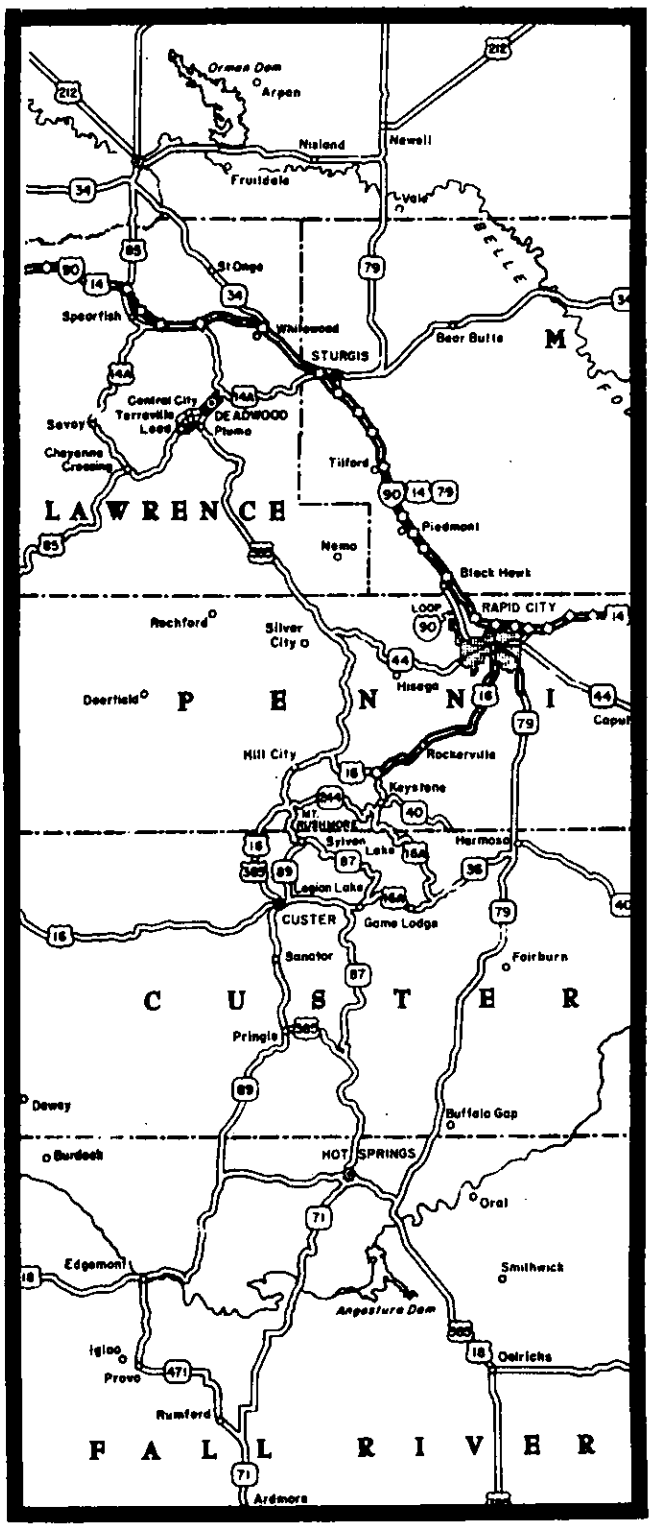
The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN09
ALLIANCE, NB TO EDGEMONT, SD

RAILROAD SEGMENT MAP

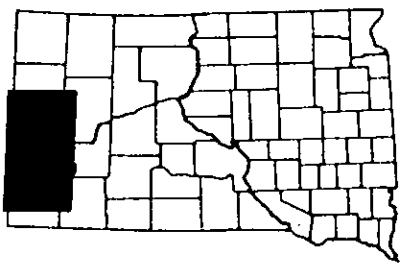


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 09 ALLIANCE, NE TO EDGEMONT, SD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Alliance Division - 2nd Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Main

LINE LENGTH IN MILES – 110.6 total; 27.4 in SD

MAXIMUM SPEED LIMIT - 49 mph **MAXIMUM WEIGHT LIMIT** – 315,000 lbs.

SERVICE FREQUENCY – Numerous Daily Trains

YARDS – N/A

CONNECTING LINES – Burlington Northern at Edgemont.

HIGHWAYS – SD 71 serves Ardmore, SD 471 serves Rumford and Provo and US 18 serves Edgemont.

RAIL WEIGHT – 112 lbs. with some 132 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
SD Border	0.0				
Ardmore	1.6				
Rumford	9.9				
Provo	18.2				
Edgemont	27.4				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	28.98 MGT	84.46 MGT	81.58 MGT
TRAFFIC DIRECTION –	N/A	77% South (1977)	76% South

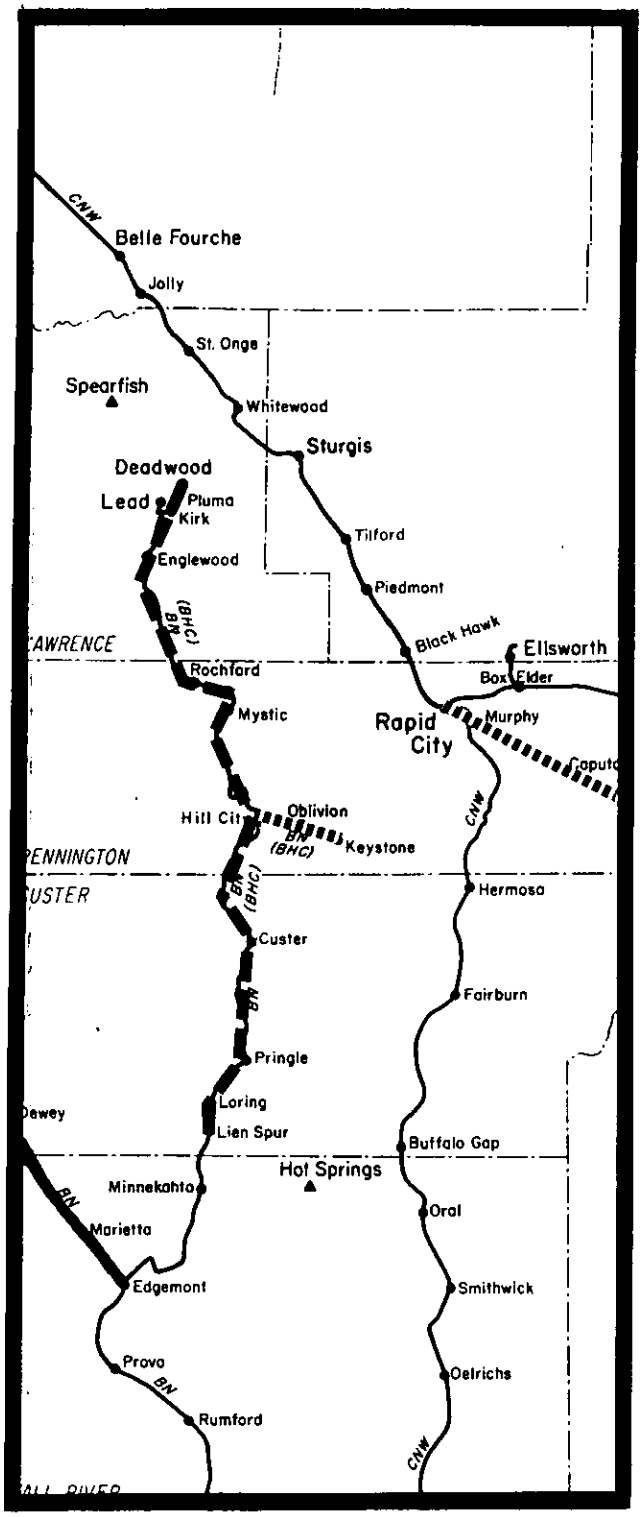
COMMODITIES – Primarily overhead coal moving in unit trains from the Gillette, Wyoming area to points east.

Other Information

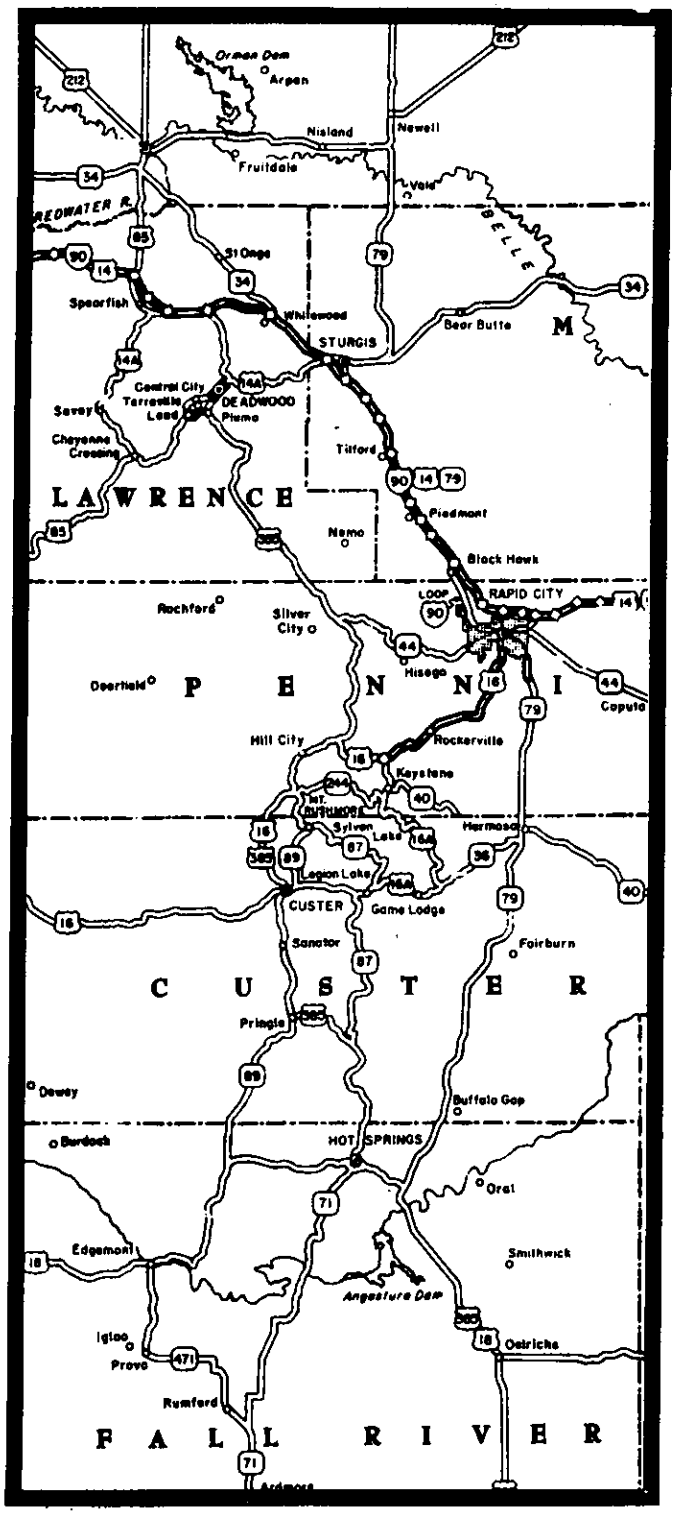
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN 10
EDGEMONT, SD TO GILLETTE, WY

RAILROAD SEGMENT MAP

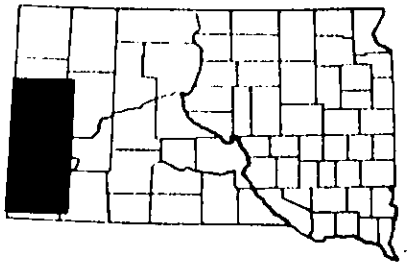


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 10 EDGEMONT, SD TO GILLETTE, WY

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Alliance Division - 3rd Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Main

LINE LENGTH IN MILES – 121.1 total; 21.4 in SD

MAXIMUM SPEED LIMIT – 49 mph **MAXIMUM WEIGHT LIMIT** – 315,000 lbs.

SERVICE FREQUENCY – Numerous Daily Trains

YARDS – N/A

CONNECTING LINES – Burlington Northern at Edgemont.

HIGHWAYS – Edgemont is served by US 18 and the other stations are served by local roads.

RAIL WEIGHT – 112 lbs. and 132 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Edgemont	0.0				
Marietta	8.2				
Dewey	19.6				
SD Border	21.4				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	28.68 MGT	79.64 MGT	81.32 MGT
TRAFFIC DIRECTION –	N/A	77% South	75% South

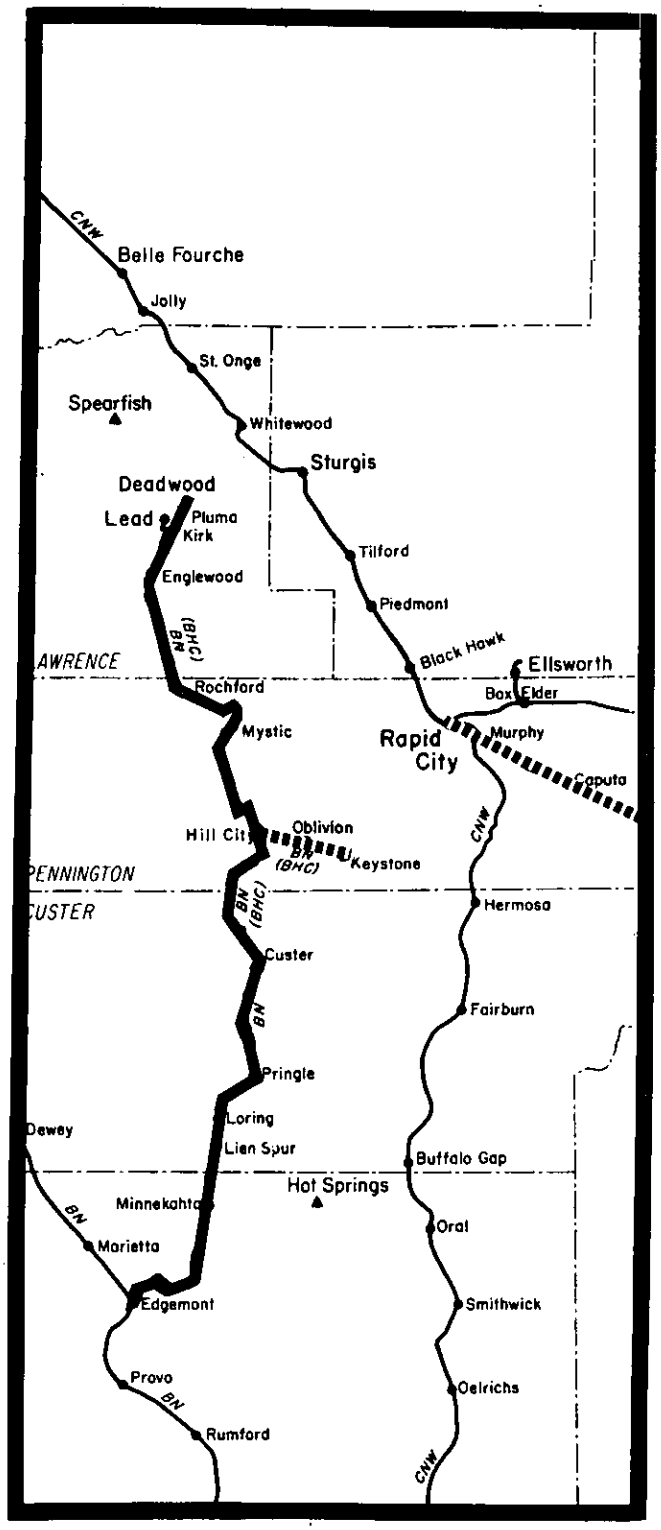
COMMODITIES – Primarily overhead coal moving in unit trains from the Gillette, Wyoming area to points east.

Other Information

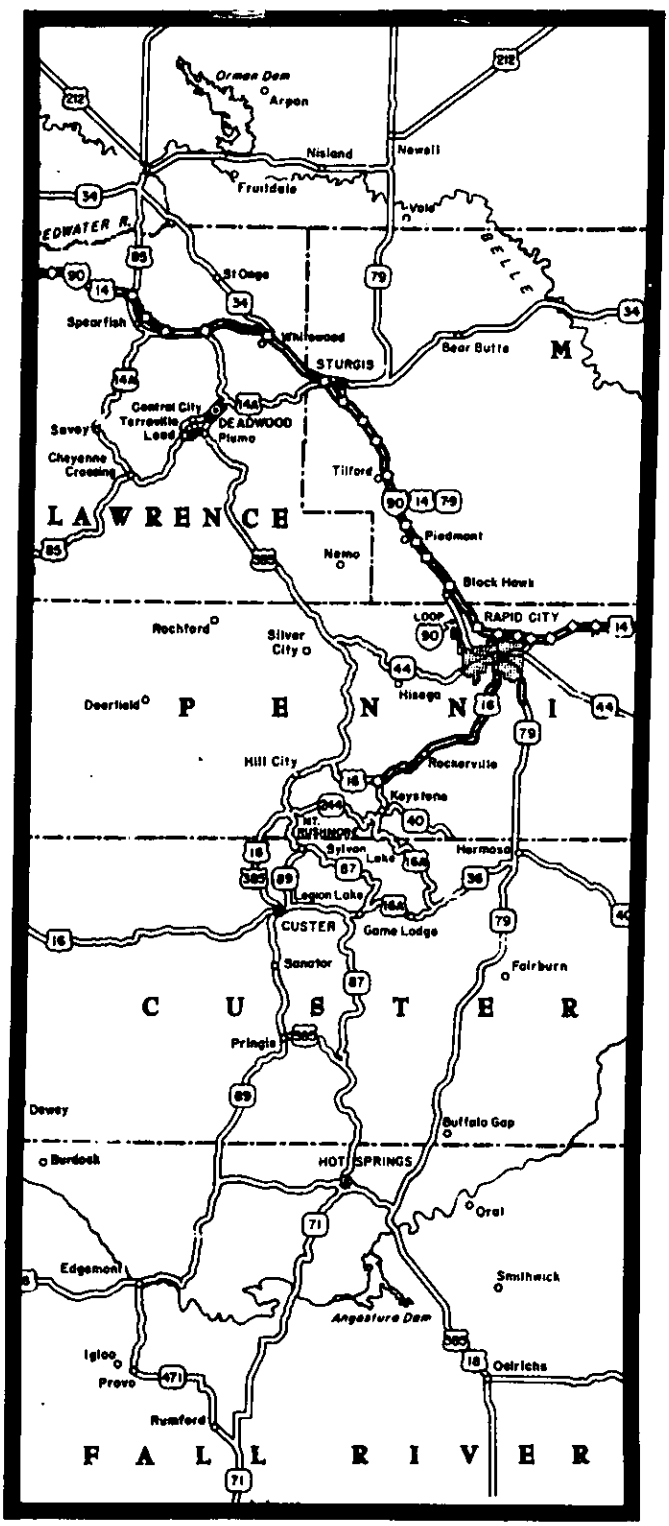
The South Dakota Rail Line Inventory Study found that very significant impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN 11
EDGEMONT TO DEADWOOD

RAILROAD SEGMENT MAP

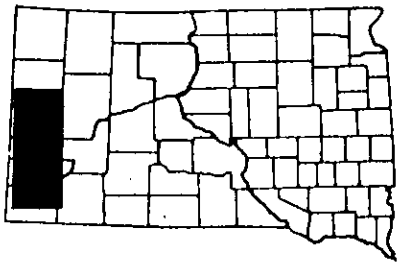


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 11 EDGEMONT TO DEADWOOD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Alliance Division - 4th Subdivision

LINE STATUS – Category 1 (Potentially Subject to abandonment in 3 years) (Lien Spur to Deadwood)

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 106.9 miles

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Three times per week.

YARDS – N/A

CONNECTING LINES – Burlington Northern main line at Edgemont and Burlington Northern branch line at Kirk.

HIGHWAYS – Edgemont is served by US 18 and SD 89, SD 89 serves station from Edgemont to Custer, US 385 serves Hill City, Pluma and Deadwood are served by US 85 and US 385, and Rochford is served by a local hard surfaced road.

RAIL WEIGHT – 85 lbs. and 90 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Edgemont	0.0	Pringle	32.3	Englewood	98.6
Deadwood Jct.	0.6	Custer	44.5	Kirk	102.9
Minnekahta	16.0	Hill City	60.4	Pluma	105.1
Lien Spur	22.1	Mystic	74.8	Deadwood	106.9
Loring	27.5	Rochford	82.1		

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.55 MGT	0.84 MGT	0.76 MGT
TRAFFIC DIRECTION –	N/A	86% Term. (1977)	61% N.

COMMODITIES – Forwarded lumber products, non-metallic minerals, and stone, clay, and glass; received coal.

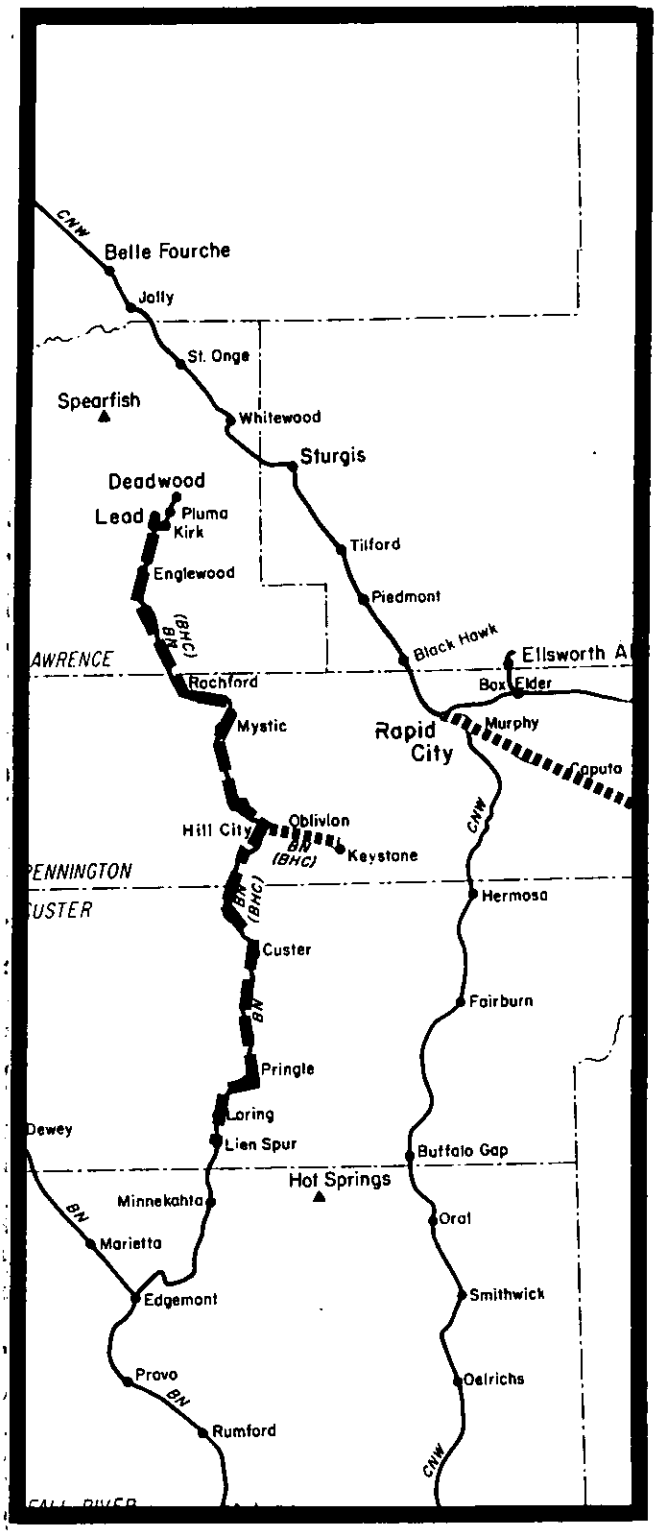
Other Information

Received coal to the Kirk power plant is the predominant commodity moved on this line.

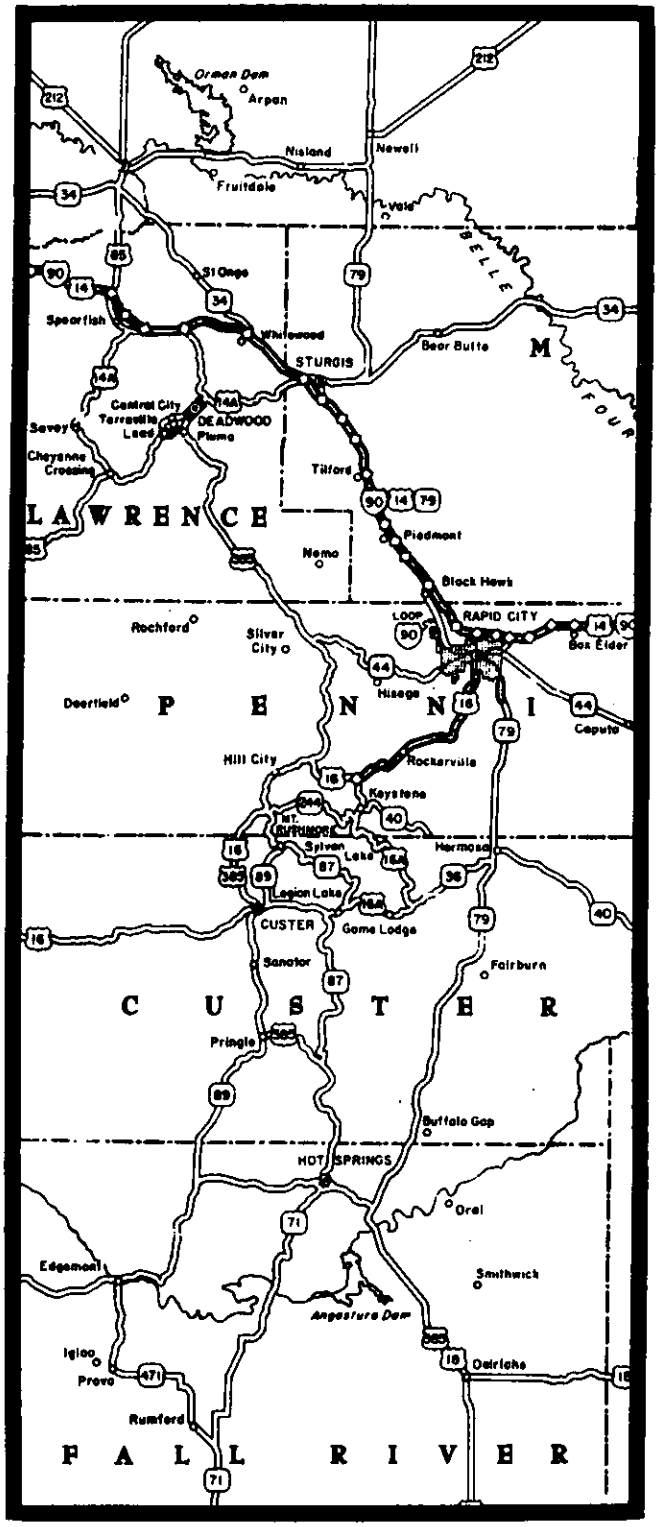
The South Dakota Rail Line Inventory Study found that limited impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN 14
KIRK TO LEAD

RAILROAD SEGMENT MAP

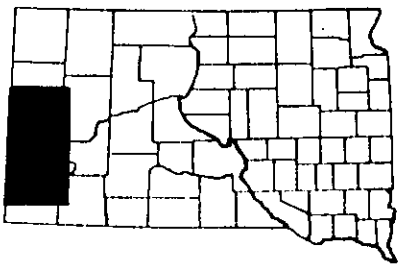


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 14 KIRK TO LEAD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION – Alliance Division - 4th Subdivision

LINE STATUS – Category 1 (Potentially subject to abandonment in 3 years)

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 3.2 miles

MAXIMUM SPEED LIMIT – 15 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY – Irregular

YARDS – N/A

CONNECTING LINES – Burlington Northern at Kirk.

HIGHWAYS – US 85 serves both stations.

RAIL WEIGHT – N/A

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Kirk	0.0				
Lead	3.2				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.02 MGT	0.02 MGT	0.01 MGT
TRAFFIC DIRECTION –	N/A	98% Term (1977)	64% N.

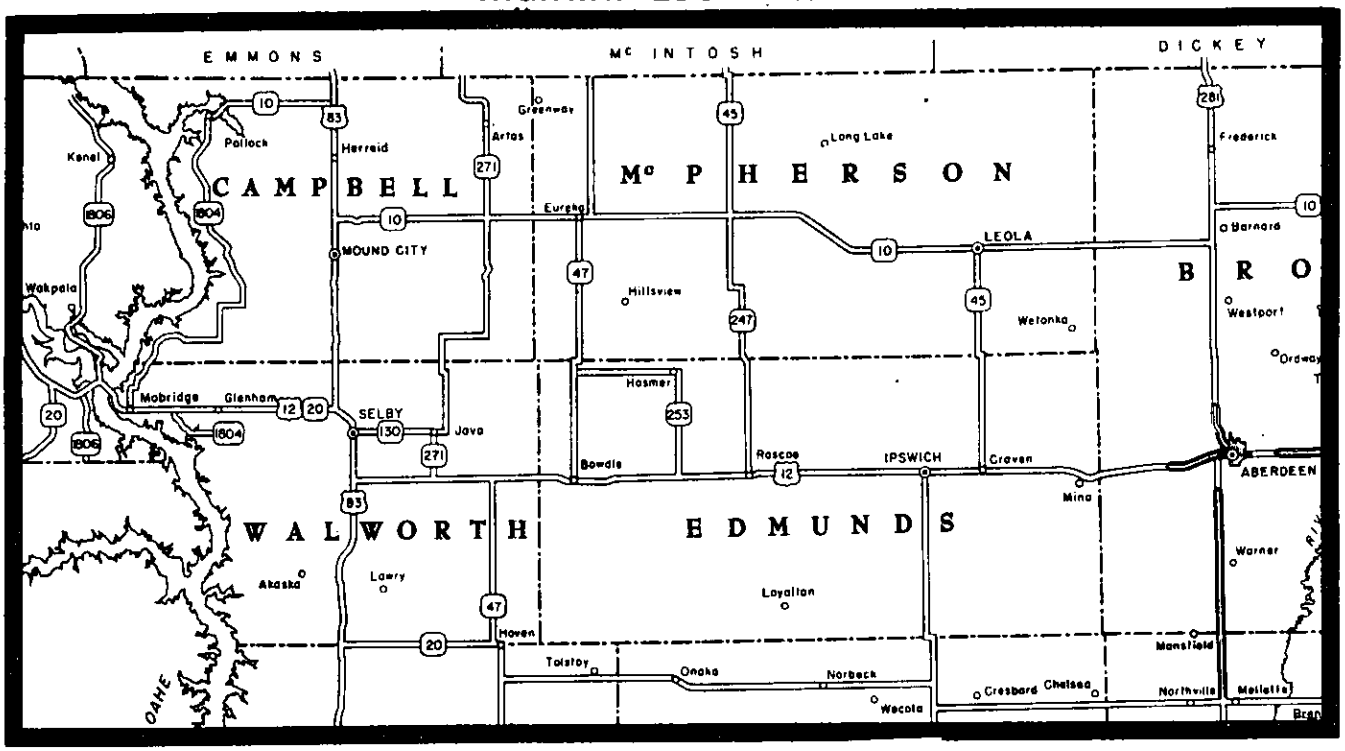
COMMODITIES – Primarily received non-metallic minerals, primary metals, and chemicals.

