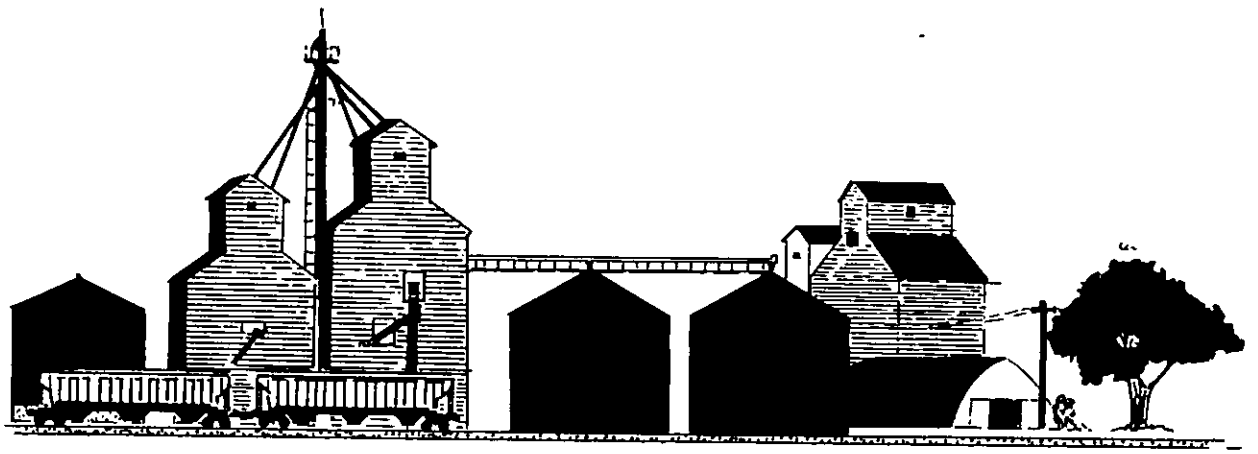
RAILPLAN
SOUTH DAKOTA
-1983-



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

JUNE 24, 1983

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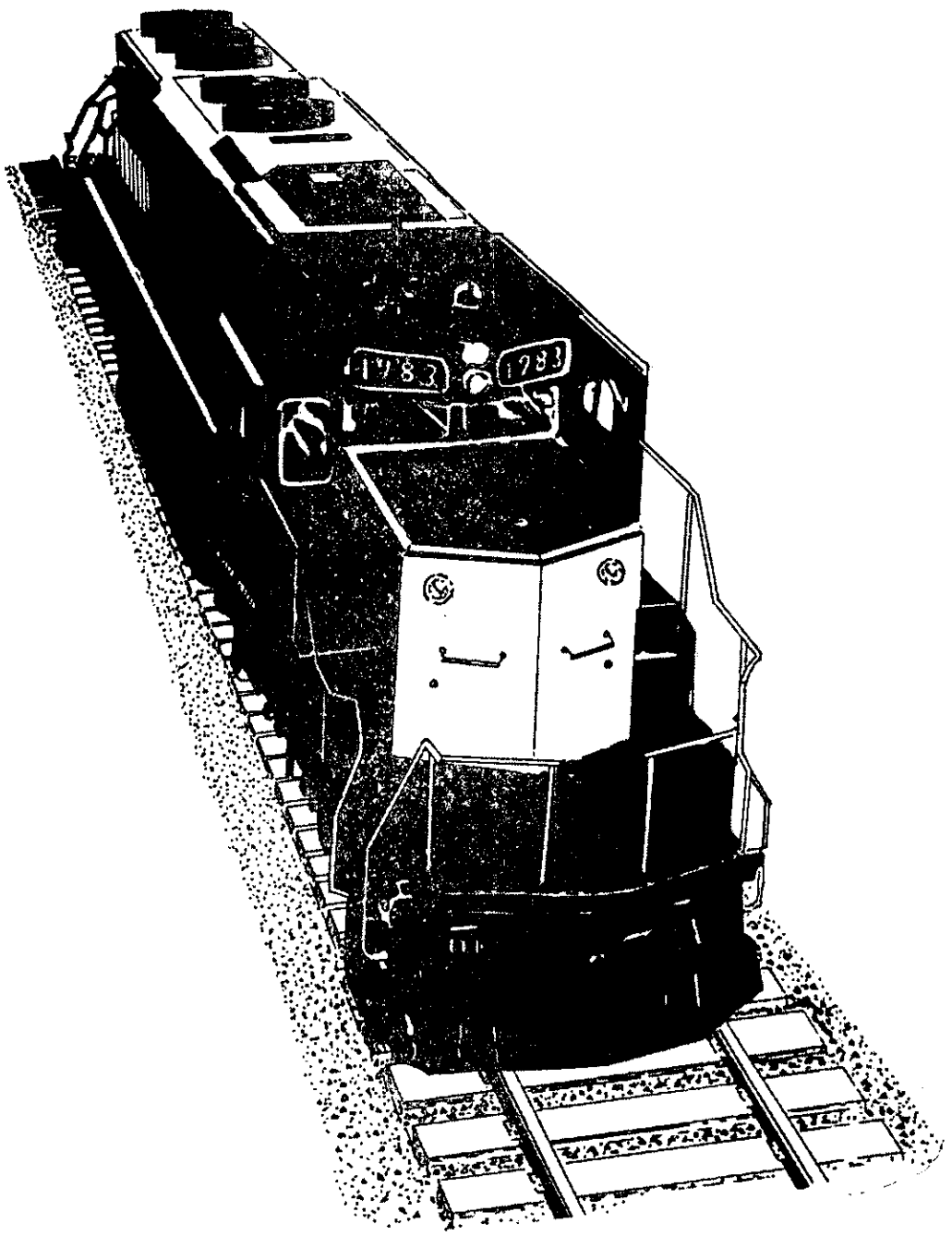


CHAPTER I

CHAPTER I

INTRODUCTION

This document, RAILPLAN SOUTH DAKOTA 1983, is South Dakota's official rail planning document for 1983. This plan is an update of the 1981 plan and its addendums and is designed to be a stand-alone document independent of prior work. This document has four purposes:

- Inform the public of the rail planning process
- Inform the public of the rail system characteristics
- Document plans for the expenditure of funds
- Maintain eligibility for federal funds

To accomplish these objectives, the plan is divided into four (4) major chapters plus the appendices.

Chapter II documents the organizational structure, planning process and goals and objectives for plans and projects. Also included are major past planning efforts, past projects and significant events affecting State rail transportation since the publication of the last rail plan.

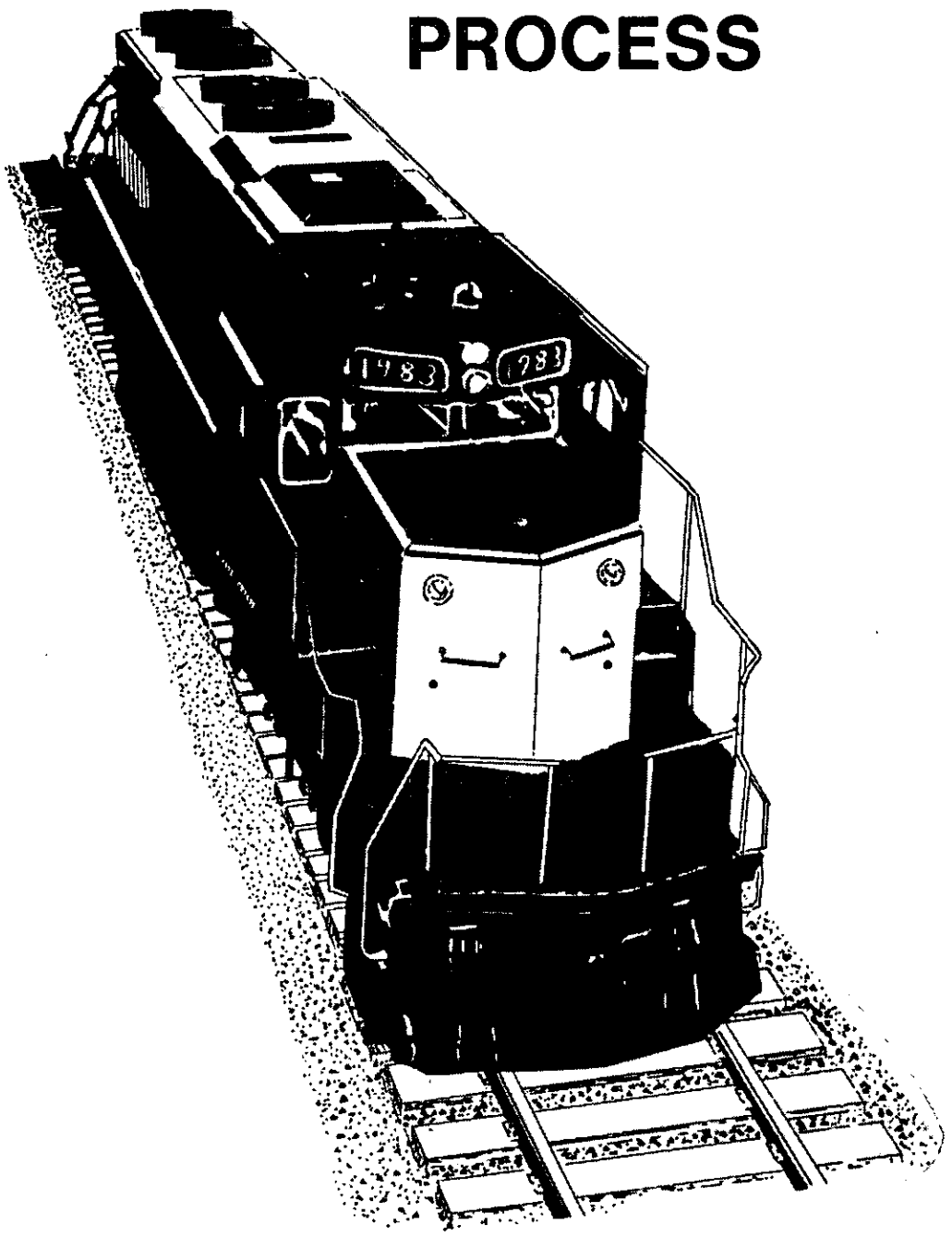
Chapter III highlights the rail system in place today and some of its characteristics. This chapter documents the rail carriers, miles in service, traffic levels, types of commodities carried and other pertinent information to assist the reader in understanding the rail network and its importance.

Chapter IV is designed to address future rail planning activities in South Dakota. It addresses past activities, future direction and methods of achieving the goals in place.

The appendices contain the official Railroad Map, a rail/highway map, detailed rail traffic characteristics and a documentary of the State purchased lines.

This plan serves as a documentary of rail planning in South Dakota. It is designed to be a working document to acquaint the reader with past activities and projects, to provide sufficient information to explain the need for a rail system and to document proposed future rail improvement projects.

TRANSPORTATION PLANNING PROCESS



CHAPTER II

CHAPTER II

TRANSPORTATION PLANNING PROCESS

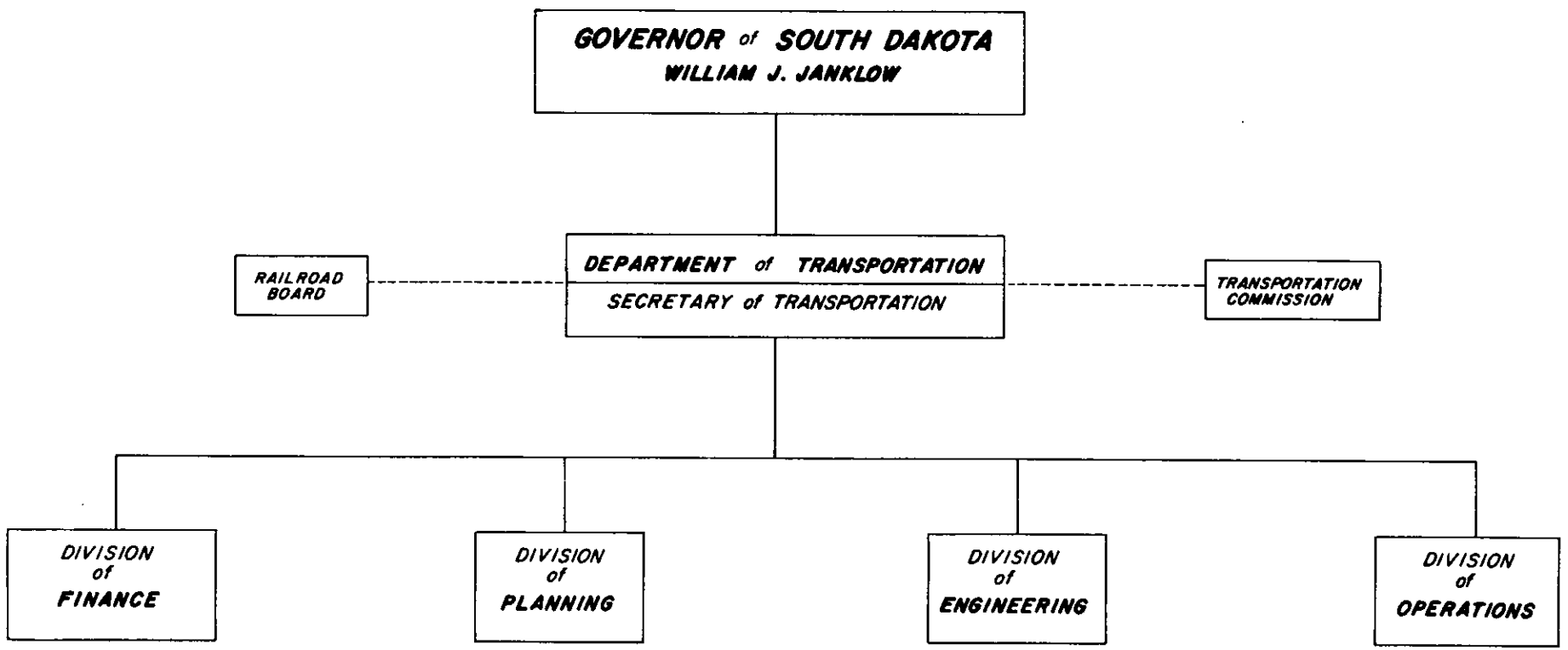
Rail planning in South Dakota developed in response to a variety of rail issues. Abandonments, bankruptcies, car shortages and load restrictions have drastically changed the character of rail operations in the State. This chapter reviews the organizational structure for rail planning and the mechanics for the overall planning process. A brief description of the past planning effort has been included to document and add insight into state purchases and rail projects. The policies, objectives and goals outlined in this chapter add direction to rail planning, project implementation and the development of this plan.

ORGANIZATIONAL STRUCTURE

Rail planning in South Dakota was, until July 1, 1983, the responsibility of the Division of Railroads, within the South Dakota Department of Transportation (DOT). The Division was established July 1, 1975 and abolished through Department reorganization on July 1, 1983. Figure II-1 shows the current organizational structure of the South Dakota DOT. Rail planning is now one of the functions of the Division of Planning within the DOT. This Division has multi-modal planning responsibilities for all modes in which the State is currently engaged. A Railroad Advisory Commission was established on July 1, 1977 that provided public input and guidance into the planning process. This Commission was abolished on July 1982 and its duties were transferred to the Railroad Board. The Board also provides policy for the Division in matters relating to the management of State-owned railroad property. The South Dakota Railroad Authority is a public financing mechanism created to acquire and improve railroad facilities.

FIGURE II - 1

SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION



The Governor has designated the Department of Transportation as the State Agency responsible for managing the Rail Planning Process and Assistance program. Federal funds for both planning and projects have been received 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 Department of Transportation also has statuatory authority to intervene in abandonment cases and other legal proceedings with railroad companies and the Interstate Commerce Commission.

OVERALL PLANNING PROCESS

One of the South Dakota Department of Transportation's (SDDOT) 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 of transportation needs and to strive for public and legislative support to meet those needs. A major objective of the SDDOT 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 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 Division is responsible for

performing planning and analysis functions necessary 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 and commodity flows;
- perform detailed line analyses on lines threatened by abandonment;
- monitor changes in the status, condition, and service on rail lines;
- 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.

Rail planning in South Dakota has long recognized the importance of public interaction. The Division will continue to keep the public informed and actively solicit their input. Rail planning grew out of public awareness of the rail crisis facing the State and the public's desire to solve the resulting transportation problems. Direct public participation in the rail planning process is generated through the issuance of news releases, agency mailings, meetings and seminars. Division staff regularly meet with shipper groups and make appearances throughout the State to inform the public and solicit input into the planning process.

Shipper surveys are conducted on lines selected for intensive study. These surveys provide information on the shippers usage of rail, future needs for rail

service and other related information. Various State departments and agencies also provide input into the rail planning process. For additional information and points of views the Division maintains close contact with the rail planning staffs of neighboring states to insure coordination focused on planning activities, program development and project implementation.

All railplans and addendums receive two final reviews before implementation. Public hearings are held on all plans and the internal A-95 review process is utilized to solicit additional comments. The 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 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 commitment of those affected by the project(s). Therefore, public participation will continue to be a major component of the rail planning process in South Dakota.

Rail planning and project implementation are conducted under the established policies, objectives and goals.

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.

- 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.

- 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 rail planning in the South Dakota DOT.

- 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 sources 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 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 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.

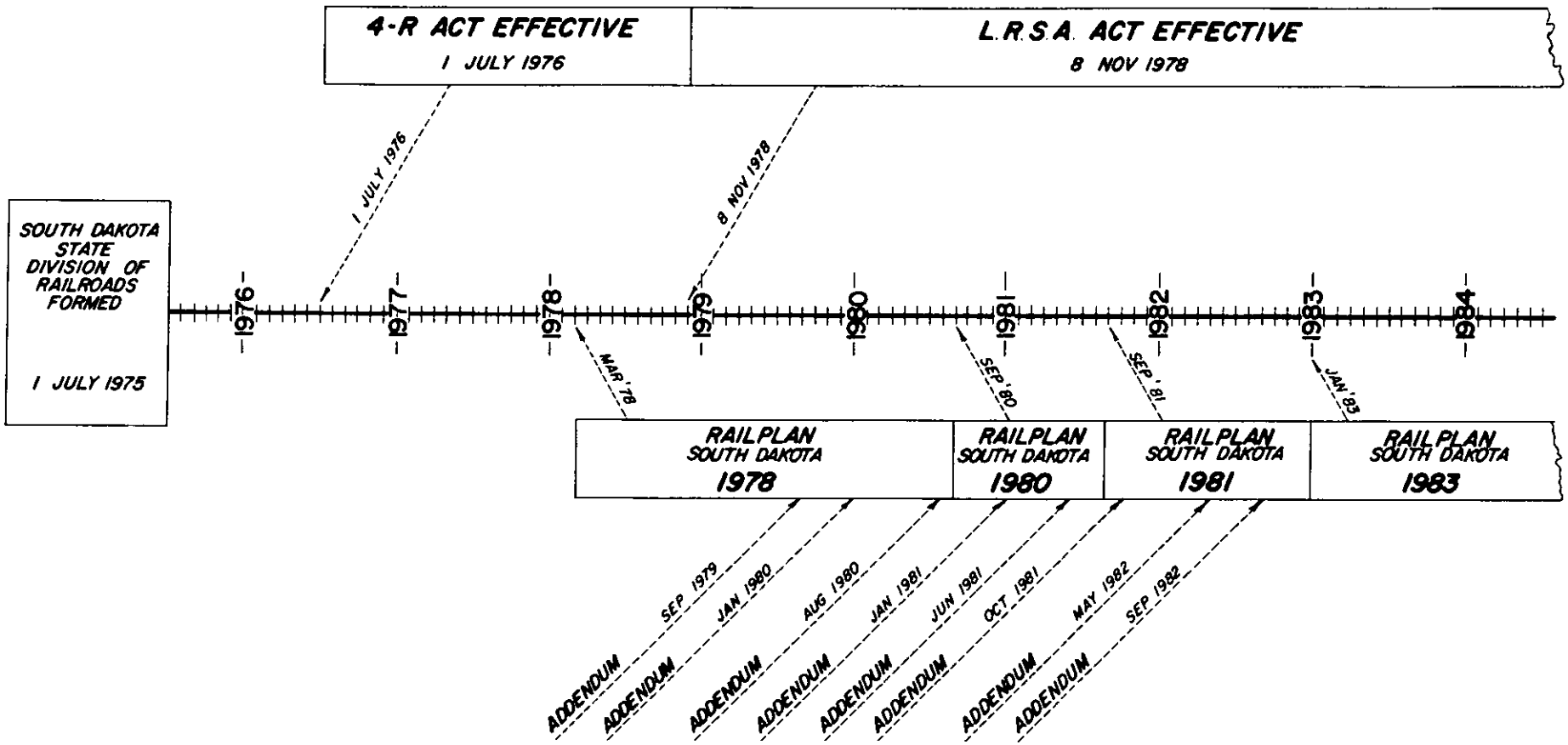
PAST PLANNING EFFORT

Several rail plans and addendums have been prepared as part of the rail planning process. These plans provide periodic documentation of changes in the South Dakota rail system, as well as the actions taken by the Division, the carriers, the shippers, and the Interstate Commerce Commission. The addendums focussed on critical transportation issues facing the State between rail plan publications. These issues arose primarily from the problems of rail service discontinuance caused by the Milwaukee Road bankruptcy. Figure II-2 shows the rail plans and addendums that have been prepared to date.

Numerous benefit/cost studies were made part of the rail plans and addendums. The aim of these studies was to determine what transportation-related alternatives best served the public interest while maximizing the utility of scarce funds. In some cases, the most appropriate alternative was the abandonment of rail service when another transport method was available. Each line analysis, therefore, did

FIGURE II - 2

SOUTH DAKOTA
RAIL PLANNING PROCESS



not lead to a proposed assistance project. Table II-1 illustrates the lines on which a detailed analysis has been performed.

With the culmination of the Milwaukee Road embargo in 1980, South Dakota was confronted with the loss of over 50% of its total operating rail mileage at one time. Despite the widely recognized fact that some rail lines in the State were not needed, the loss of service resulting from the embargo went far beyond the elimination of unnecessary lines. In an effort to provide a knowledgable approach to the rail problem, the Division analyzed every rail line in the State. This analysis led to the identification of a minimum set of lines constituting a core system of essential lines.

This core system concept, as shown in Figure II-3, was the basis for State purchases and rehabilitation projects designed to preserve rail service. While some core system lines have remained in the private sector, other lines for which a private solution could not be found were purchased by the State. Service has been restored to all State-owned core system lines by the State of South Dakota through an operating agreement with the Burlington Northern Railroad.

A select group of non-core lines were also purchased that were recognized to have either a future potential or a high level of local interest. Some of these lines have had minimum service restored. The remainder, while still in place, have not shown that the investment required to restore operations and to conduct required maintenance is a feasible alternative. Lines purchased by the State are shown in Appendix C.

All lines that have shown an urgent need and would benefit from assistance efforts have been analyzed. Table II-2 lists all past projects which have received financial assistance through the Local Rail Service Assistance Act administered by

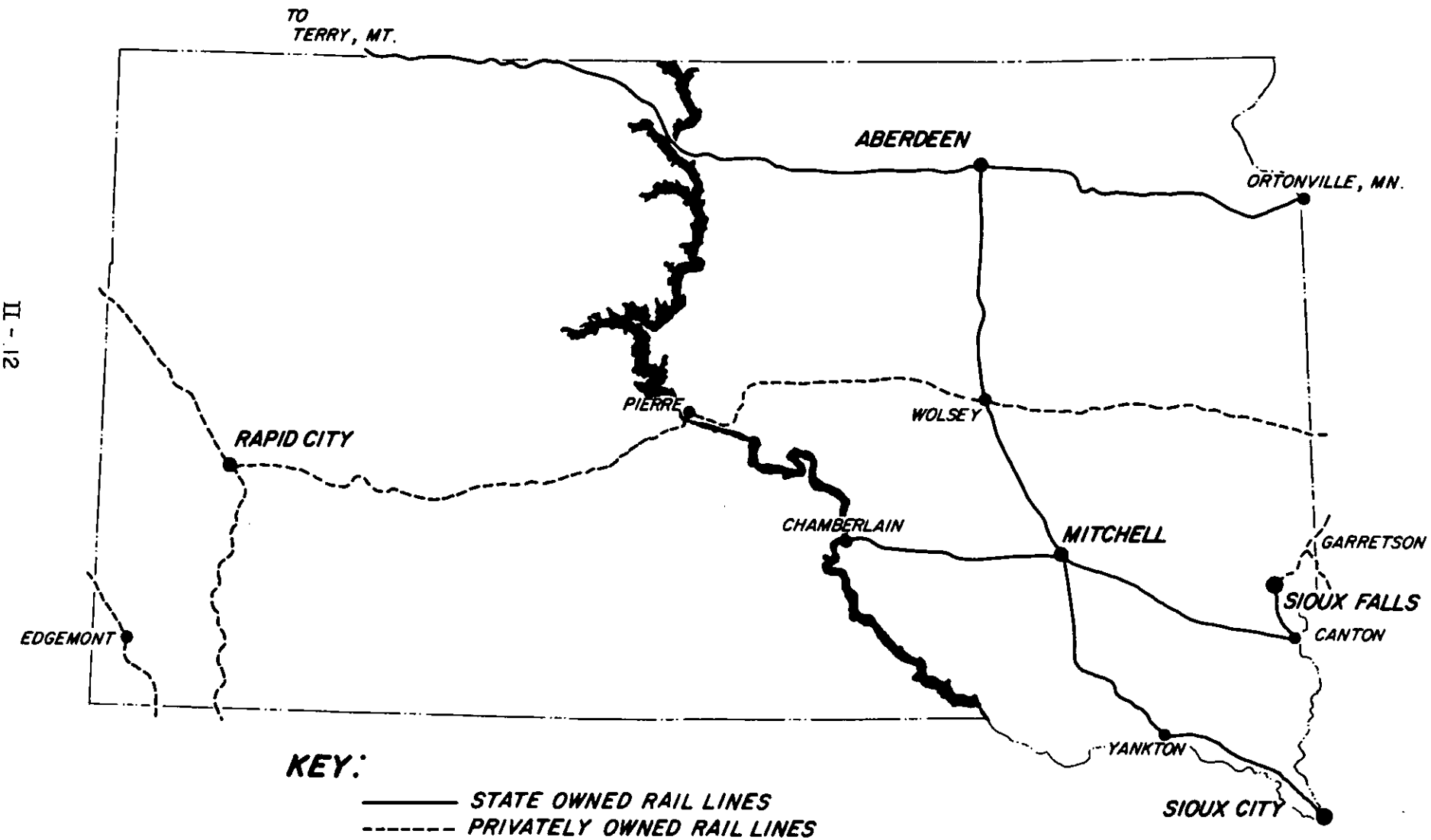
TABLE II-1

DOCUMENTATION OF PAST RAIL PLANNING AND PROJECT ASSISTANCE

RAIL PLANNING DOCUMENT	SCOPE OF STUDY	PROJECT ACTION
RAILPLAN SOUTH DAKOTA 1978	Branch Line Analysis of 25 Lines	No Project
Addendum-September, 1979	Blunt to Onida	No Project
Addendum-January, 1980	Jonathan, MN to Miles City, MT	Project Completed
Addendum-August, 1980	Miles City, MT to Gascoyne, ND	Project Completed
RAILPLAN SOUTH DAKOTA 1980	Milbank to Sisseton	No Project
	Andover to Brampton, ND	Project Completed
	Roscoe to Linton	No Project
	Aberdeen Siding	No Project
	Aberdeen to Rutland	No Project
	Madison to Sioux Falls	Project Completed
	Wentworth Siding	No Project
	Redfield to Aberdeen	No Project
	Pierre to Huron	No Project
	Blunt to Gettysburg	No Project
	Rapid City to Colony, WY	No Project
	Wolsey Transfer Track	No Project
	Miles City, MT to Gascoyne, ND	No Project
	Vienna Siding	No Project
Addendum-January, 1981	Blunt to Gettysburg	No Project
	Watertown to Clark	No Project
Addendum-June, 1981	State-Owned Core System	No Project
SECTION 505 APPLICATION	Ortonville, MN to Terry, MT	Project Underway
RAILPLAN SOUTH DAKOTA 1981		
Addendum-October 1981	State-Owned Core System	Project Underway
Addendum-May, 1982	Milbank to Sisseton	No Project
	Pierre to Huron	Project Underway
Addendum-September, 1982	Milbank to Sisseton	Project Planned for 1983
RAILPLAN SOUTH DAKOTA 1983		
Addendum-February, 1983	Canton to East Wye Switch	Project Underway
	Mitchell to Aberdeen	Project Underway (Part)
	Blunt to Onida	No Project
	Pierre to Rapid City	No Project
	Custer to Deadwood	No Project

FIGURE II - 3

SOUTH DAKOTA'S CORE SYSTEM CONCEPT



the Federal Railroad Administration. As denoted in Table II-2, six projects are currently in process in this 1983 construction season:

- o Sioux City to Mitchell
- o Mitchell to Canton
- o Huron to Pierre
- o Canton to East Wye Switch
- o Ortonville, Minnesota to Terry, Montana
- o Milbank to Sisseton

The $30 million upgrading project on the Ortonville to Terry Line is funded through a loan agreement between the State of South Dakota and the Federal Railroad Administration. The Burlington Northern is responsible for repayment of the loan through the lease and operating agreement with the State.

A map showing the locations of the rail lines receiving assistance is shown on Figure II-4. Also shown are two line segments for which assistance is currently planned. The projects have supported the State's core system concept. In some cases, the need for a project outside of the core system, combined with local support, has expanded the State's efforts beyond the core system.

This document, Railplan South Dakota 1983, is the fourth rail plan developed by the State. An intensive study of the rail system resulted in the establishment of the core system. A significant number of studies have analyzed segments of the rail system to guide assistance efforts. A total of ten projects have been implemented or are planned to be implemented from eight separate studies. Although funding levels have been reduced, the rail system will continue to be monitored for changes in service.

TABLE II-2

RAIL IMPROVEMENT PROJECTS
USING SOUTH DAKOTA AND/OR FEDERAL FUNDS
(ESTIMATED COSTS)

RAIL SEGMENT	RAIL LINE OWNER	YEAR IMPLEMENTED	TYPE OF IMPROVEMENT*	TOTAL COST	STATE PARTICIPATION**	PROJECT STATUS
Big Stone-Gascoyne	MILW	1979	1-2-3	$2,227,000	$1,781,000	Completed
Miles City-Gascoyne	MILW	1980	1-2-3-6	2,477,000	1,982,000	Completed
Sioux Falls-Madison	BN	1981	1-2-3-4-6	5,670,000	1,760,000	Completed
Core System***	SD	1981	1	2,794,297	2,794,297	Completed
West Jct.-Canton	SD	1981	1-2-3-4-5-6	879,100	879,100	Completed
Sioux City-Mitchell	SD	1981	1-2-3-5-6	6,382,035	6,382,035	In Process
Mitchell-Canton	SD	1982	1-2-3-5-6	2,016,512	2,016,512	In Process
Huron-Pierre	C&NW	1982	1-2-3-4-6	4,474,015	3,376,198	In Process
Britton Spur	SD	1982	1-2-3-4-5-6	896,776	717,421	Completed
Ortonville-Terry	SD	1982	1-2-3-4-5-6	30,000,000	- 0 -	In Process
Canton-East Wye Switch and Hawarden to Beresford	SD	1983	1-2-3	812,136	212,136	In Process
Milbank-Sisseton	DAK.R.	1983	1-2-3-6	933,813	655,699	In Process
Aberdeen-Wolsey	SD	1983	1	1,961,000	1,961,000	In Process

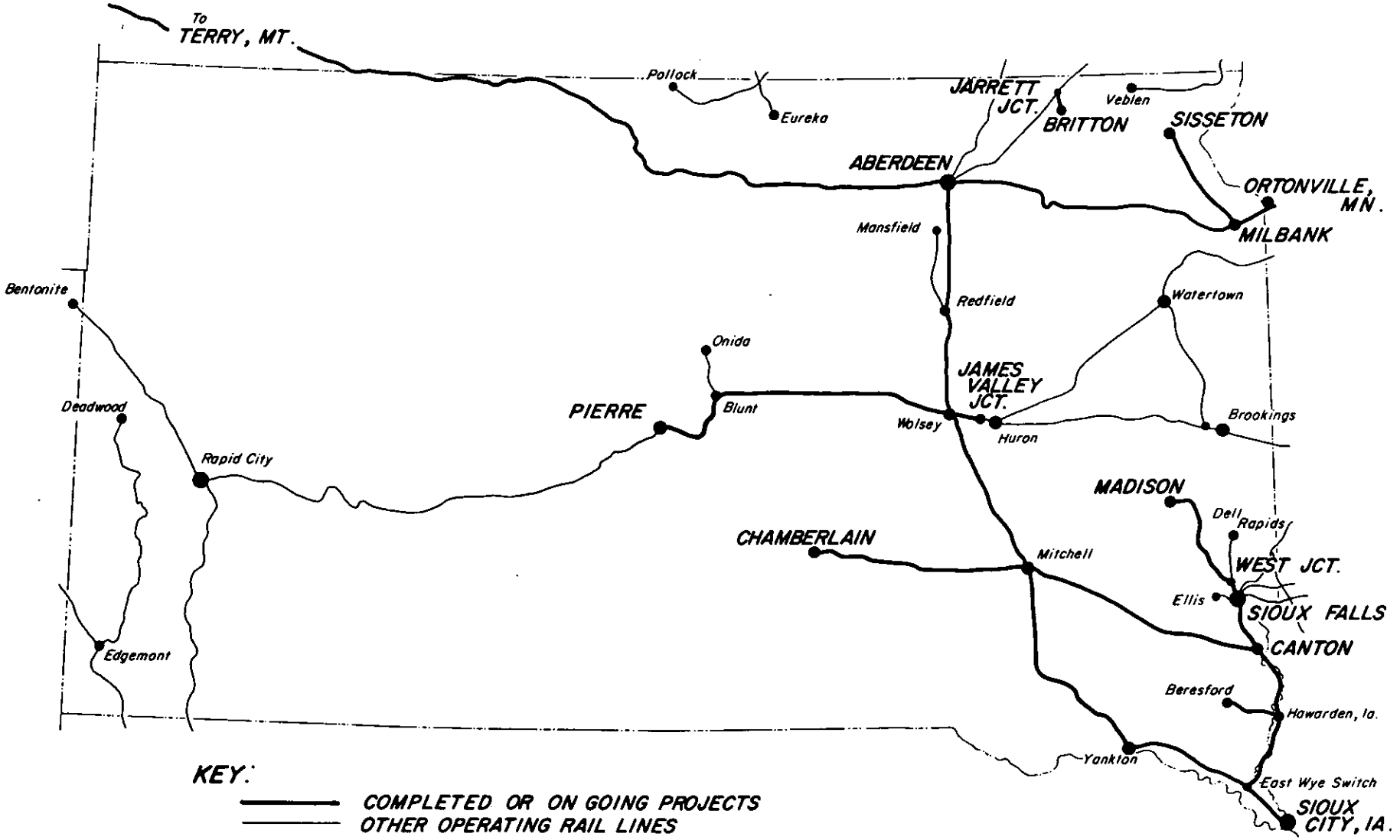
* Major Components of Improvement
1 - Ties
2 - Ballast
3 - Surfacing
4 - Rail
5 - Crossings
6 - Achors

** Includes Federal 803 and/or State Funds

*** Directed Service Project

FIGURE II - 4

RAIL LINES WHICH HAVE RECEIVED REHABILITATION ASSISTANCE THROUGH STATE AND/OR FEDERAL PROGRAM(S)



SIGNIFICANT EVENTS SINCE RAILPLAN SOUTH DAKOTA 1981

Several significant events have occurred since the publication of the last rail plan that affect the rail system in South Dakota:

- MAIN LINE PURCHASE - The South Dakota Railroad Authority purchased the former Milwaukee Road track from Ortonville, MN to Terry, MT in 1982. The Burlington Northern began operations on the line on April 20, 1982 under contract with the State.