Other Information

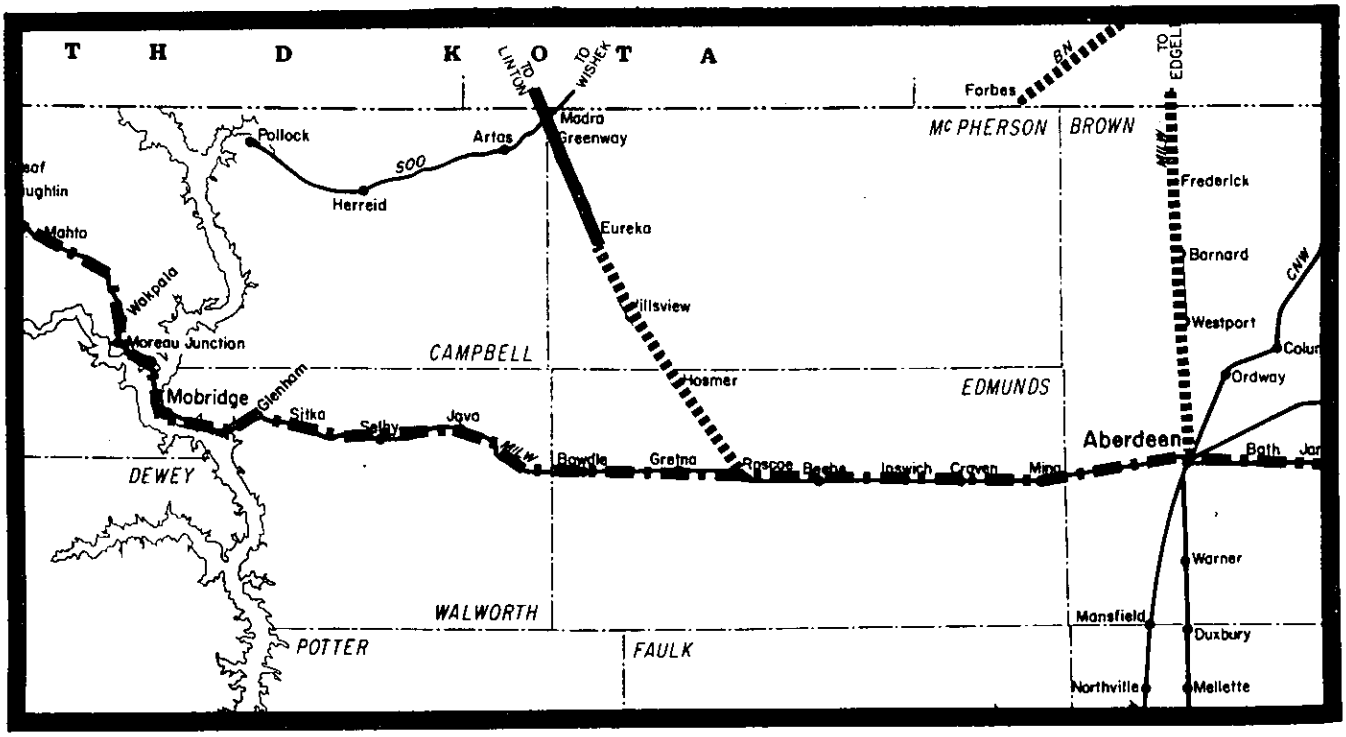
The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT BN 15
LINTON, ND., TO EUREKA, SD

HIGHWAY LOCATION MAP

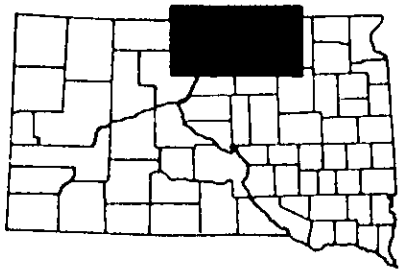


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BN 15 LINTON, ND TO EUREKA, SD

Line Description

OWNERSHIP – BURLINGTON NORTHERN

DIVISION / SUBDIVISION –

LINE STATUS – Category 2 - Under study by the Railroad.

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 49.0 total, 14.8 in SD

MAXIMUM SPEED LIMIT – 25 mph **MAXIMUM WEIGHT LIMIT** – 220,000 lbs.

SERVICE FREQUENCY –

YARDS – Linton, ND

CONNECTING LINES – Intersects with Soo Line branchline at Madra; connects with Burlington Northern at Linton.

HIGHWAYS – Eureka is served by SD 10

RAIL WEIGHT – 56 lbs. rail

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Linton, ND	0.0				
Madra, SD	36.7				
Greenway, SD	38.2				
Eureka, SD	49.0				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –			0.07 MGT
TRAFFIC DIRECTION –			64% North

COMMODITIES – Primarily forwarded grain; also received fertilizer.

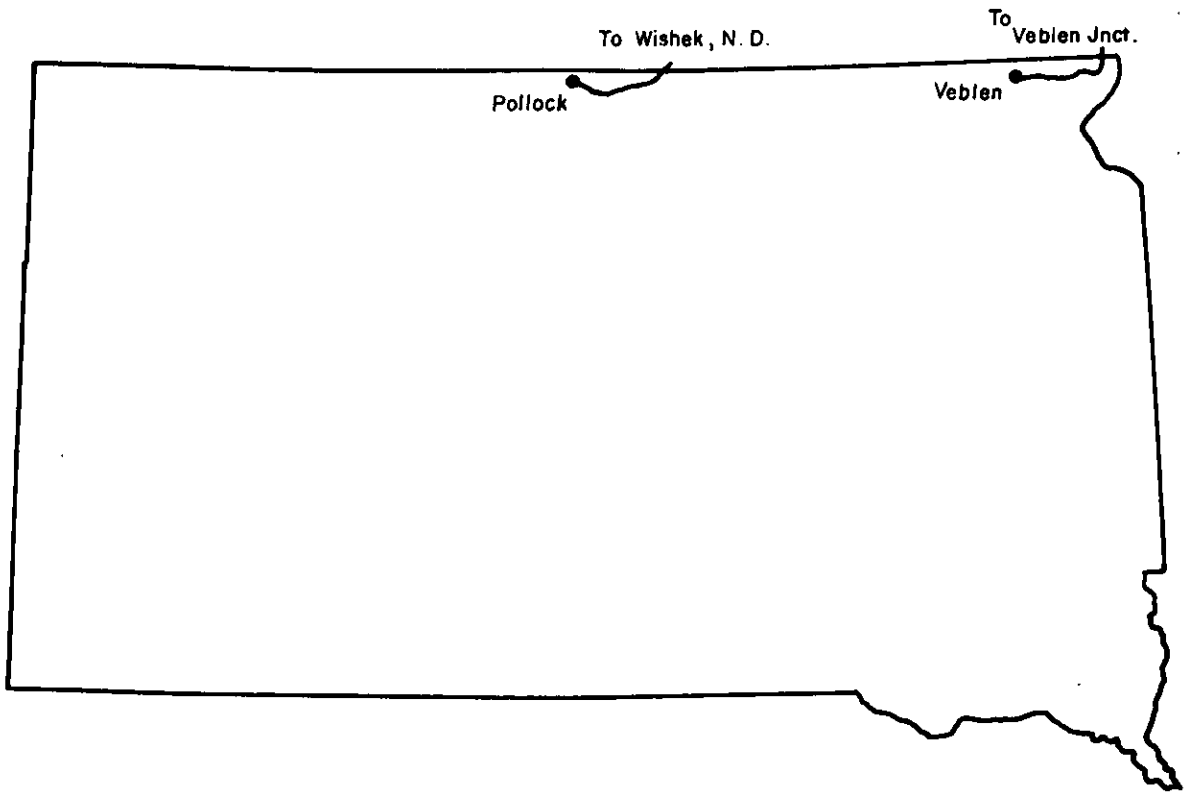
Other Information

This is part of the Roscoe to Linton line (MW 08) which has been abandoned by the Milwaukee Road. The BN has purchased and is operating the line between Linton, ND and Eureka.

The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

FIGURE VI-5

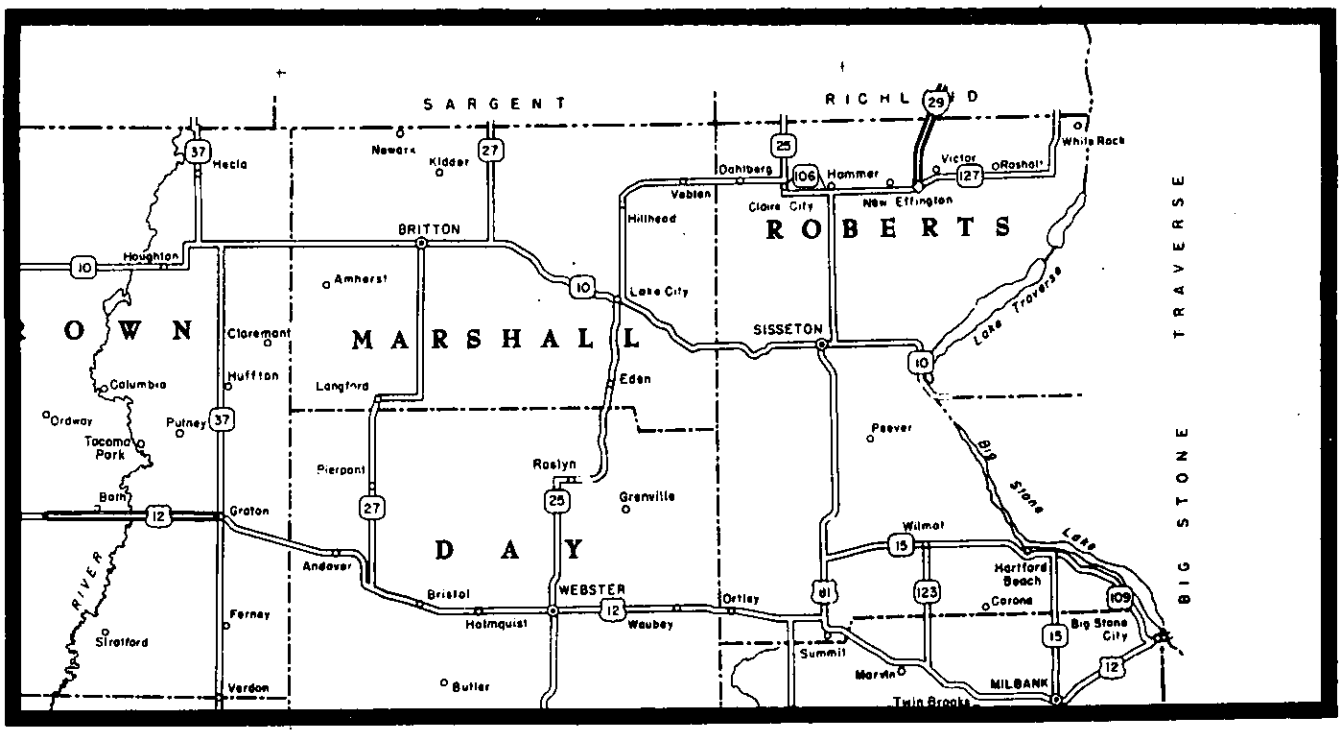
Soo Line
South Dakota Network



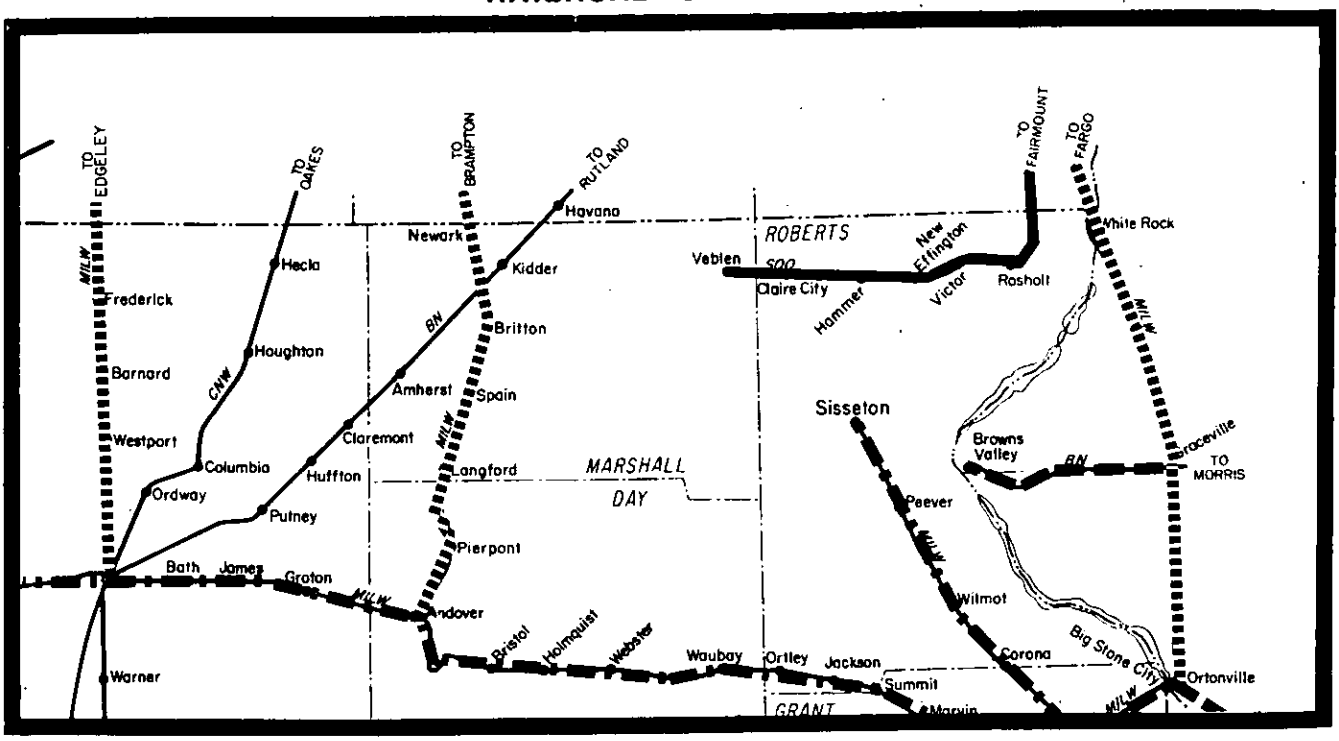
The Soo Line, as of December 31, 1980, operated 4,445 miles of railroad in the seven states of Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Montana and Illinois. These miles consist of 1,399 owned and operated main line, 2,810 owned and operated branch line, and 236 miles operated under trackage rights. The Company currently operates two branch lines totalling 66 miles in South Dakota in the extreme northern part of the state. There have been no abandonments since 1976, but one line totalling 33 miles is currently under study by the Company.

SOUTH DAKOTA SEGMENT SL01
VEBLEN JCT., ND TO VEBLEN, SD

HIGHWAY LOCATION MAP

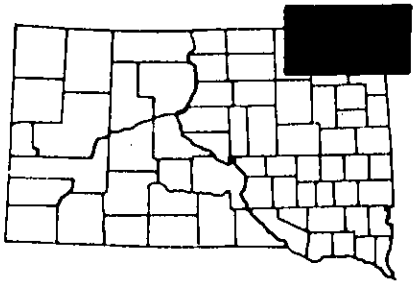


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SL 01 VEBLEN JCT., ND TO VEBLEN, SD

Line Description

OWNERSHIP – SOO LINE

DIVISION / SUBDIVISION – Western Division - 1st Subdivision

LINE STATUS – Category 5: Continued Operation

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 42.2 total; 33.5 in SD

MAXIMUM SPEED LIMIT – 20 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Weekly to Veblen, twice per week to Rosholt.

YARDS – None

CONNECTING LINES – Soo Line at Veblen Jct., ND

HIGHWAYS – US 81 serves Rosholt, Victor, New Effington and Hammer, Claire City and Veblen are served by SD 25, ND 11 serves Veblen Jct., ND, and no major roads serve LaMars, ND

RAIL WEIGHT – 85 lbs. to Rosholt, remainder is 60 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Veblen Jct., ND	0.0	Hammer, SD	29.2		
LaMars, ND	6.8	Claire City, SD	33.1		
Rosholt, SD	14.5	Veblen, SD	42.2		
Victor, SD	19.5				
New Effington, SD	24.0				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.15 MGT	0.20 MGT	0.21 MGT
TRAFFIC DIRECTION –	74% Orig. (1974)	84% Orig.(1977)	86% N.

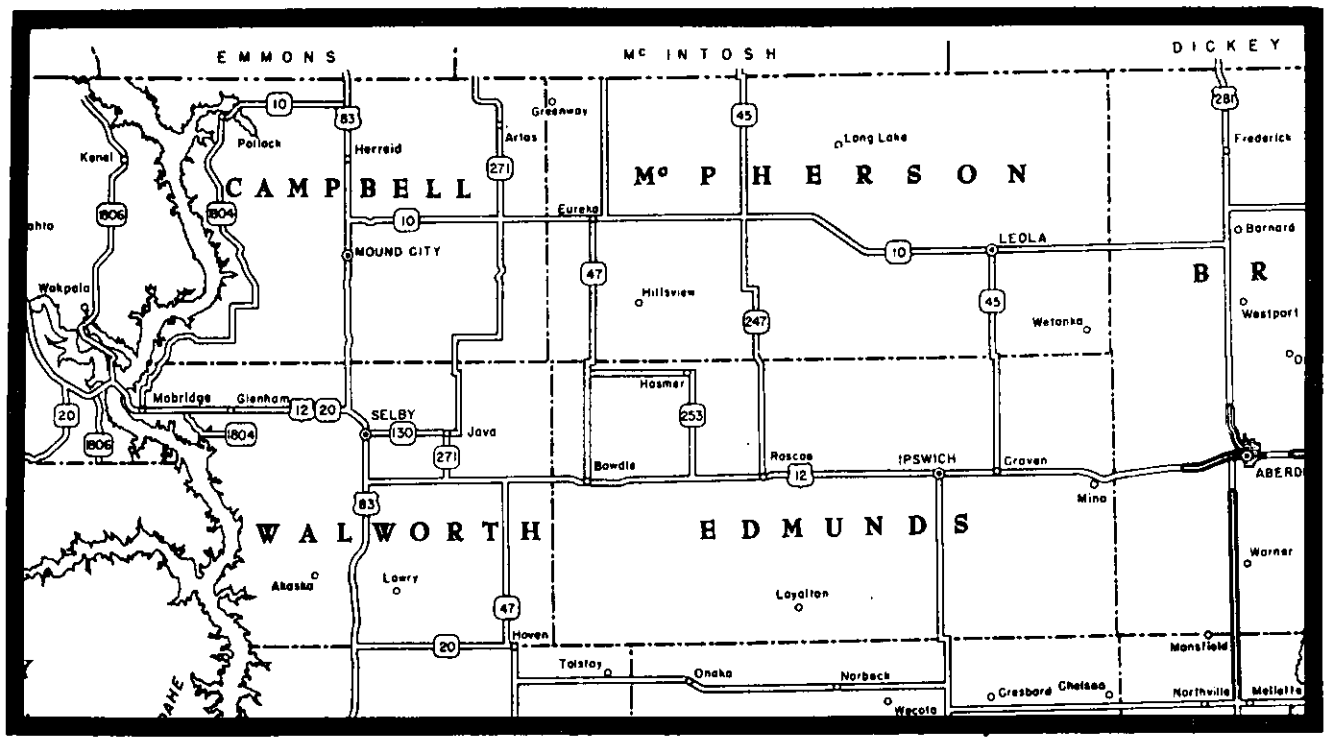
COMMODITIES – Forwarded grain; received fertilizer.

Other Information

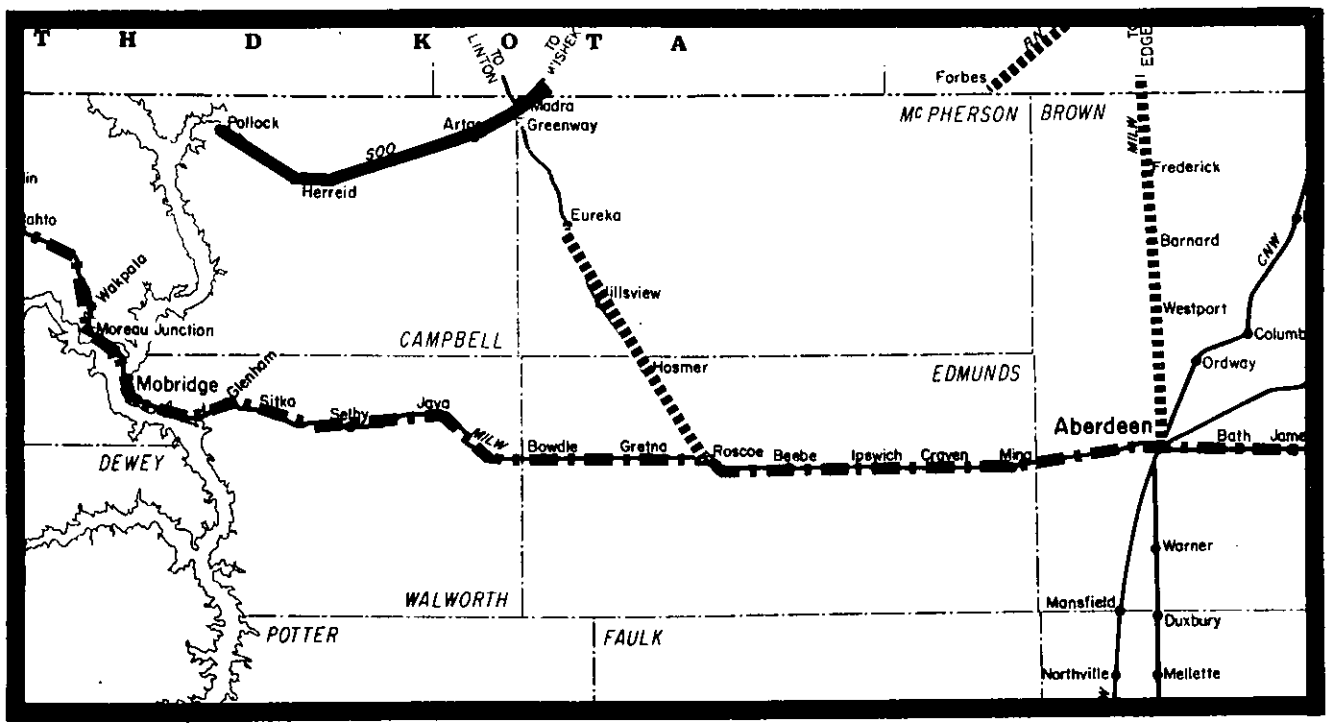
The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

SOUTH DAKOTA SEGMENT SL02
WISHEK, ND TO POLLOCK, SD

HIGHWAY LOCATION MAP

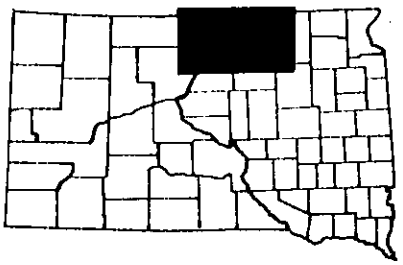


RAILROAD SEGMENT MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - SL 02 WISHEK, ND TO POLLOCK, SD

Line Description

OWNERSHIP – SOO LINE

DIVISION / SUBDIVISION – Western Division - 7th Subdivision

LINE STATUS – Category 2: Under Study by the Soo Line

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 69.9 total; 32.8 in SD

MAXIMUM SPEED LIMIT – 20 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Weekly and more often if needed.

YARDS – Wishek, ND and Pollock, SD

CONNECTING LINES – Soo Line at Wishek, ND

HIGHWAYS – SD 10 serves Pollock, US 83 serves Herreid, SD 271 serves Artas. SD 11 serves Ashley, SD 13 serves Wishek, and local roads serve Danzig, Venturia and Madra.

RAIL WEIGHT – 60 lbs. with 2 miles at 80 lbs. at Pollock

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Wishek, ND	0.0	Artas, SD	43.7		
Danzig, ND	10.5	Herreid, SD	57.0		
Ashley, ND	20.2	Pollock, SD	69.9		
Venturia, ND	28.1				
Madra, SD	37.7				

Traffic Characteristics

	1975	1979	1980
TRAFFIC DENSITY –	0.05 MGT	0.07 MGT	0.04 MGT
TRAFFIC DIRECTION –	64% Orig. (1974)	87% Orig. (1977)	100% N.

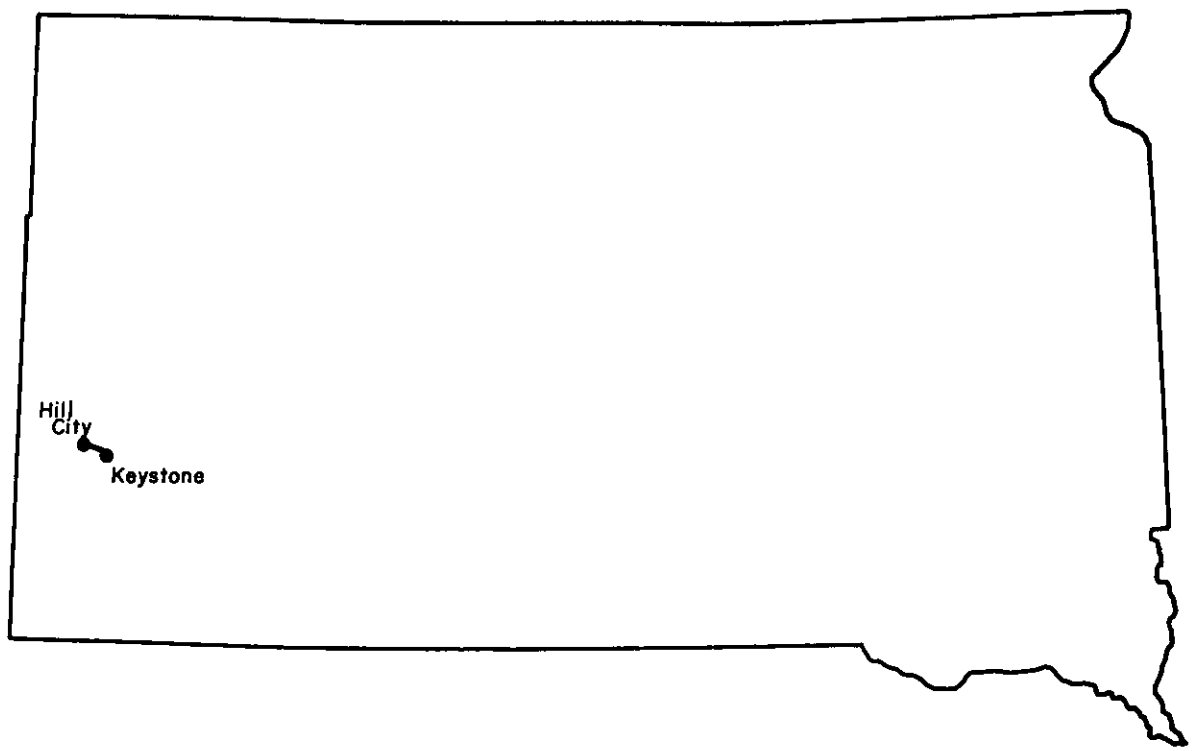
COMMODITIES – Forwarded grain; received fertilizer

Other Information

The South Dakota Rail Line Inventory Study found that minimal impacts would result from abandonment of this line, based on 1977 traffic data.

FIGURE VI-6

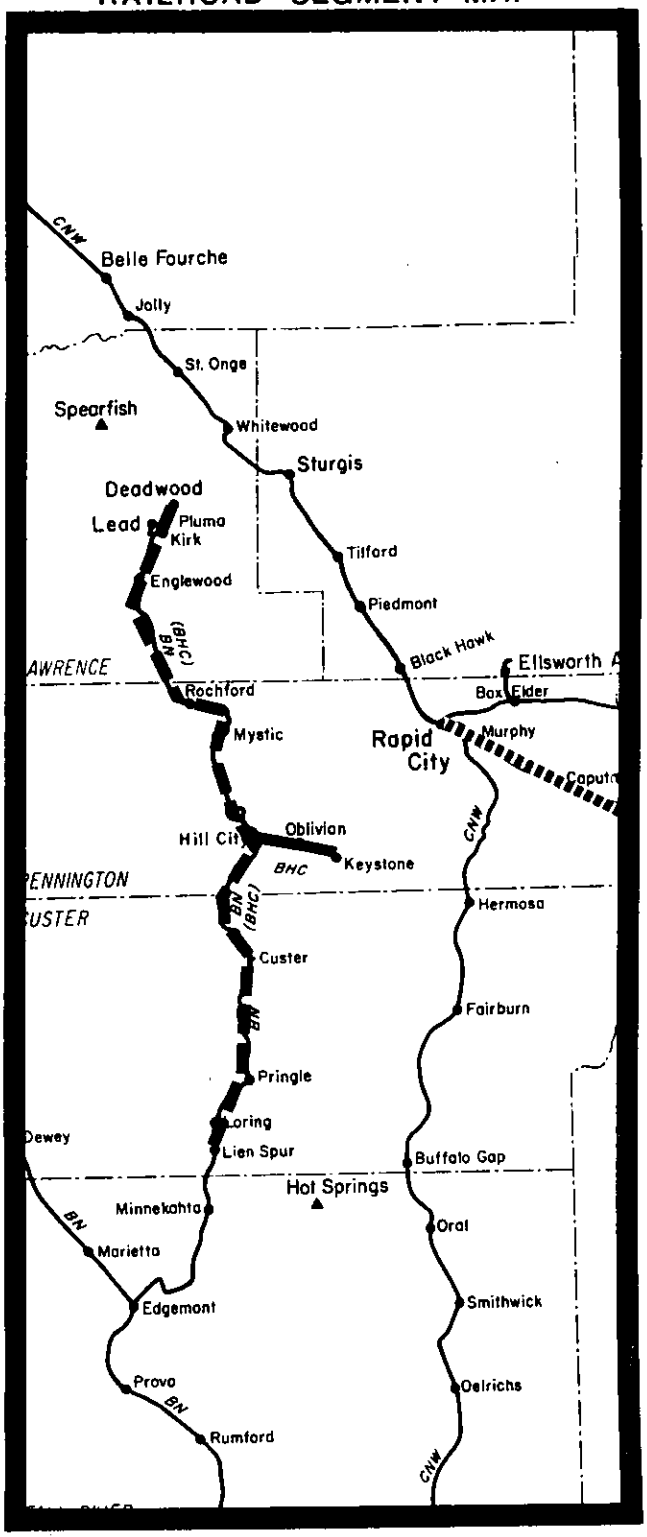
Black Hills Central South Dakota Network



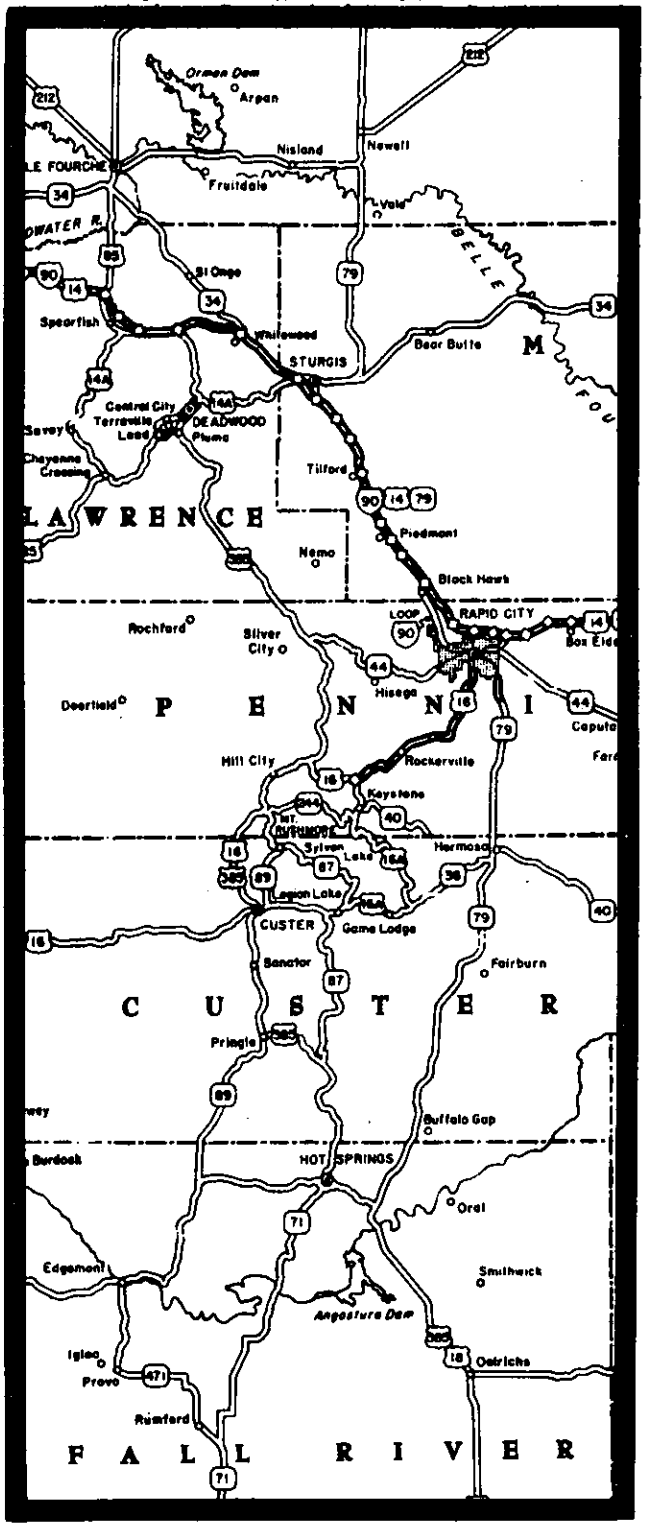
The Black Hills Central Railroad, better known as "The 1880 Train", has operated a steam tourist train since 1957. The company has been operating on Burlington Northern lines in the Black Hills through a trackage rights agreement. The BN received a certificate to abandon its Hill City to Keystone line in 1981 and the Black Hills Central has purchased the line and will continue operations. The Black Hills Central has run excursion trains in the past on the Burlington Northern lines to Deadwood and to Custer, but its main operation has been from Hill City to Oblivion and return for an 8.6 mile operation.