- MERGER IMPLEMENTATION - The Burlington Northern and the St. Louis & San Francisco Railroad merger was approved in 1980. This merger opened up new one line haul movements for South Dakota rail shipments to several southern markets.

- ABANDONMENTS - There were 483 miles of railroad approved for abandonment in South Dakota in 1981 and 1982.

- LINES RETURNED TO SERVICE - After abandonment, 336 miles of railroad in South Dakota were put back into service in 1982.

- NEW COMPANIES - Two new rail companies, the D & I Railroad and Dakota Rail, were formed to restore service on abandoned rail lines.

- REHABILITATION PROJECTS - Rail improvement projects utilizing state and/or federal funds were implemented on 390 miles of railroad in 1981 and 1982. In addition, the 480 mile Ortonville to Terry project was implemented in 1982 using Section 505 loan funds.

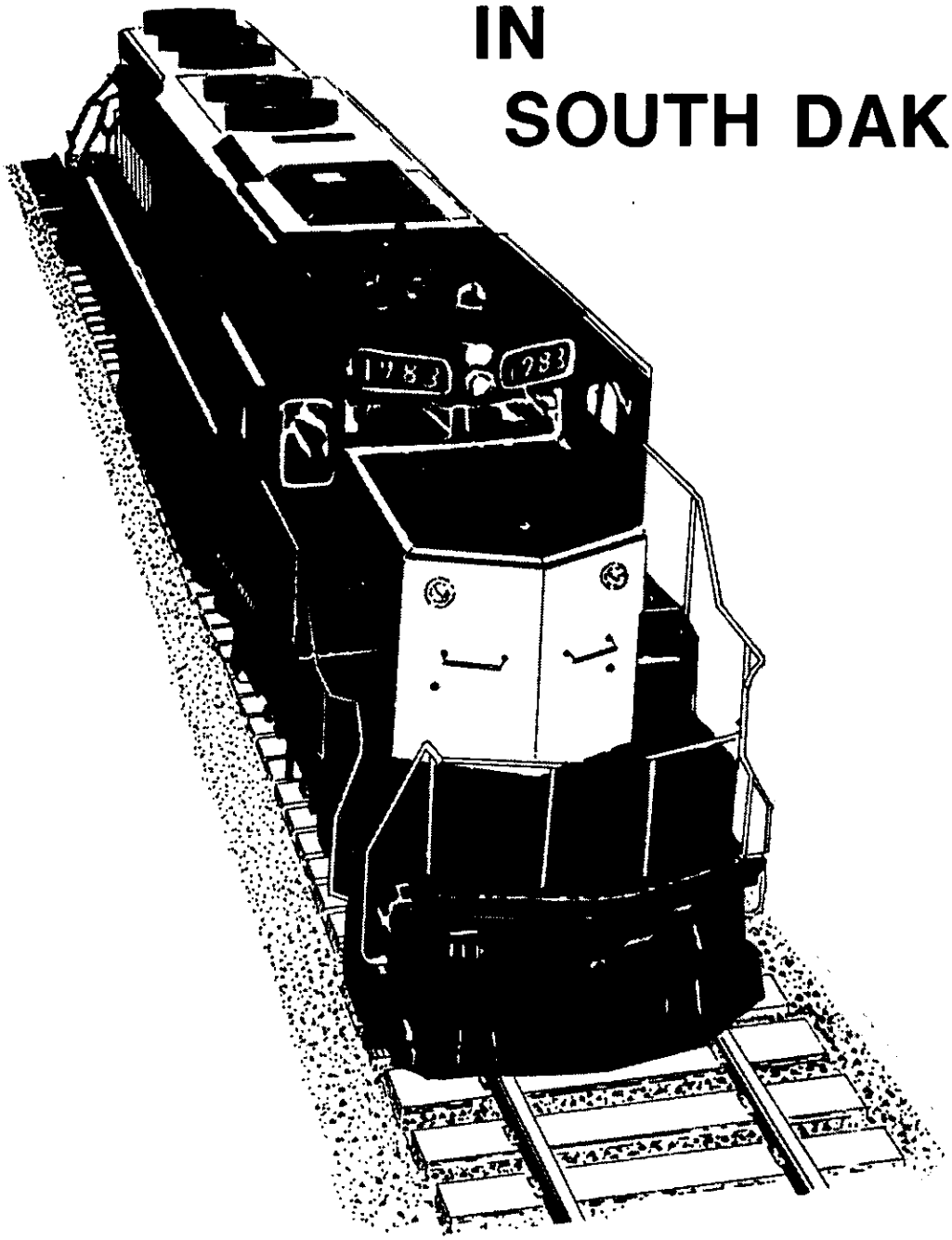
- NEW CONSTRUCTION - The Burlington Northern completed a $14 million rail bridge over the Missouri River at Sioux City in 1982 which replaced an old

inferior structure. This new bridge allows fully loaded grain hopper cars that were prohibited on the old structure. This improvement enhances the movement of South Dakota grain to southern markets.

- MILWAUKEE ROAD - The Milwaukee Road, once the largest carrier in South Dakota, no longer owns any track in the State. Its only rail operation is by a trackage rights agreement with the BN on the ten (10) mile segment between Ortonville, MN and Milbank, SD.

The events listed above illustrate the changes in rail operations in South Dakota during the past two years. Many have been positive changes which have led to improved rail service characteristics or facilities. The following chapter describes the current rail facilities, as well as some of its characteristics.

THE RAIL SYSTEM IN SOUTH DAKOTA



CHAPTER III

CHAPTER III

THE RAIL SYSTEM IN SOUTH DAKOTA

A thorough understanding of the rail system in South Dakota is necessary to wisely plan for future transportation decisions. The railroads have eliminated many miles of light density lines in the past few years. This track reduction has statistically put the existing traffic volume on fewer miles of railroad. However, many miles of operating lines still remain that have a low traffic density and are in poor physical condition.

It is inevitable that additional lines will be abandoned, therefore, careful monitoring is necessary to insure that lines important for the movement of the State's products remain intact. An ongoing program is important to promote the improvement of remaining necessary lines. The following information in this chapter explains the rail system, its usage and its characteristics to promote an orderly rail planning program.

RAIL MILEAGE

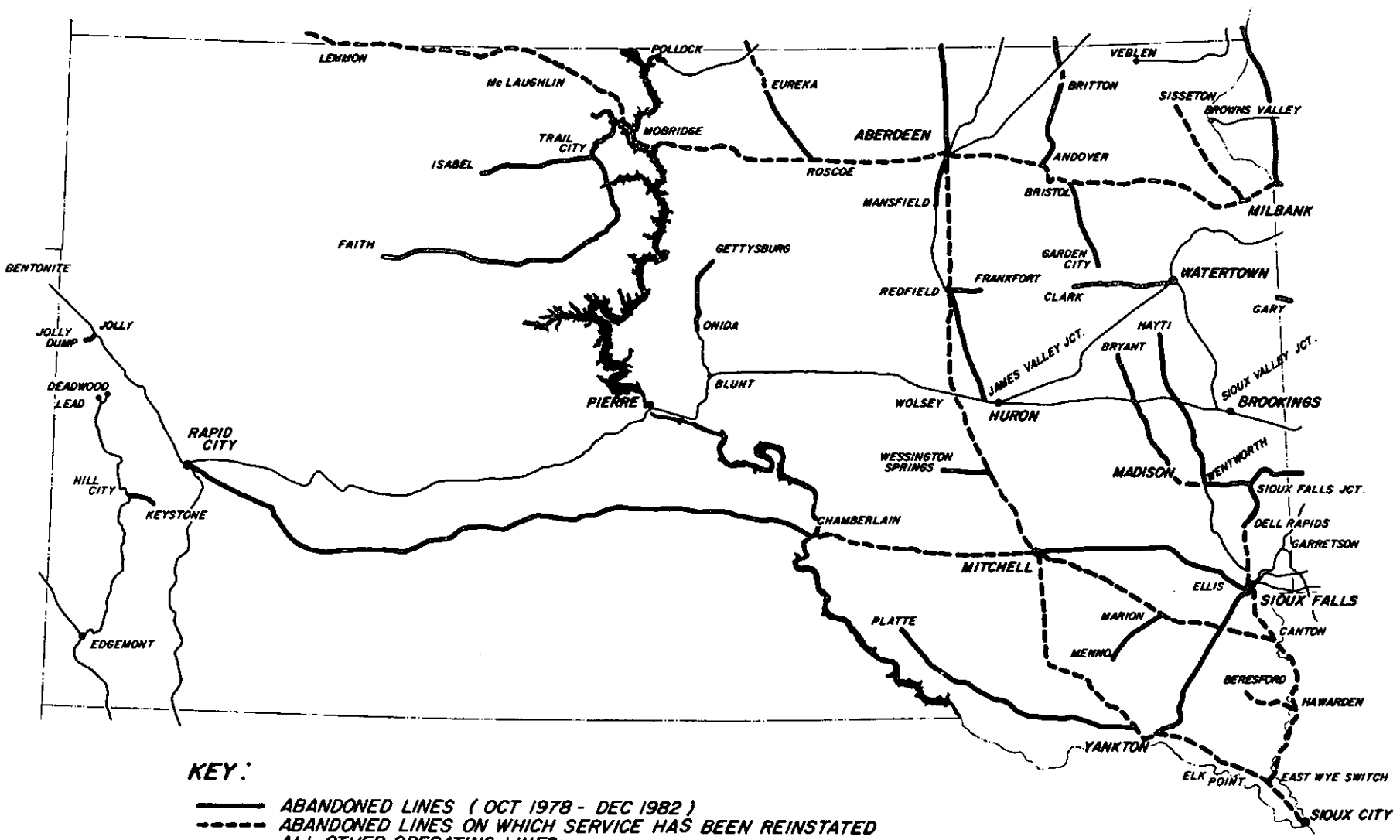
A total of 4,420 miles of railroad were constructed in South Dakota, with the last track being laid in 1948. Since 1909, rail abandonments have resulted in the loss of service on 3,275 miles of railroad. South Dakota, working with private companies such as the Burlington Northern, has been successful in restoring service on 844 miles of abandoned rail lines. Operating trackage in the State currently totals 1,989 miles.

The current rail system is shown on Figure III-1, as well as those lines which have received abandonment approval since October 1978. Table III-1 shows rail miles in operation as of June 1, 1983.

FIGURE III - 1

SOUTH DAKOTA RAIL LINE ABANDONMENTS

OCTOBER 1978 THROUGH DECEMBER 1982



KEY:

- ABANDONED LINES (OCT 1978 - DEC 1982)
- ABANDONED LINES ON WHICH SERVICE HAS BEEN REINSTATED
- ALL OTHER OPERATING LINES

TABLE III-1

CURRENT MILEAGE OPERATED BY CARRIER

SOUTH DAKOTA

Railroad	Miles Owned	Other Miles Served	Trackage Rights	Total Miles Served in SD
Burlington Northern	418	765	13	1,183
Chicago & North Western	685	--	74	685
Soo Line	66	--	--	66
Dakota Rail	37	--	--	37
D & I	--	18	52	18
Milwaukee Road	--	--	10	0
Total	1,206	783	149	1,989

A history of South Dakota's Railroad system is illustrated in Table B-1 in Appendix B. As is apparent from this Table, more than 48% of all rail abandonments in South Dakota have occurred in the last three years. The three year abandonment total of 1586.6 miles represents 36% of the total rail mileage ever constructed in the State.

Table B-2 in Appendix B lists the line segments and mileages for abandonments from January 1, 1979 to the present. The Milwaukee bankruptcy directly accounted for 83%, or 1,550 miles, of the total abandoned mileage since 1979.

RAIL CARRIERS

Currently six (6) railroad companies provide freight service in South Dakota. Four (4) of these companies are Class I carriers and the remaining two (2), Dakota Rail and the D & I Railroad, are short line operators. The Illinois Central Gulf has been eliminated from the list of operating railroads in the State even though

they do not, as of the date of publication, have a certificate of abandonment. Their 15 mile line to Sioux Falls was filed for abandonment in 1977. Due to appeals and technicalities, a cetificate has been delayed. Service has not been provided on the line for about one year.

The Burlington Northern (BN), see Figure III-2, operates more miles of track in the State than all other carriers combined. Its operating system is comprised of 418 miles of their own track and 765 miles of State-owned track. Table III-2 is a line by line listing of its trackage, showing the miles and the weight limit. Only three (3) line segments, totaling 86.7 miles, have weight restrictions such that they cannot accommodate the 100-ton hopper car preferred for grain service. The BN's extensive service area, covering 27,000 miles in 24 states and 2 Canadian Provinces, provides access to a large number of markets that are important to South Dakota industries.

The Chicago & North Western (C&NW), see Figure III-3, currently operate on 685 miles of its own track with trackage rights for 74 miles on the State-owned system. Table III-3 is a line by line listing of C&NW trackage showing the miles operated and the weight limit. Its system in South Dakota has characteristics which permits fully loaded large hopper cars on only one of its line segments. All other segments have weight limits of less than 263,000 pounds. This characteristic severely limits the marketing of grain outside the C&NW system as the export markets require hopper cars. The C&NW system does, however, effectively serve eleven (11) states in the Upper Midwest as a regional carrier, where boxcars and lighter loads are acceptable.

The remaining four (4) rail carriers in the State are illustrated in Figure III-4. This information is presented in Table III-4 showing the miles operated and the weight limit by line segment.

The Dakota Rail Railroad Company is a shortline railroad providing service on the former Milwaukee Road line from Milbank to Sisseton. The 37 mile branch line was purchased by local private investors who are also responsible for operations of the line. The major traffic is barley which is interchanged with the Milwaukee Road at Milbank for destinations in Minnesota and Wisconsin.

The uniqueness of the barley traffic permits this physically weak line to be economically operated. The grain product is sold as malting barley, which receives a significantly higher price than other barley. The local market area for barley, therefore, extends far beyond the local production area and constitutes an overwhelming majority of the rail movements on this branch line.

The Soo Line Railroad Company, a 7-state Upper Midwest carrier, operates two dead end branch lines that extend 66 miles into the State from its system in North Dakota. Although these branch lines may provide a local transportation need, their stateweide value is limited. The two lines carried 2.7% of the total rail traffic in the State, 96% of which was originating grain.

The D & I Railroad was formed to haul rock and crushed stone quarried at Dell Rapids and Hawarden, Iowa. It has a limited common carriage certificate for certain types of rock products only. It operates on the line from Dell Rapids to Sioux City, Iowa. It operates on a leased industrial spur owned by the State from Sioux Falls (West Jct.) to Dell Rapids and has trackage rights over the Burlington Northern operated State owned line from West Jct. to Sioux City.

The Milwaukee Road no longer owns any trackage in South Dakota. Once the State's largest rail carrier, the Milwaukee has abandoned all trackage west of Minnesota. It has retained trackage rights, however, for 10 miles between Ortonville, Minnesota and Milbank, South Dakota to interchange traffic with Dakota Rail at

FIGURE III - 2

BURLINGTON NORTHERN

- SOUTH DAKOTA OPERATIONS -

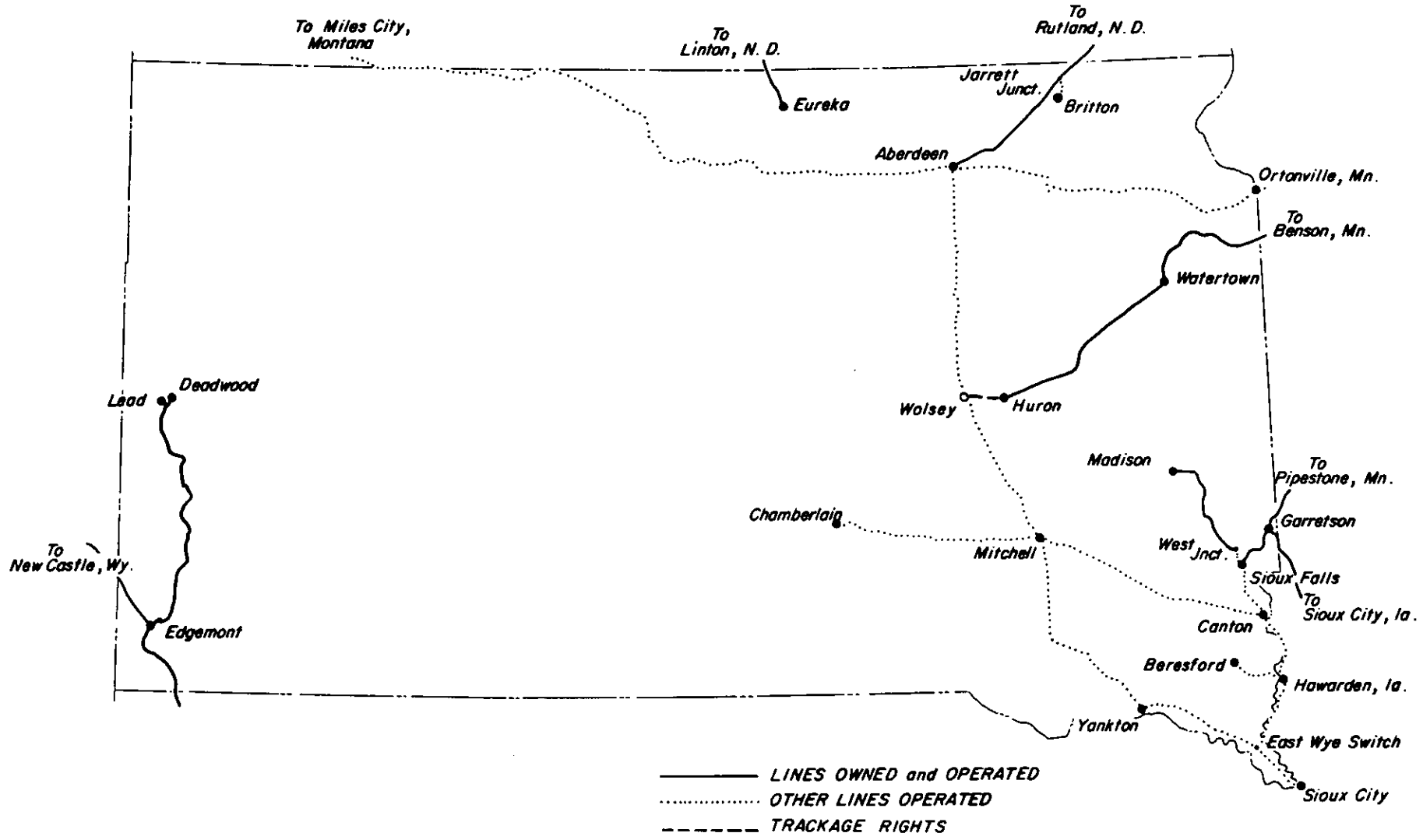


TABLE III-2
BURLINGTON NORTHERN
SOUTH DAKOTA OPERATIONS (7-1-83)

SEGMENT (BN Ownership) FROM	TO	TOTAL MILES	SD MILES	WEIGHT LIMIT (LBS)
Willmar, MN	Garretson	127.9	4.6	263,000
Garretson	Sioux City	94.6	8.1	263,000
Garretson	Sioux Falls	20.4	20.4	263,000
Sioux Falls	Madison	42.7	42.7	263,000
Benson, MN	Watertown	92.0	45.1	263,000
Watertown	Huron	69.9	69.9	263,000
Geneseo Jct.	Aberdeen	76.6	53.6	263,000
Aliance, NE	Edgemont	110.6	27.4	315,000
Edgemont	Gillette, WY	121.1	21.4	315,000
Edgemont	Custer	40.6	40.6	263,000
Custer	Deadwood	65.7	65.7	263,000
Kirk	Lead	3.4	3.4	220,000
Linton, ND	Eureka	49.0	14.8	220,000
	TOTAL		417.7	

SEGMENT (SD Ownership) FROM	TO	TOTAL MILES	SD MILES	WEIGHT LIMIT (LBS)
Sioux Falls	Canton	20.8	20.8	263,000
Canton	Mitchell	80.5	80.5	263,000
Mitchell	Wolsey	54.7	54.7	263,000
Wolsey	Aberdeen	74.0	74.0	263,000
Mitchell	Yankton	74.7	74.7	263,000
Yankton	Sioux City	62.0	56.0	263,000
Mitchell	Chamberlain	68.5	68.5	220,000
Jarrett Jct.	Britton	5.0	5.0	263,000
Canton	East Wye Switch	49.7	14.1	263,000
Hawarden, IA	Beresford	16.9	16.2	263,000
Ortonville, MN	Aberdeen	110.7	110.7	263,000
Aberdeen	Mobridge	98.6	98.6	263,000
Mobridge	Terry, MT	275.6	89.8	263,000
East Jct.	West Jct.	1.7	1.7	263,000
	TOTAL		765.3	

SEGMENT (C&NW OWNERSHIP) FROM	TO	TOTAL MILES	SD MILES	WEIGHT LIMIT (LBS)
Huron	Wolsey	13.3	13.3	263,000

FIGURE III - 3

CHICAGO AND NORTH WESTERN

- SOUTH DAKOTA OPERATIONS -

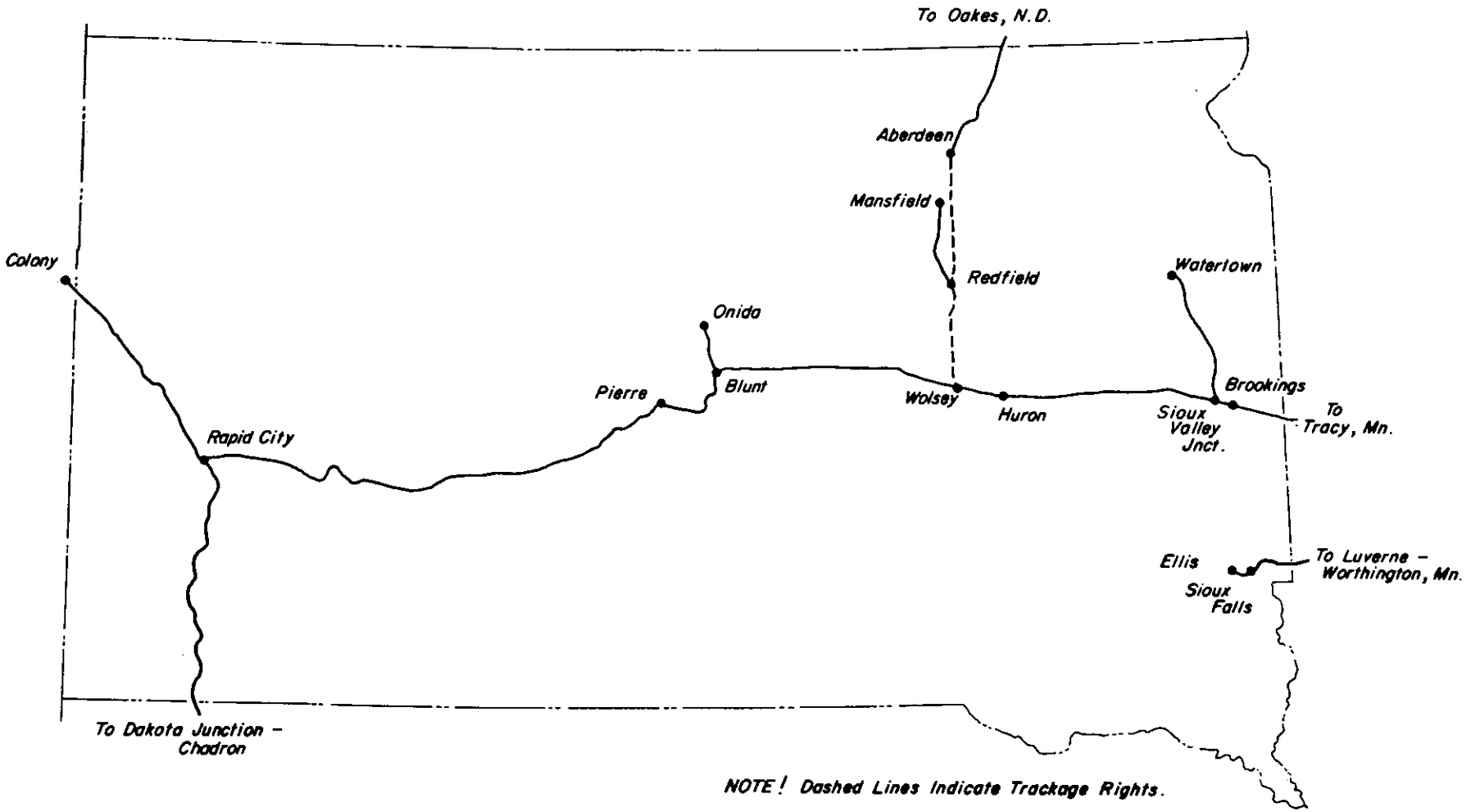


TABLE III-3

CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY
SOUTH DAKOTA OPERATIONS (7-1-83)

SEGMENT (C&NW OWNERSHIP)		TOTAL MILES	SD MILES	WEIGHT LIMIT (LBS)
From	To			
Tracy, MN	Wolsey	149.7	104.5	263,000
Wolsey	Pierre	104.4	104.4	251,000
Pierre	Rapid City	170.8	170.8	210,000
Redfield	Mansfield	26.3	26.3	210,000
Aberdeen	Oakes, ND	52.7	38.7	210,000
Chadron, NE	Rapid City	102.2	86.8	251,000
Rapid City	Bentonite, WY	77.6	71.0	251,000
Worthington, MN	Ellis	68.6	22.6	210,000
Sioux Valley Jct.	Watertown	44.2	44.2	210,000
Blunt	Onida	15.6	15.6	185,000
	TOTAL		685.2	
TRACKAGE RIGHTS ON SOUTH DAKOTA OWNED LINES				
Wolsey	Aberdeen	74.0	74.0	263,000

FIGURE III - 4

OTHER RAIL OPERATIONS

- SOUTH DAKOTA -

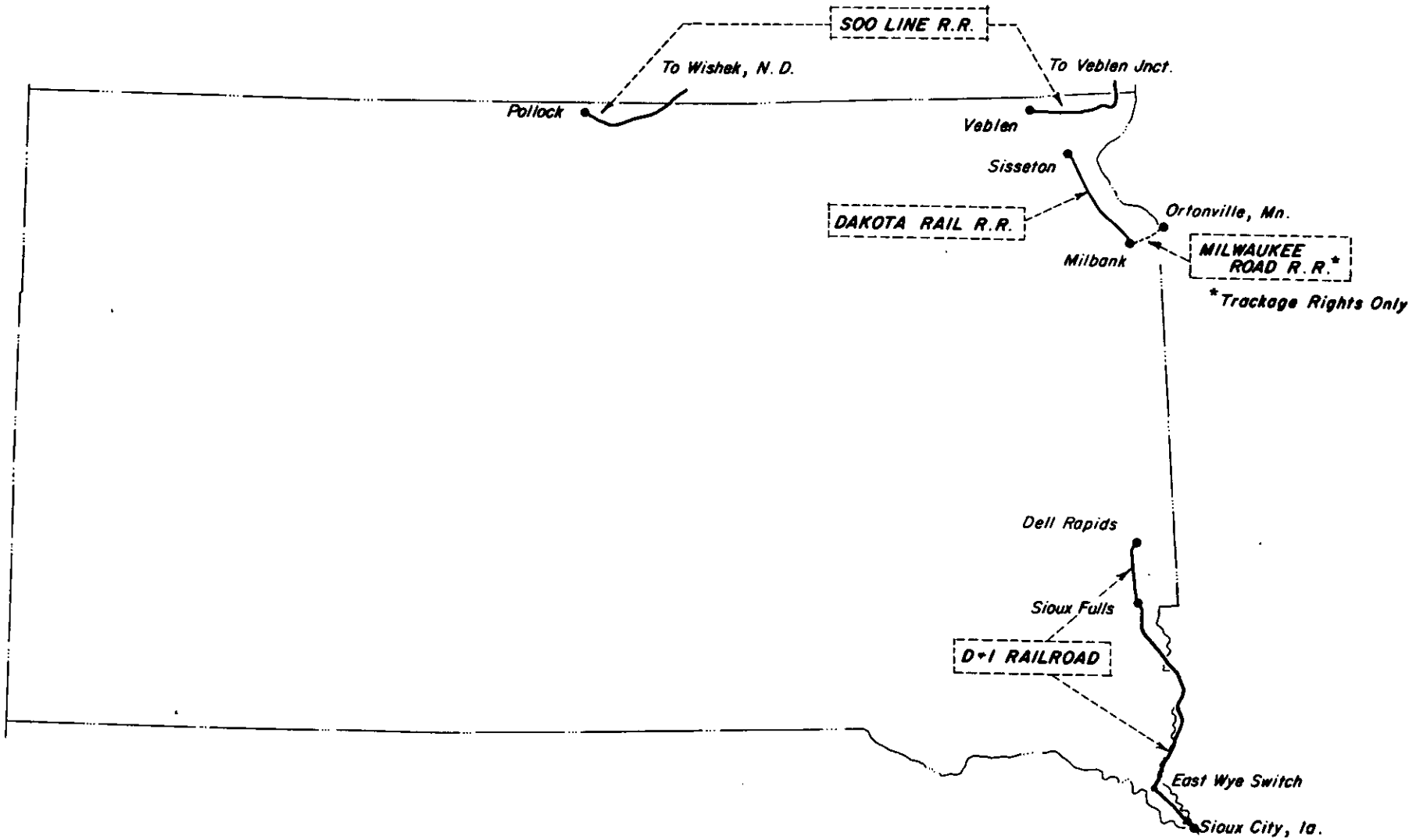


TABLE III - 4

OTHER RAIL OPERATIONS
-SOUTH DAKOTA-

SEGMENT FROM - TO	TOTAL MILES	SD MILES	WEIGHT LIMIT (LBS)
MILWAUKEE ROAD (Trackage Rights on SD Owned Line)			
Ortonville, MN - Milbank, SD	10.4	10.4	263,000
DAKOTA RAIL			
Milbank to Sisseton	37.1	37.1	220,000
SOO LINE			
Veblen Jct. - Veblen	42.2	33.5	263,000
Wishek, ND - Pollock	69.9	32.8	263,000
D & I RAILROAD (Trackage Rights on SD Owned Line)			
Dell Rapids - Sioux City	110.2	68.6	220,000 - 263,000

Milbank. The Milwaukee Road has been attempting to reorganize under the bankruptcy laws from a transcontinental carrier to an Upper Midwest carrier serving 10 states.

RAIL TRAFFIC

Rail traffic can be measured in several different ways. Common measurements of traffic are cars, tons and revenue, whereas the railroad commonly measures in gross tons per mile. The former Milwaukee Road lines that comprise the State-owned core system were not operated during the first half of 1981. The traffic shown for these lines, now being operated by the Burlington Northern, therefore, do not represent a complete year of operations.

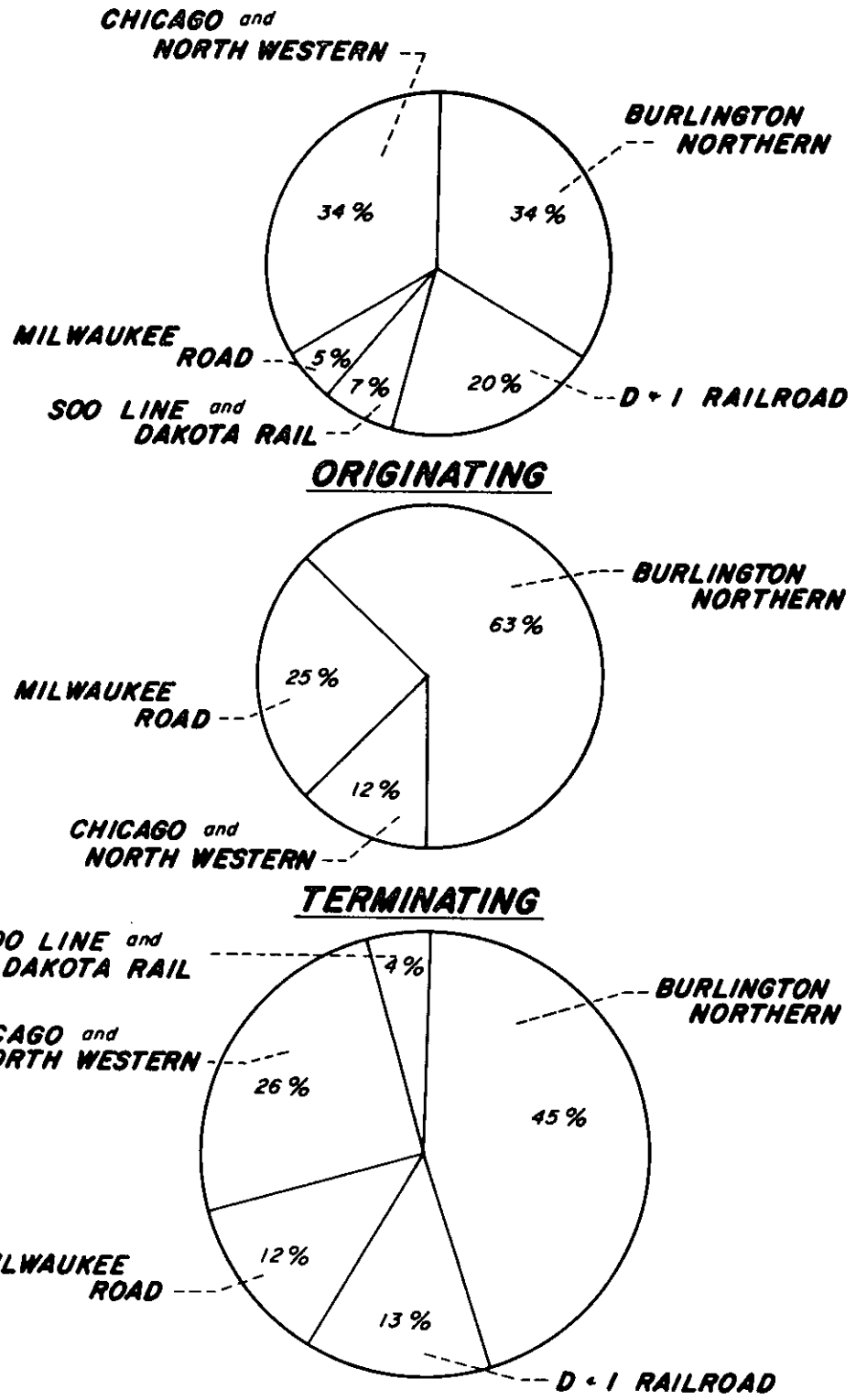
Figure III-5 graphically shows the percentage of rail carloadings by carrier for the year 1982. This figure shows that the Burlington Northern carried 45% of the State's products followed by 26% for the Chicago and North Western and 12% for the D & I Railroad. The Milwaukee Roads small impact is attributed to the fact that it operated for 3 months in 1982. The Milwaukee Road ceased operating its last lines in the State in March 1982, but the majority of its traffic has been retained by other carriers.