SOUTH DAKOTA SEGMENT BH 01
HILL CITY TO KEYSTONE

RAILROAD SEGMENT MAP

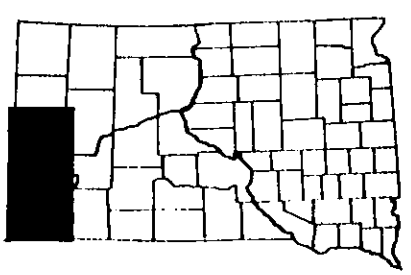


HIGHWAY LOCATION MAP



KEY

- Study Segment
- Abandoned Line
- Potentially Subject to Abandonment Within 3 Years
- Pending Abandonment Approval
- All Other Lines



South Dakota Segment - BH 01 HILL CITY TO KEYSTONE

Line Description

OWNERSHIP – BLACK HILLS CENTRAL RAILROAD

DIVISION / SUBDIVISION –

LINE STATUS – Non-Common Carrier Line

TYPE OF LINE – Branch

LINE LENGTH IN MILES – 8.8 miles

MAXIMUM SPEED LIMIT – 15 mph **MAXIMUM WEIGHT LIMIT** – 263,000 lbs.

SERVICE FREQUENCY – Seasonal

YARDS –

CONNECTING LINES – Burlington Northern at Hill City

HIGHWAYS – Forest Service Roads serve this line.

RAIL WEIGHT – 90 lbs.

Station Locations

STATIONS	MILES	STATIONS	MILES	STATIONS	MILES
Hill City	0.0				
Oblivion	4.3				
Keystone	8.8				

Traffic Characteristics

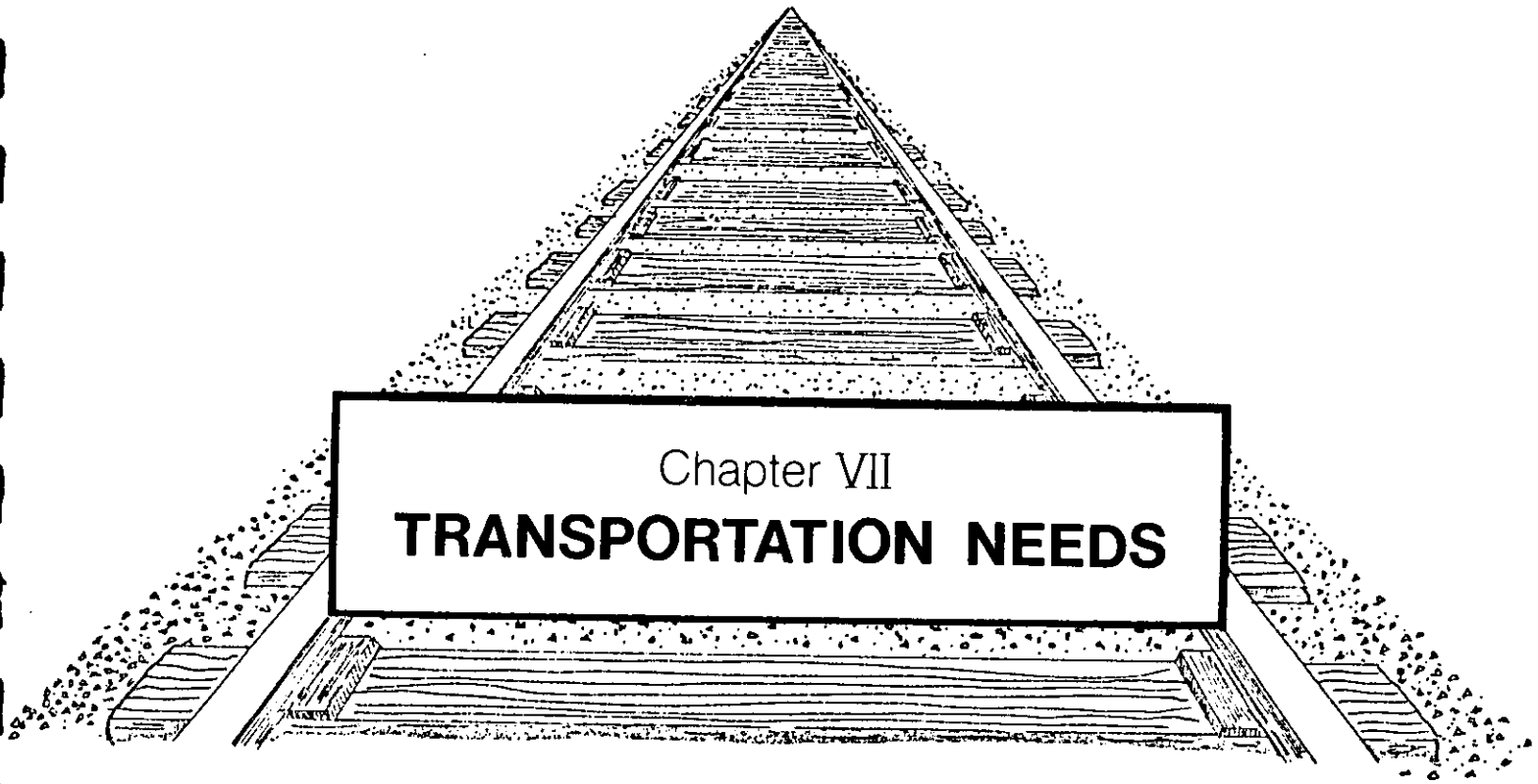
	1975	1979	1980
TRAFFIC DENSITY –	Less than 0.01 MGT		0

TRAFFIC DIRECTION –

COMMODITIES – Non-metallic minerals in 1975 & 1979.

Other Information

This is a former Burlington Northern line which was abandoned in 1981. This has been purchased by the Black Hills Central Railroad which has operated the line as a tourist railroad since 1957.



Chapter VII

TRANSPORTATION NEEDS

CHAPTER VII

TRANSPORTATION NEEDS

South Dakota rail customers can be segmented into several broad industrial groups which can generally be classified by the commodity being shipped. The major classes of commodities that are moved by rail in the State include farm products, coal, nonmetallic minerals, stone, clay, and glass products, lumber and wood products, and chemical and allied products.

In the five year period from 1976 through 1980, South Dakota rail shipments as a whole did not experience major growth or decline in volume. The total number of carloadings originating or terminating in the State totaled 97,230 in 1976 compared with 101,910 in 1980. This 4.6% increase in traffic volume resulted solely from the 140% increase in the carloading of farm products. Other commodities (except coal) experienced a substantial decrease in total traffic volume.

FARM PRODUCTS

Agriculture, the State's main industry, accounted for 40.7% of the total carloadings in 1980. The principal farm product is grain, which consists of corn, wheat, sorghum, oats, soybeans, barley, rye, flax, and sunflowers. Originating traffic accounted for 99.3% of the total traffic movement of farm products.

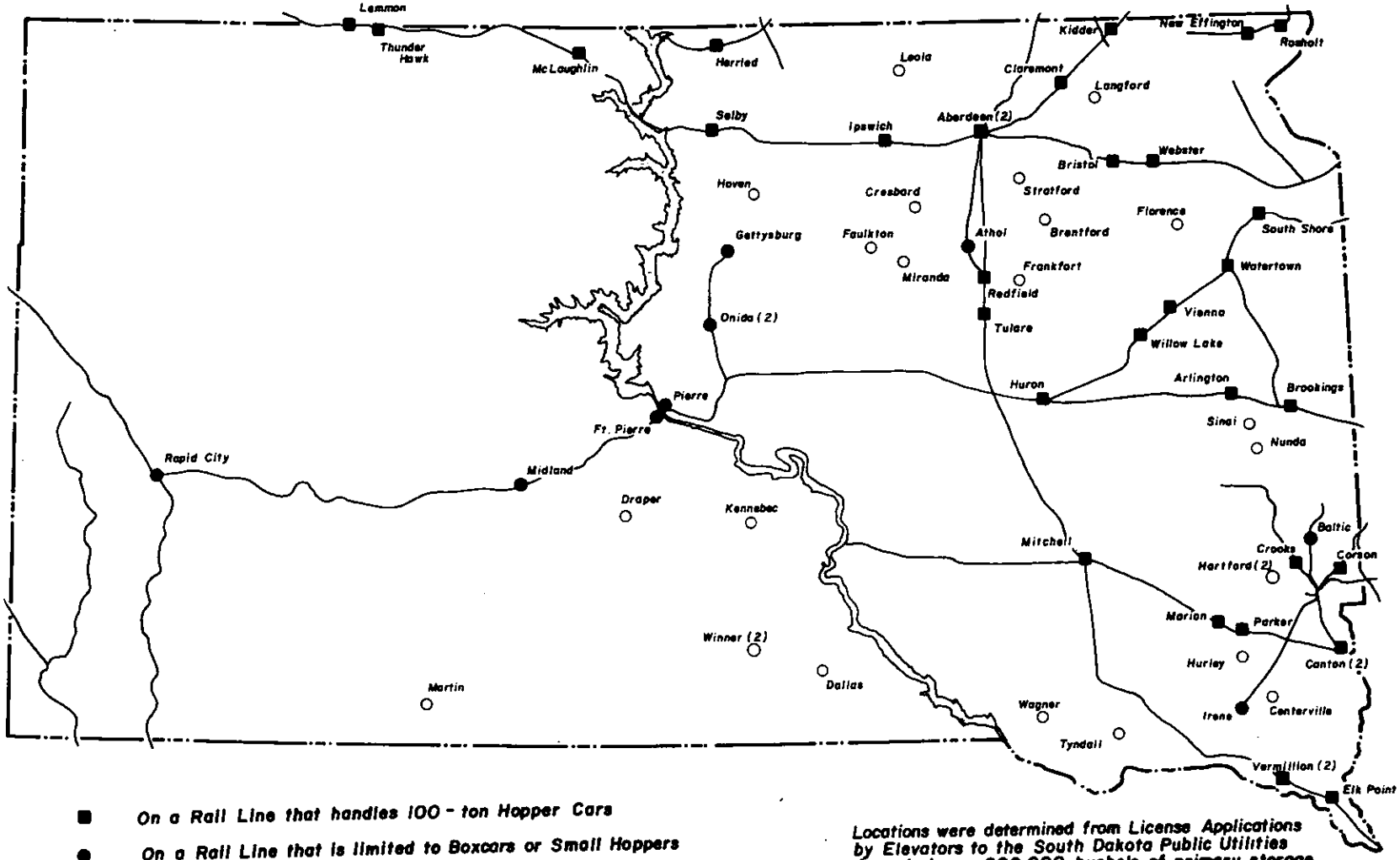
The movement of grain by rail is one vital element of transportation in a complex market that typically includes, as a minimum, the producer, the shipper, a larger terminal, and an ocean-going vessel for foreign sales. All segments of this market must mesh together in a manner that allows the producer the opportunity to sell grain by using rail transportation. The local elevator provides an important link between producer and the world by distributing harvest shipments, accumulated over 4 to 6 weeks, throughout the year depending on current pricing trends.

Of paramount importance is the ability of the elevator to communicate to the rail carrier the anticipated volume of shipment in order to secure the available rolling stock. Large volume shipments are beneficial both for the carrier, which produces more revenue per unit of operational cost, and for the shipper, through reduced freight rates. Figure VII-1 shows the location of large elevators throughout the state relative to active rail lines.

The total volume of grain available for shipment may vary considerably from year to year because of weather conditions, planting patterns, and domestic use. The different crop types also have different values per bushel which is a factor on their importance to the economy. Figures VII-2 through VII-18 graphically show the value of production per square mile on a county basis for each of the nine (9) major crops grown. An accompanying page for each crop, except sunflowers, lists the 10 year production trend analysis, the marketed production share of the total that was grown, the value of that marketed and the top five (5) counties ranked by volume produced. These Figures provide a wealth of information that shows that the rail network serves an area with the highest value of production. The South Dakota essential rail system, plus an additional few ICC Category 5 lines, does provide access to the more dense areas of production. When the three major export crops (corn, wheat and soybeans) are added together, they account for nearly 75% of the total crop value.

FIGURE VII-1

Large Grain Storage Facilities



■ On a Rail Line that handles 100-ton Hopper Cars

● On a Rail Line that is limited to Boxcars or Small Hoppers

○ Not on a Rail Line

Locations were determined from License Applications by Elevators to the South Dakota Public Utilities Commission: 200,000 bushels of primary storage (approximate volume of a 54-car unit train) was the minimum capacity for a facility to be included.

Crop production is not evenly distributed throughout the State. On Figure VII-19, the extreme southeastern corner of South Dakota produced more than 25,000 bushels per square mile in 1979; which is more than 25 times greater than the western tier of counties. Because different areas of the State exhibit different soil and climatic conditions, a shift in the dominant crop also occurs. The southeastern quarter of the State produces mainly corn and soybeans, the northeastern quarter grows feed grains and wheat, and the western half is generally sorghum and wheat territory.

The value of a strong transportation system for moving agricultural commodities can be illustrated by comparing the price that producers receive for grain at different local elevators. The price that the elevator offers is the price given at a terminal minus transportation and handling costs. Therefore, all elevators start with the same available price but then must adjust that price to cover the cost of moving that grain to the terminal.

In order to analyze the effectiveness of the transportation system for agriculture statewide, a statewide average price for grain must be established. The Crop Reporting Board, Economics and Statistics Service of the United States Department of Agriculture has established these averages based on their surveys of grain producers. By comparing South Dakota with other states, especially regionally, a relative value of the transportation network can be determined. Table VII-1 establishes the State's national rank in price for various crops during the 1978-79 time period.

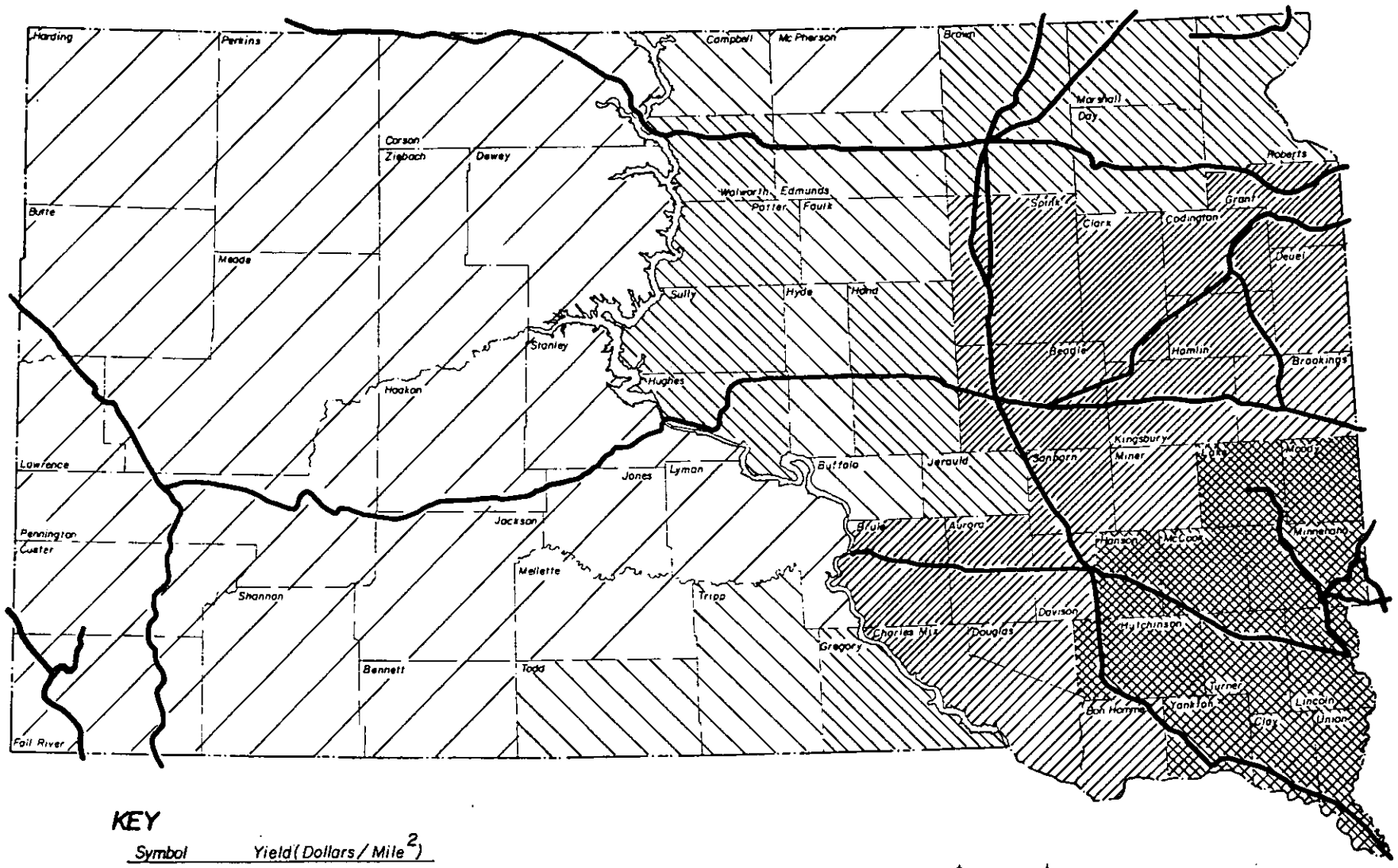
A more accurate, quantitative evaluation can be made by comparing the additional per bushel value that South Dakota grain would have if it were grown in an adjoining state. Table VII-2 presents the 1979 sales volume of grain from the State and multiplies it by the difference in price received in the neighboring state. The total increase in value is then divided by the total volume of sales to determine the per bushel increase in value if South Dakota producers had a transportation system equivalent to that of neighboring states.

Agriculture and railroads in South Dakota are mutually dependent on each other for economic prosperity. Just as the carloadings of grain have increased dramatically in the last five years, the next five years are anticipated to cause an even greater development of the relationship. A comparative example between production and the capacity of available grain hauling methods is given in Figure VII-20. As fuel costs bite deeper into the economics of transportation, the fuel efficiency of the grain unit trains will become even more prevalent.

FIGURE VII - 2

VALUE OF CORN PRODUCTION PER SQUARE MILE - 1979

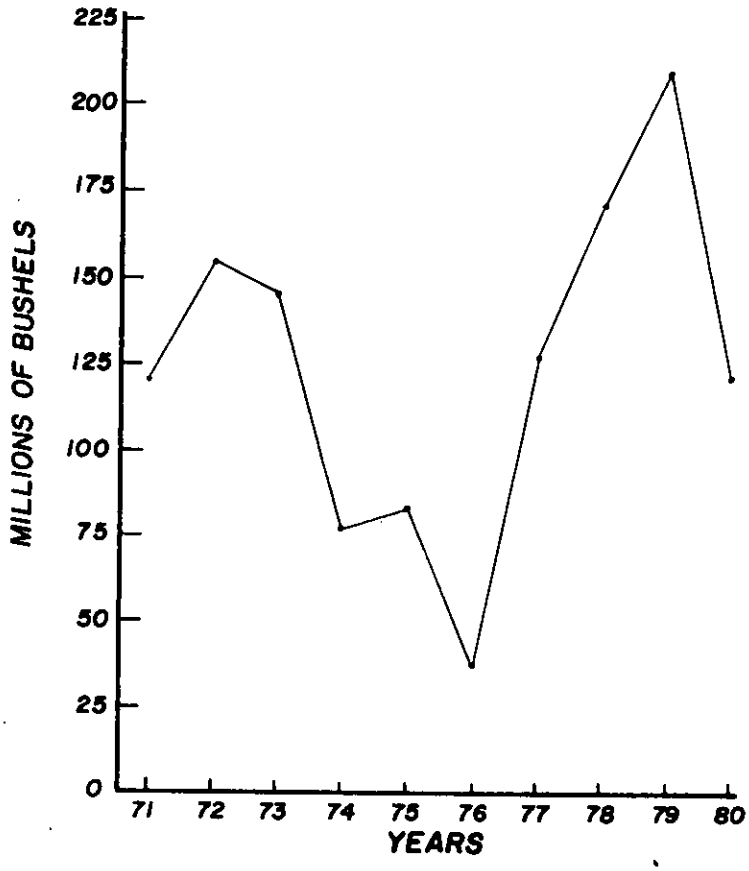
SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDONMENT)



KEY

Symbol	Yield (Dollars / Mile^2)
	None Reported
	Less than $1000
	$1000 - $2500
	$2500 $7500
	$7500 - $20000
	More than $20000

FIGURE VII-3
CORN PRODUCTION ANALYSIS



Year	Production
1971	120,796,000 Bushels
1972	154,496,000
1973	146,340,000
1974	76,890,000
1975	83,250,000
1976	37,200,000
1977	126,850,000
1978	171,520,000
1979	210,900,000
1980*	121,900,000

Ten Year Trend Analysis

Corn yields were low during the 1974-1976 drought but recovered for a record yield in 1979. This record was established due to the high yield per acre (74 Bushels/Acre) and the high number of acres harvested for grain (2,850,000 acres). South Dakota State University Economics Department estimates 1984 production at 125,860,000 bushels.

1979

Production	210,900,000 Bushels
Marketed Production	99,123,000
Value of Marketed Production at the average seasonal price of $2.07/Bushel	$205,185,000

Top Five Counties in Production - 1979

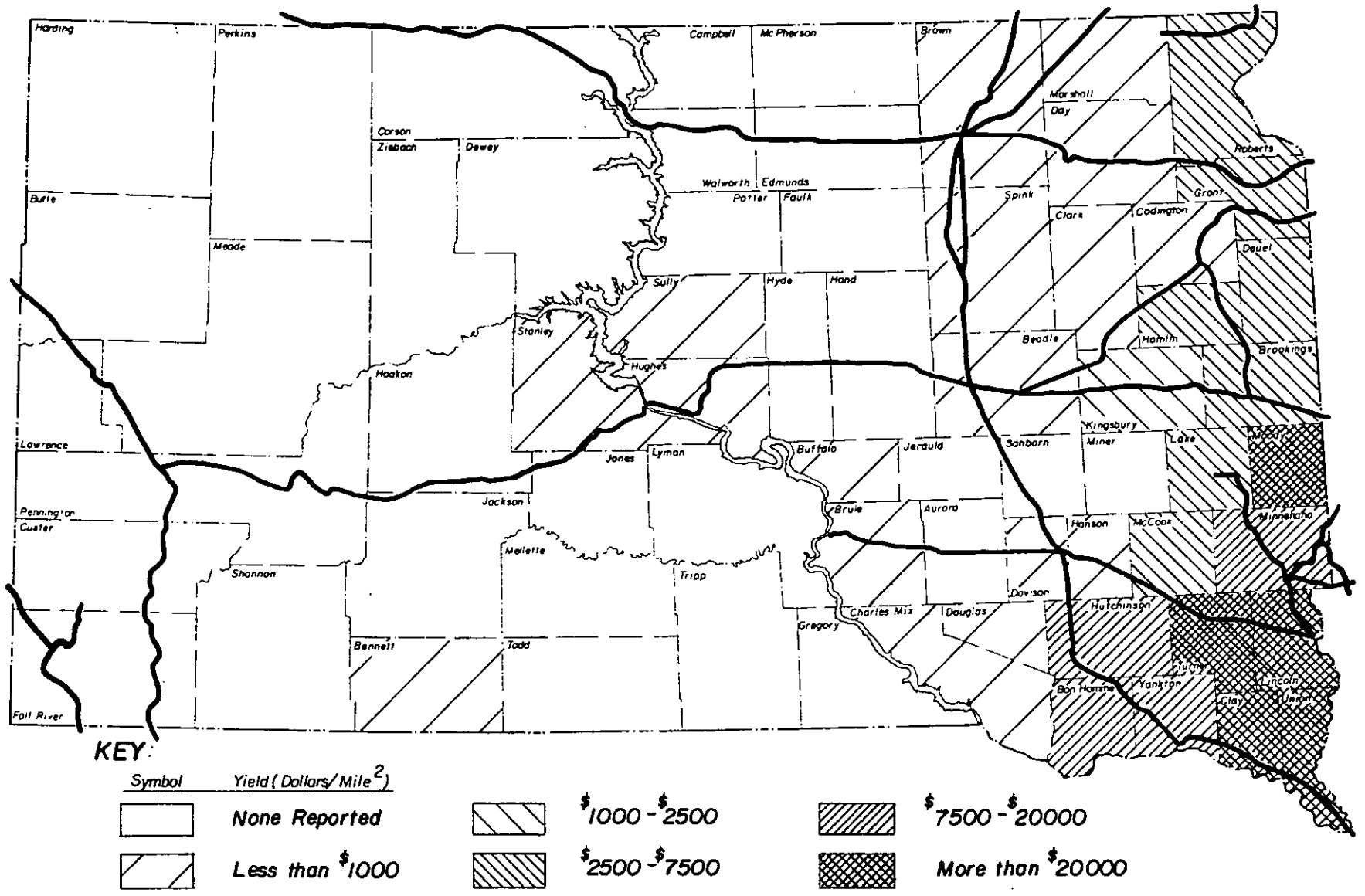
1.	Turner	13,425,000 Bushels
2.	Minnehaha	13,057,000
3.	Lincoln	12,140,000
4.	Union	11,558,000
5.	Hutchinson	10,717,000

*Preliminary data only for 1980
Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-4

VALUE OF SOYBEAN PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES
(NOT CANDIDATE FOR ABANDONMENT)

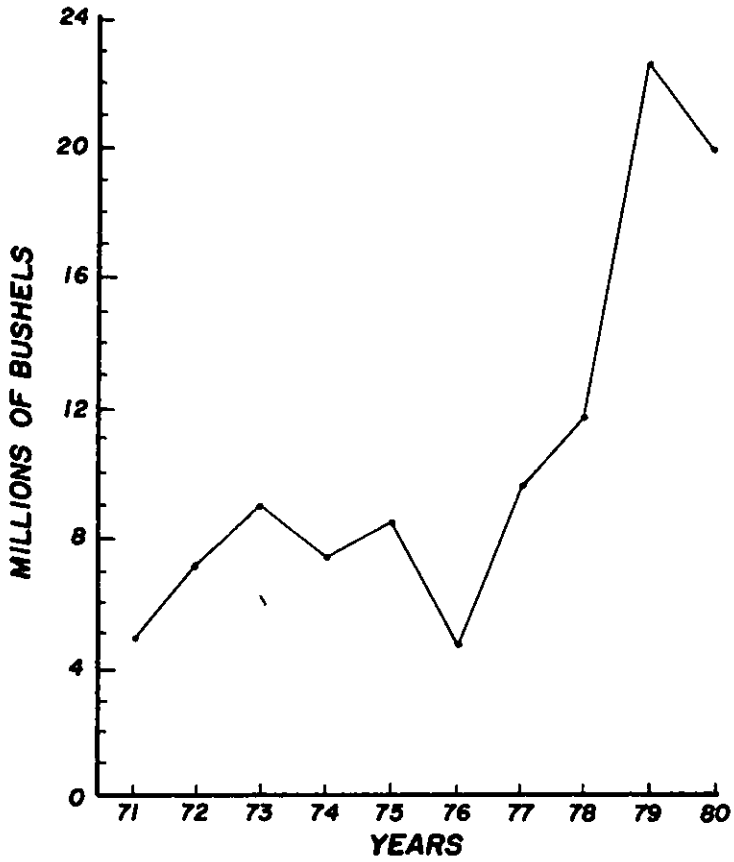


KEY:

Symbol	Yield (Dollars/Mile^2)	Symbol	Yield (Dollars/Mile^2)	Symbol	Yield (Dollars/Mile^2)
	None Reported		$1000 - $2500		$7500 - $20000
	Less than $1000		$2500 - $7500		More than $20000

FIGURE VII - 5

SOYBEANS PRODUCTION ANALYSIS



Year		Production	
1971	-	4,872,000	Bushels
1972	-	7,084,000	
1973	-	9,054,000	
1974	-	7,360,000	
1975	-	8,550,000	
1976	-	4,607,000	
1977	-	9,608,000	
1978	-	11,895,000	
1979	-	22,605,000	
1980*	-	20,020,000	

Ten Year Trend Analysis

Production exhibited a large growth after 1978 mainly because of the increased acreage involved. Harvested acreage in 1980 was at 770,000 acres, or nearly double the harvested acreage in 1978 and more than three times that in 1974. South Dakota State University Economics Department estimates 1984 production at 9,895,000 bushels.