A historical trend for carloadings by carrier for the years 1974-1982 is shown on Table B-3 in Appendix B. As this table shows, only the Burlington Northern has experienced a major increase in carloadings since 1977. The further decline in the Milwaukee Road traffic and the increase in Burlington Northern traffic that occurred in 1982 are factors due to further rail restructuring in the State.

Figure III-6 graphically shows the carloadings for the major rail commodities in South Dakota during the year 1982. The leading commodity on rail were:

FIGURE III - 5

PERCENTAGE OF RAIL CARLOADINGS BY CARRIER
- 1982 -



- o Coal (27% of the total traffic)
- o Farm products (35%, mainly grain)
- o Non metallic minerals (17%, mainly curshed rock)
- o Stone and clay (7%, mainly cement and bentonite)

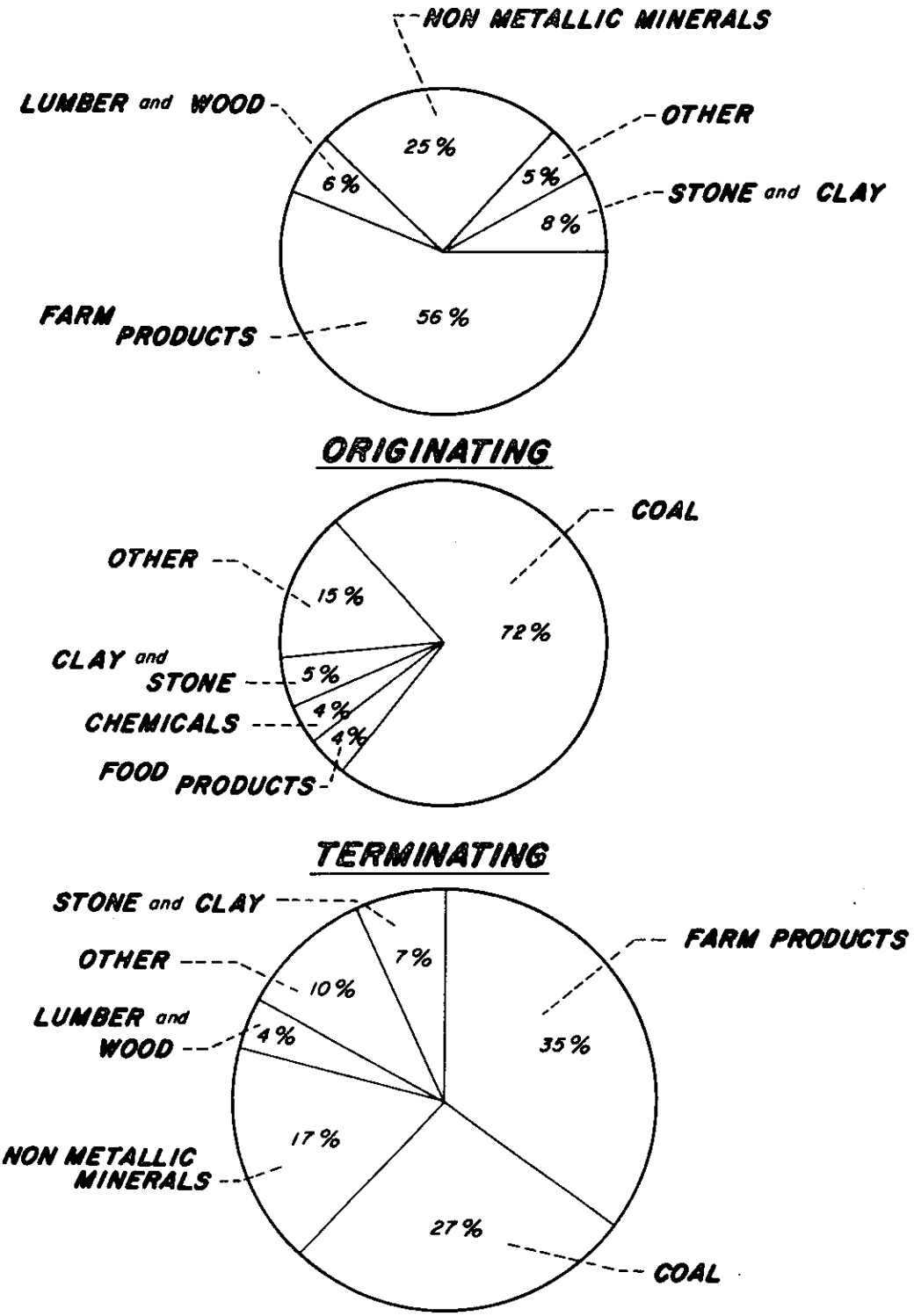
Here again, the Milwaukee Road and Burlington Northern coal hauls along with farm producers represent the main traffic source. Farm products accounted for 56% of the originating traffic, whereas coal dominated the terminating traffic with 72%. The four (4) major commodity groups represent 86% of the rail traffic in the State, based on number of cars. A tabular listing of the major commodities by tonnage on rail is found on Table B-4 in Appendix B.

A historical trend of rail tonnage by major commodity groups for the years 1977-1982 is shown in Table B-4 in Appendix B. Although some of the major commodity groups may be relatively stable, the commodity groups of food, lumber, and stone and clay have shown dramatic decreases. The largest increases are found in non-metalic minerals and coal traffic. Even though the number of carloadings is down about 10% from 1977, the tonnage carried on rail in the State is up over 3%.

The trend in tonnage by carrier is shown in Table B-5 in Appendix B. This table shows that the Burlington Northern and "other" carriers (mainly the D & I Railroad) have increased their originating tonnage in the State while other carriers are experiencing a decrease. This increase in BN traffic is due to its operation of additional State-owned track and its increased success in marketing grain in unit train quantities. The historic Milwaukee Road traffic has decreased substantially for certain commodities, but is hidden because of the very large increase in coal traffic to the powerplant at Big Stone City. The 1982 traffic is down substantially because the Milwaukee Road ceased operating its remaining line in the State on March 31, 1982.

FIGURE III - 6

PERCENTAGE OF RAIL CARLOADINGS BY COMMODITY
- 1982 -



A common measurement of rail line health by a railroad company is freight density. This quantity is measured in millions of gross tons per mile of track operated. Figure III-7 is a traffic density composite of all operating lines in the State for the year 1982.

As this Figure shows, only three rail lines in the State carry over 3 million gross tons per mile. The railroads, as a general rule, indicate that a line must carry at least 3 million gross tons per mile to be capable of providing an adequate return on investment while justifying necessary maintenance. This rule would not necessarily apply to branch lines as their condition and needs are different than through routes. However, any branch line generating less than 1 million gross tons per mile probably is not contributing sufficient revenue to the railroad to support necessary maintenance nor capital improvements. As is apparent from Figure III-7, many branch lines in the State are below the 1 million gross tons per mile benchmark and should be of concern to the State and shippers.

OTHER RAIL CHARACTERISTICS

Rail volume is an indicator of rail usage. However, many factors influence traffic, income and abandonment decisions. An examination of other rail characteristics besides those previously mentioned is necessary to understand and analyze rail transportation in South Dakota.

Figure III-8 illustrates the weight limits for each operating rail line in the State. A line must have a capacity of 263,000 pounds or greater to efficiently use large modern rail cars such as the covered hopper car. Any line rated less than 263,000 pounds will most generally result in inefficiencies or must rely on smaller cars, such as the boxcar or smaller hopper, to move freight. Grain sold

FIGURE III - 7

RAIL FREIGHT TRAFFIC DENSITY
- 1982 -

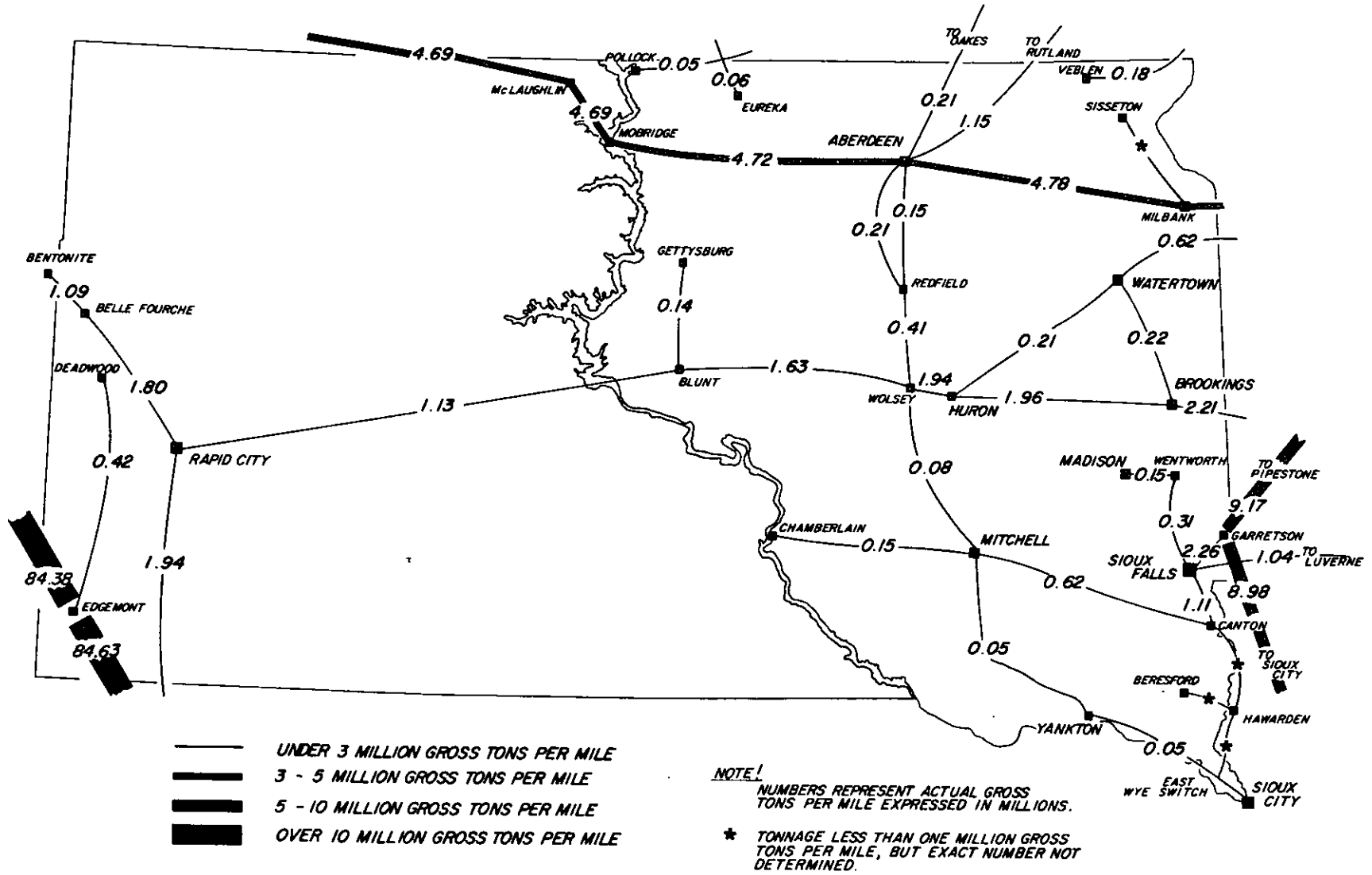
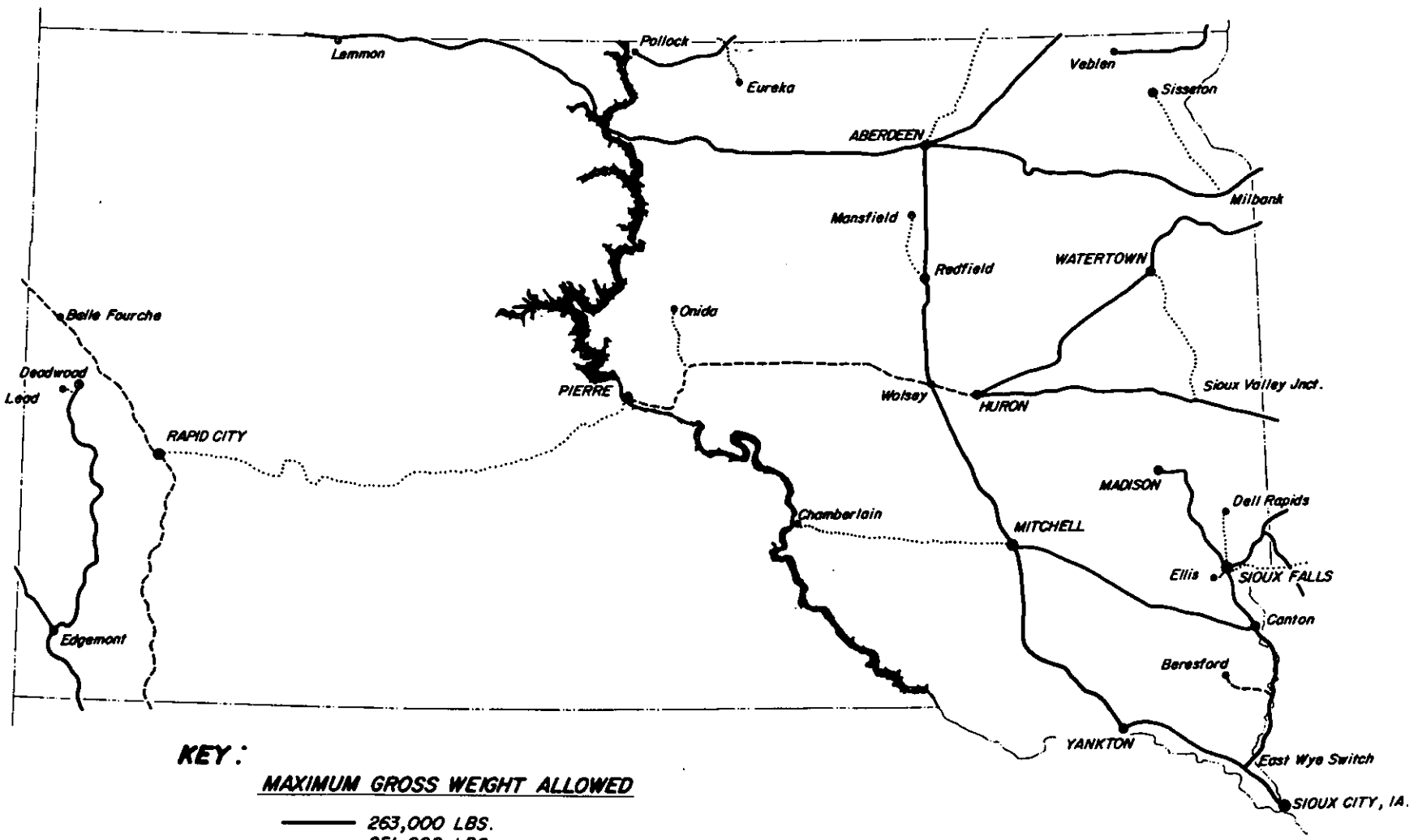


FIGURE III - 8

1982
SOUTH DAKOTA OPERATING SYSTEM
MAXIMUM ALLOWABLE LOAD LIMITS



KEY:

MAXIMUM GROSS WEIGHT ALLOWED

——— 263,000 LBS.
- - - - - - - 251,000 LBS.
..... 220,000 LBS. or LESS

to export terminals, if transported by rail, must be moved in the large hopper cars.

As Figure III-8 shows, not all of the lines in the State are capable of supporting fully loaded hopper cars. This circumstance restricts the competitive ability of the carrier for that particular line. The State and shippers should recognize that these lines, in order to remain a part of the rail system, must be upgraded for grain transportation.

Since South Dakota does not have rail passenger service, the rail network must rely solely on freight traffic for its support. The AMTRAK passenger system is shown on Figure III-9. South Dakota residents must travel several hundred miles before they can take advantage of the rail passenger system. Because of the small population of the State, AMTRAK service will probably not be extended to serve South Dakota in the foreseeable future.

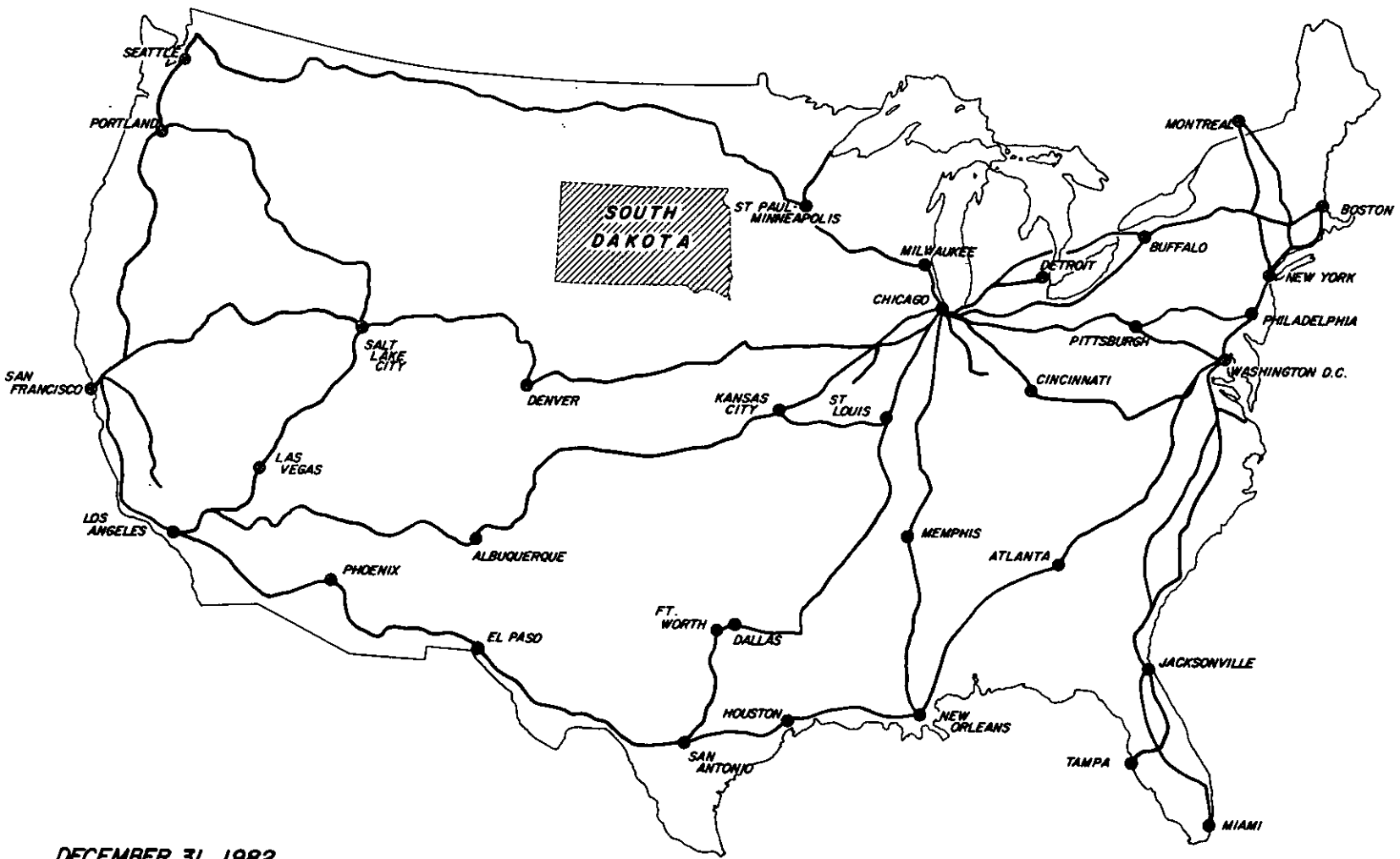
POTENTIAL ABANDONMENT CANDIDATES

Each year the railroads must classify each line in their system into one of five categories and make a System Diagram Map available to the States in which they operate. These categories represent how the railroad views its lines in terms of a possible abandonment candidate. The classifications are:

- Category 1 -- A line which the carrier anticipates will be filed for abandonment or discontinuance within 3-years following the placement in this category.
- Category 2 -- A line potentially subject to abandonment which the carrier has under study and believes may be the subject of a future abandonment application.

FIGURE III - 9

AMTRAK'S NATIONWIDE RAIL PASSENGER SYSTEM



DECEMBER 31, 1982

- Category 3 -- A line for which an abandonment or discontinuance application is pending before the Interstate Commerce Commission.

- Category 4 -- A line which is being operated under subsidy through the Regional Rail Reorganization Act of 1973 as amended.

- Category 5 -- All other lines owned and operated.

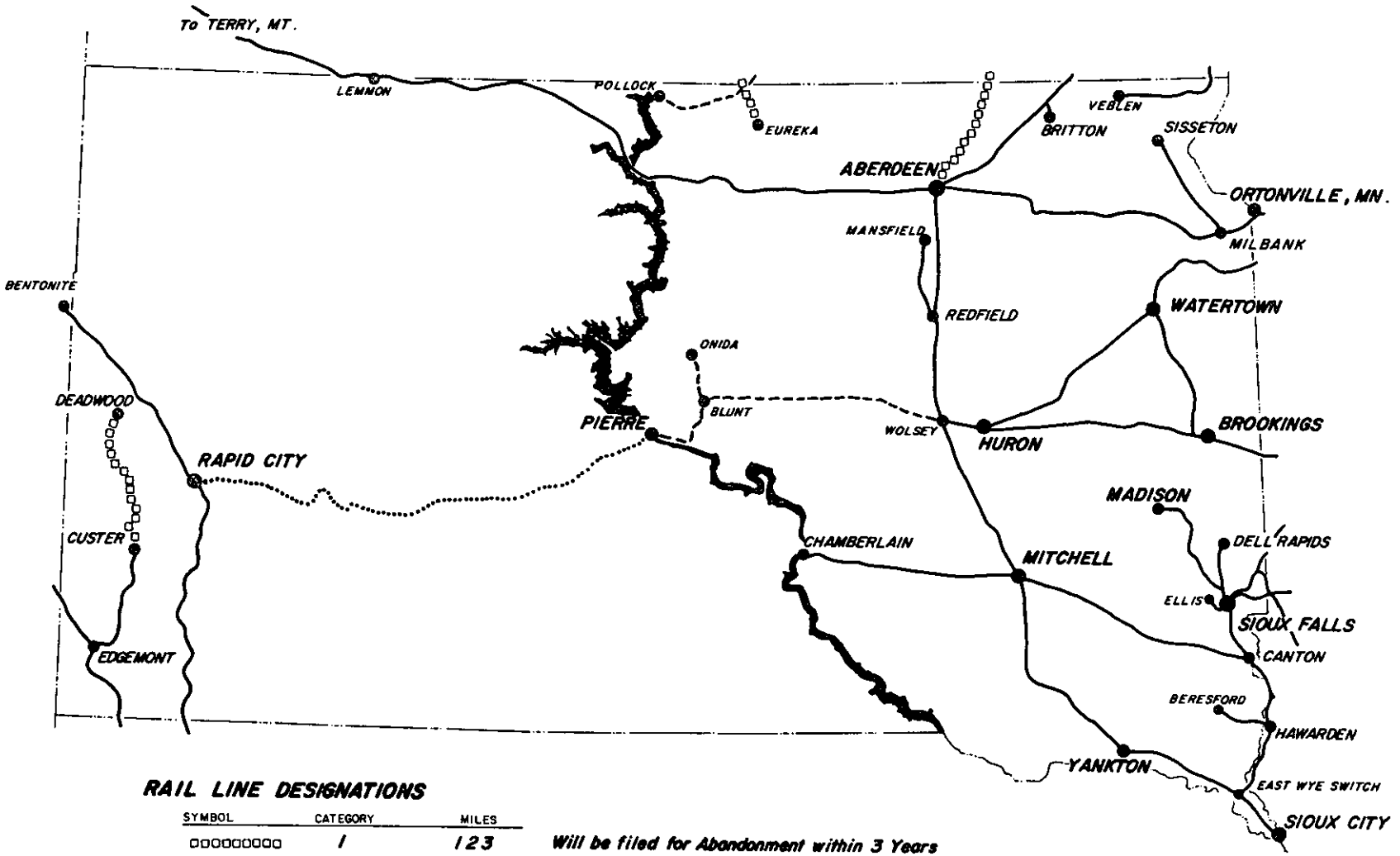
Figure III-10 is a composite of all carrier's System Diagram Maps (System Classifications) that serve the State. The line extending from Pierre to Rapid City is the only line in immediate danger in an area not currently served by another carrier.

Table III-5 is a tabular listing of the System Diagram Classifications. This table shows that 21% of the statewide mileage is in Categories I, II, or III. Other lines in the State have characteristics, whether it is low traffic or physical deficiencies, which place them in a questionable situation. These may at some future time be placed in an abandonment situation and be in one of these three (3) categories. All of these lines must be addressed and appropriate action taken if an abandonment application is filed.

The following chapter takes a look at these lines and outlines some of the problems and issues associated with rail service.

FIGURE III - 10

SOUTH DAKOTA
SYSTEM DIAGRAM MAP FOR OPERATING LINES



RAIL LINE DESIGNATIONS

SYMBOL	CATEGORY	MILES	
□□□□□□□□□	1	123	Will be filed for Abandonment within 3 Years
- - - - - - -	2	156	Potentially Subject to Abandonment
.....	3	167	Application for Abandonment is pending
	4	—	Operated Under Subsidy
———	5	1,543	All Other Lines
	TOTAL	1,989	

JUNE 1, 1983

TABLE III-5

RAIL LINE CLASSIFICATIONS
FOR RAIL OPERATIONS IN SOUTH DAKOTA

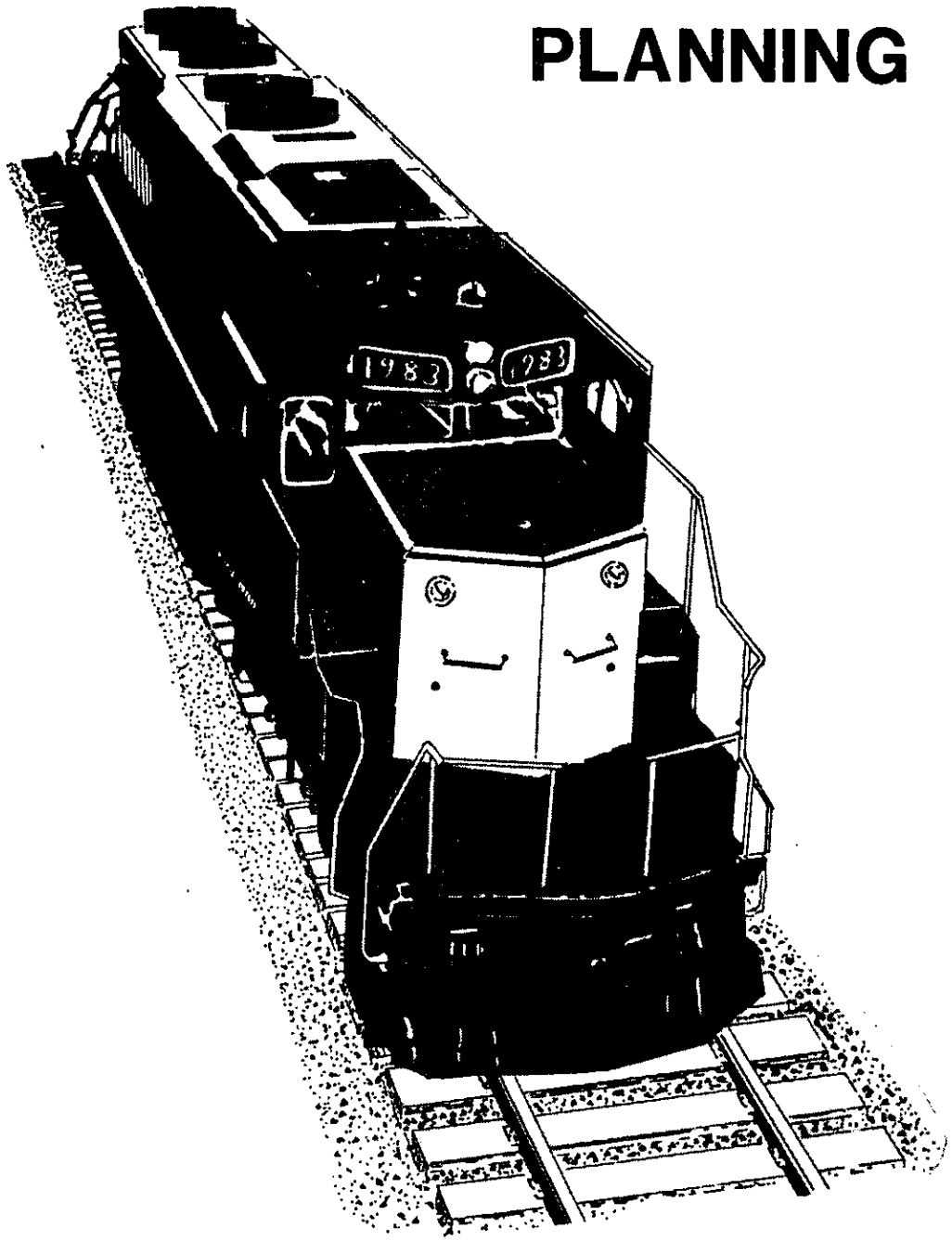
(JULY 1, 1983)

CLASS I RAILROAD	CATEGORY 1 MILES	%	CATEGORY 2 MILES	%	CATEGORY 3 MILES	%	CATEGORY 5 MILES	%	TOTAL MILES
Chicago & North Western	38.7	6	123.7	18	167.4	24	355.4	52	685.2
Burlington Northern	83.9	7	0.0	--	0.0	--	1,099.1*	93	1,183.0
Soo Line	0.0	--	32.8	49	0.0	--	33.5	51	66.3
TOTAL	122.6	6%	156.5	8%	167.4	9%	1,488.0	77%	1,934.5
	Additional miles in service by other than Class 1 Railroad =								54.9
	Total Miles with Rail Service in South Dakota =								1,989.4

*BN owned 333.8
SD owned 765.3
1,099.1

CATEGORY	DESCRIPTION
1	Anticipates will be filed for abandonment within 3 years
2	Potentially subject to abandonment
3	Abandonment application is pending
5	Other rail lines

FUTURE RAIL PLANNING



CHAPTER IV

CHAPTER IV

FUTURE RAIL PLANNING

Rail planning in South Dakota has been, and will continue to be, an ongoing process. Through this rail plan and past plans, South Dakota rail planning and project implementation have been well documented. The statewide rail system has been analyzed in detail and that set of rail lines that comprise the essentail system has been documented. The task at hand now is to preserve and improve that system by utilizing available state resources in conjunction with assistance from the carriers and the shippers.

CONTINUING PLANNING

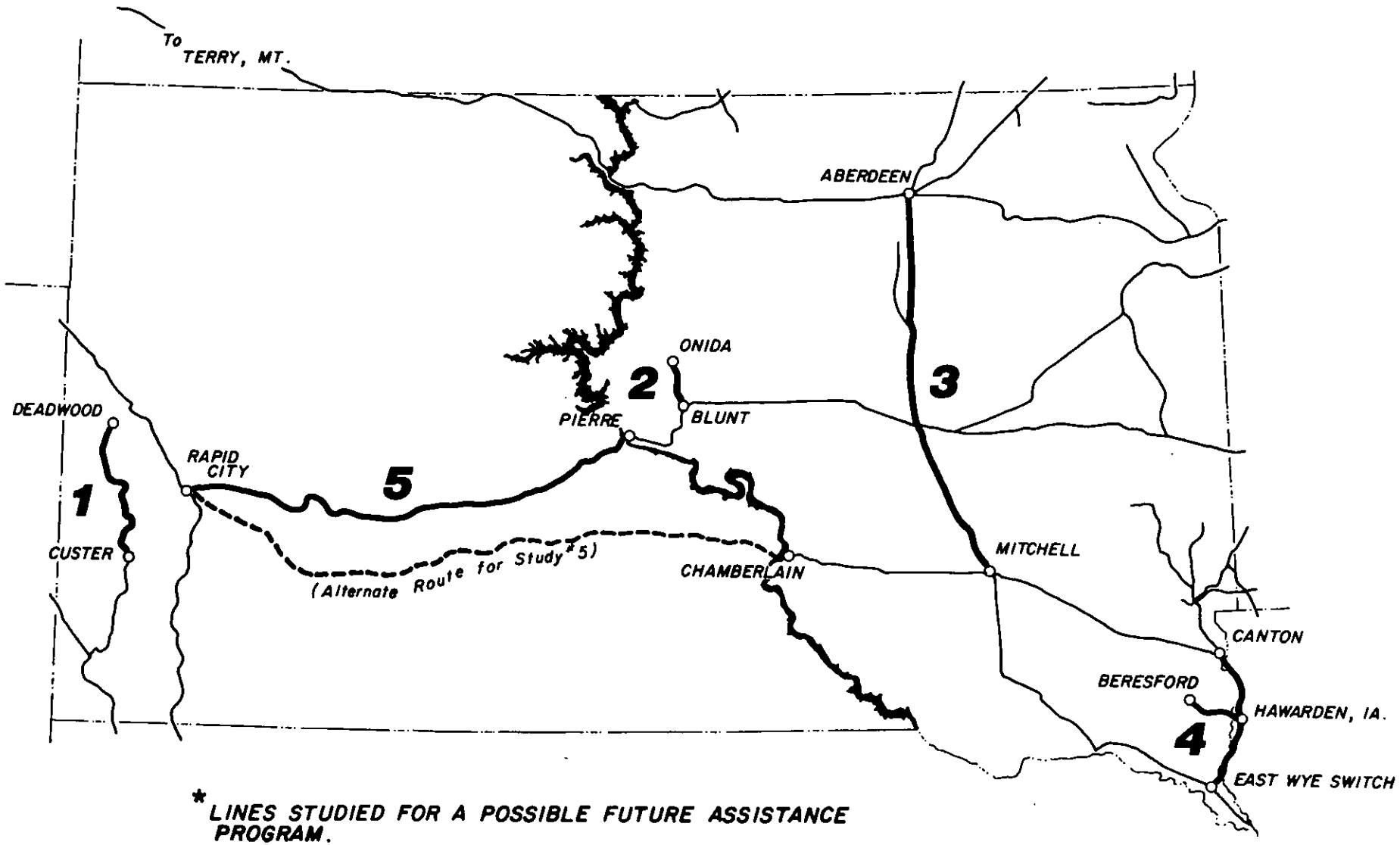
The rail network in South Dakota will continue to be monitored for the trends in rail traffic as part of the continuing planning process. Proposed abandonments will be analyzed to determine if feasible alternatives exist that would mitigate projected impacts.

A study recently completed entitled "Economic Evaluation of Five South Dakota Rail Lines" provides a detailed analysis on these lines. A summary of this report is contained in Appendix D. The location of these lines is shown in Figure IV-1. The lines studied are:

- Blunt to Onida
- Canton to East Wye Switch
- Mitchell to Aberdeen
- Pierre to Rapid City, and
- Custer to Deadwood.