1979

Production	22,605,000	Bushels
Marketed Production	22,040,000	
Value of Marketed Production at the average seasonal price of $6.28/Bushel	$14,083,973	

Top Five Counties in Production - 1979

1. Turner	2,781,700	Bushels
2. Lincoln	2,620,800	
3. Minnehaha	12,593,200	
4. Clay	2,499,300	
5. Union	2,429,200	

*Preliminary data only for 1980

Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-6

VALUE OF WHEAT PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES
(NOT CANDIDATE FOR ABANDONMENT)

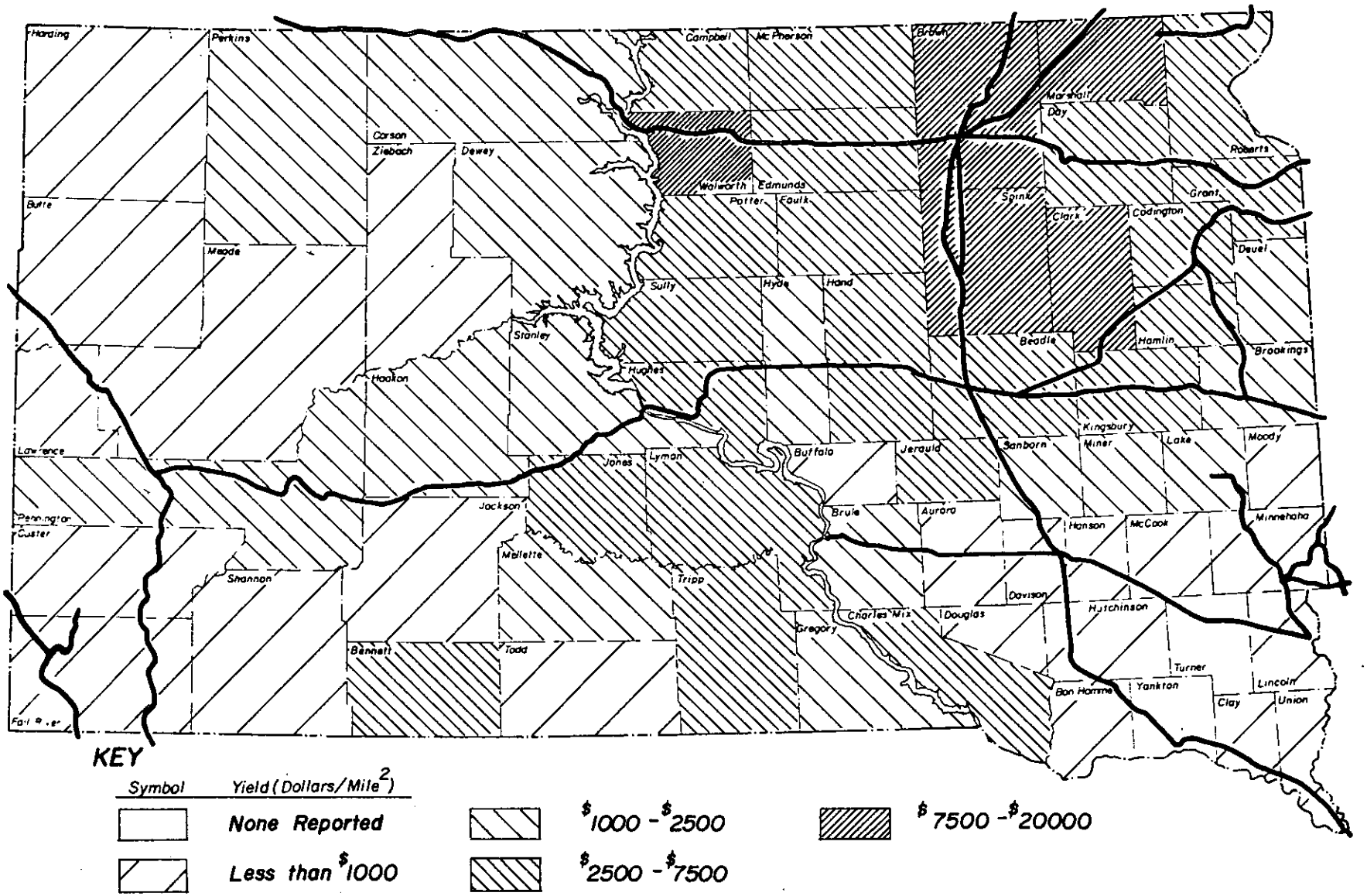
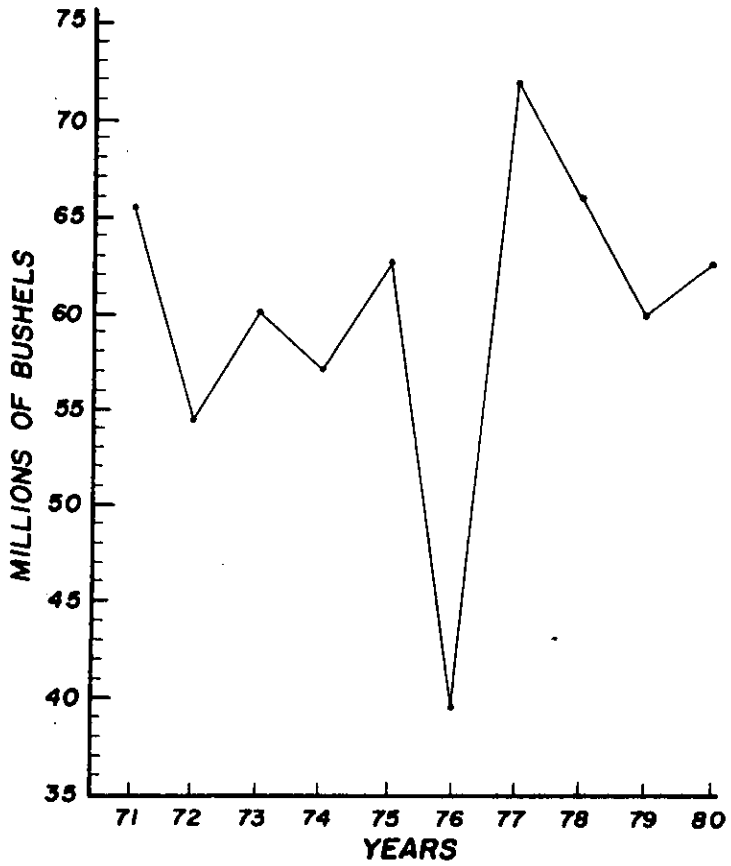


FIGURE VII-7
WHEAT PRODUCTION ANALYSIS



Year		Production
1971	-	65,466,000 Bushels
1972	-	54,430,000
1973	-	60,110,000
1974	-	57,020,000
1975	-	62,610,000
1976	-	39,520,000
1977	-	71,964,000
1978	-	66,000,000
1979	-	60,060,000
1980*	-	62,425,000

Ten Year Trend Analysis

Wheat yields for the 10-year period remained relatively constant because, as the main cash crop in the northern and southwestern parts of the state, harvested acreage statewide did not vary significantly. South Dakota State University Economics Department estimates 1984 production at 69,689,000 bushels.

1979

Production	60,060,000 Bushels
Marketed Production	56,276,000
Value of Marketed Production at the average seasonal price of $3.64/Bushel	$204,853,000

Top Five Counties in Production - 1979

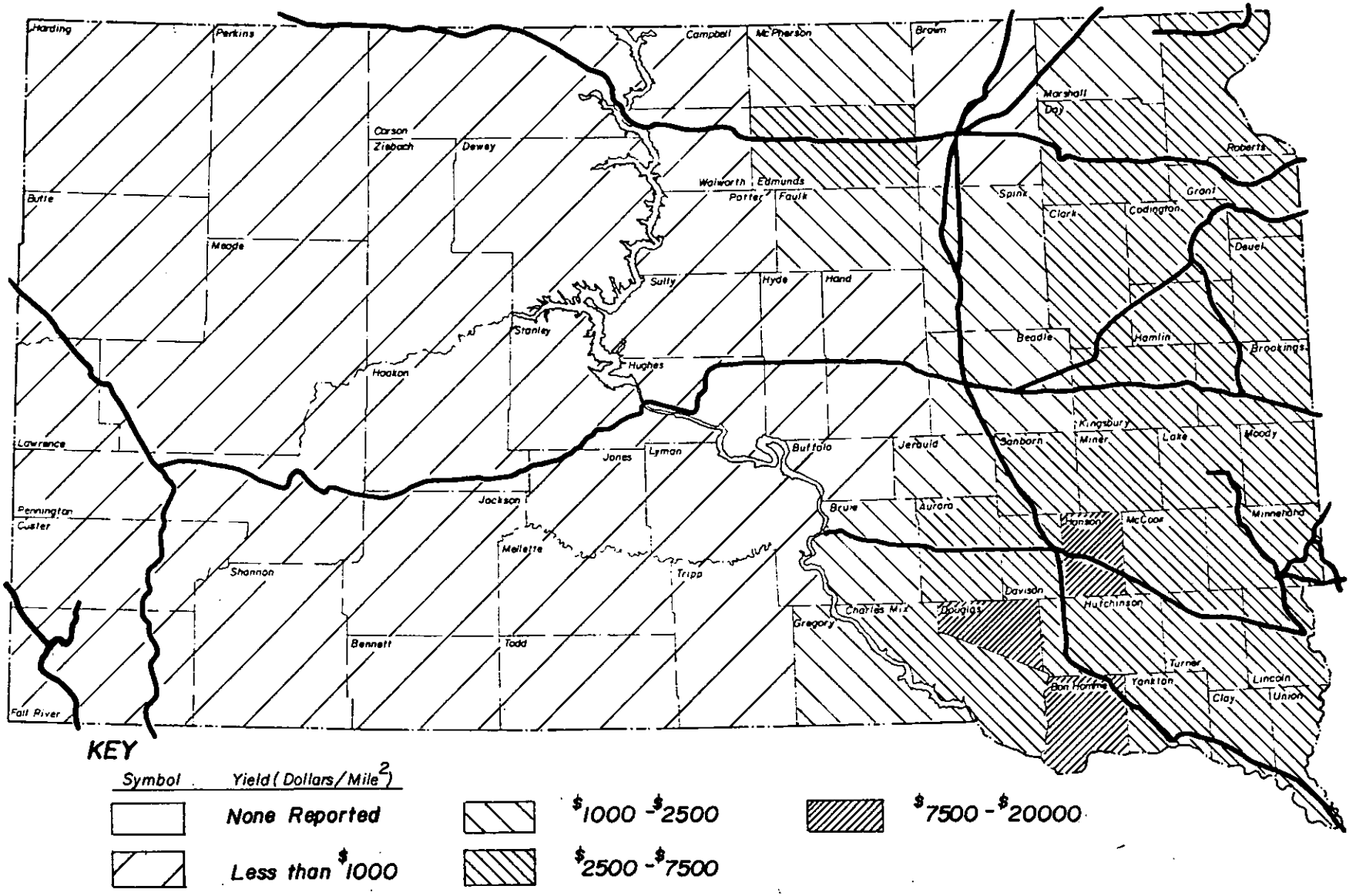
1.	Brown	4,954,100 Bushels
2.	Spink	4,614,600
3.	Day	3,019,800
4.	Marshall	2,995,600
5.	Perkins	2,377,200

*Preliminary data only for 1980
Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-8

VALUE OF OATS PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDOMENT)

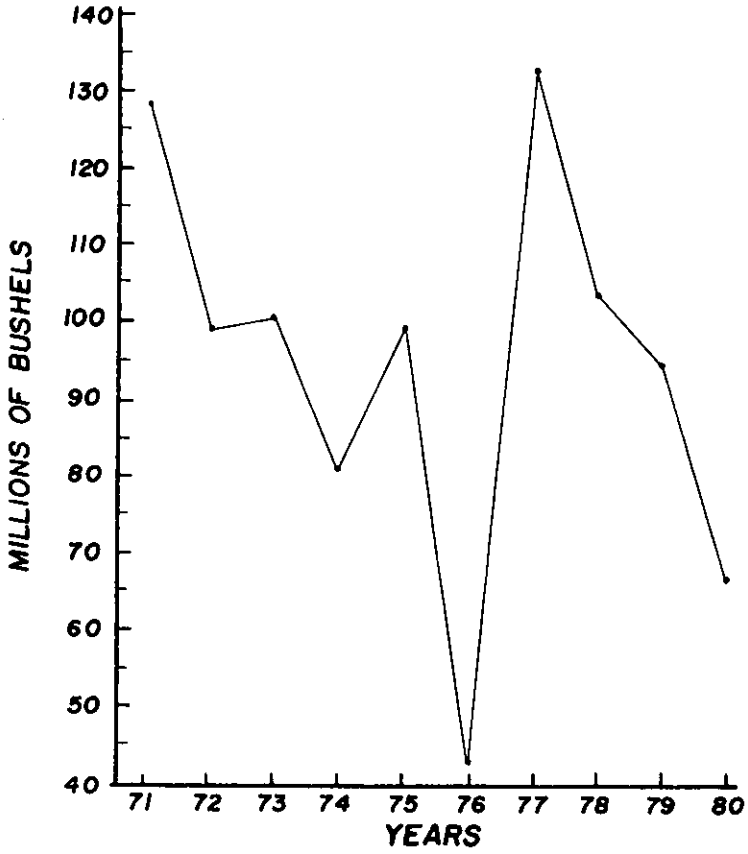


KEY

Symbol	Yield (Dollars/Mile^2)	Symbol	Yield (Dollars/Mile^2)	Symbol	Yield (Dollars/Mile^2)
	None Reported		$1000 - $2500		$7500 - $20000
	Less than $1000		$2500 - $7500		

FIGURE VII-9

OATS PRODUCTION ANALYSIS



Year	Production
1971	128,358,000 Bushels
1972	98,000,000
1973	100,580,000
1974	81,120,000
1975	98,120,000
1976	42,600,000
1977	132,300,000
1978	102,765,000
1979	94,400,000
1980*	66,000,000

Ten Year Trend Analysis

As the major feed grain grown in every county of the state, oats has not exhibited any definite growth or decline in decline in production volume. Yield and harvested acreage varied from a low of 30 Bushels/Acre and 1,420,000 Acres in 1976 to a high of 54 Bushels/Acre and 2,450,000 Acres in 1977. South Dakota State University Economics Department estimates 1984 production at 100,304,000 bushels.

1979

Production	102,765,000 Bushels
Marketed Production	41,536,000
Value of Marketed Production at the average seasonal price of $1.09/Bushel	$51,089,000

Top Five Counties in Production - 1979

1.	Hutchinson	4,510,000 Bushels
2.	Bon Homme	3,919,000
3.	Brookings	3,764,200
4.	McCook	3,364,400
5.	Minnehaha	3,361,900

*Preliminary data only for 1980

Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-10

VALUE OF BARLEY PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDONMENT)

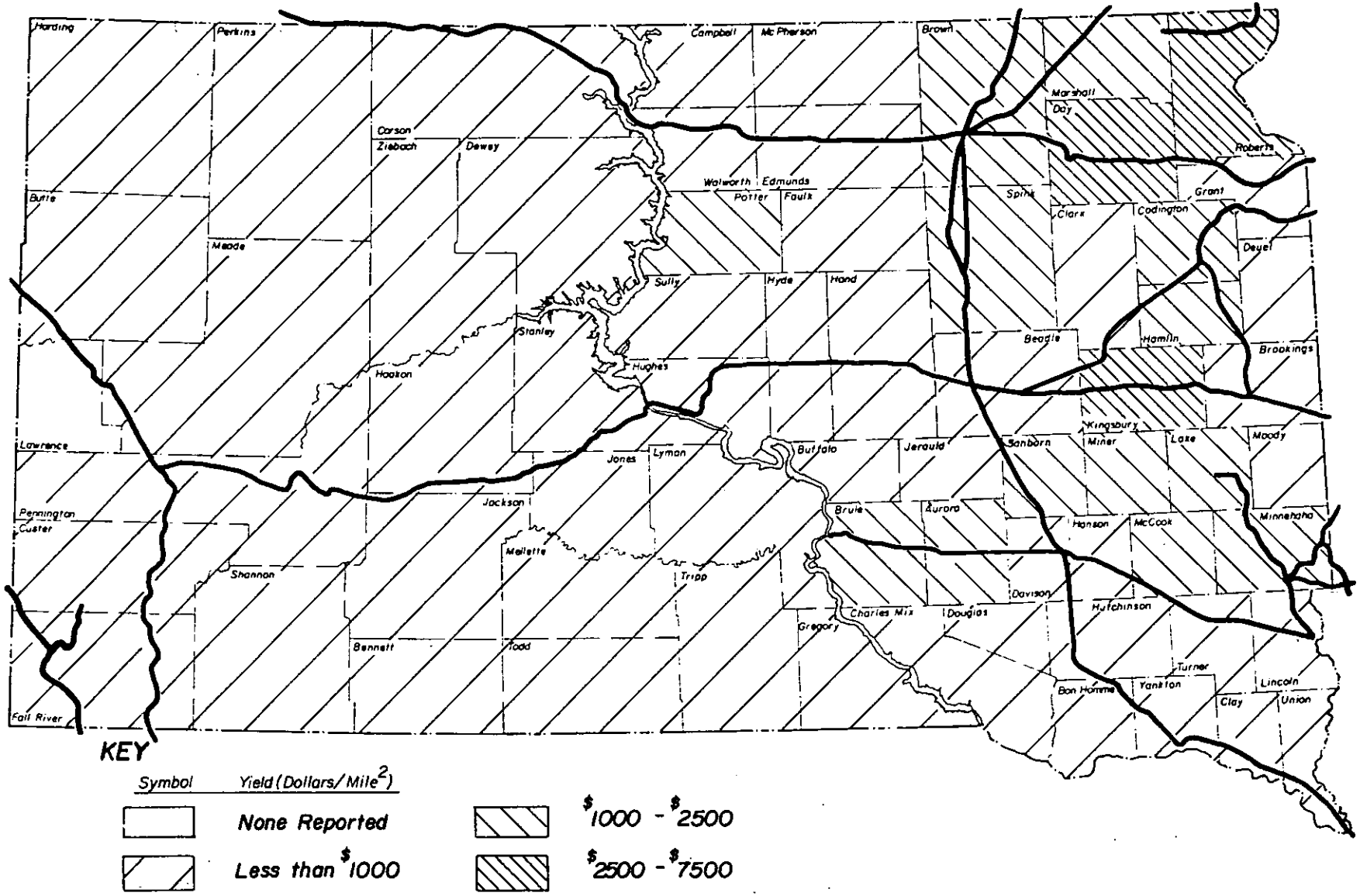
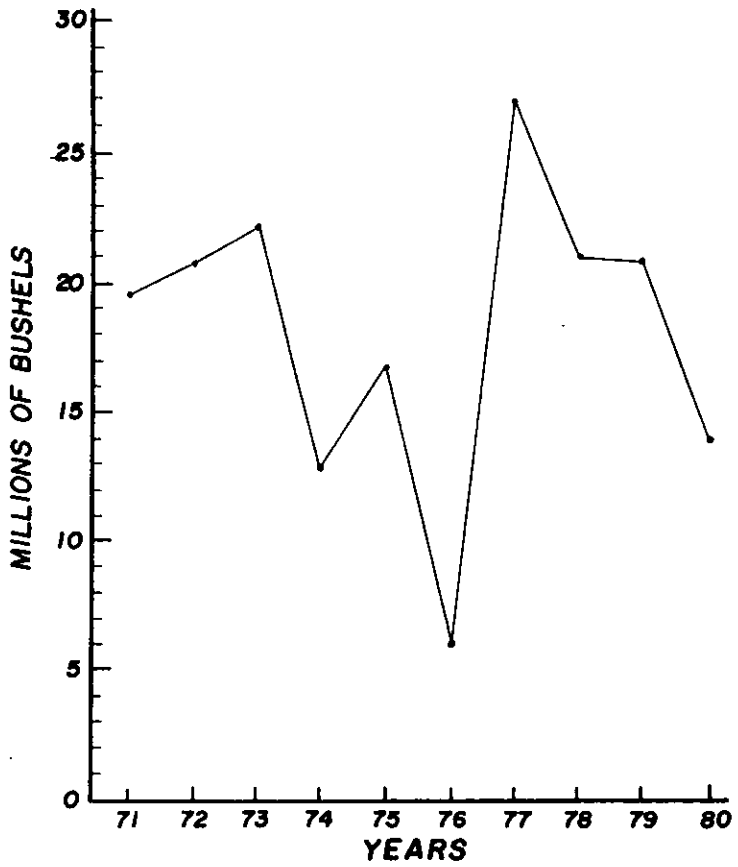


FIGURE VII - 11

BARLEY PRODUCTION ANALYSIS



Year		Production	
1971	-	19,598,000	Bushels
1972	-	20,736,000	
1973	-	22,085,000	
1974	-	12,800,000	
1975	-	16,492,000	
1976	-	5,950,000	
1977	-	26,880,000	
1978	-	20,905,000	
1979	-	20,800,000	
1980*	-	13,860,000	

Ten Year Trend Analysis

Although no specific trends for barley can be noted for the ten-year period, the production appears to be closely tied to weather conditions. In most years yields were steady at about 38 Bushels/Acre. South Dakota State University Economics Department estimates 1984 production at 19,433,000 bushels.

1979

Production	20,800,000	Bushels
Marketed Production	9,776,000	
Value of Marketed Production at the average seasonal price of $2.06/Bushel	$20,139,000	

Top Five Counties in Production - 1979

1.	Brown	1,927,000	Bushels
2.	Roberts	1,557,000	
3.	Day	1,457,300	
4.	Kingsbury	1,025,900	
5.	Codington	821,500	

*Preliminary data only for 1980

Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-12

VALUE OF SORGHUM PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDONMENT)

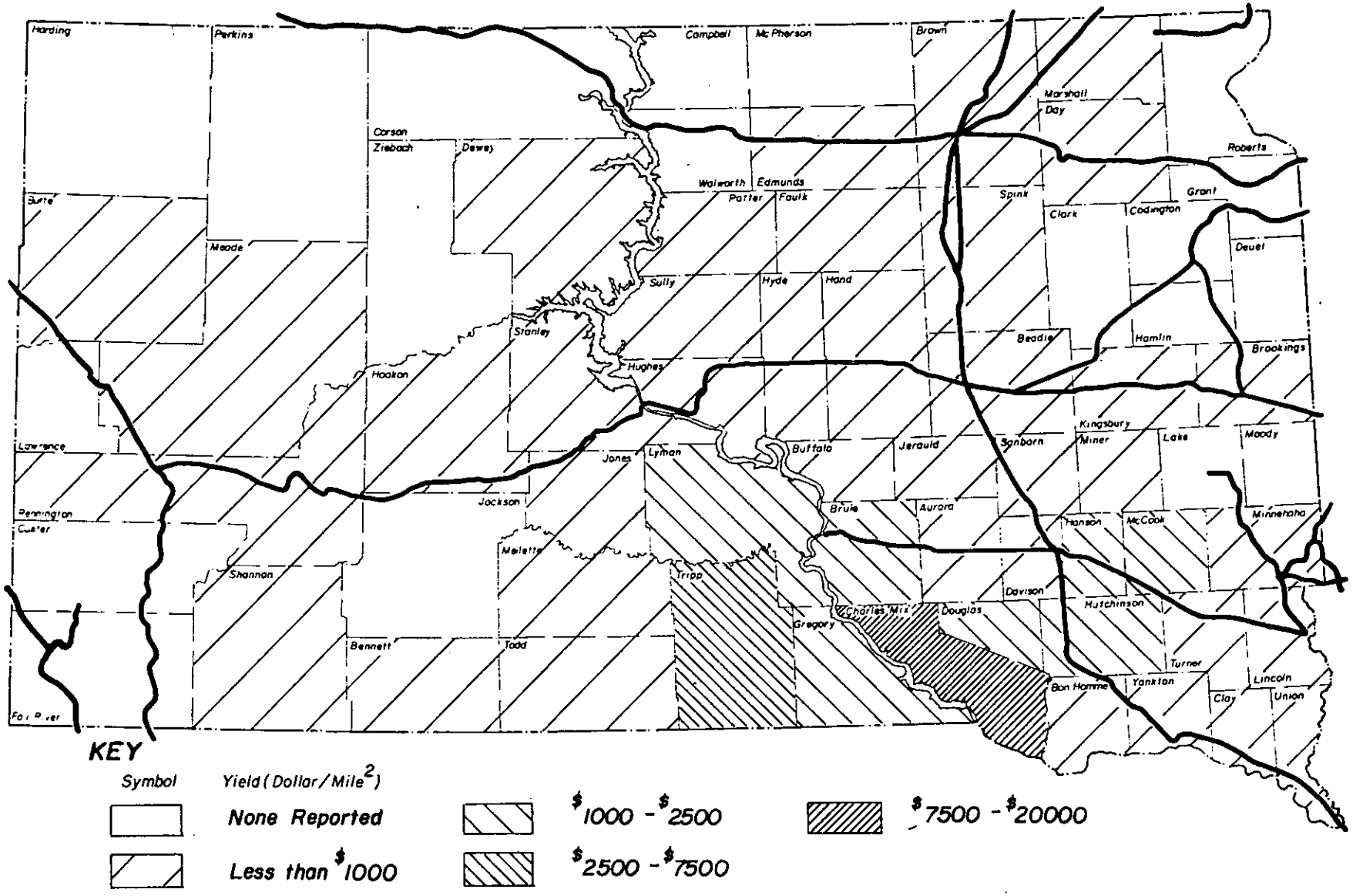
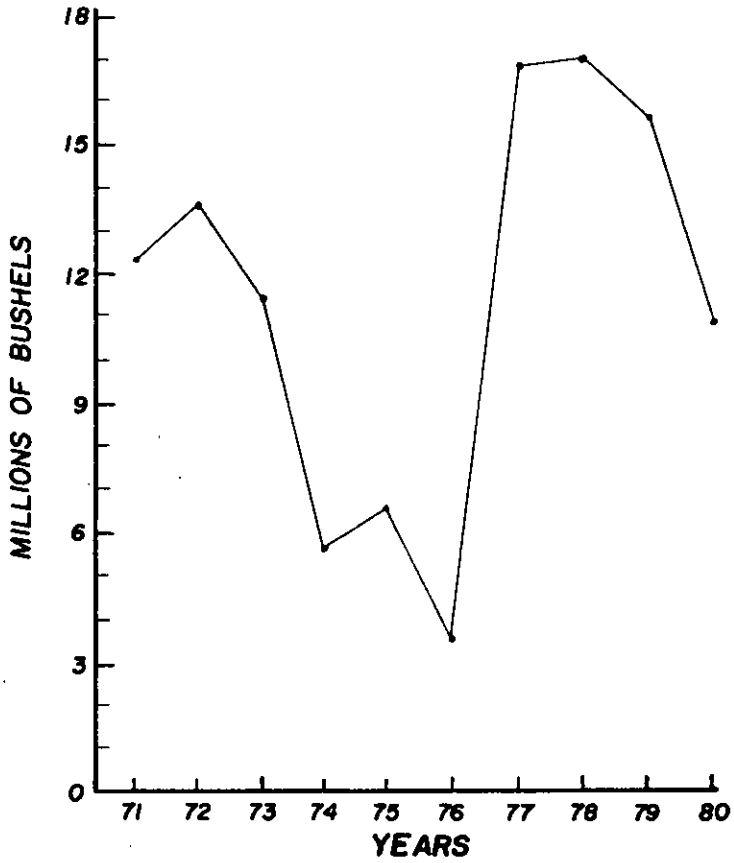


FIGURE VII - 13
SORGHUM PRODUCTION ANALYSIS



Year		Production	
1971	-	12,250,000	Bushels
1972	-	13,536,000	
1973	-	11,266,000	
1974	-	5,616,000	
1975	-	6,422,000	
1976	-	3,496,000	
1977	-	16,807,000	
1978	-	17,000,000	
1979	-	15,525,000	
1980*	-	10,725,000	

Ten Year Trend Analysis

Sorghum has shown trends that are similar to that of corn. From 1977 to 1979, yield averaged 48 Bushels/Acre. South Dakota University Economics Department estimates 1984 production at 10,560,000 Bushels.

1979

Production	15,525,000	Bushels
Marketed Production	7,918,000	
Value of Marketed Production at the average seasonal price of $1.80/Bushel	$14,252,000	

Top Five Counties in Production - 1979

1. Charles Mix	4,631,000	Bushels
2. Tripp	2,266,000	
3. Lyman	1,028,000	
4. Gregory	703,000	
5. Hutchinson	670,000	

*Preliminary data only for 1980
Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-14

VALUE OF RYE PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDONMENT)

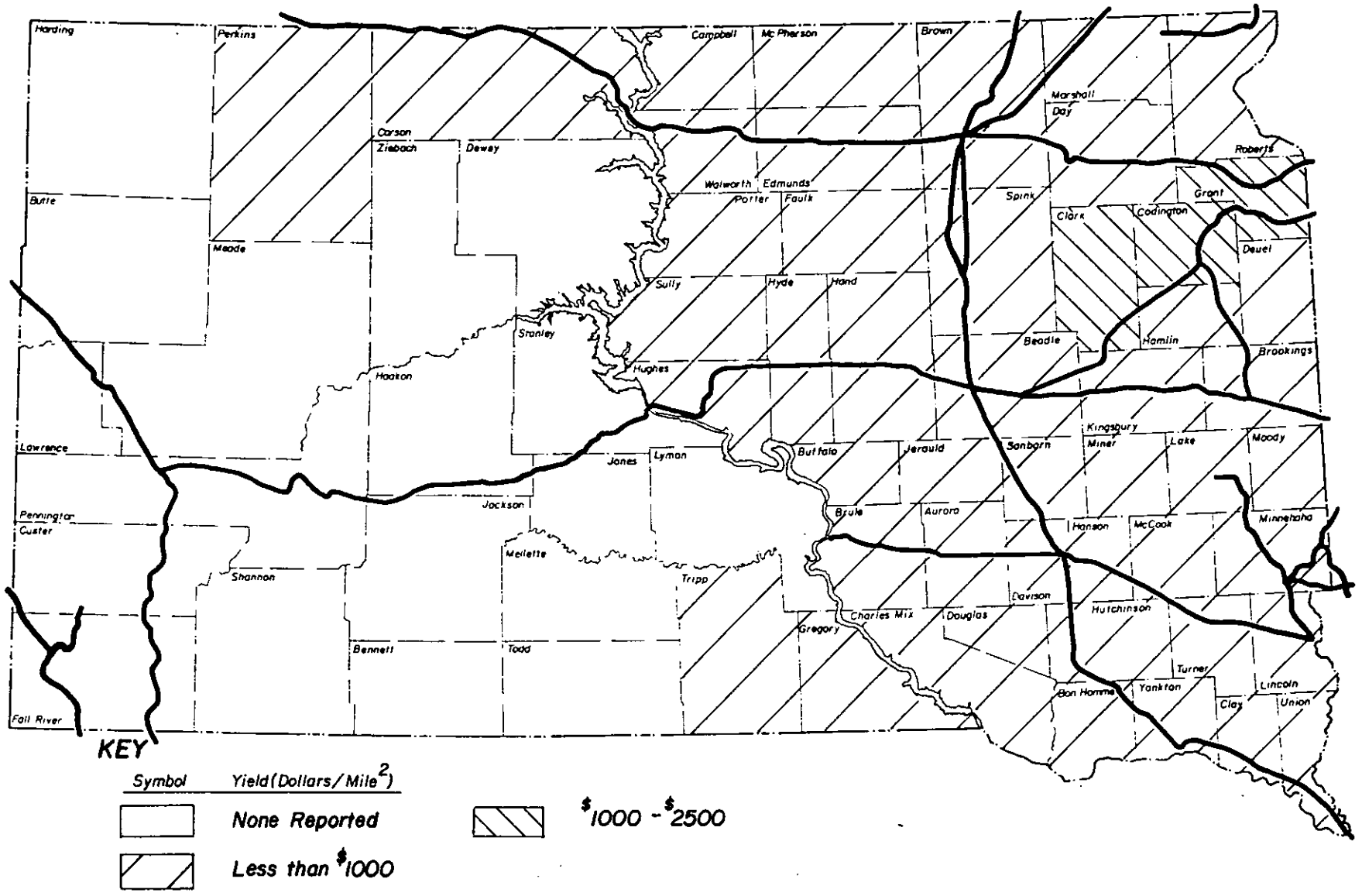
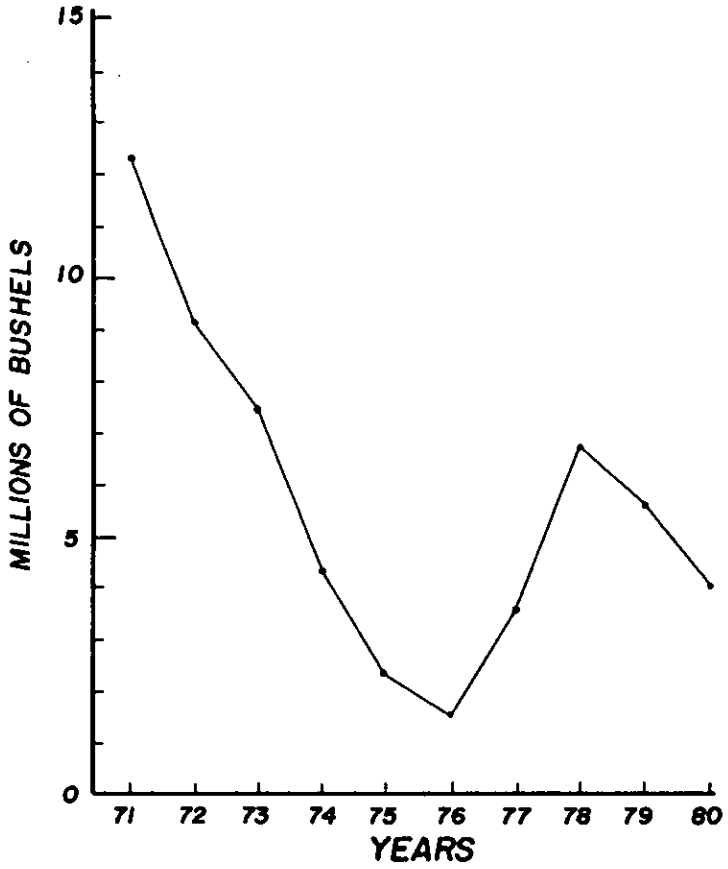


FIGURE VII - 15
RYE PRODUCTION ANALYSIS



Year		Production
1971	-	12,320,000 Bushels
1972	-	9,108,000
1973	-	7,480,000
1974	-	4,278,000
1975	-	2,346,000
1976	-	1,485,000
1977	-	3,480,000
1978	-	6,820,000
1979	-	5,700,000
1980*	-	4,030,000

Ten Year Trend Analysis

In terms of statewide production, rye is a minor crop but is distributed over many counties. Total production appears to be decreasing steadily as fewer acres are producing rye. South Dakota University Economics Department estimates 1984 production at 8,021,000 bushels.