FIGURE IV-1

ECONOMIC EVALUATIONS OF FIVE(5) SOUTH DAKOTA RAIL LINES*



* LINES STUDIED FOR A POSSIBLE FUTURE ASSISTANCE PROGRAM.

The core system concept for South Dakota, as identified in 1980 (See Figure II-3) has guided the State in its purchase and assistance programs and will continue to be a guide in the future. As has been documented in previous planning efforts, this system represents the rail transportation network of statewide significance. It acts as a collector system in areas of dense transportation need and serves as a connector to the Nation's rail network. The goal of future planning is to continue the work of preserving this essential system of rail lines.

An important part of the ongoing rail planning process will be the assessment of endangered rail lines and a study of transportation alternatives when viable options are present. The Division of Railroads, in an attempt to guide future planning activity, has classified each rail line in the State into one of three categories to reflect the stability of each line. These categories are:

- o Immediate danger of abandonment (threatened)
- o Potential future candidate for abandonment (weak), and
- o No immediate danger of abandonment (secure).

Foremost in future rail planning will be concentration on those lines in the most immediate danger of being abandoned. A preliminary analysis will be performed to determine if a detailed analysis is justified to study the transportation alternatives on a given rail line.

Figure IV-2 identifies the lines in the above three categories and Table IV-1 is a line by line listing.

FIGURE IV - 2

RAIL LINE STABILITY

THE STATE'S VIEW

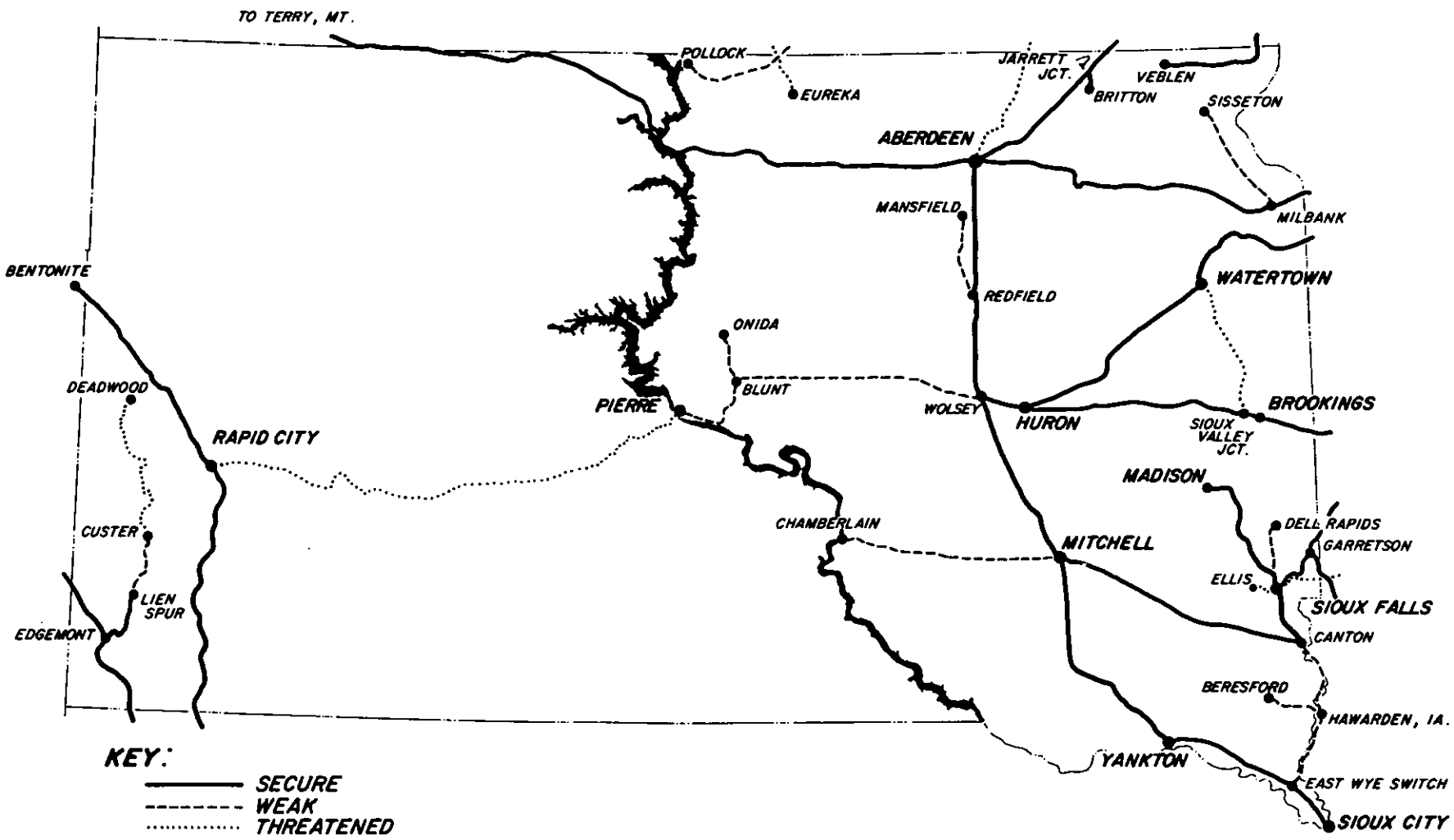


TABLE IV-1
RAIL LINE STABILITY
THE STATE'S VIEW

THREATENED

1. Custer to Deadwood (BN)
2. Kirk to Lead (BN)
3. Pierre to Rapid City (C&NW)
4. Aberdeen to Oakes, ND (C&NW)
5. Linton, ND to Eureka (BN)
6. Sioux Valley Jct. to Wtrn. (C&NW)
7. Worthing, MN to Ellis (C&NW)

TOTAL THREATENED MILES = 356.9

WEAK

1. Blunt to Onida (C&NW)
2. Wolsey to Pierre (C&NW)
3. Lien Spur to Custer (BN)
4. West Jct. to Dell Rapids (SD)
5. Canton to East Wye Switch (SD)
6. Hawarden to Beresford (SD)
7. Mitchell to Chamberlain (SD)
8. Redfield to Mansfield (C&NW)
9. Wishek, ND to Pollock (SOO)
10. Milbank to Sisseton (PRIVATE)

TOTAL WEAK MILES = 354.5

SECURE

1. Ortonville, MN to Terry, MT (SD)
2. Aberdeen to Wolsey (SD)
3. Wolsey to Mitchell (SD)
4. Mitchell to Sioux City (SD)
5. Mitchell to Canton (SD)
6. Canton to Sioux Falls (SD)
7. Britton to BN Jct. (SD)
8. Sioux Falls to West Jct. (SD)
9. Aberdeen to Geneseo Jct. (BN)
10. Benson, MN to Watertown (BN)
11. Watertown to Huron (BN)
12. Willmar, MN to Garretson (BN)
13. Garretson to Sioux City (BN)
14. Garretson to Sioux Falls (BN)
15. Sioux Falls to Madison (BN)
16. Alliance, NE to Gillette, WY (BN)
17. Edgemont to Lien Spur (BN)
18. Tracy, MN to Wolsey (C&NW)
19. Chadron, NE to Rapid City (C&NW)
20. Rapid City to Colony, WY (C&NW)
21. Veblen Jct., ND to Veblen (SOO)

TOTAL SECURE MILES = 1,278.0

Rail lines that are currently "threatened" and in the most immediate danger of abandonment are as follows:

1. Custer to Deadwood - The Burlington Northern has indicated that it will file this lightly traveled, relatively long branch line in 1983. The major commodity carried on the line is coal to a power plant near Lead. The rail mileage for this movement is approximately 230 miles while the highway coal traffic would travel only 125 miles. The light volume of traffic indicates that trucks are a viable alternative mode of transportation. A detailed analysis of this line appears in an addendum to this plan.

2. Kirk to Lead - This 3.2 mile branch line extends from the previous line, has a very small amount of traffic and its fate will correspond to that of the longer connecting line.

3. Pierre to Rapid City - This C&NW line is the last line operating between the western and the eastern half of the State. This is one of the lines currently being analyzed in detail in an addendum. Its extreme length and poor condition, coupled with a low traffic level, makes this a "threatened" line.

4. Aberdeen to Oakes, ND - The majority of the remaining traffic on this C&NW line is cement from Rapid City. The line is probably marginal at best, but without the cement, no justification exists for the line.

5. Linton, ND to Eureka, SD - This line has been designated ICC Category 2 by the Burlington Northern (under study for a possible future abandonment application). The line is laid with light rail, has a 220,000 pound weight limit and has a large amount of deferred maintenance. The high

cost of rehabilitation coupled with the low traffic level makes continued rail service doubtful. Decisions by the BN and the State of North Dakota will determine the future of this line.

6. Sioux Valley Jct. to Watertown - The future of this Chicago & North Western line hinges on prospective traffic levels. Carloadings have been steadily decreasing and the last major traffic source for the line is cement from Rapid City. The outcome of the Pierre to Rapid City line will influence the outcome of this line.

7. Worthington, MN to Ellis, SD - This line serves as the C&NW entry to Sioux Falls. Although the traffic level at Sioux Falls may be attractive, the line is in poor physical condition. A substantial amount of traffic is cement from Rapid City.

Rail lines that are "Weak" and in a secondary position for possible abandonment are as follows:

1. Blunt to Onida - This dead-end C&NW branch line connects with the Pierre to Wolsey line. The rail is light and the line is in very poor condition. Although the traffic level is fairly good it cannot participate in the export market due to the type of equipment utilized on the line. The line must receive near-term rehabilitation assistance to remain in service.

2. Wolsey to Pierre - In addition to a low level of local traffic, this C&NW line carries overhead traffic generated by the "threatened" Pierre to Rapid City line. Although the State has participated in a rehabilitation project on the line, it is still in need of additional repairs to achieve a solid future standing. Traffic levels must also be improved.

3. Lien Spur to Custer - This BN segment connects to the Deadwood line. Low traffic levels makes this a "weak" link.

4. West Jct. to Dell Rapids - This line is owned by the State and is operated under agreement by The L. G. Everist Company. This line is not in service as a common carriage line and operates exclusively for the movement of quarried rock from Dell Rapids. Because of this unique situation, it is not part of a public program and has been declared excess to the needs of the State. This line is scheduled to be sold in 1983.

5. Canton to East Wye Switch - This State-owned line has been designated as a local option line. Due to its service characteristics, traffic volumes and other lines in the area, it has been classified as "weak". To remain in service, rehabilitation assistance is needed from local rail users.

6. Hawarden to Beresford - This line connects with the preceding line at Hawarden. Its future also rests with local commitments for rehabilitation assistance.

7. Mitchell to Chamberlain - This is the weakest segment of the State-owned core sytem. The weight of rail prohibits the use of jumbo hopper cars and the track condition limits the speed. Other factors include low traffic volumes and a parallel Interstate highway.

8. Redfield to Mansfield - Although the C&NW has not indicated that they plan to abandon the line, it is in poor condition. It is doubtful this line could remain in service without substantial rehabilitation assistance. It parallels the state-owned system for its entire length, which is never more than five miles away.

9. Wishek, ND to Pollock, SD - This Soo Line branch line has been classified as "weak" because of the very low traffic volume. More than one-half of this line lies in North Dakota.

10. Milbank to Sisseton - This privately-owned line is operated by Dakota Rail, a short line operation. It is classified as "weak" because of its poor condition. While the State is currently participating in a tie and ballast project, the rail still needs to be replaced. Traffic from this line is currently interchanged with the Milwaukee Road at Milbank. Much of the feasibility of this line rests with the Milwaukee Road's position in the barley market and their continued access to Milbank. Without the Milwaukee Road, the operations on this line may not be feasible.

The remaining lines in the State have been classified as "secure". This classification means that, currently, the lines are not in immediate danger of abandonment. Track conditions and traffic levels are such that they remain attractive to the operator.

All rail lines will be monitored through the continuing planning process. Those lines that are most threatened with abandonment will receive more intense analysis, as well as those lines studied for possible assistance projects. The State will continue to work with shippers and shipper groups to assist them in rail related matters. The State will also strive to integrate both rail and highway planning so that future analyses will properly consider both modes.

PROPOSED TRANSPORTATION IMPROVEMENTS

The State will continue to promote projects to improve rail facilities. Four (4) projects were implemented in 1982 that will continue into the 1983 construction season. These projects, which include the Yankton to Mitchell, the Mitchell to Canton, the Pierre to Huron and the Northern Main line projects, are all vital improvements to key rail lines in the State. Projects implemented in 1983 are Aberdeen to Wolsey, Milbank to Sisseton and Canton to East Wye Switch. Funding limitations prevent additional project implementations at this time.

Rail lines, in order to be eligible for federal funds, must meet certain tests. The lines must have a favorable benefit/cost ratio, and either have been approved for abandonment since October 1978 or carry less than 3 million gross tons per mile. Figure III-1 illustrates lines that are eligible because they have been abandoned. Figure IV-3 illustrates operating lines that are currently eligible because of low traffic volumes. These criteria may become unimportant because the Federal Program may be scaled down to a small funding level or may be eliminated completely.

As is readily apparent, only three operating lines in the State are <u>not</u> eligible for funding because of the traffic level. Due to the large financial needs on operating lines (larger than the resources available), assistance will not be provided on those lines which are no longer operating. The screening criteria used to select future projects for financial assistance are as follows:

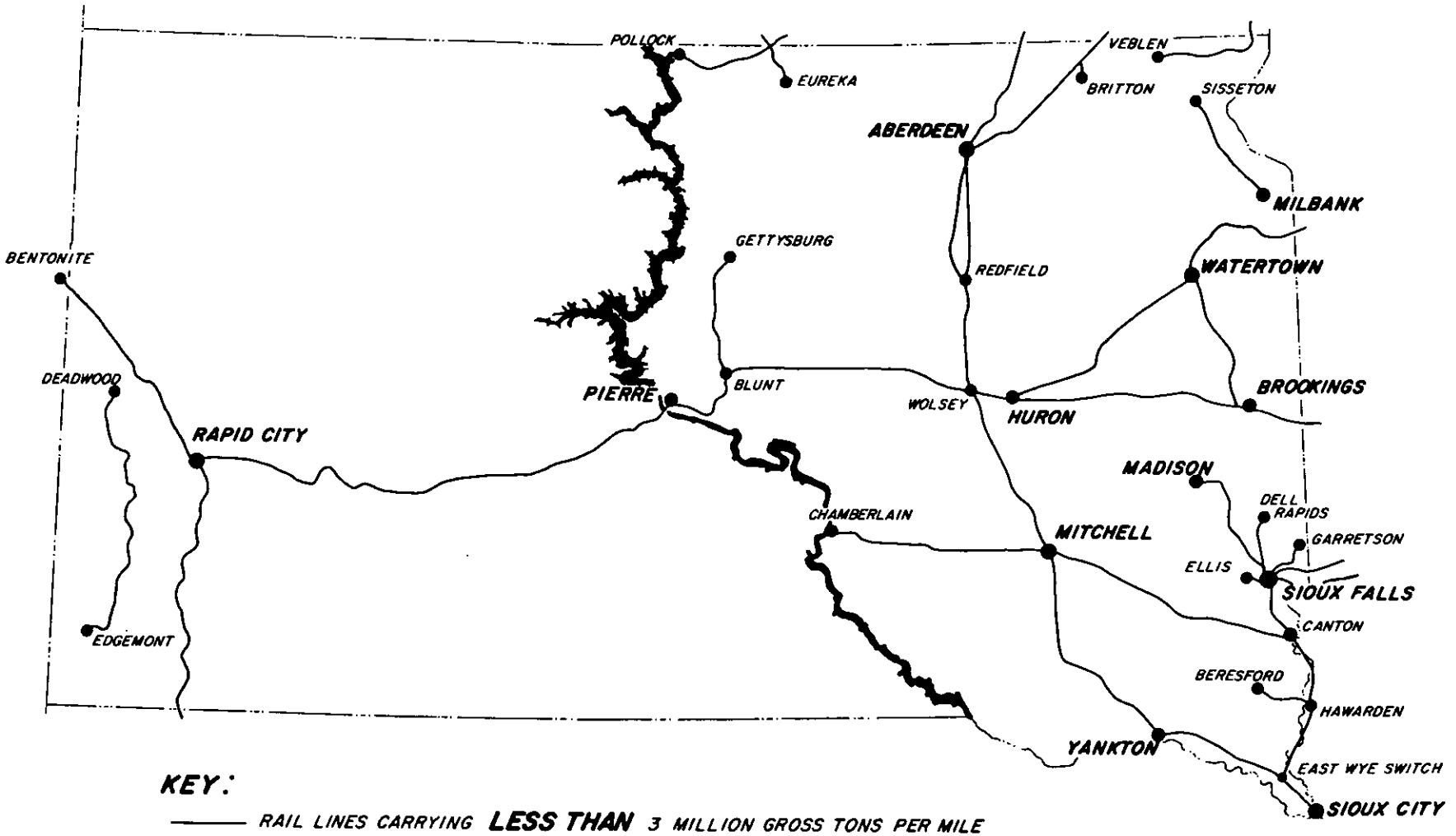
A. Lines that are a part of South Dakota's core rail system concept.

B. Lines whose abandonment could have significant impacts on the affected shippers and communities.

FIGURE IV-3

1982
OPERATING RAIL LINES CARRYING LESS THAN 3 MILLION GROSS TONS PER MILE*

(* ONE OF THE ELIGIBILITY REQUIREMENTS FOR FEDERALLY FUNDED PROJECTS)



KEY:

——— RAIL LINES CARRYING **LESS THAN** 3 MILLION GROSS TONS PER MILE

C. Light density lines threatened by physical deterioration or requiring rehabilitation to permit more efficient operations.

D. Light density lines providing access to the regional and national railroad network.

E. Project locations where significant shipper interest in improving or maintaining local rail operations is demonstrated.