1979

Production	5,700,000 Bushels
Marketed Production	5,130,000
Value of Marketed Production at the average seasonal price of $1.89/Bushel	$36,824,000

Top Five Counties in Production - 1979

1.	Codington	564,000 Bushels
2.	Clark	516,000
3.	Spink	460,000
4.	Grant	400,000
5.	Day	354,000

*Preliminary data only for 1980
Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII-16

VALUE OF FLAXSEED PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDONMENT)

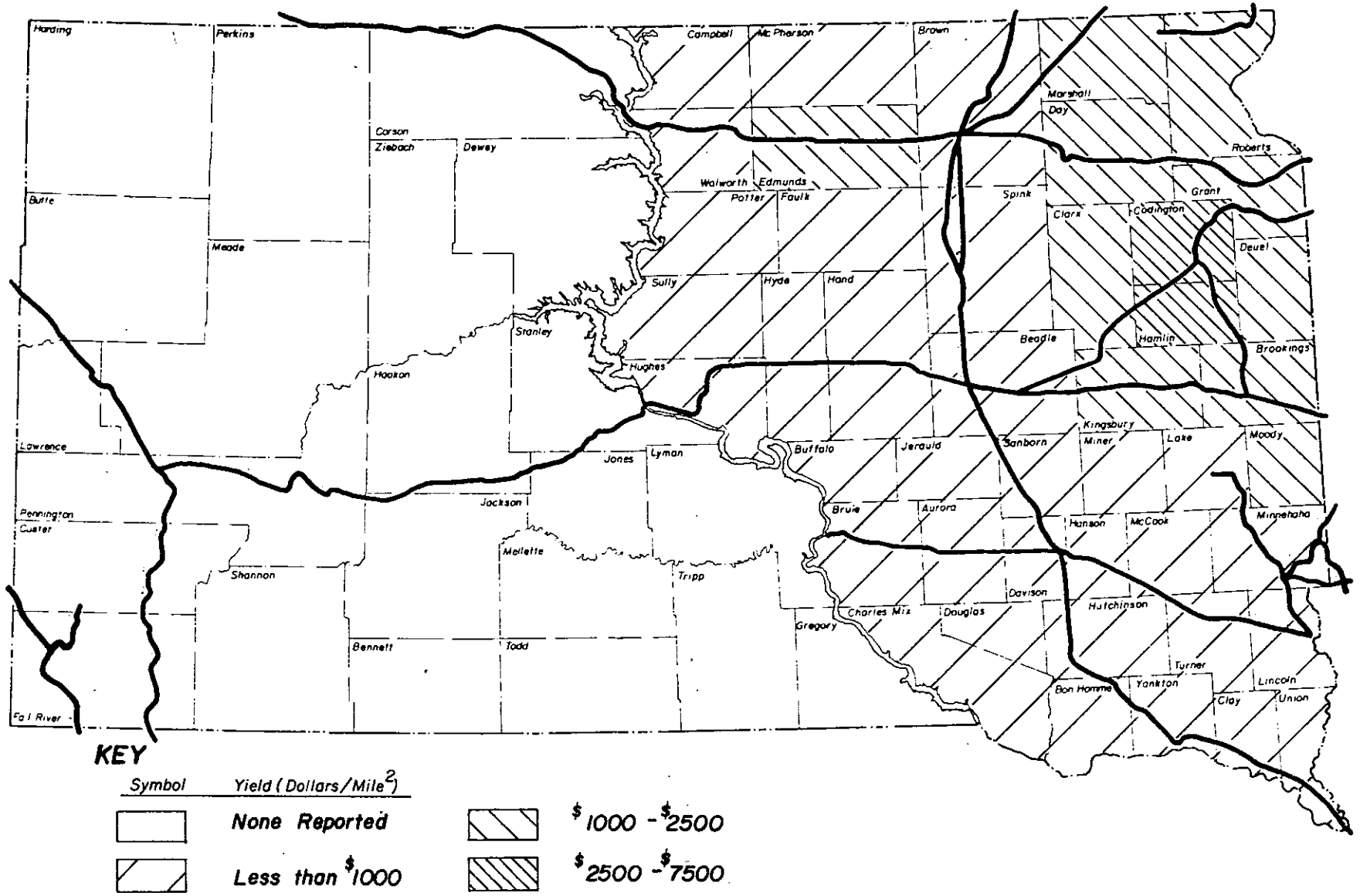
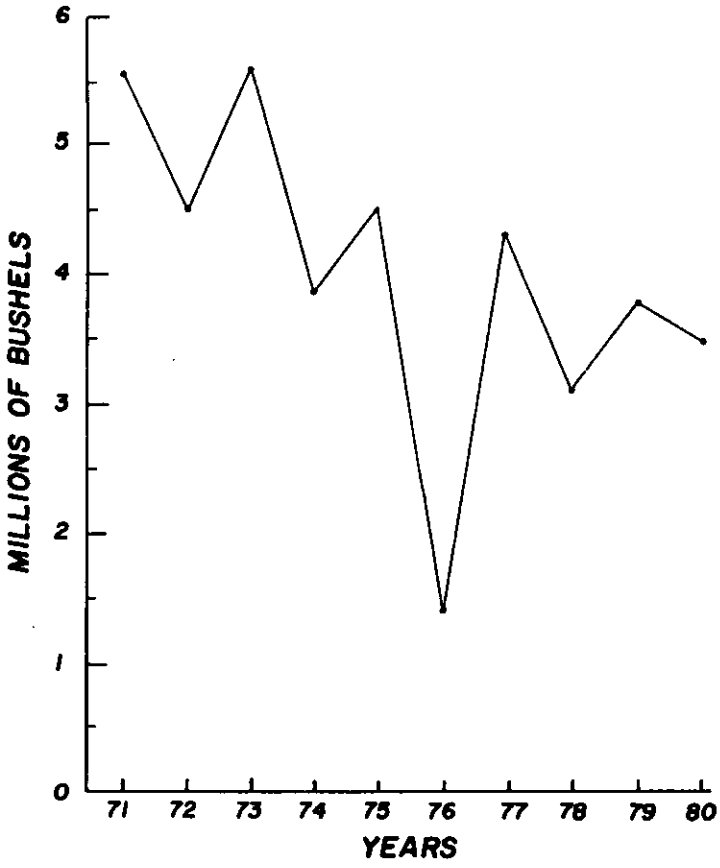


FIGURE VII - 17
FLAXSEED PRODUCTION ANALYSIS



Year		Production	
1971	-	5,525,000	Bushels
1972	-	4,500,000	
1973	-	5,577,000	
1974	-	3,818,000	
1975	-	4,460,000	
1976	-	1,380,000	
1977	-	4,290,000	
1978	-	3,091,000	
1979	-	3,770,000	
1980*	-	3,445,000	

Ten Year Trend Analysis

Production appears to be slowly declining. South Dakota State University Economics Department estimates 1984 production at 3,148,000 bushels.

1979

Production	3,770,000	Bushels
Marketed Production	3,657,000	
Value of Marketed Production at the average seasonal price of $6.25/Bushel	$22,856,000	

Top Five Counties in Production - 1979

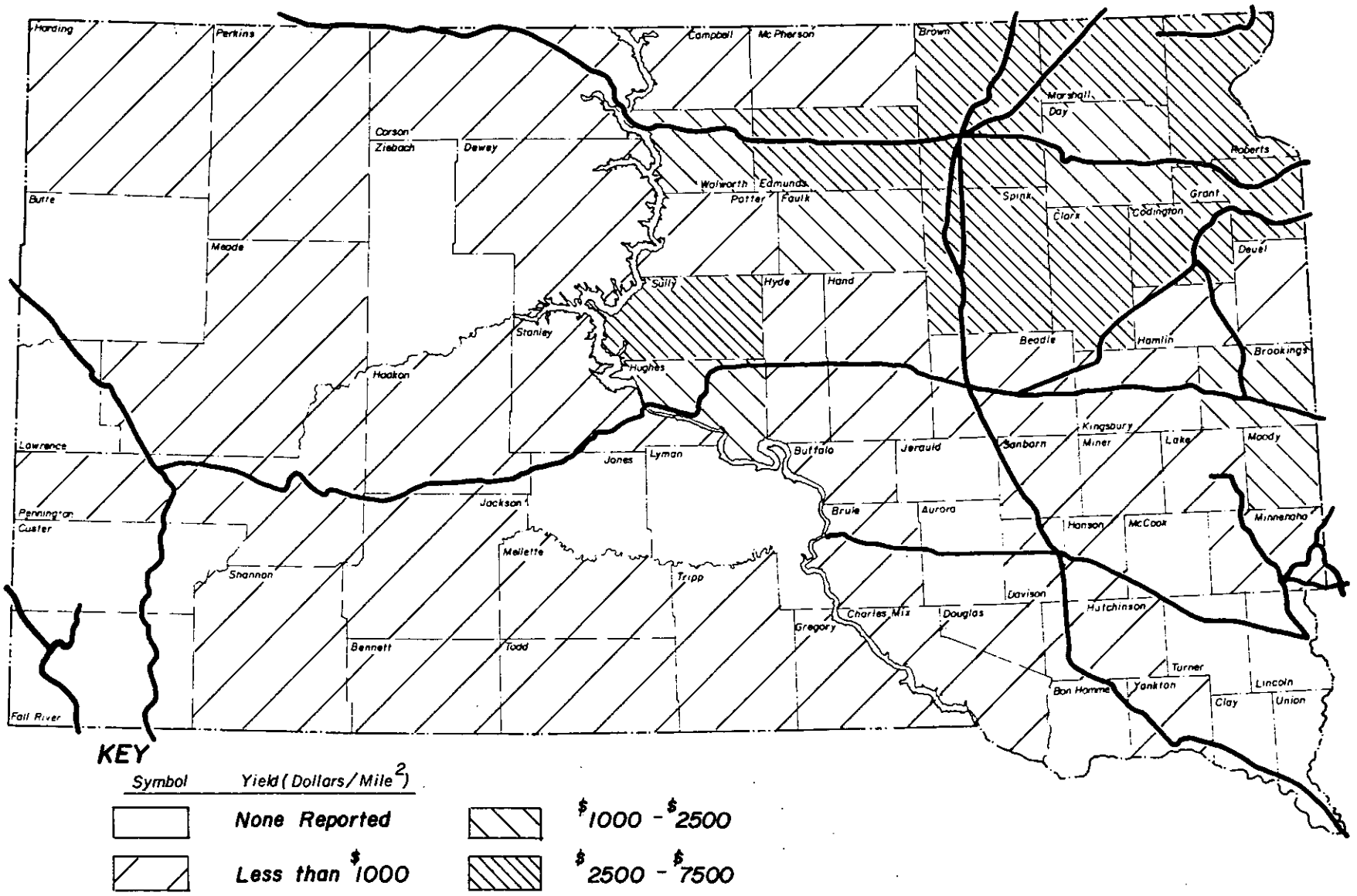
1. Codington	417,000	Bushels
2. Hamlin	340,300	
3. Clark	338,800	
4. Kingsbury	292,500	
5. Day	290,200	

*Preliminary data only for 1980
Source: South Dakota Crop and Livestock Reporting Service

FIGURE VII - 18

VALUE OF SUNFLOWER PRODUCTION PER SQUARE MILE - 1979

SOUTH DAKOTA ESSENTIAL RAIL SYSTEM AND ICC CATEGORY 5 LINES (NOT CANDIDATE FOR ABANDONMENT)



KEY

Symbol	Yield (Dollars/Mile^2)	Symbol	Yield (Dollars/Mile^2)
	None Reported		$1000 - $2500
	Less than $1000		$2500 - $7500

FIGURE VII - 19

Grain Production Per Square Mile

[Thousands of Bushels]

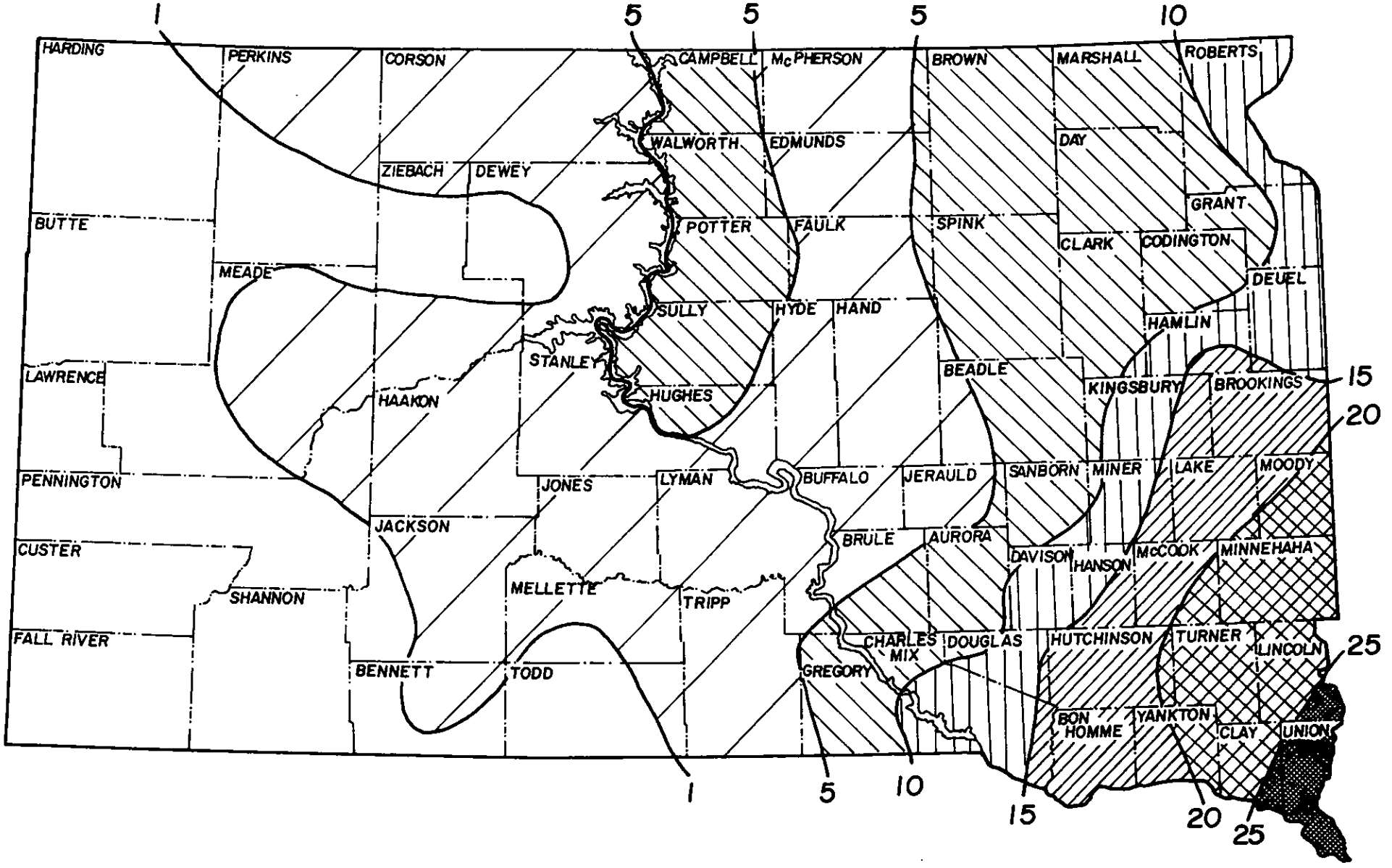


Table VII-1

SOUTH DAKOTA GRAIN PRICES, 1978, 1979, AS COMPARED WITH OTHER STATES

	1978			1979		
CROP	S.D. PRICE PER BUSHEL	S.D. RANKING	NATIONS PRICE RANGE	S.D. PRICE PER BUSHEL	S.D. RANKING	NATIONS PRICE RANGE
Corn	$ 1.91	41:41	$ 1.91-$2.88	$ 2.07	41:41	$ 2.07-$ 3.26
Sorghum	1.62	23:23	1.62- 2.58	1.80	24:24	1.80- 3.20
Oats	1.09	34:36	1.00- 1.90	1.23	34:36	1.16- 2.20
Barley	1.73	27:33	1.65- 2.60	2.06	21:33	1.70- 2.70
Wheat	2.81	35:42	2.70- 3.51	3.64	35:41	3.30- 4.24
Rye	1.88	25:29	1.45- 4.00	1.89	25:27	1.70- 3.30
Soybeans	6.28	30:30	6.28- 6.87	5.95	26:30	5.80- 6.60
Flax	5.71	2:4	4.45- 5.84	6.25	1:4	5.76- 6.25
Sunflowers	10.30/cwt	4:4	10.30- 11.50	8.45/cwt	4:4	8.45- 10.60

Price Per Bushel - The seasonal average price per bushel received by the producer as reported by the producer on surveys made by the Crop Reporting Board, Economics, Statistics & Cooperatives Service; USDA. It gives an indication of available terminal prices minus transportation costs.

South Dakota Ranking - The comparison of prices received by State from highest to lowest. The first number is South Dakota's ranking, the second number is the total number of states reporting this crop. EXAMPLE: For corn, South Dakota ranked 41st (first number) out of the 41 states that produce corn.

Price Range - The lowest and highest national price for a particular crop.

SOURCE: "Field Crops - Production, Disposition, Value 1978-1979 and 1979-1980" Crop Reporting Board, Economic Statistics & Cooperatives Service, USDA, April, 1980.

Table VII-2

1979 SOUTH DAKOTA GRAIN SALES - VALUE OF TRANSPORTATION
A REGIONAL COMPARISON

CROP	Marketed Production (X1,000 Bu.)	Increase in Sales Value if SD Price Equaled that of.. NEBRASKA	IOWA	MINNESOTA	N. DAKOTA
Corn	99,123	$34,693,050	$34,693,050	$18,833,370	$ 5,947,380
Sorghum	7,918	3,404,740	1,662,780	-	-
Oats	41,536	3,738,240	7,476,480	1,246,080	- 2,907,520
Barley	9,776	-3,030,560	-	879,840	0
Wheat	56,276	0	-19,133,840	3,939,320	10,129,680
Rye	5,130	820,800	6,207,300	1,333,800	- 874,700
Soybeans	22,040	- 440,800	4,848,800	1,102,000	- 3,306,000
Flaxseed	3,654	-	-	841,110	- 1,791,930
Sunflowers	2,608 (7,563,000cwt)	-	-	8,621,820	3,327,720
TOTAL		$39,185,470	$35,754,570	$35,115,120	$10,424,630
Average Additional Value Per S.D. Bushel Sold		15.8¢	14.4¢	14.2¢	4.2¢

Note: Dash means that the State did not have any sales in that commodity.
Zero means of difference in price from South Dakota to the other state.

Dollar amounts in the state columns signify the total additional value of commodities if the price received in that state is applied to the volume of South Dakota grain sales.

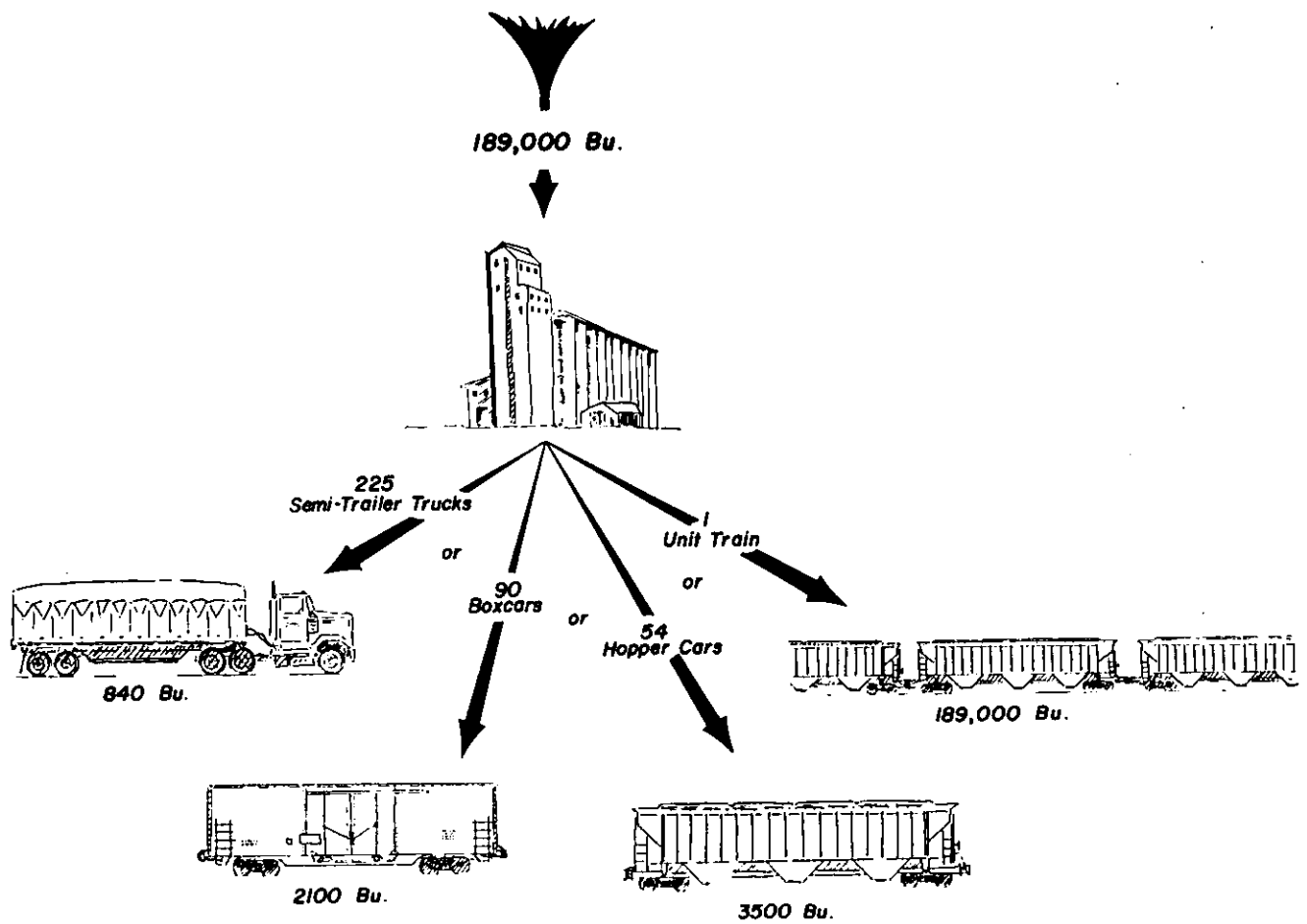
Source: "Field Crops: Production, Disposition, Value - 1978-1979," United States Department of Agriculture.

Figure VII-20

EXAMPLE DECISION MODEL FOR AGRICULTURAL COMMODITY SHIPMENTS

This model takes into account the numerous variables involved in grain shipping. To make the model work several factors must be established, including typical number of acres produced, yield, volume sold and capacities of a farm truck, a semi-trailer truck, boxcar, and hopper car. Once these factors are determined, the following simplified scenario may occur in the corn producing area of southeastern South Dakota.

15 agricultural producers decide that they will each grow 335 acres of corn. The harvested yield for each producer is 80 bushels per acre, or 26,800 bushels. The producers then decide that they will keep an amount for feed and seed and sell the remainder. Each one decides to sell 12,600 bushels to the elevator by using his 450-bushel farm truck 28 times. The elevator, who had all his storage filled to capacity already, must ship all of this corn, a total of 189,000 bushels, as soon as possible. When faced with the decision of how to ship, he discovers that he will need 225 semi-trailer trucks, 90 boxcars, 54 hopper cars, or 1 unit train.



CHEMICALS AND ALLIED PRODUCTS

Another important element in the relationship between railroads and agriculture is fertilizer. This product originates mainly from Canada and southeastern United States. The demand is typically seasonal but relatively constant in annual volume, whether hauled by rail or motor carrier.

In 1978, the total consumption of fertilizer mixtures and other direct application materials was, 373,386 tons. Tonnage in 1979 was 399,200, or a 7% increase. With the exception of 1980, carloadings of chemicals and allied products, which is mainly fertilizer, have experienced a slow but steady increase over the last five years. The typical system of transporting fertilizer involves a regional distribution center that, in turn, retails the chemicals to local users.

Factors that influence the total volume of fertilizer that is applied include the price of fertilizer, total planted acreage, the acreage planted to a particular crop, groundwater moisture, and precipitation expectations. With the potential of expanded irrigation of farmland in the future, the need for large volumes of fertilizer will increase proportionately. As with grain transportation, the peak of fertilizer usage in springtime usually means that additional traffic is diverted to motor carriers, which are more flexible in routings and schedules. The prospect for further development of regional fertilizer distribution centers is recognized and could impact the rail traffic volumes.

COAL

Coal, a viable energy resource, will also play an important role in the need for a stong South Dakota transportation network. Projections into the 1990's show that the demand for Western coal will increase dramatically. The total capacity of railroads to haul coal must also increase to meet this demand.

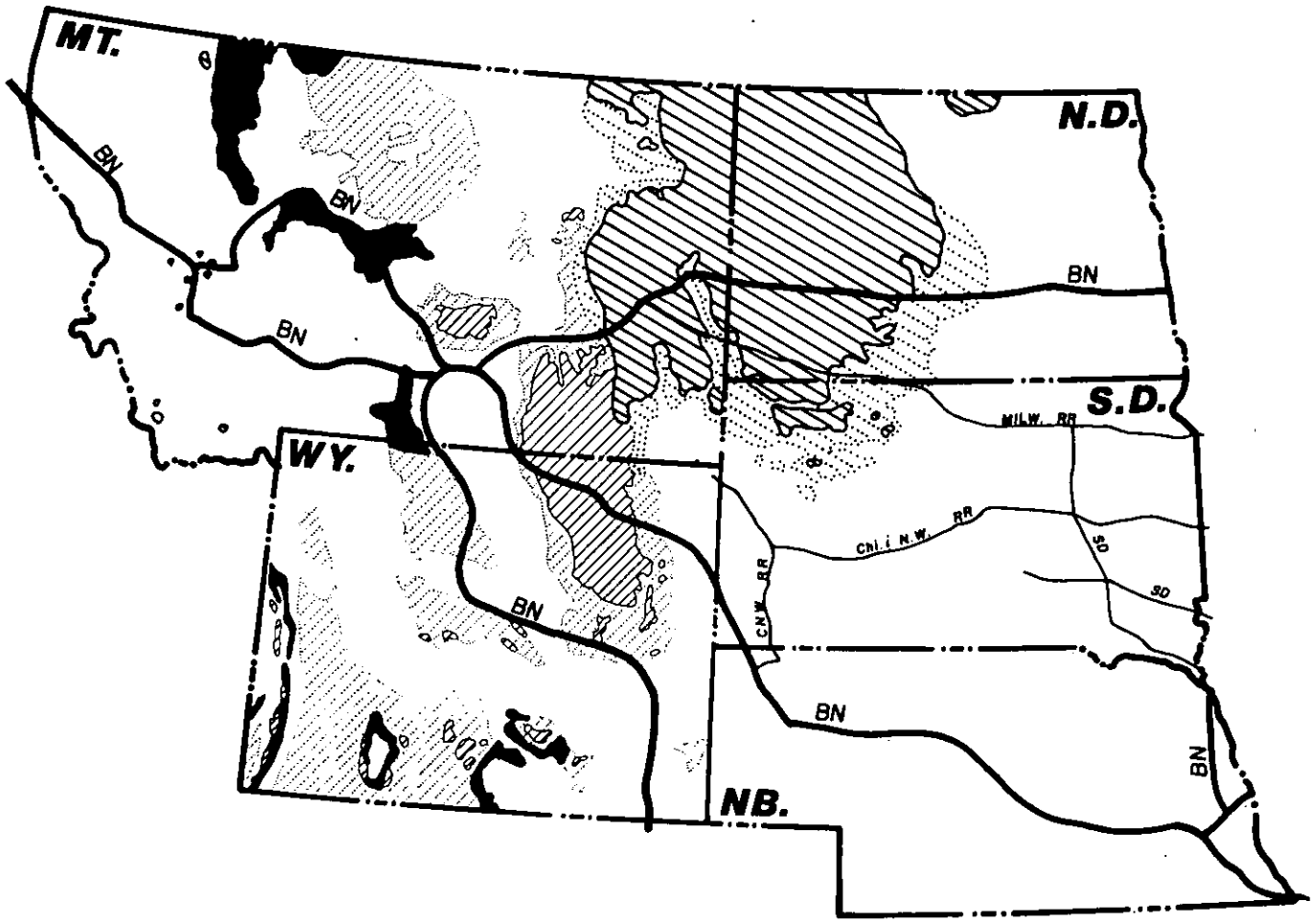
Although little, if any, coal is currently being mined in South Dakota, a large volume terminates in the State. A map illustrating the location ot major coal reserves is presented on Figure VII-21. The major user is the Big Stone Power Plant, located near Milbank. Another smaller user of coal is Black Hills Power & Light Company near Deadwood. Carloads used by these plants have been steady during the past five years, with 28,767 carloads in 1980 (28.2% of total state carloadings). A main line of the Burlington Northern that is a heavy coal route also traverses 48.8 miles of southwestern South Dakota.

The filing for abandonment on May 15, 1981 of the line that serves the Big Stone Power Plant has caused an intensified search to find an acceptable alternative to the loss of Milwaukee Road service. This effort has been preceded by several intensive studies, including two short-term multi-state repair projects. The following description is quoted from the January 1980 Railplan Addendum that addressed the first regional rehabilitation project on the line.

> "Big Stone requires 2.7 million tons per year, or approximately 60,000 tons per week of lignite. The lignite is supplied by Knife River Coal Mining Company from the Gascoyne Mine in southwestern North Dakota. Knife River was committed to supply the Big Stone partners with an average of 2,750,000 tons of coal per year during the first 20 years of

FIGURE VII-21

Coal Resources



LEGEND

Subbituminous	▨	PROVED RESERVE
	⋰⋱	PROBABLE RESERVE
Bituminous	■	PROVED and PROBABLE RESERVE
Lignite	▨	PROVED RESERVE
	⋰⋱	PROBABLE RESERVE

Main Lines — Branch Lines

plant life. Last year (1979) the mine shipped 2,862,893 tons to Big Stone. The reserves of the Knife River Mine are approximately 400,000,000 tons. At the current rate of consumption, the Knife River reserves would provide a continuous fuel supply to the Big Stone site for well over 100 years".

The Burlington Northern rail line that lies in Custer and Fall River Counties in southwestern South Dakota and passes through the City of Edgemont serves the Powder River Basin in Wyoming. The Federal Railroad Administration has estimated that this line will originate three times as much coal in 1990 as it did in 1978. It will then become the most heavily travelled rail line, in terms of tonnage, in the United States.

STONE, CLAY, AND GLASS PRODUCTS

The commodity that accounts for most of the traffic in this class is cement. The state-owned plant at Rapid City is the sole source of cement production in South Dakota. Three types of portland cement and a prepared masonry cement are manufactured at the facility. The plant, with a rated production capacity of 3,300 tons per 24 hours, uses three wet-process kilns of 375-foot length and one dry process kiln of 220-foot length in its production line. Approximately 1 3/4 tons of mineral raw material, including clay, shale, gypsum, and lime, are mined in the State to be used in each ton of cement produced.

Ready-Mix companies are the largest users of the portland cement produced, consuming more than half of the output in recent years. Originating traffic accounts for 65.5% of the total traffic in 1980. An average of 585,000 tons per year were shipped from 1973 to 1979, primarily to in-state customers. Distance is the main economic determinant for competition in out-of-state markets.

Projected demand for cement is expected to grow in the 1980's. Industrial development, municipal expansion, and the increasing cost of asphalt and petroleum products will tend to raise the demand for cement further above the already limited capacity of the region to supply the product. A strong railroad service is necessary to maintain the competitive stance of the South Dakota Cement Plant in the multi-state Upper Midwest Region.

NONMETALLIC MINERALS

The production of nonmetallic minerals is the fourth major source of traffic for South Dakota railroads. Principal mineral commodities handled by rail include stone, sand and gravel, and bentonite. Although production is distributed throughout the State, the value is concentrated in the Black Hills because of the mining operations and bentonite processing that is concentrated there.

The value of nonfuel mineral production in South Dakota for 1978 and 1979 was $114.8 million and $148.7 million, respectively, setting records each year. [1] While this was occurring, rail carloadings remained relatively constant from previous years. In 1980, however, a 40% decrease in carloadings, from 21,395 to 12,829 signalled a significant loss of business for the railroads. This may have been caused by a general business slowdown as well as the embargo and subsequent abandonment of most Milwaukee Road lines.

[1]The Mineral Industry of South Dakota, 1978-79 Bureau of Mines Mineral Handbook S.D. Dept. of Interior.

Bentonite

Bentonite is a clay product obtained from the Northern Black Hills area centered around Belle Fourche, South Dakota and Colony, Wyoming. Its principal use is in oil and gas drilling muds, foundry sands, animal feeds, and waterproofing sealants. Bentonite accounts for the majority of clay that is hauled on rail.

A survey of three companies involved in the mining and processing of bentonite revealed that all three would either be forced to close down or reduce operations considerably without rail service. As a result, several hundred people would be directly affected by the loss of company jobs. Countless other people would feel side effects of a secondary nature as the shock of company closure ripples through the local economy.

Since bentonite is found in only one area and few companies are involved in mining operations, specific data on production and traffic flow cannot be released. However, the estimated approximate production level lies between 750,000 and 850,000 tons annually. Due to the nature of the product and its location, rail is the most suitable transportation mode. Since the demand for bentonite is increasing, rail traffic is also expected to increase significantly by 1990.

Stone

Sandstone, limestone, and granite ranked first in terms of value of all nonmetallic minerals produced in South Dakota. This accounted for nearly one-fifth of the total State value during 1978-79. In 1979, production was recorded from 19 quarries, operated by 14 firms located in 8 counties. [2]

Sandstone is the most important rock for railroads because it is used as line ballast. Other uses include concrete aggregate, bituminous aggregate, and riprap. Production was centered at four sites in Hanson, Minnehaha, and Tripp Counties.

Limestone output exceeded that of any other type of rock. The seven deposits in Custer, Fall River, Lawrence, and Pennington Counties were used most extensively as aggregate. Granite was quarried by six companies near Milbank in Grant County. Most of the dimension granite was used in making monuments while the crushed granite was utilized as aggregate.

Production from individual quarries throughout the State ranged from less than 25,000 tons to more than 900,000 tons per year. The quantity of crushed stone produced in 1979, 3,891,000 short tons, represents a 5.4% increase from the 1978 production level. Sixty-two percent of the crushed stone was shipped by truck, and the remainder by rail. Future rail hauls for crushed stone may increase considerably because of the large volume needed for ballast on several rail rehabilitation projects.

LUMBER AND WOOD PRODUCTS [3]

The Black Hills Region of South Dakota produces a significant amount of lumber and wood products annually. In the five year period from 1976 through 1980, an average of 102 million board feet (MBF) was harvested per year. Projections for the next five years show about 125 MBF harvested annually.

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[2]The Mineral Industry of South Dakota
[3]Information received from Black Hills National Forest Personnel.

Of the 102 million board feet harvested, approximately 25 MBF is roundwood used for post and poles, most of which stays in the region. The saw timber that remains is then milled to produce lumber. About 50% of the timber is recoverable lumber, or 9.6 million cubic feet, assuming four board feet equals one cubic foot. Approximately 95% of the lumber, or 9.1 million cubic feet, is exported. Of the mill residue that constitutes the remaining 50% of the mill products, some of it is shipped as pulpwood by rail when the sales income is greater than the freight costs, and some is burned. In 1977, approximately one-third of the residue was shipped.

The usual shipping range for Black Hills processed lumber is North and South Dakota, Nebraska, and Illinois. Pulpwood that is shipped travels mainly to Wisconsin. Other nearby states, including Minnesota and Colorado, either have their own lumber or are getting it from the West Coast.

In addition to the National Forest lands, private individuals also harvest a significant amount of wood. In 1978, about 8½ million board feet, or 8% of the total harvest, were removed from private land and state parks.

For the immediate future, lumber and wood products travelling by rail from South Dakota appears to be generally steady to slighty lower volumes because of the sluggish housing industry. The long range need for wood products will probably continue the slow rate of growth experienced during the last five years.

INDUSTRIAL CENTERS

In addition to the previously discussed commodities and industries that exhibit significant transportation needs, various locations in the State serve as regional trade and commerce centers. These communities have a considerable area either in use or available for development as industrial parks. Businesses that are located in an industrial park generate a demand for transportation services, and depending on the amount, size, and perishability of the freight, frequency of service needs, and the shipping point of the commodity, may have a strong need for rail transportation.

For purposes of identifying these regional commerce centers, First Class cities, as legally defined in South Dakota statutes, provides a logical community grouping. As Table VII-3 indicates, thirteen communities attain this classification, only one of which has no rail service. Four communities are served by more than one carrier, which may allow the community the luxury of selecting between rail carriers.

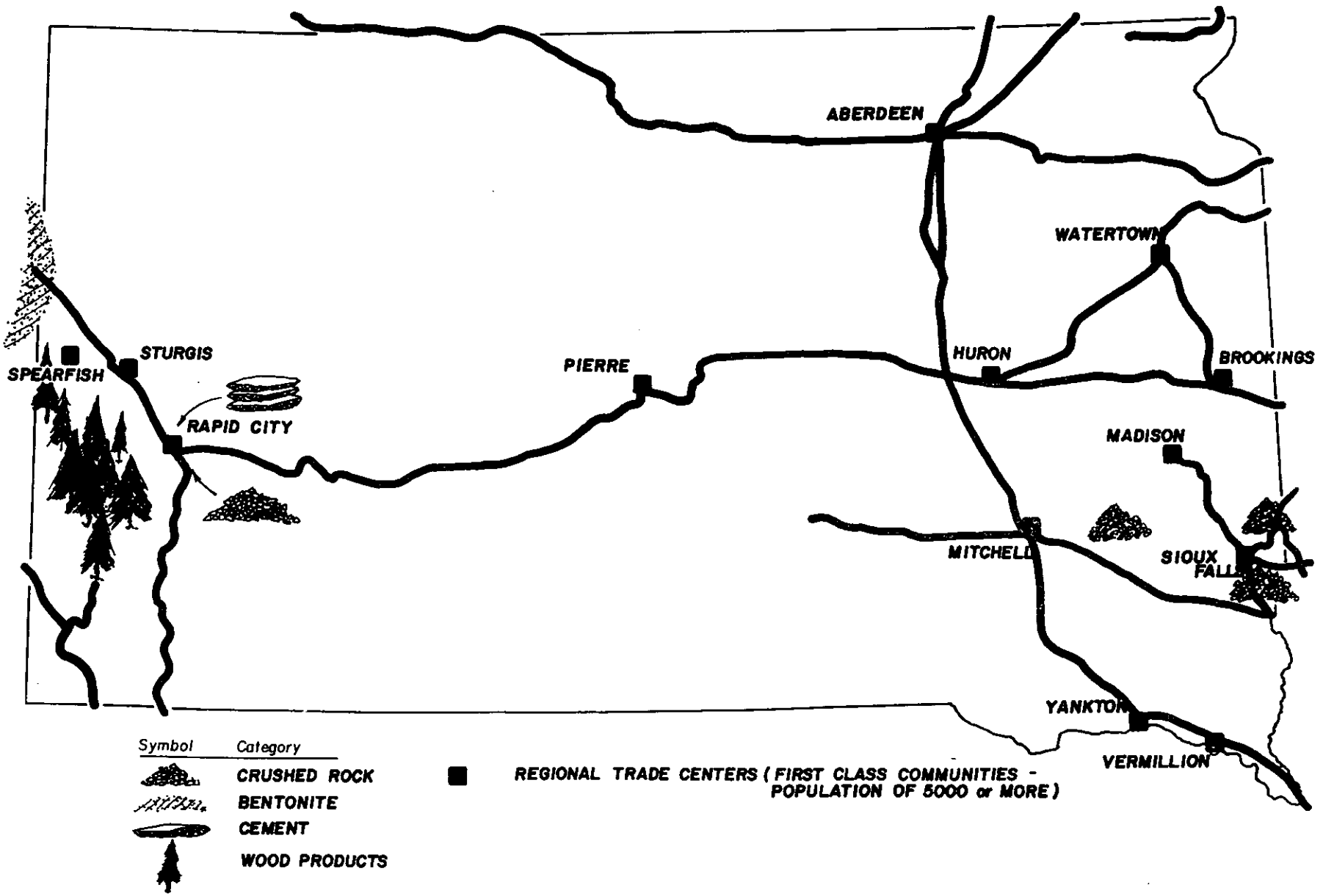
The future industrial growth of South Dakota is dependent upon a comprehensive multi-modal transportation system. As industries develop or expand, the economics of transportation plays a significant role in site selection. Strong rail access to the rest of the nation is important to industrial managers for cost and distribution control. Community leaders must have an understanding of industrial marketing needs to promote the assets of their location. Figure VII-22 shows the location of major rail users for five (5) industrial groups as described in this chapter.

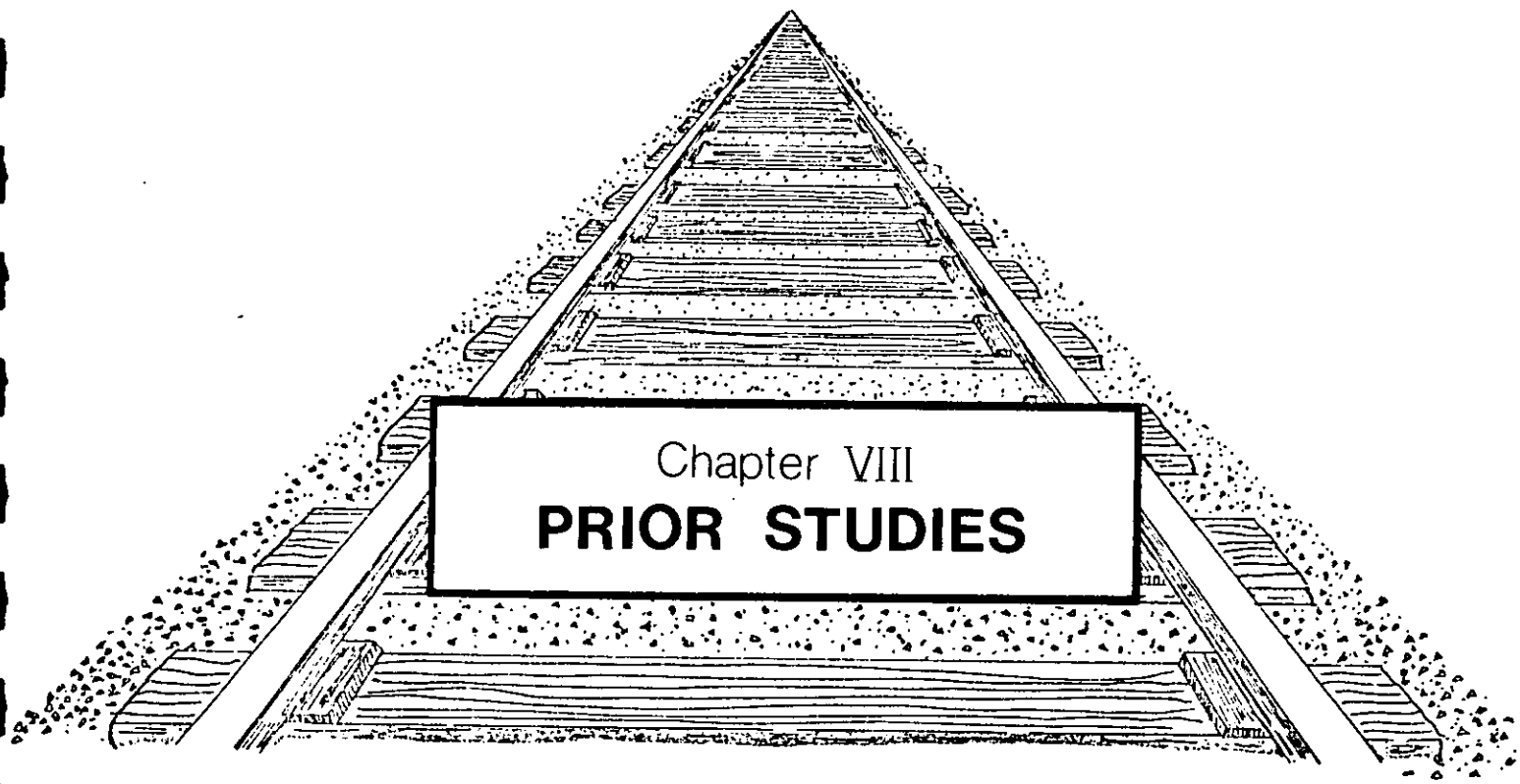
TABLE VII-3
Regional Trade Centers
(First Class Communities - Population of 5,000 or more)

City	1980 Population	Rail Carriers
Sioux Falls	80,908	BN-CNW
Rapid City	46,340	CNW
Aberdeen	25,937	BN-CNW-MILWAUKEE
Watertown	15,632	BN-CNW
Brookings	14,915	CNW
Mitchell	13,917	BN
Huron	13,000	BN-CNW
Yankton	11,992	BN
Pierre	11,966	CNW
Vermillion	10,140	BN
Madison	6,213	BN
Spearfish	5,252	NONE
Sturgis	5,182	CNW

FIGURE VII-22

PRODUCTION AREAS OF MAJOR NON-AGRICULTURAL RAIL SHIPMENTS





Chapter VIII

PRIOR STUDIES

CHAPTER VIII

PRIOR STUDIES

The development of RAILPLAN SOUTH DAKOTA 1981 is a milestone in the continuing effort to communicate the needs and resources of all parties involved in rail transportation. The publication of this document and the priorities that are established herein have arisen from previous RAILPLAN documents, the Milwaukee Road bankruptcy, past legislative actions, and public participation in planning activities. All of these influences have acted together and concurrently to form the information and analysis contained in this RAILPLAN.

In addition to RAILPLAN SOUTH DAKOTA 1981, previous plans, plan addendums, and other studies have been conducted that assist in ongoing rail planning activities. While several of these documents have been developed by sources other than the State of South Dakota, all items have been useful in further defining the goals and objectives of the Division of Railroads and describing the decision-making process involved in rail assistance efforts.

Previous Railplans

The first official documentation of the status of railroads serving South Dakota came with the publication of RAILPLAN SOUTH DAKOTA 1978. The Railroad Revitalization and Regulatory Reform Act (4-R) authorized federally-supported state rail planning and programming and provided funds for railroads to revitalize rail service. The Local Rail Service Assistance (LRSA) Act of 1978 extended project assistance programs by permitting the use of "Section 803" funds on light density lines (less than 3 million gross tons average density; up to 5 million gross tons with approval by the FRA Administrator) before abandonment is approved by the ICC.

South Dakota's initial application for project funding under the LRSA Act came in a 1979 RAILPLAN addendum. This planning document provided a benefit and cost analysis in support of a $2.3 million rehabilitation project along the Milwaukee Road line between Jonathan, Minnesota and Miles City, Montana. The line serves local shippers of agricultural products along the line, as well as the Big Stone Power Plant at Big Stone City. Abandonment of the line would have resulted in severe economic losses due to the closing of the Big Stone Plant. The project consisted of replacing ties and adding ballast to the most deteriorated portions of the line. The proposed project was approved by the FRA in July 1979 and completed in early November 1979.

A second project that was applied for as part of RAILPLAN SOUTH DAKOTA 1978 also addressed the importance of rehabilitation along the same Milwaukee Road line. The $2.5 million project directly related to the 169 miles of track between Gascoyne, North Dakota and Miles City, Montana and again consisted of replacing ties and adding ballast. The Milwaukee also agreed to perform an additional $1.5 million of similar rehabilitation work on the line east of the project segment. The combined $4 million program has eliminated the most severe effects of deferred maintenance and ensured continued operation for the short term. The project was approved by the FRA in September 1980 and completed in June 1981.

In 1980, the Division of Railroads developed a new, updated document called RAILPLAN SOUTH DAKOTA 1980. Spurred on by the dramatic developments during the previous two years, including the Milwaukee Road bankruptcy, subsequent actions taken by the 1980 South Dakota State Legislature, and the continuing abandonments of light density branch lines, the State proceeded on an aggressive course of rail service reformulation. As part of the RAILPLAN, several potential programs addressing rail service problems were proposed. The only "Section 803" project currently being conducted, the Sioux Falls-Madison branch line of the Burlington Northern, is being rehabilitated through a joint shipper-railroad-state funding effort, commonly known as an "Iowa Plan". Multiple car loading facilities are being planned along the line for unit train movements once the rehabilitation is completed. The project was approved by the FRA in June 1981.

An addendum to RAILPLAN SOUTH DAKOTA 1980 was submitted in June, 1981 which presented a benefit and cost analysis on the rehabilitation of the state-owned portion of the Core System. This proposed project has been programmed to follow and supplement the rehabilitation resulting from the Direct Service Program being conducted during June, July and August 1981. Implementation of this project will enable the segment of track to achieve FRA Track Safety Standards of Class II, where the Directed Service Project was designed to attain Class I Standards.

Prior Studies

Most studies conducted during the late 1970's dealt with the problems of light density branch lines. Since that time, however, the emphasis has been broadened due to the statewide demise of the Milwaukee Road and the subsequent action by the State of South Dakota to retain a vital core rail system. The adverse conditions imposed on South Dakota shippers, both economically and politically, have led to several detailed analyses exploring potential solutions. The following abstracts summarize the most significant documents that supplement South Dakota rail planning efforts.

WHAT DOES SOUTH DAKOTA DO NOW ABOUT RAILROADS? NOVEMBER 1, 1980

South Dakota started in 1980 with transportation problems that almost defied solution. Trucking costs were going up, road and bridge repair costs were almost prohibitive and 1,245 miles of the railroad system were in the control of a bankruptcy court. The Governor proposed a program of track acquisition and contractual operations to the 1980 Legislature. The result of that Session was an increase in the State sales tax to raise $25 million for track purchase but with operations prohibited. The problems arising from this transportation dilemma are dealt with in terms of what the users have to do, why the crisis developed, what alternatives are available, and what the legislation does for the rail system.

Author: Ag Unity Organization, Huron, SD

MODEL GRAIN STORAGE/HANDLING FACILITIES RELOCATION ASSISTANCE PROJECT APRIL 1981

The purpose of this report is to prepare a model plan for a Grain Storage and Handling Facilities Relocation Assistance Project. Such a plan will aid in identifying the various components required by a shipper for relocating a grain collection and shipping terminal. In turn, this model may be reviewed by the Federal Railroad Administration for identification of relocation and construction cost items eligible for FRA assistance programs. The model presented in this report represents a fictitious installation containing many options found in various combinations at existing facilities. An actual project would include in its scope of work only those facilities operated at the time by the shipper requesting assistance.

This report was derived, in part, from on-site studies of several existing facilities. These studies, completed in September, 1980, detailed specific tasks to be accomplished in relocation assistance projects. The reports consisted of:

Relocation of Grain Storage Facilities at Britton, South Dakota.
Relocation of Grain Storage Facilities at Beresford (2), South Dakota.
Relocation of Fertilizer Storage Facilities at Riverside, South Dakota.
Relocation of Grain Storage Facilities at Eureka, South Dakota.
Relocation of Grain Storage Facilities at Sisseton, South Dakota.

Author: Banner Associates, Brookings, SD.

ANALYSIS OF THE MILWAUKEE ROAD RAIL LINE BETWEEN JONATHAN, MINNESOTA AND MILES CITY, MONTANA SEPTEMBER 16, 1980

In recent years, with the bankruptcy of the Milwaukee Road and the discontinuance of through freight traffic to the Pacific Coast, the railroad has lost almost all of its overhead traffic which contributed to the general support of this line segment. Traffic on the segment is mainly lignite from Gascoyne, North Dakota to Big Stone City, South Dakota and Burlington Northern coal trains headed for Columbia, Wisconsin from an origin west of Miles City. Other traffic consists mainly of a fluctuating level of grain shipped from elevators, many of which are small, and inbound and outbound traffic for a sugar refinery in Renville, Minnesota. An analysis is conducted on the revenue-generating traffic that will be available to the line in the short-term future, including traditional movements, movements received from the South Dakota core system, and possible increases in coal traffic. From this data, existing operations are analyzed as well as several potential alternatives, based on the physical condition of the line, market service needs, and rolling stock. Revenue and cost determinations are then made for all alternatives.

Author: Peat, Marwick, Mitchell & Co. Washington, D.C.

BRANCHLINE ECONOMIC FEASIBILITY ANALYSIS 1980

The objective of this study is to analyze the financial feasibility of continued rail service on each of several branchlines analyzed in South Dakota. The analysis considers the ability of the branchline, under the various ownership/operating alternatives, to earn a net operating profit within five years of service initiation. This criterion is intended to provide potential creditors an estimate of the branchline's ability to repay any loans after no more than five years. The purpose of the report is to assist shippers in making well-informed decisions about borrowing and/or investing in the line. The branch lines studied were:

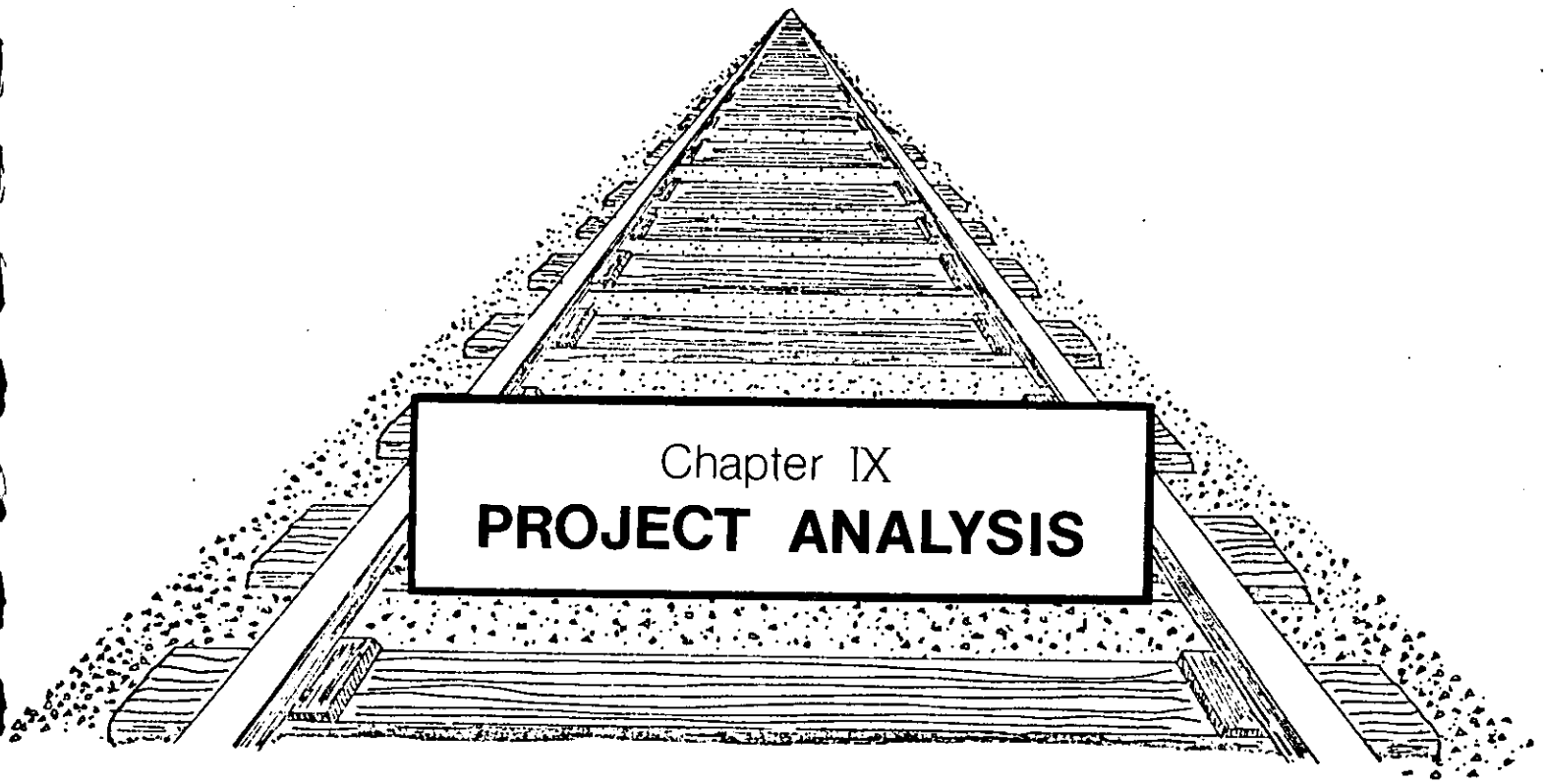
Trent to Elk Point
Mitchell to Rapid City
Blunt to Gettysburg
Napa to Platte
Andover to Brampton
Roscoe to Linton

Author: Department of Economics, South Dakota State University, Brookings and Rail Management Services, Syracuse, New York, with the support of the Department of Agricuture.

METHODOLOGICAL RESEARCH AND ASSESSMENT OF VIABILITY OF BRANCH LINE RAIL SERVICES IN SOUTH DAKOTA: NAPA-PLATTE RAIL LINE STUDY APRIL 1980

This study was completed in two phases to provide methodology and decisions on continued branch line rail service. During Phase I, the literature, including several past studies of rail lines across the country, was reviewed to determine the best methodology for the collection and presentation of data. Phase II is a test of the methodology heretofore determined. A representative rail line (Napa-Platte) was selected and data collected and compiled. The first section of this report deals primarily with the local economy and the relative potential for rail use that now exists. The second section contains macro or state level research into fuel usage, track rehabilitation, and state revenue and expenditures.

Author: Business Research Bureau, University of South Dakota, Vermillion



Chapter IX

PROJECT ANALYSIS

CHAPTER IX

RAILROAD PROJECT(S) ANALYSIS

The passage of Federal Legislation in 1973, 1976 and 1978 provided a source of outside funding to the rail industry and alerted the public to the railroads plight. One provision of the legislation provided low interest, deferred payment loans to railroads for track or equipment improvements. This funding source was logically used to improve speed and efficiencies on lines with the larger traffic bases. Light density lines like those in South Dakota did not directly benefit by these loans.

The Federal Legislation also made money available to states for rail planning and rail related projects. These were grants, not loans, and required a 20% match. Initially, only lines that had been approved for abandonment were eligible for these grants. Subsequent legislation now permits light density lines of 3 million gross tons per mile or less to be eligible, but raised the required match to 30%. This program is designed to help rehabilitate important light density lines that have large capital needs. Another provision of the legislation makes "substitute service" projects eligible for assistance. These types of projects are designed to assist shippers in making adjustments to the loss of rail service.

Even with the elimination of several hundred miles of branch lines in South Dakota, a large need still exists for capital to rehabilitate those lines essential for freight service. Improving the operating efficiencies by upgrading the track structure generally results in a more profitable line, allowing it to remain in, or return to private ownership and operation.

The need for track improvements has been so large in South Dakota that it has become very difficult to choose where to apply limited rail assistance funds. Figure IX-1 illustrates the lines that are eligible to receive federal assistance either by virtue of having been approved for abandonment or by being light density lines carrying less than 3 million gross tons per mile.

A significant number of benefit/cost studies were performed with the objective of assessing the viability of rail service in various sections of the State. The specific lines that were selected for study were based upon the Divison of Railroads' perception of overall transportation need and valid shipper interest. These lines, several of which were not identified in the essential rail system (Chapter IV), are shown graphically in Figure IX-2. These studies, coupled with the essential rail line analysis, served to complete the overview of South Dakota's rail transportation needs.

The analysis of the essential rail system resulted in the State purchase of 834.5 miles of former Milwaukee Road track for nearly $25 million of State funds. A 433.5 mile core system has since been put back into operation. This system needed large amounts of rehabilitation work. However, the State decided to invest its 1980 funds into projects on private sector lines which would allow them to be kept by Class I railroads. The State then intends to direct its attention to the State owned track in 1981.

FIGURE IX-1

Rail Lines Eligible for Project Assistance - 1981

[266.15(C)(3)(i)]

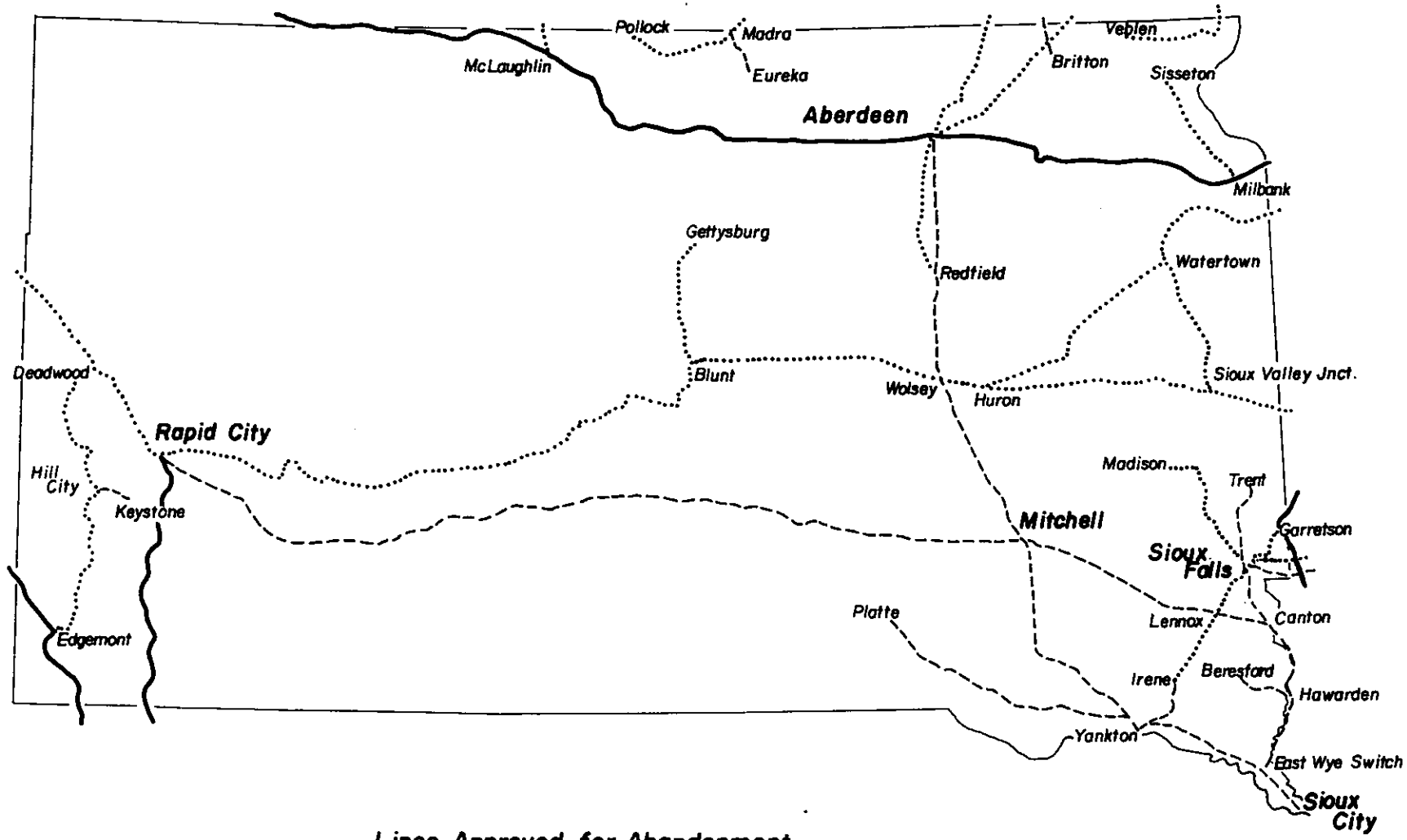
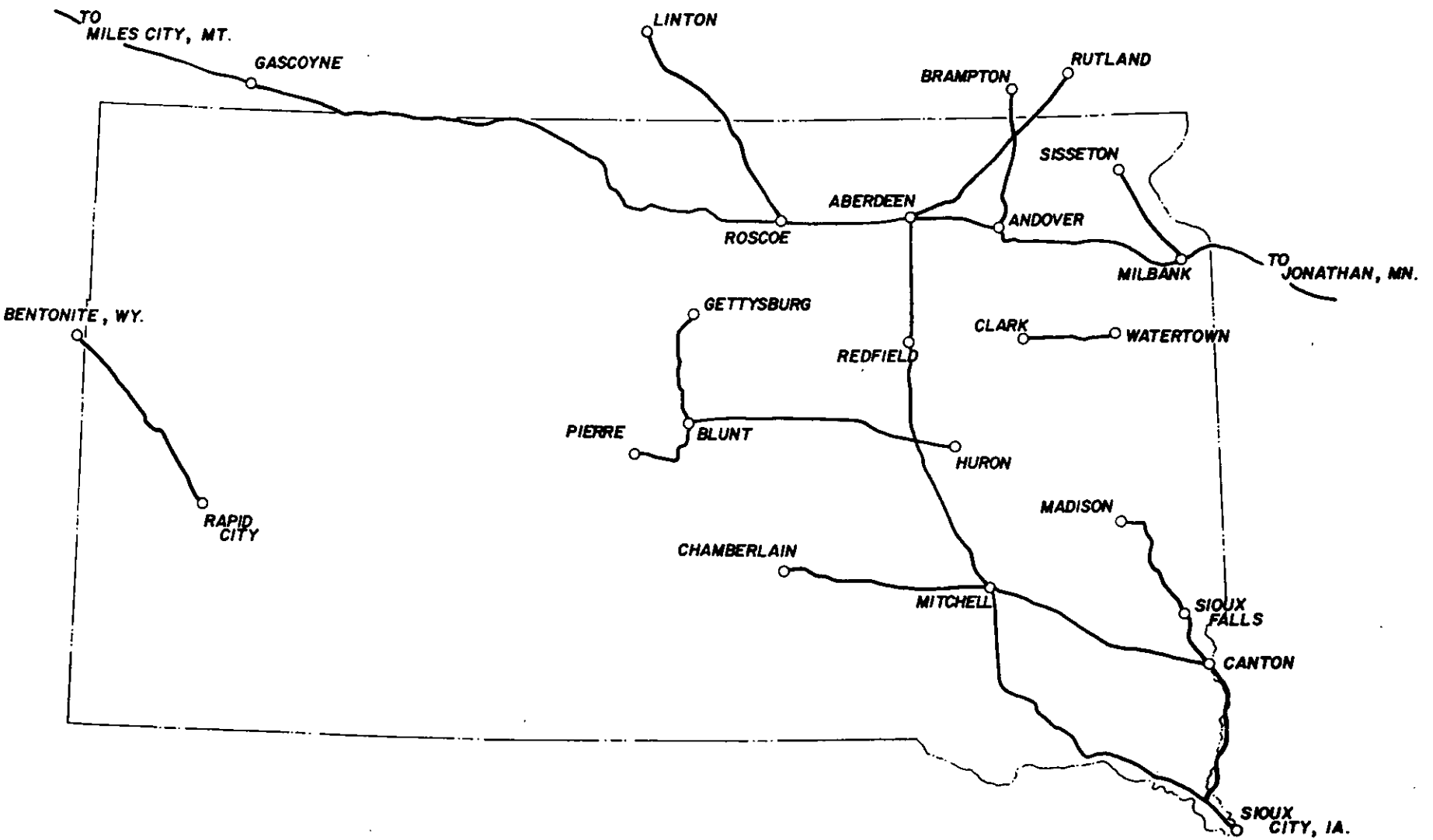


FIGURE IX-2

LINE SEGMENTS FOR WHICH BENEFITS/COST ANALYSIS HAVE BEEN PERFORMED



An addendum to RAILPLAN SOUTH DAKOTA 1980 studied the benefits and costs associated with improving the State owned system from Class I to Class II track conditions. The scenario studied in this addendum was for a short line operator to provide service on Class II track (25 MPH). The overall benefit/cost ratio was a commendable +2.12.

The selection of the Burlington Northern as the operator changed two factors in the analysis. The first change eliminated the segment between Canton and East Wye Switch from the core system operating plan because it paralleled a BN main line in Iowa. The second change upgraded the track structure necessary to support grain unit train traffic, for which the BN offers rate advantages.

The benefit/cost analysis of the core system was consequently reanalyzed to reflect the deletion of the Canton to Elk Point line and the rehabilitation capable of supporting unit train operations of jumbo hopper cars. This type of improvement is planned for the entire State-owned core system except for the Mitchell to Chamberlain line which will not initially be upgraded to this level. The amended benefit/cost analysis has been republished as an addendum to this 1981 Plan. Rehabilitation work will commence on the Sioux Falls to Mitchell segment late in 1981. The State will make application for 1982 federal funds to continue the rehabilitation work during the 1982 construction season.

Project Selection Process [266.15 (c)(4)&(7)] and [266.15(c)(9)(iv)]

The Project Selection Process for those projects which were recommended for implementation but which were not previously funded is documented in the Addendum to RAILPLAN SOUTH DAKOTA 1981. Also documented in the Addendum are the individual benefit/cost (B/C) analyses for each project plus the methodology used in computing each B/C ratio.

South Dakota's goal is to rehabilitate the core system as soon as possible. None of the lines when purchased met Class II standards, and only one (Aberdeen to Wolsey) even met Class I standards. The State believes that rehabilitation allowing trains to operate at 25 miles per hour (Class II) is essential to achieve an efficient, cost effective rail system. Therefore, a two-year rehabilitation plan was formulated. This plan is summarized in Table IX-1.

The first element of the plan uses the Directed Service Program. This program, created by the Milwaukee Road Restructuring Act, is designed to assist purchasers of Milwaukee lines with service restoration. On May 6, 1981, the Interstate Commerce Commission approved South Dakota's plan for using Directed Service funds, and the Federal Rail Administration approved the State's application for $2.6 million to restore segments of the core system to a Class I condition.

South Dakota's plan implemented the Program in three discrete 30-day periods, beginning on the first days of June, July and August. Each period addressed a different portion of the core system. The lines included in each period were:

June 1 - June 30: Wolsey - Mitchell and Mitchell - Canton

July 1 - July 30: Mitchell - Chamberlain and Mitchell - Scotland; and

August 1 - August 30: Scotland - Elk Point.

TABLE IX-1

PLAN FOR REHABILITATING CORE SYSTEM LINES

LINE — LINE SEGMENT	EXISTING CONDITIONS	PLANNED CONDITION AFTER 1981 PHASE	PLANNED CONDITION AFTER 1982 PHASE
MITCHELL-CANTON and SIOUX FALLS			
— CANTON TO SIOUX FALLS	CLASS I	CLASS II	CLASS II MAINTAINED
— MITCHELL TO CANTON	CLASS I*	CLASS I MAINTAINED	CLASS II
MITCHELL - SIOUX CITY			
— ELK POINT TO SIOUX CITY	CLASS I	CLASS II	CLASS II MAINTAINED
— YANKTON TO ELK POINT	CLASS I*	CLASS I MAINTAINED	CLASS II
— MITCHELL TO YANKTON	CLASS I*	CLASS I MAINTAINED	CLASS II
MITCHELL - ABERDEEN			
— WOLSEY TO ABERDEEN	CLASS I	CLASS I MAINTAINED	**
— MITCHELL TO WOLSEY	CLASS I*	CLASS I MAINTAINED	**
MITCHELL - CHAMBERLAIN			
— MITCHELL TO CHAMBERLAIN	CLASS I*	CLASS I MAINTAINED	**

* LINE REHABILITATED TO CLASS I IN 1981 THROUGH DIRECTED SERVICE PROGRAM.
** LINE WILL BE UPGRADED TO CLASS II WHEN FUNDS ARE AVAILABLE.

The Aberdeen to Wolsey line was ineligible for the Program because service was being provided by the Chicago and North Western.

The Burlington Northern signed an agreement to operate the legislatively defined State core system. Operations immediately followed the directed service rehabilitation work on each segment. Operations on the Wolsey to Aberdeen segment by the Burlington Northern began in November of 1981. The original operating plan under a short line operation called for a short term operating subsidy. The Burlington Northern agreed to operate without a subsidy, but requested that the track be upgraded to Class II speeds of 25 MPH capable of handling unit train movements of jumbo hopper cars.

The Addendum to RAILPLAN SOUTH DAKOTA 1981 provides updated benefit-cost analyses of core system lines. These analyses reflect South Dakota's belief that the operation of these lines is essential to meeting the State's transportation needs. Class II operating speeds for unit train movements should be attained as soon as possible to:

- improve the efficiency of operations and reduce operating costs on a car-load basis;
- satisfy additional demand for rail transportation; and
- attract additional traffic that will move by motor carrier unless rail operating speeds exceed Class I levels.

Each line studied was also analyzed to determine the effect that a project would have on existing lines in the area. The outcome of this analysis was that no major economic disbenefits or harm would occur to any other rail line in the State by the implementation of the proposed projects.

These projects represent a unique application of rehabilitation assistance for the core system. After the projects are completed, the core system operator will be responsible for performing annual maintenance, therefore eliminating the need for further State or federal rehabilitation assistance. This process will also complete South Dakota's initial plan for addressing its rail transportation crisis.

Project Descriptions and Prioritization
[266.15 (c)(3)(vii), (9)(iii), and (12)(i)]

Project descriptions, along with the prioritization for federal funding of the line segments that constitute the state owned core system, is documented in the Addendum to RAILPLAN SOUTH DAKOTA 1981. South Dakota's current rail assistance program is intended to upgrade the core system to Class II track conditions, improve the efficiency with which the system can be operated, and permit all projected rail shipping demands to be served. A summary of South Dakota's Rail Assistance Projects is shown on Table IX-2. The intensive study lines are assigned a priority ranking that reflects the urgency of the rehabilitation need, expressed as a sequential priority in the operating year that rail assistance funding is to be applied to the project.

TABLE IX-2

SOUTH DAKOTA RAIL ASSISTANCE PROJECTS

[266.15(C)(3)(vii)] [266.15(C)(9)(i)]

PROJECT NAME	GRANT NUMBER	PROJECT COSTS			PROJECT STATUS	PRIORITY
		FEDERAL	MATCH	TOTAL		
JONATHAN, MN. TO MILES CITY, MT.	79 SD-2	$1,781,249.80	$445,312.45	$2,226,562.25	COMPLETED	79 - 1
GASCOYNE, N.D. TO MILES CITY, MT.	79 SD-1	1,981,996.01	495,499.01	2,477,495.02	COMPLETED	80 - 1
SIOUX FALLS TO WENTWORTH	80 SD-3	1,760,000.00	3,910,000.00	5,670,000.00	IN PROCESS	80 - 3
BRITTON SPUR	80 SD-5	820,000.00	205,000.00	1,025,000.00	IN PROCESS	80 - 5
WEST JUNCTION TO SIOUX FALLS				300,800.00 *	IN PROCESS	81 - 1
SIOUX FALLS TO CANTON				946,520.00 *	IN PROCESS	81 - 1
ELK POINT TO SIOUX CITY, IA.				1,810,510.00 *	IN PROCESS	81 - 1
CANTON TO MITCHELL		1,851,185.00	1,851,185.00	3,702,370.00	REALLOCATION PENDING	82 - 1
ELK POINT TO YANKTON		1,061,155.00	1,061,155.00	2,122,310.00	REALLOCATION PENDING	82 - 2
HURON TO PIERRE		3,150,000.00	1,350,000.00	4,500,000.00	APPLICATION PENDING	82 - 3
YANKTON TO MITCHELL		1,732,880.00 **	3,900,560.00	5,633,440.00	APPLICATION PENDING	82 - 4
MITCHELL TO ABERDEEN				8,069,170.00	LACKS FUNDING	82 - 5
MITCHELL TO CHAMBERLAIN				4,280,210.00	LACKS FUNDING	82 - 6
PARKER TO BIG SIOUX RIVER	78 N/A				CANCELLED	78 - 1
BLUNT TO ONIDA	79 SD-3				DEFERRED	79 - 2
HURON TO PIERRE	80 SD-2				DEFERRED	80 - 2
MILBANK TO SISSETON	80 SD-4				DEFERRED	80 - 4
SIOUX CITY, IA. TO WEST JCT. (SIOUX FALLS)	81 PR-1				DEFERRED ***	81 - 1
ABERDEEN TO WOLSEY	81 PR-2				DEFERRED	81 - 2

* 100% STATE FUNDED

** MAXIMUM CURRENTLY AVAILABLE

*** PARTIALLY COMPLETED IN 1981 USING 100% STATE FUNDS

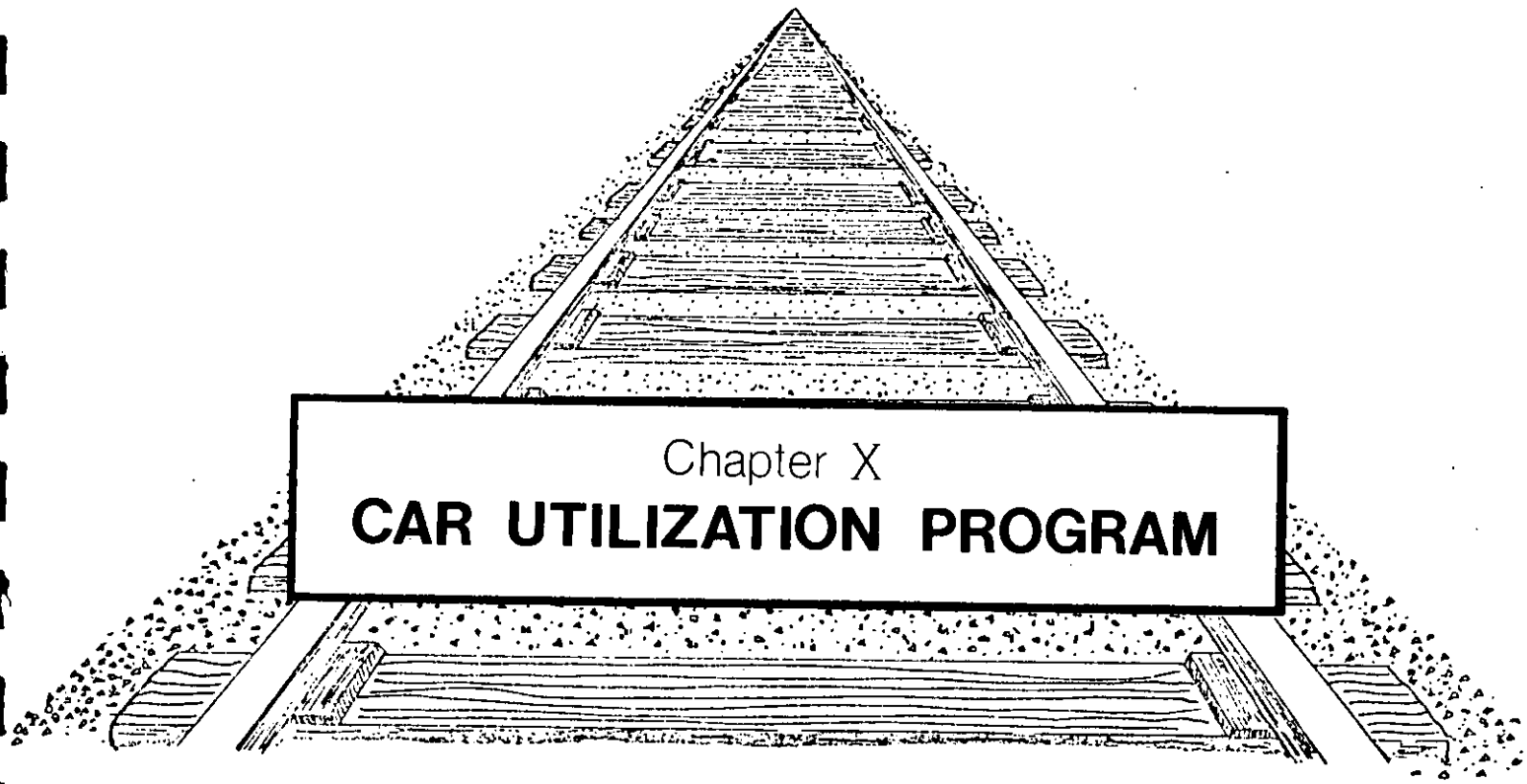
The core system lines are emphasized for assistance because they fulfill several important rail service and planning policies, objectives, and goals. These are to:

- coordinate the efforts of rail users, railroad companies, local governments, and the State to solve transportation problems in South Dakota;
- maintain essential rail services and facilitites in South Dakota which serve the public interest but which cannot otherwise be profitably continued by private carriers;
- coordinate the available resources of rail users, railroad carriers, and governments (local, state, and federal) for the purpose of maintaining essential transportation accessibility within South Dakota.
- retain a viable core rail system of essential lines which serve the primary traffic-producing areas of the State and which provide accessibility to State and national markets;
- develop competitive transportation options for those communities that lose rail service;
- promote increased use of rail service in those ways in which it is best suited; and
- provide for the transportation needs of communities where the loss of rail service will cause severe economic or socio-economic hardships.

Table IX-2 also lists past projects, pending projects and deferred projects which were carried forward from previous plans. Pending and deferred projects will not be implemented until final cost figures are calculated and sufficient federal funds are secured. The State is prepared to provide up to 50% of the funding for the core system projects, far exceeding the 30% participation that is required. Some additional projects are under study that may require 100% state funding.

Future Rail Planning Issues

Congress has recently proposed to fund the "Section 803" program for three years at a reduced level of funding. This funding source will be used to carry the planning and project implementation program forward. The State's goal is to upgrade the core system to a level that will sustain sufficient operations. The State will achieve this goal by assisting in rehabilitation efforts to improve efficiencies of operation on the "Essential Rail System" as previously identified in Chapter IV. The State will also monitor State owned local option lines and other private sector lines for possible assistance projects. Specifically the State will monitor the Pierre to Rapid City line, rail serving Watertown, the Deadwood line and lines that have received assistance in the past.



Chapter X

CAR UTILIZATION PROGRAM

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CAR UTILIZATION PROGRAM

The Problem

The car supply problem facing South Dakota and the nation is, in its simplest form, the allocation of an often scarce national transportation resource to areas where the need for shipping is the greatest. Since the available traffic density is not as high in South Dakota as elsewhere, and the track structure limits the size of cars, South Dakota is frequently not a priority during high demand periods. The nature and scope of the problem is such that it not only affects the viability of South Dakota's rail lines, but also affects the economic health of shippers.

For South Dakota, the problem truly has roots on both sides of the supply and demand equation. Crop production has exhibited growth as technological advances have occurred and new markets have become available to the producer. In the ten years from 1969 to 1979, South Dakota corn production increased 51% and wheat production increased 40%. The capacity needed to haul the 156 million bushels of corn and wheat marketed in 1979 was 74,400 boxcar equivalents or 45,400 jumbo hopper car equivalents. The actual rail carloadings of all farm products was at a 5-year high in 1979 with 30,450 carloadings, mostly boxcars.

On the supply side, the on-going retirement of 40-foot boxcars has limited the grain export capabilities of shippers. As the rest of the nation is converting to the modern 100-ton hopper car for grain movements, South Dakota retains the boxcar because of the light weight capacity of the existing track structure. A major portion of the rail in South Dakota can't support the modern 100-ton hopper which has become the standard for the movement of grain.

At the close of 1980, about 43,000 40-foot boxcars were owned and operated by Class I railroads. At the rate that these cars are being retired, the 40-foot boxcar will become a transportation vehicle of the past by 1984. Also, because of the problems associated with unloading boxcars at terminals, they often receive low priority for handling. Some West Coast terminals have actually embargoed boxcars.

Even for the modern grain-hauling rail vehicle, the 100-ton hopper car, problems have occurred with production levels and terminal congestion. Levels of demand have spurred on companies, rail and non-rail alike, to invest heavily in hopper cars. The Interstate Commerce Commission, through their past regulatory policies, have "contributed to the growth of an artificial distinction between 'car supply' railroads and railroads whose primary business was transportation." These factors, when taken in combination, have often resulted in too many cars waiting to be routed in and out of terminal yards, spot shortages during the harvest season (especially in South Dakota, grain states to our east have higher demand and better service), and general surpluses during slack periods.

The 1980 South Dakota State Legislature recognized the basic problem of railcar availability. In order to address the negative ramifications of the problem for shippers, the South Dakota Division of Railroads was directed to develop a Car Utilization Study. This chapter is a summary of the development of the study and a brief discussion of ongoing applications of the analytical procedure.

The Solution

Eight months after the South Dakota Legislature created this car utilization program, the Comptroller General of the United States issued a report to Congress entitled, "There Is No Shortage of Freight Cars - Railroads Must Make Better Use of What They Have". The initial paragraph of the Digest summarizes the conclusion of the study:

> "Shippers complain that they cannot get freight cars when they want them. The problem appears to be that freight cars are not in the right place at the right time rather than not having enough cars. The solution, therefore, is to improve car utilization." The report also states that "rather than adding more cars, the freight problem could be reduced in the long run through technical and economic changes. The railroads could improve utilization and balance distribution by developing and using a computerized, nationwide system of management."

The car management systems that many railroads individually have in place currently are oriented primarily toward customer service. As more rail carriers are turning to computers for management purposes, shippers are being provided with timely data on car location and status. This data is derived from the latest available report on a car, which usually comes from an in-transit yard or terminal location. These systems are not, however, set up to analyze the efficiency of operations. Car utilization is a secondary concern to railroads, who primarily are seeking revenue, and to shippers, who primarily want good service.

Several years ago the Association of American Railroads (AAR) attempted to establish a uniform car reporting system and failed because, at that time, computer tracking was in its infancy and many of the nation's railroads would not standardize reporting. Despite the failure of their initial attempt, the AAR realized that a computer-based car management system would reveal many intricacies involved with car utilization (i.e., the problem involved with in-transit connections with other carriers may be minimized by alterations in scheduling...Terminal delays may be reduced by cooperation between carriers and terminals.) It has been well recognized that applications for car utilization data could provide a major technological and managerial breakthrough for the rail transportation network.

Today all major railroads have their own car tracking systems. Problems continue to exist in adapting to the differences between systems and in addressing the intelligent use of the data that these systems provide. The solution that will enable South Dakota to deal effectively with car utilization problems does not involve the reinvention of car tracking systems, but rather utilizes modern computer processing methods to refine data that is available from existing sources. This information permits South Dakota to structure a data base that enables the State to identify and analyze a multitude of utilization problems without a major reprogramming effort.

Projected benefits of this program are:

1) an increased usage of shipper's railcars from improved cycle times;

2) more business available to rail carriers due to the increase in carloadings;

3) better coordination between shipper, carrier and terminal for improved car handling;

4) lower costs for shippers, who use shipper-owned or controlled cars; and

5) lower costs for railroads from better equipment utilization and scheduling.

South Dakota Car Utilization Program

Prerequisite to analyzing any transportation network is the ability to pinpoint traffic flows. For tracking purposes, this involves the determination of points of origin, points of destination, and the preferred routes to connect these two points. When this task is accomplished, alternative traffic flows may be delineated.

Two major marketing factors influence the choice of routes by the shipper. The first is the commodity being handled. Frequently, the commodity type determines the destination of shipments according to the demand or price for that commodity at a specific location. Second is the rate structure, if a shipper has several choices for a carrier, he will select that carrier that offers him the lowest cost to transport his product. This information is obvious to a shipper when selecting a marketing option and indispensable to a car utilization study when analyzing transportation alternatives.

The final factor involved in a car utilization study is the gateways that may exist between carriers. Most often, these gateways occur between rail companies as the region that one of them serves terminates. A gateway may also occur at or near a large terminal yard where several carriers interchange cars to transport them to industries that they serve.

After typical traffic flows were established, several shippers were selected and permission obtained to use their cars in the utilization study. These shippers had to either have leased cars in their control or railroad-owned cars that were specifically assigned for use by that shipper. Shippers who have cars that are being traced include South Dakota Wheat Growers Association, South Dakota Grain Terminal Association, Northeast Terminal in Watertown, and Vienna Seed & Grain, Inc. These companies were selected also because of their variety of rail carrier service, location, and method of shipping. In all, ninety-three cars are currently involved in the study.

The identification of traffic flows for shippers allows for the final formative manuever in the program: the establishment of a contract with a car tracking company. A contract was entered into on September 24, 1980 that permits Railtex, a Texas-based firm specializing in tracing cars, to perform the data acquisition. Railtex has created TRAX, a computer-based daily tracing and reporting service, which is being used to find South Dakota car movements. The company is providing reports of car movements every weekday. Included in the reports are data items specifying the car number, the city and state where it is located, the last reported action on the car, the railroad handling the car, the day and time of the action, and whether it was loaded or empty.

Applications

The car tracking data that has been accumulated since October 1, 1980, has been analyzed using the computer programs previously developed. Several delay points have been identified from the analysis and are being further researched to pinpoint the actual causes as more data becomes available. The transit delays and the terminal problems that are characteristic of rail movements originating in South Dakota are being thoroughly analyzed and two delay problems are presented here as examples of current restraints on good car utilization that affect grain shippers in the State.

The transit example occurs in Western Minnesota where three stations, located fairly close together, each have individual characteristics that inhibit car utilization. Montevideo is a station served by the Milwaukee Road, Appleton is served by the Milwaukee and the Burlington Northern and Willmar is a BN station. Information derived from the car tracking program yields the following statistics:

STATION	AVERAGE DELAY (HOURS)
Montevideo	43
Appleton	48
Willmar	39

Further analysis reveals that, at Montevideo, a yard is present where the train crews change. Since Appleton is an interchange between the Milwaukee and the BN, car transfer depends on train schedules for both companies. Willmar is a main switching location between north-south and east-west BN main lines. Solutions to be explored with the railroads may deal with alterations in scheduling, crew change points, and train routes.

The terminal example occurs at Winona, Minnesota, a station served by the Milwaukee Road. The average delay is 93 hours. Since Winona is a barge location on the Mississippi River, the delay is probably associated with the handling and transfer of grain from railcars to the terminal to the barge. Onsite study is required for this problem to be further understood and its possible remedies to become apparent.

These problem examples have been cited because of the relatively large volume of South Dakota traffic that moves through these stations. In order to quantify the impact of a 93-hour delay on shippers' cars, a covered hopper represents an average cost of about $500 per month. Ninety-three hours is 13% of one month, or about $64.50. If this average delay was applied to all 30,450 carloads of farm products shipped from South Dakota in 1979, producers are subjected to an annual cost of about two million dollars. To put it another way, at South Dakota's current level of agricultural shipping, a 10% improvement in car utilization has the potential to provide well over $1,500,000 per year in savings to producers.

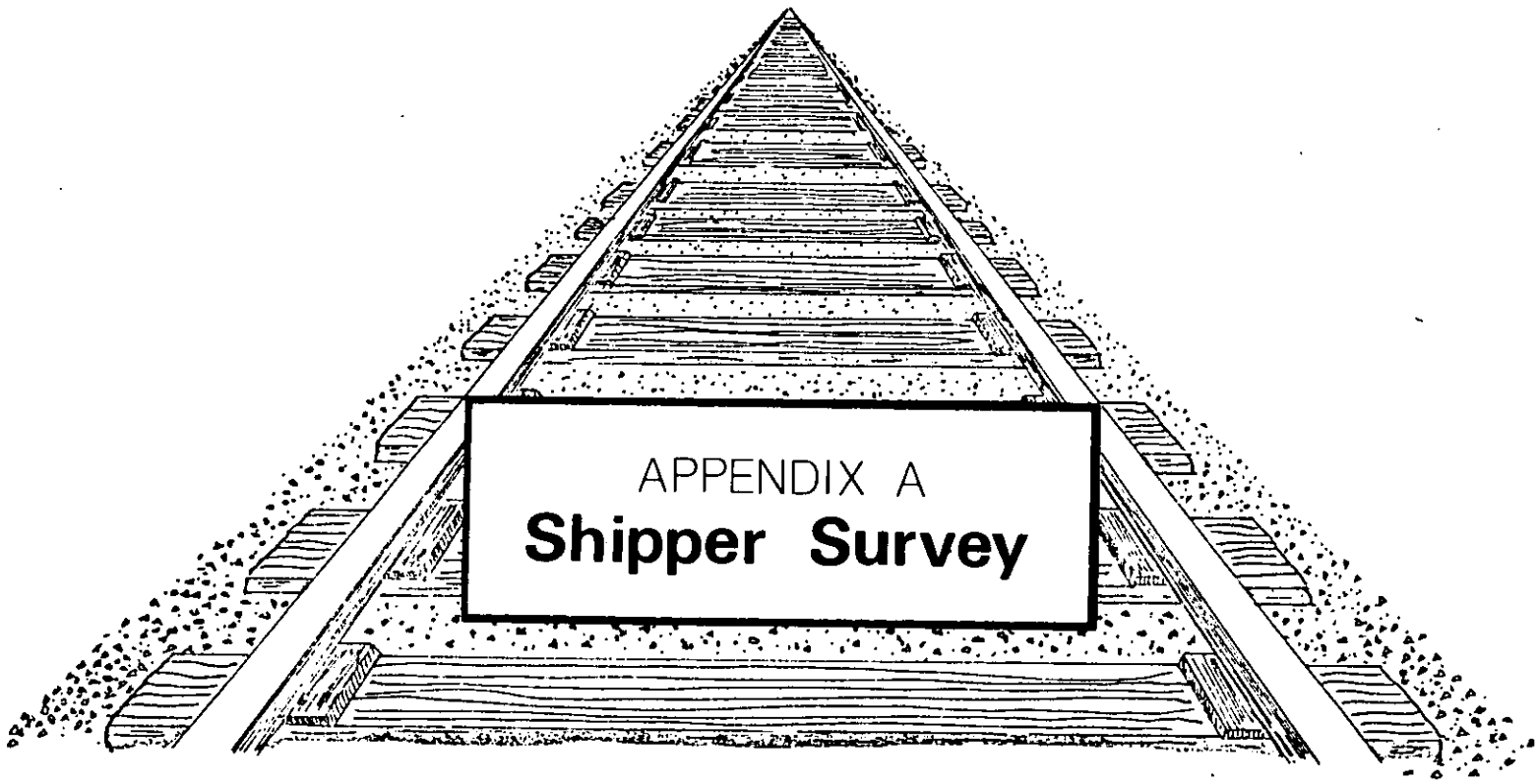
South Dakota must be able to identify these delays, propose solutions, and work with shippers, railroads and terminals to implement improvements in car utilization. Through a coordinated effort, the State will be able to assist shippers in maximizing their rail business, assist railroads and shippers in improving their

car utilization, and assist terminals and railroads in upgrading their vital grain handling relationships.

Conclusion

The Division of Railroads is now in the implementation phase of the study. Problem areas are continually being identified, and possible reasons and solutions are being proposed. The next step in this phase will include several on-site inspections of problem stations with interactions involving railroad company personnel, shippers, and terminals. The program will directly benefit the railroads serving South Dakota by permitting higher freight revenue through better equipment utilization. South Dakota shippers will also be rewarded with more rolling stock available for use when desired.

APPENDICES


APPENDIX A
Shipper Survey

APPENDIX A

SOUTH DAKOTA STATE RAIL PLANNING SURVEY
SHIPPER SURVEY

Person Conducting Survey: _____

PART A: GENERAL INFORMATION

1. Name and address of firm:

   _____

   _____

   _____

   _____

   Telephone: _____

2. Name and address of parent company (if different from above):

   _____

   _____

   _____

   _____

   Telephone: _____

3. Name of person reporting information, title:

   _____

NOTE: In all of the following questions, please record only local authority information - not information concerning parent company.

4. Do you plan to ship or receive traffic via the South Dakota rail system?

   _____

5. Principal type of business activity at firm (grain elevator, chemical plant, etc.):

   _____

6. How many people are currently employed at your firm: _____

   How many people do you estimate will be employed at your firm in 5 years:

   _____

PART B: USER ATTITUDES

1. Describe the type of rail service you need:

   Service frequency _____

   Cars Per Week _____

   Car Type _____

   Other _____

2. Can your facility load jumbo covered hoppers? _____

3. How many cars can you load at one time? _____

   Siding size (cars) _____

   Elevator capacity (cars) _____

4. How much time is required to load the above amount? _____

5. What type of siding does your facility use?

   Public _____ Private _____

PART C: IMPACTS OF RAIL SERVICE CHANGES

1. Since rail service to your firm has been discontinued, which action(s) did your firm take or is anticipating taking? (Check as many responses as apply):

   _____ Maintain present level of operations

   _____ Reduce operations by _____%

   _____ Close plant

   _____ Relocate plant to active rail line within South Dakota

   _____ Relocate plant to location outside South Dakota

   _____ Convert to truck transportation for entire haul

   _____ Truck to nearest rail line loading facility

   _____ Other (Specify) _____ _____

2. Is your firm willing to guarantee a minimum annual shipment level? _____

   What is the general range of this level? _____

3. Since rail service on the line to my facility will be restored,

   a. Employment at the facility over the next five years will increase/decrease by _____ jobs, or not change?

   b. Annual rail usage at the facility over the next five years will increase/decrease by _____ tons, or not change?

   c. Annual truck usage at the facility over the next five years will increase/decrease by _____ number of tons, or not change?

4. What is the destination of traffic that is shipped via truck?

   _____

PROJECTED TRAFFIC VOLUME

COMMODITY	ORIGIN	HISTORICAL (1979)		RAIL SERVICE LEVEL					
				MOST LIKELY		IMPROVED		NONE	
		CARS	TONS	CARS	BUSHELS / TONS	CARS	BUSHELS / TONS	TRUCKLOADS	BUSHELS / TONS

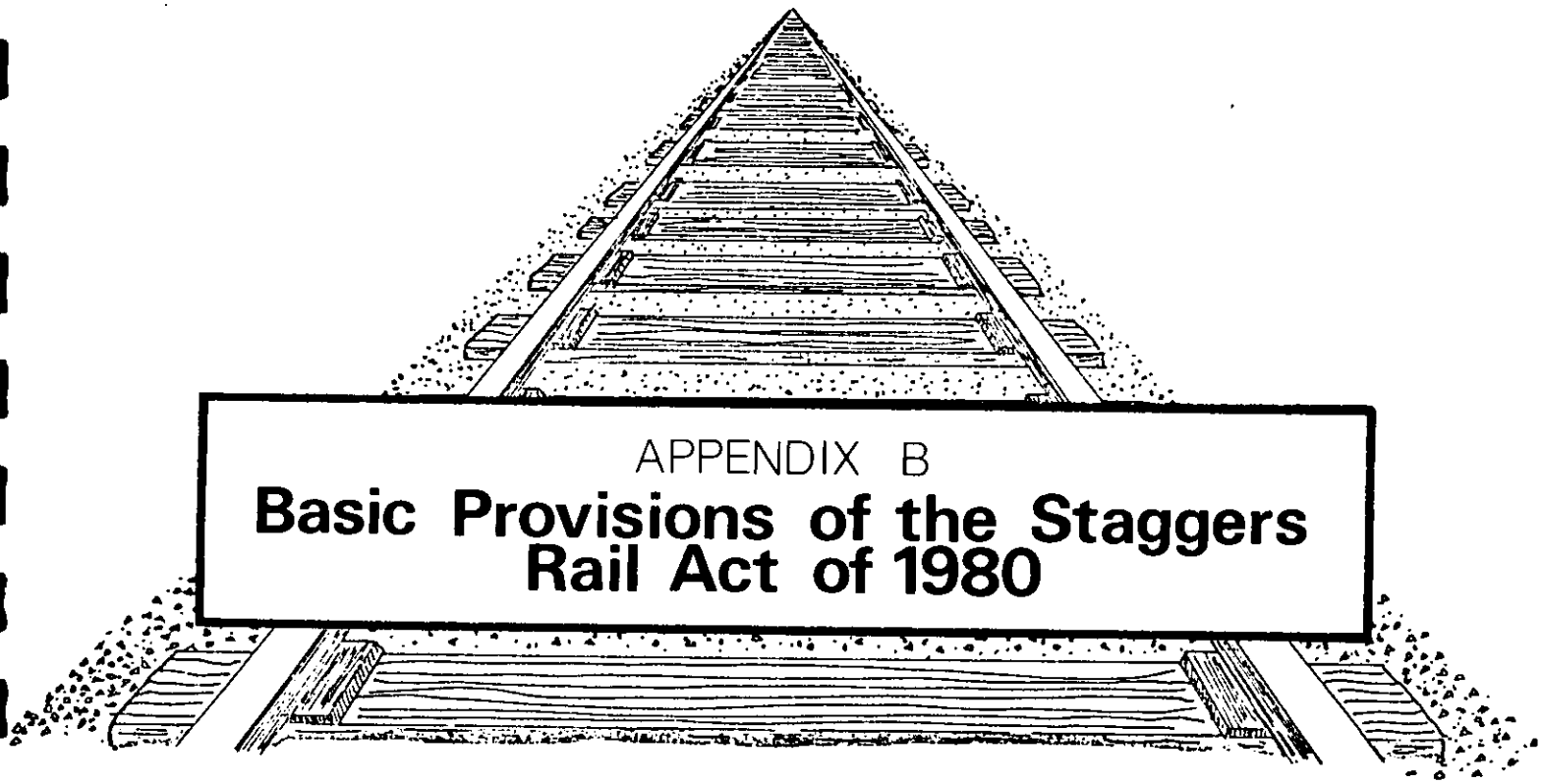
PROJECTED TRAFFIC VOLUME

COMMODITY	DESTINATION	HISTORICAL (1979)		RAIL SERVICE LEVEL					
				MOST LIKELY		IMPROVED		NONE	
		CARS	TONS	CARS	BUSHELS / TONS	CARS	BUSHELS / TONS	TRUCKLOADS	BUSHELS / TONS

PART E: ADDITIONAL COMMENTS

Thank you for assisting in the completion of this shipper survey. Your cooperation will help the Division to fully assess the importance of the rail line serving your facility, as it affects your firm and South Dakota as a whole. Do you have any additional comments, questions, or suggestions? If you have any further comments, please contact the Division of Railroads at:

Department of Transportation
Division of Railroads
Transportation Building
Pierre, South Dakota 57501
Telephone: 605-773-3710



APPENDIX B

Basic Provisions of the Staggers Rail Act of 1980

APPENDIX B

BASIC PROVISIONS OF THE STAGGERS RAIL ACT OF 1980

The Staggers Rail Act of 1980 was signed into law by President Carter on October 14. The new law, while short of wholesale deregulation, nevertheless substantially eases the regulatory burden on the railroad industry, providing significant changes in rules governing ratemaking, car control and other areas of railroading.

Here is a summary of some of the law's points:

RATEMAKING

Perhaps the most extensive changes in regulation provided by the Rail Act are in the provisions on railroad ratemaking. While protection for rail-dependent shippers was retained, the Congress clearly intended that the disciplines of the competitive marketplace would control most ratemaking. The new rate provisions curtail activities of rate bureaus and move to phase out general rate increases, but also offer a new measure of flexibility in the setting of rates and in the marketing of rail services.

**MAXIMUM RATES - Nearly two-thirds of all railroad rates will be freed from maximum rate regulation under a provision that limits ICC jurisdiction to those rates where railroads exercise "market dominance" and charge a rate above a threshold level set intially at 160 percent of variable costs. That will rise 5 percentage points a year until 1984 when it will be dependent upon a "cost recovery percentage" to be determined by the ICC. That percentage can vary from 170 to 180 percent of variable costs.

**ZONE OF RATE FLEXIBILITY - A carrier can raise any rate by the percentage increase in the railroad cost index (which will be published quarterly by the ICC). For the first four years after enactment, rates can be raised up to 6 percent a year above the cost recovery index (with a cumulative maximum of 18 percent). After that, annual increases will be limited to 4 percent and be restricted largely to carriers not earning adequate revenues.

Shippers can still bring a complaint case on the 6 percent and 4 percent increases after the rate has gone into effect. But the ICC cannot suspend those increases and can only investigate those more than 20 percentage points above the threshold, subject to a maximum of 190 percent of variable cost. In a shipper-initiated complaint, the burden of proof is on the shipper. In an ICC investigation, the burden of proof is on the carrier.

**MINIMUM RATES - Railroads will be permitted to reduce rates more easily to meet motor and water carrier competition under a provision that any rate that contributes to the "going concern value" shall be considered reasonable. Going concern value has been defined as a rate that equals or exceeds variable cost.

**GENERAL RATE INCREASES - General rate increases are limited to joint rates and are to be eliminated completely by January 1, 1984, unless the ICC finds that

elimination is not feasible. The ICC cannot eliminate them before April 1, 1984, but until they are, general rate increases are to be limited to recovery of inflation costs.

The ICC may institute an index system to supplant evidentiary requirements in a general rate increase. After elimination of general rate increases, the ICC could prescribe a percentage increase that individual carriers could accept or "flag-out."

The percentage prescribed by the ICC may be for a range broad enough to allow carriers to differentiate between commodities as necessary to recover inflationary cost increases.

**RATE BUREAUS - There can be no discussion of, or voting on, single line rates and no discussion of, or voting on, joint line rates unless a carrier can "practicably participate in the movement." The definition of "practicably participate" will be left to ICC discretion.

No later than January 1, 1984, discussion of joint line rates will be limited to carriers forming part of a particular route. Transcripts or recordings of meetings and records of votes must be submitted to the ICC.

Protection will be granted from "parallel action" antitrust allegations where a carrier has a single line rate and participates in a competing joint rate.

**SURCHARGES AND CANCELLATIONS - For the next 3 years, carriers may apply a surcharge to any joint rate that does not yield 110 percent of variable cost. Any surcharge must apply equally in dollar amounts to all routes between the points to which the surcharge applies to prevent predatory discrimination between routes.

Unless affected shippers and carriers consent, a carrier's revenues cannot exceed 110 percent of Rail Form A costs as a result of a surcharge, except that carriers with inadequate revenues may apply a surcharge to cover all costs of service on lines carrying less than 3,000,000 gross ton-miles (1,000,000 gross ton-miles if an adequate revenue carrier). Carriers earning adequate revenues may not surcharge traffic on lines carrying over 3,000,000 gross ton-miles per year.

Carriers may cancel the application of a joint rate to any route not providing 110 percent of Rail Form A variable costs. The ICC may reopen the route if shippers or carriers provide the cancelling carrier revenue equal to 110 percent of variable costs through a new rate, division or surcharge.

**DIVISIONS - ICC proceedings will be expedited, with a 9-month limit for taking of evidence. Final action must be taken within 180 days after completion of a proceeding.

**CONTRACTS - Contract rate agreements are specifically legalized, and all contracts must be filed with the ICC. Grounds for shipper complaint against a contract are severely restricted.

Service under contract shall be separate and distinct from common carriage by rail. Once approved, the ICC cannot require a carrier to violate the contract. Contract enforcement is restricted to the courts.

**DISCRIMINATION - Under the new law, the existing discrimination provision of the Interstate Commerce Act does not apply to contracts, surcharges or cancellations of routes, separate rates for distinct services, rail rates applicable to different routes, or business entertainment and solicitation expenses.

**INVESTIGATION AND SUSPENSION OF RATES - Proceedings are reduced from seven months to five.

To get a suspension, a shipper must show likelihood it will prevail on merits, that it will suffer substantial injury, and that a refund is inadequate protection. If a suspended rate is finally approved, the shipper will be required to pay any undercharges resulting from suspension, plus interest.

**NOTICE - The notice period is reduced from 30 days to 20 days for rate increases and to 10 days for rate decreases.

**RECYCLABLES - With the exception of iron and steel, rates for recyclables are to be limited to the average ratio of revenue to variable costs necessary for railroads to cover all costs and earn a reasonable return on investment.

**RELEASED VALUE RATES - A carrier may establish deductibles and limit liability to pre-established values.

**SAVINGS PROVISION - Any rate in effect on the date of enactment that is not challenged within 180 days and found to be unreasonable shall be deemed to be lawful and may not thereafter by challenged. A rate may not be challenged within the 180-day period unless the carrier has market dominance.

**INTERSTATE RATES - Federal standards and procedures will apply in intrastate rate cases.

**MISCELLANEOUS - Existing law is repealed with regard to demand-sensitive and capital incentive rates.

MANAGEMENT

Railroads have been restricted, far more than many other businesses, by regulations concerning their business practices and day-to-day management of their companies. The Staggers Act moves to alter some of these restrictions and return decision-making to management.

**CAR SERVICE - ICC car service orders will be restricted to emergencies having regional or national significance, but the ICC's authority to require joint use of terminals during emergencies will be expanded to include all facilities. Emergency services are to be performed by employees who would otherwise have performed the service if there had been no emergency.

Premium charges may be imposed for special services to improve car utilization.

Shippers are authorized to seek approval for agreements among themselves with respect to private car compensation. Approval having been received, they may negotiate with the railroads and, if they fail to agree, any party may petition the ICC to set compensation levels.

Incentive per diem is eliminated.

**COST ACCOUNTING - A new board with a three-year life will be created to establish new cost accounting principles which will be implemented by the ICC. Carriers can adopt their own accounting systems as long as they meet the standards, but carrier systems must be certified by the ICC.

**BUSINESS ENTERTAINMENT -Railroads may entertain customers on the same basis as other businesses. Previously, railroads were prohibited from engaging in normal business solicitation activities.

OTHER PROVISIONS

**ABANDONMENTS - Abandonment standards remain unchanged, but proceedings will be speeded up with unprotested abandonments permitted 75 days after application. Protested but uninvestigated abandonments will be permitted 120 days after application. The final decision on protested and investigated applications must be made within 255 days of filing.

The maximum time limit to effective date of a permitted abandonment is set at 330 days. The Act creates a mechanism that requires a railroad to sell a line approved for abandonment to responsible persons offering either to subsidize or acquire the line. If parties fail to agree on an offer for subsidy or purchase of an abandoned line, the ICC can establish terms and conditions.

**MERGERS AND OTHER TRANSACTIONS - Carriers and shippers may jointly ask the ICC to provide alternative motor carrier service if a shipper is inadequately served.

A merger application of two Class I carriers is expedited without changing current substantive standards. However, the ICC must consider whether the transaction would have an adverse effect on competition among rail carriers in the region. Substantive standards for mergers not involving two Class I railroads are reduced.

**CONRAIL STUDIES AND EMERGENCY FUNDING - USRA and Conrail each must submit a report to Congress covering the effect of different funding alternatives on the region. Each report shall include recommendations concerning projected funding requirements, Conrail structure, and legislative action necessary. Conrail is required to prepare special reports on alternatives to present labor agreements and on savings resulting from the Staggers Act, potential transfers or abandonments, other potential cost savings and potential revenue increases.

**ENTRY - The standard for granting a permit for construction or operation of extensions or additions of railroad lines is eased. Once a permit is granted by the ICC, a railroad cannot refuse permission to another railroad to cross its line. The ICC may order reciprocal switching agreements.

**EXEMPTIONS - Existing ICC authority to grant an exemption from regulation when the transportation or service is of limited scope is broadened.

**FEEDER RAILROAD DEVELOPMENT PROGRAM - For three years following enactment, any "financially responsible person" (except Class I and II carriers) can acquire a rail line with a density of less than 3 million gross ton-miles per year upon an

ICC determination (after a hearing) that: the carrier operating the line refuses to make reasonable efforts to provide adequate service; transportation over the line is inadequate for a majority of shippers using the line; sale of the line will not adversely affect the railroad operating the line - either financially or operationally; and sale of the line will be likely to result in improved transportation for shippers using the line. Payment must not be less than net liquidation value or going concern value - whichever is greater.

After three years, the density criterion is removed and any rail line can be acquired on the same basis. The ICC can also require the sale of lines proposed for abandonment. If a line is sold and the subsequent operator stops service, the selling carrier has the right to repurchase the line at the original selling price plus interest.

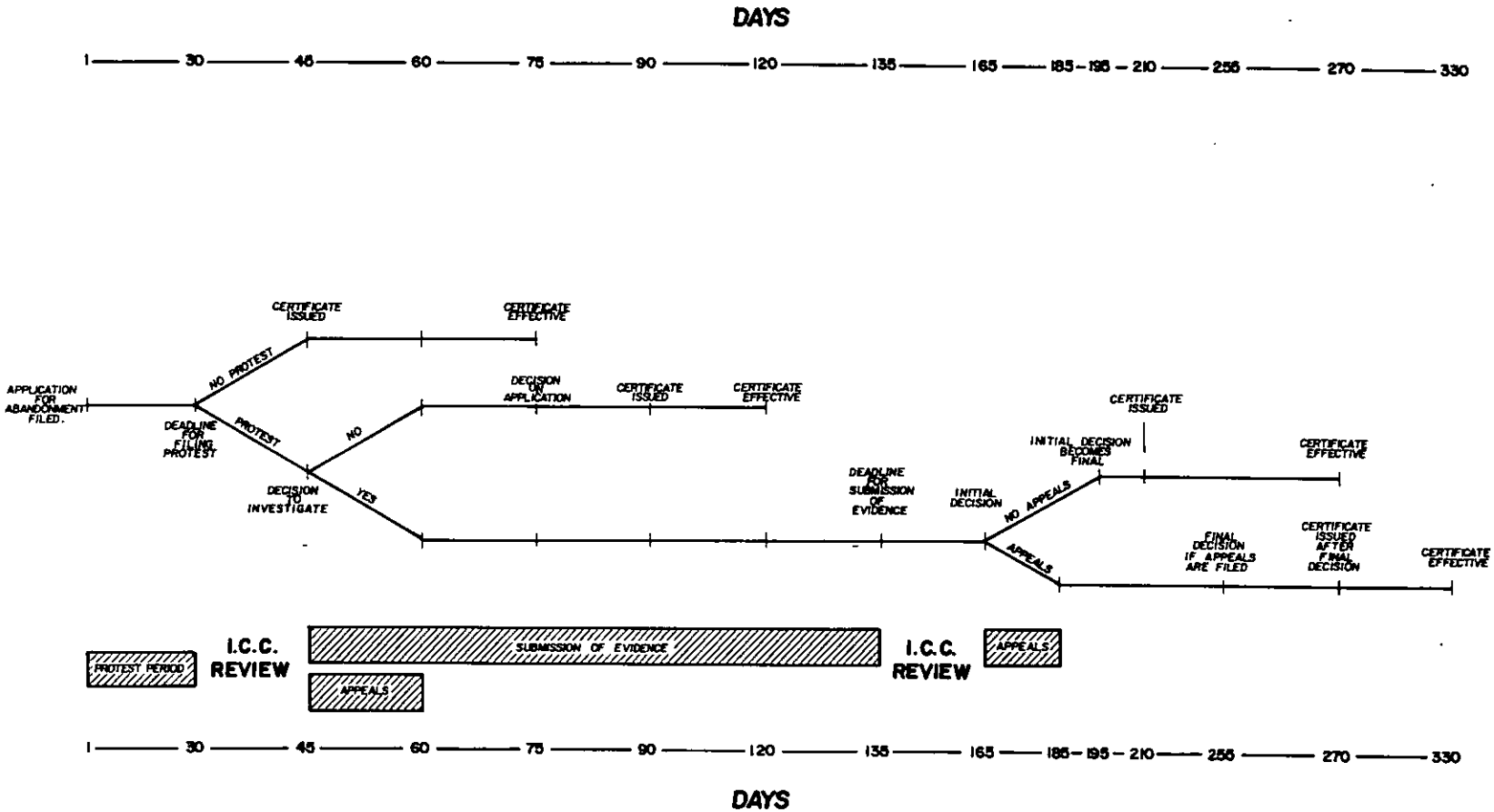
CONCLUSIONS

The Staggers Rail Act of 1980, when fully effective, may have far-reaching effects on South Dakota rail users.

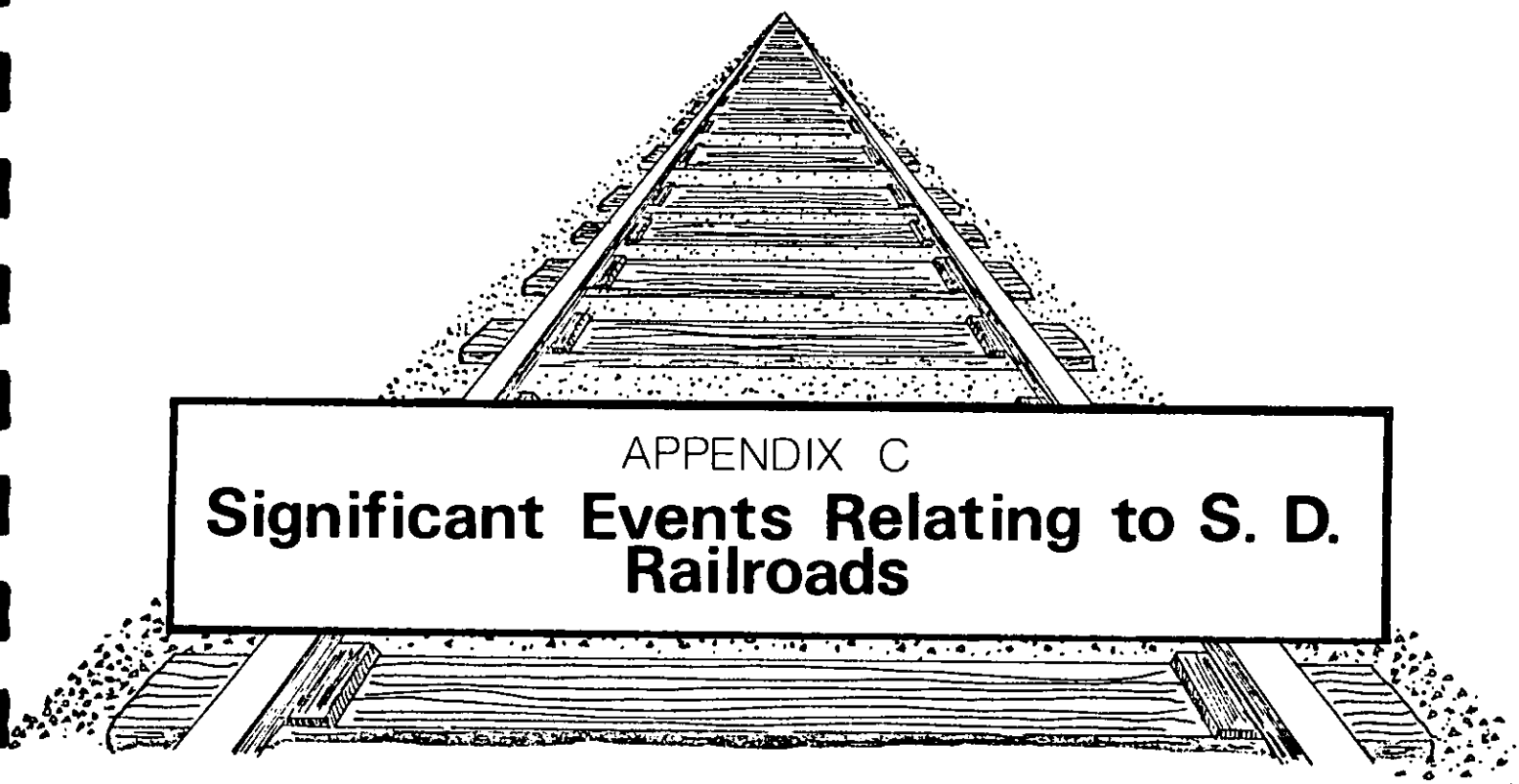
Legislatively, the Act establishes several key provisions for generating revenue. Rates can be raised to a stated ratio of revenue-to-variable cost without ICC intervention. A zone of rate flexibility is established based on the railroad cost recovery index. General rate increases eventually are to be eliminated completely, but surcharges are permitted specifically on light density lines. Contract rate agreements are permitted. Other provisions include accelerated abandonment proceedings and expedited merger procedures.

To implement the legislation, the Interstate Commerce Commission is promulgating rules and regulations that will permit the provisions of the Act to be instituted. The comprehensive nature of the legislation has led to several rulemaking proceedings which are presently not completed. A thorough, on-going review process by railroads and shippers is necessary prior to any final assessment is made of the Act. Not included in the legislation was any funding provisions for carriers or shippers to implement activities related to the ACT.

I.C.C. Rail Line Abandonment Timetable



NOTE: PROCESS IMPLEMENTED BY STAGGERS RAIL ACT OF 1980.



APPENDIX C

Significant Events Relating to S. D. Railroads

APPENDIX C

SIGNIFICANT EVENTS RELATING TO SD RAILROADS

December 19, 1977	Milwaukee Road files for financial reorganization under the Federal Bankruptcy Act.
May 18, 1978	SDDOT announces that 49% of state's rail mileage in various stages of abandonment.
July 11, 1978	Milwaukee receives $47 million in federal financial aid.
September 21, 1978	Trustee Stanley E. G. Hillman announces that all services west of Minneapolis would be withdrawn from service.
December 21, 1978	Milwaukee Road employees form Save Our Railroad Employment (SORE) to buy trackage from the Twin Cities to the West Coast.
January 18, 1979	Milwaukee Road's cash flow critical - cash on hand at first of year $13 million - a further decline to $5 million by the end of January is expected.
February 2, 1979	FRA provides $5.1 million loan to Milwaukee for winter conditions - ERSA.
March 7, 1979	The Milwaukee Road ran completely out of cash, but by the end of the week it had negotiated an emergency $10 million loan from its subsidiary land company.
March, 1979	Milwaukee Road plans to layoff 4-5% of the railroads work force - to try to save about $20 million in wages. South Dakota to loose about 20 employees.
April 5, 1979	Milwaukee got another $10 million loan from Milwaukee Land Company to keep operating.
April 23, 1979	The Trustee for the Milwaukee Road petitioned the U.S. District Court for an order directing partial embargo (suspend service) of freight operations on the Milwaukee system not included in his "core" system. There were no lines in S.D. included in the proposed system, so all Milwaukee Road lines in S.D. would cease operation under the Trustees plan.
May 4, 1979	The Trustee advised the court that he had modified his "core" system to include the line from Renville, Minnesota to Miles City, Montana and the two branch lines of Milbank to Sisseton and McLaughlin to New England, North Dakota. Governor Janklow pledged to raise $2.3 million for needed repairs on the main line. Most of the money would come from Federal 4-R Act funds available to South Dakota,

	Minnesota and North Dakota. The required 20% match would be furnished by local shipppers and power companies on the line. Work is scheduled to start in July, 1979 on the project. The Trustee stated that the date for embargoing most of the RR's system should be postponed until May 31.
May 4, 1979	Federal Judge Thomas McMillen approved a $15 million loan for the Milwaukee Road.
June 1, 1979	Judge McMillen ordered the Milwaukee Road to continue to operate their 9,800 mile system, and denied the request of the Milwaukee Road to embargo part of its system.
June 19, 1979	Judge McMillen approves $20 million loan from FRA to Mil. Road.
July 23, 1979	Richard B. Ogilvie appointed as new Milwaukee Road Trustee.
July 23, 1979	Agreement signed between Governor Janklow and Milwaukee Trustee, for the $2.3 million Milwaukee Main Line Project. Approved by Federal Judge, McMillen - Bankruptcy Court.
August 10, 1979	Milwaukee Trustee files Re-organization Plan before Judge McMillen - down from 9,800 miles to 3,400 miles.
October 31, 1979	Judge McMillen allows Milwaukee Trustee to tap $15 million of earnings held in escrow to operate line.
November 1, 1979	Bankruptcy Court allows embargo on all Milwaukee lines not part of the Milwaukee Trustee's Core System . All other Milwaukee lines in South Dakota lose service except the Main Line.
November 4, 1979	President Carter signs the Milwaukee Railroad Restructuring Act of 1979 - PL-96-101 which takes abandonments decision for railroads in bankruptcy proceedings away from ICC and gives them to Bankruptcy Court.
January 7, 1980	FRA provides $50 million loan to Milwaukee to keep entire system running until March 1, 1980.
January 16, 1980	Governor Janklow delivers South Dakota State Rail Program to the Legislature.
January 16, 1980	ICC recommends abandonment of Milwaukee track in South Dakota to the Federal Bankruptcy Court.
January 30, 1980	Day-long legislative recess to discuss all aspects of the State Rail Program - Governor Janklow, Rail Director Jim Myers, Worthington Smith, and Garold Thomas, FRA, speak to legislators.
March 1, 1980	Judge McMillen orders embargo of services of 975 miles of Milwaukee track in S.D.

March 12, 1980	The Legislature, in the last day of session passes a compromise rail plan after 13 hours of debate. A temporary 1¢ increase in the sales tax is passed to raise $25 million to buy rail lines but no rail operations are allowed.
March 19, 1980	ICC rejects all three reorganization plans for the Milwaukee Road - Liquidation (Holding Company) Milwaukee II (Trustee) and New Milwaukee (ESOP).
March 24, 1980	FRA pledges loans up to $50 million to keep Milwaukee running until Trustee comes up with a viable reorganization plan.
March 31, 1980	South Dakota Supreme Court issues restraining order prohibiting collection of 1¢ sales tax and implementation of the State Rail Program.
April 17, 1980	S.D. Supreme Court dismisses proceeding brought to stop collection of 1¢ sales tax - 4-1 decision - State will begin collection of tax on May 1st.
April 17, 1980	ICC okays merger between the BN and the St. Louis - San Francisco railroads making the combination the longest railroad in the U.S., about 30,000 miles.
May 15, 1980	Milwaukee Trustee files a new re-organization plan with Federal Bankruptcy Court. Plan calls for abandonment of New England and Sisseton branch lines and shippers, State and Federal financial assistance in providing funds for a $35 million rehab on the Miles City main line. Milwaukee II can show a net profit by 1983.
May 22, 1980	Congress approves Rock Island Bill which contains funds to provide directed service over abandoned Milwaukee lines in South Dakota.
July 9, 1980	BN announces new 54-car unit train grain rates for S.D. shippers to the West Coast.
August 12, 1980	Milwaukee Road work crews begin a second rehabilitation project on the Main Line between Milan, Minnesota and Miles City, Montana - project west of Gascoyne is jointly funded by South Dakota and North Dakota - project east of Gascoyne funded by Milwaukee Road.
August 22, 1980	ICC approves sale of 500 miles of Milwaukee track to Burlington Northern and Union Pacific for $40 million.
September 23, 1980	South Dakota Railroad Advisory Commission recommends $7.22 million in federal Section 803 funds for rail rehab or alternative service in S.D. $900,000 to Milwaukee Main Line rehab, $3.5 million for C&NW Pierre to Huron line, $1.76 million for BN Sioux Falls to Wentworth and $1 million for elevator relocation at Sisseton.

September 26, 1980	S.D. Railroad Authority votes to purchase 760 miles (15,798 acres) of abandoned Milwaukee Road track for approximately $18-20 million.
October 1, 1980	House and Senate passed the Staggers Rail Act of 1980.
October 1, 1980	FRA approved 3 rail projects in South Dakota - Pierre to Huron $3.5 million - Wentworth to Sioux Falls $1.76 million and Milbank to Sisseton $1.0 million.
October 27, 1980	Judge McMillen, Federal Bankruptcy Court approves sale of 760.1 miles of Milwaukee track to South Dakota for $18,750,000. State also acquired option to purchase 94 miles in Iowa.
November 28, 1980	S.D. makes first payment on Milwaukee Road purchase - $6 million.
December 13, 1980	Division of Railroads advertised for qualified railroad operators in the Wall Street Journal.
December 15,1980	Judge McMillen allows Milwaukee Trustee to borrow $32.8 million for operations from escrow accounts and subsidizing operations through 1981.
December 24, 1980	Milwaukee files Amended Systems Map with ICC showing mainline to Miles City, Montana as under study for abandonment.
January 14, 1981	Governor Janklow and Milwaukee Trustee Ogilvie in Pierre to discuss abandonment of the Main Line and Ogilvie agrees to postpone decision until February 17th - wait to see South Dakota's plan.
February 17, 1981	Milwaukee Bankruptcy Judge is impressed with multi-state effort to save the Main Line - extends the deadline from February 17 to April 15.
February 20, 1981	Governor signs one cent sales tax extension to March 31 for railroad trust fund.
February 28, 1981	Late on the morning of February 28, House and Senate barely vote two thirds majority for a one cent gas tax for rail operations.
April 13-14, 1981	FRA Administrator Robert Blanchette tours Milwaukee Road line from Minneapolis to Aberdeen with political leaders from both South Dakota and Minnesota.
May 8, 1981	Milwaukee Road revenues for the first 3½ months of 1981 fall 6% below projected levels.

May 8, 1981	South Dakota Supreme Court rules that gas taxes cannot be used to fund the State rail plan after a suit was filed by a highway users group.
May 9, 1981	South Dakota Railroad Board awards $2.3 million rail rehabilitation contract to Railroad Builders, Inc. of Englewood, Colorado.
May 15, 1981	Milwaukee Road files to abandon the Main Line.
May 18, 1981	In the first Special Session of the South Dakota Legislature in 31 years, an internal transfer of funds in State government enables efforts for rail operations to continue.
May 21, 1981	An agreement is signed between South Dakota, Burlington Northern, and rail users along the Sioux Falls-to-Madison line that will start a $5.7 million rehabilitation project on the line.
June 1, 1981	30 day rehabilitation work starts on the first of three core system segments, the Sioux Falls-Canton-Mitchell and Mitchell-Wolsey routes.
June 2, 1981	Congressional compromise enables $30 million to be earmarked for rehabilitation of Milwaukee Main Line.
June 16, 1981	Burlington Northern named as the operator of the core system.
July 1, 1981	Rehabilitation work starts on the Mitchell-Scotland and Chamberlain-Mitchell segments of the core system.
August 1, 1981	Rehabilitation work starts on the Scotland-Elk Point segment of the core system.