Based on eligibility of lines and the screening criteria, new projects implemented in 1983 are:

1. Mitchell to Aberdeen - This is the remaining segment of the State core system scheduled to be upgraded. This will be an $8+ million project composed of tie replacement, ballast, surfacing and grade crossings. The rehabilitation of this line is essential for optimal rail operations on the remainder of the core. Because this project is larger than available funds, only the Aberdeen to Wolsey part of this line will be addressed this construction season. The criteria used to select this line for a project are A, B, C, D and E.

2. Milbank to Sisseton - A first level assistance project, consisting of ties and ballast, is necessary for the line to continue in service until a longer term solution can be found. Potentially high traffic levels, adverse impacts of abandonment and shipper commitment are the reasons for participating in a project on this line. The criteria used to select this line for a project are B, C, D and E.

3. Canton to East WYe Switch and Beresford to Hawarden - Rehabilitation of these two local option lines is being financed by the shippers using the

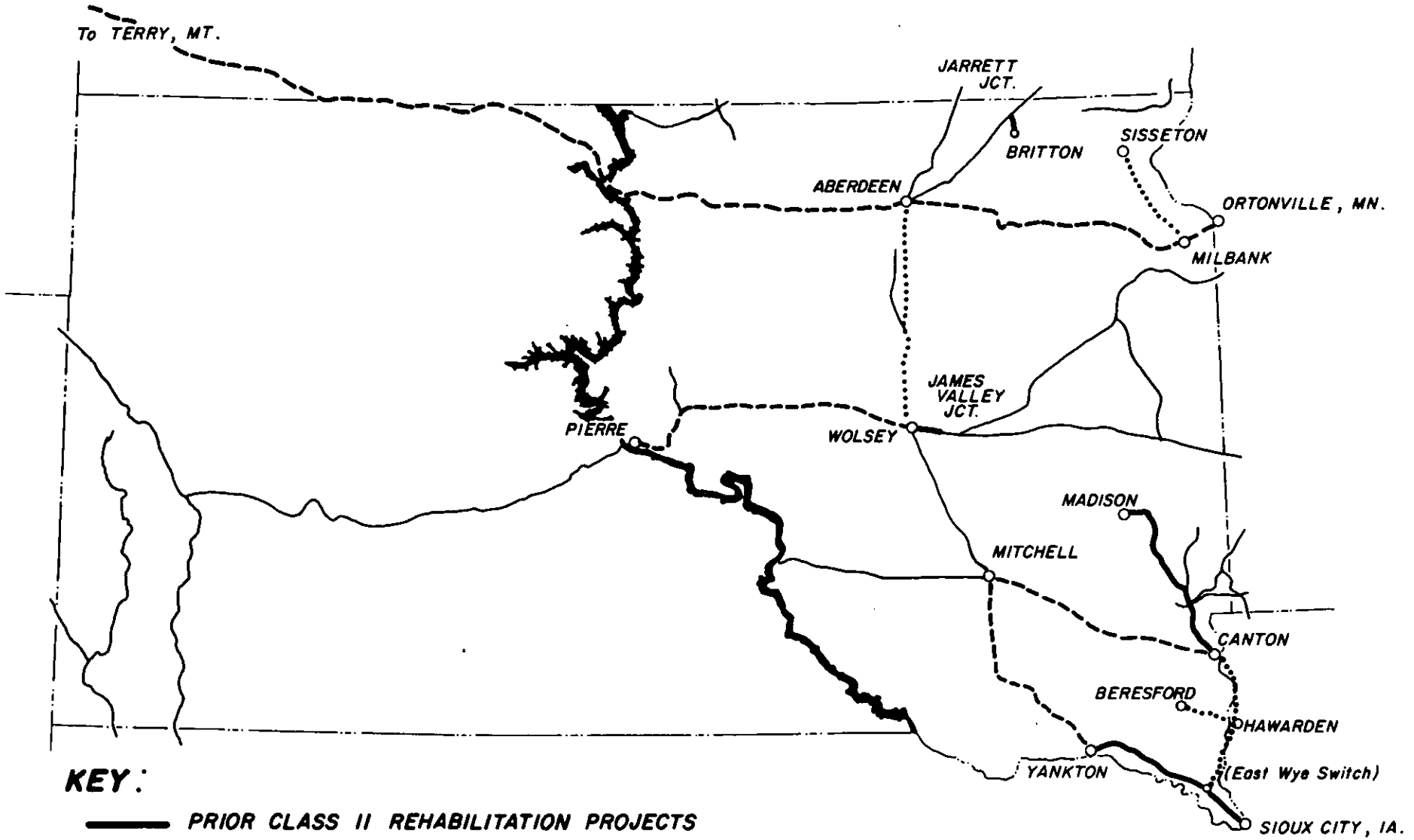
line and some funds from the State of South Dakota. This is a tie and ballast project designed for safe Class 1 operations. The criteria used to select this line for a project are B, C, D and E.

The above three (3) projects have obligated all the federal and state funds available for rail assistance in FY 83. Other possible projects are summarized in Appendix D, but these are beyond the State's existing funding limits.

Figure IV-4 graphically shows the location of ongoing and completed rail line improvement projects.

FIGURE IV - 4

RAIL IMPROVEMENT PROJECTS
USING STATE AND/OR FEDERAL FUNDS



OTHER ISSUES

Several other important issues are noteworthy in addition to the assistance projects. Prior funding assistance for both planning and projects was made available through federal legislation. Recent budget cuts at the federal level have left the current program without funds for the next fiscal year. Therefore, in order to continue the State rail planning and project programs, other sources of funds must be secured. The State has, in the past, raised funds for acquisition and rehabilitation. The major existing funding measure is revenue from the gasoline tax for off-highway use. This will be the major funding source for future projects unless the State Legislature provides additional funds.

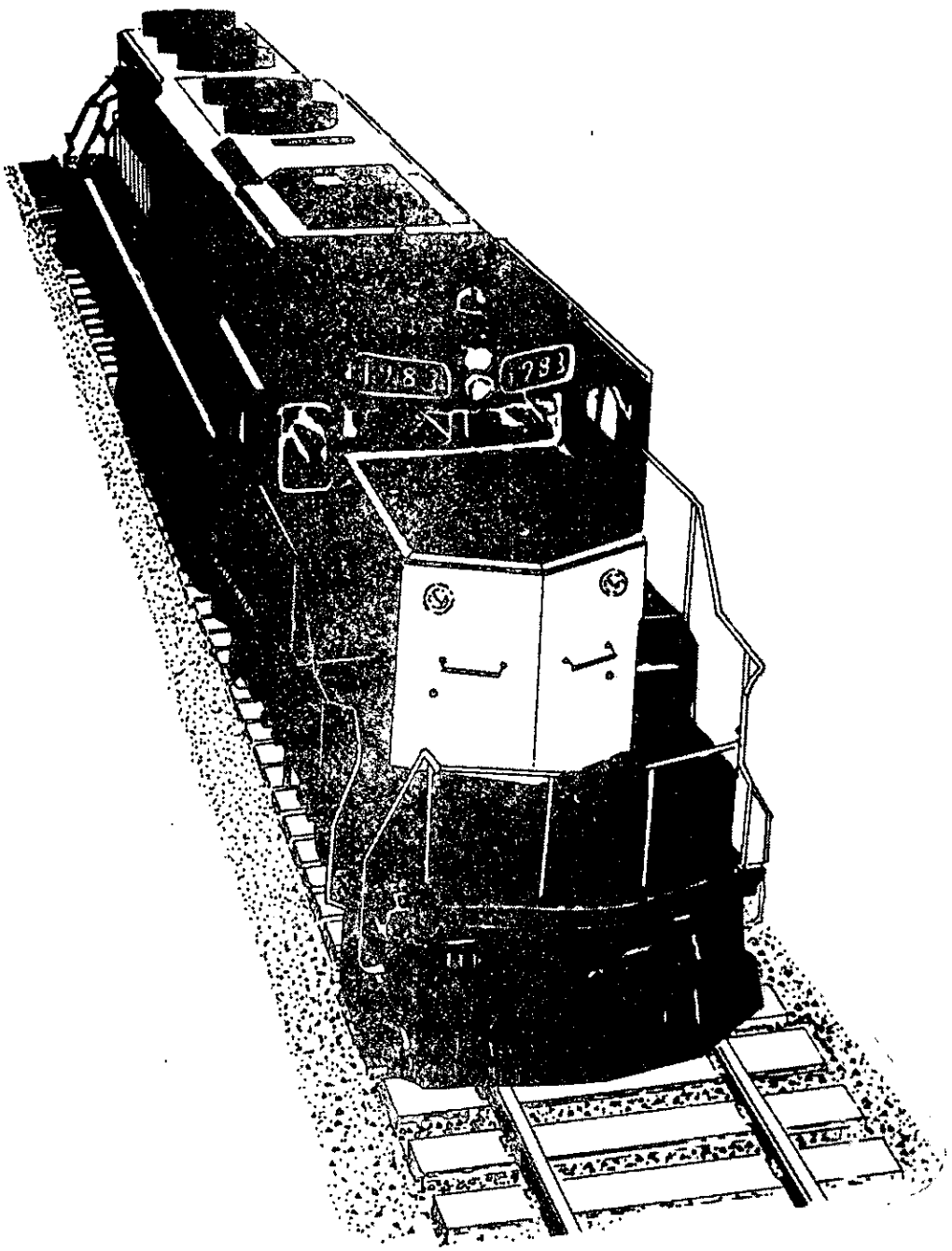
The Division of Railroads will strive to lease additional property along the state-owned lines. This will generate additional funds, but more importantly, it will improve utilization of rail property that had been idle. This will, in turn, assist in weed control and stimulate better overall management of the State-owned property.

The State will assist shippers or shipper groups to efficiently utilize rail facilities. This may include the location of new businesses or the expansion of existing structures. Any improvements in rail utilization will take into consideration the highway network and its access to the rail area.

The State-owned rail system will be monitored to determine current usage, rehabilitation needs and other transportation alternatives. Based upon the evaluation, recommendations may be made for changes to the system to better serve the public interest. Overall, the State-owned core system appears to be working well, but needs more time to allow traffic levels to fully develop. The State may at some future date consider the possibility of returning the rail property to the

private sector. Overall, rail planning and assistance programs have reached their peak in the State and will, in years to come, play a smaller role in terms of magnitude of transportation planning and programs. A brief summary of rail planning and assistance follows in Chapter V.

SUMMARY



CHAPTER V

CHAPTER V

SUMMARY

The rail system in South Dakota has undergone significant changes in the last five years. These changes have resulted in the establishment of the "core system concept", the purchase of selected abandoned lines by the State, and a reestablishment of rail operations on a limited number of lines.

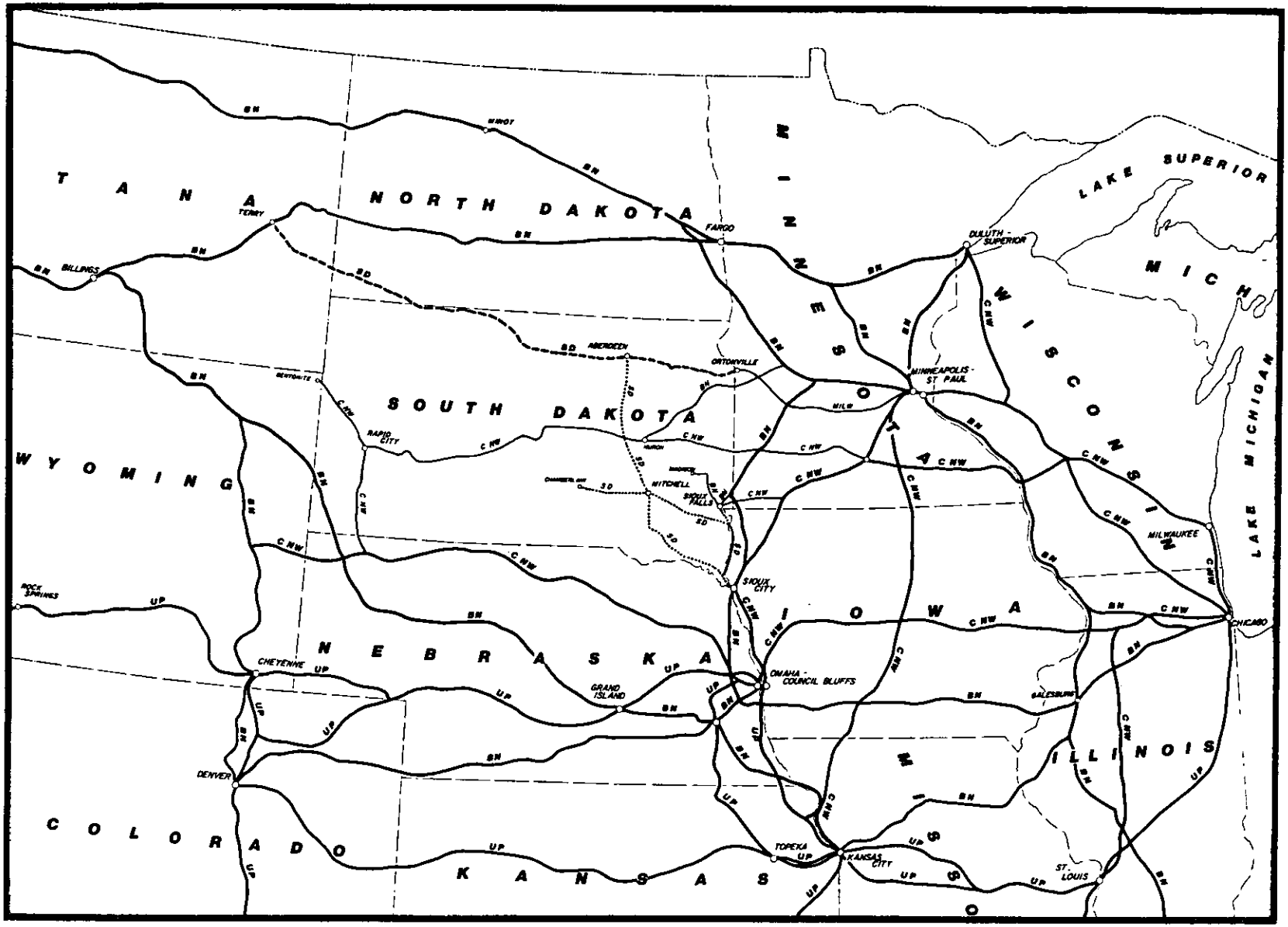
The cause for the high level of involvement in rail activity by the State of South Dakota was primarily the Milwaukee Road bankruptcy. Of the total 1,850 rail miles abandoned in the State since 1978, 1,550 miles resulted directly from the Milwaukee Road bankruptcy.

The elimination of key segments from the State's rail network created the need for the involvement of some entity dealing with transportation. Since the private sector expressed no willingness to purchase these important lines, the State was forced to intervene. South Dakota, therefore, purchased 1,312 miles of trackage, 1,003 miles of which are now being operated. An agreement was signed with the Burlington Northern Railroad Company to provide service on most of this trackage. The BN has allowed this State-owned trackage to become a fully functional part of the national rail network. Figure V-I illustrates how the State-owned trackage fits into the BN system and the regional rail network.

During the last decade, the rail industry has undergone several significant changes that have affected South Dakota. Shifting markets, specifically for grain, have altered traffic patterns to the extent that current rail shipping in South Dakota is significantly different from ten years ago. The dominance of hopper cars for grain has almost eliminated the use of boxcars from grain shipping. These larger and heavier cars create additional strain on the track

FIGURE V-1

SOUTH DAKOTA'S INTERFACE WITH THE REGIONAL RAIL NETWORK



MAIN LINE RAILROADS OF IMPORTANCE TO SOUTH DAKOTA

SOUTH DAKOTA OWNED CORE SYSTEM - BURLINGTON NORTHERN OPERATED

SOUTH DAKOTA OWNED - BURLINGTON NORTHERN LEASED

LOCAL CONNECTOR LINES TO MAIN LINES

structure. If the line does not have adequate adequate structural support, or if the rail is too light, the trackage is obsolete for the use of modern equipment.

While these changes have been occurring, competing modes have been aggressively pursuing the total available traffic. Trucks, through their flexibility in routes, schedules, and rates, have been able to secure a larger portion of the short haul traffic, especially for manufactured goods. Barges enjoy a massive capacity for bulk commodities while using public waterways at a low cost. In the future pipelines may capture significant volumes of coal.

Because of this strong competition, railroads have been forced to improve service by applying state-of-the-art technology for highly competitive traffic. In addition, recent energy considerations have improved the industry's position, due to the relatively large capacity and fuel efficiency of railroads.

Railroads that did not adjust to these economic considerations most often experienced a gradual loss of traffic, a lower level of service, deferred track maintenance, and a decline in the revenue/cost ratio. Depending on the ability of the carrier to recognize and react to these factors, it has often meant an internal subsidization of weak lines. However, until very recently, regulation has restricted railroads from rationalizing their operating system. It was this very inability to recognize and correct this problem that led to the bankruptcy of the Milwaukee Road.

Nationally, the rail network is continuing to decline in total operating mileage. Limited track maintenance budgets are beginning to be spent much more selectivley on the remaining trackage. We are now beginning to see some improvement in health in the railroad industry due to significant adjustments. The trend towards fewer, more effective carriers is expected to continue, as several true transcontinental

carriers may be formed by merger activities. South Dakota is in a relatively strong position because the State is centrally located in the Burlington Northern's system. The Chicago & North Western Railroad, although still a regional carrier for South Dakota and the Upper Midwest, has been described as an attractive merger candidate and may one day offer more transportation alternatives to this State. It would appear for South Dakota as more mergers occur, the rail transportation system will continue to exhibit more stability.

SOUTH DAKOTA: PAST INVOLVEMENT--FUTURE PLANS

The goal of South Dakota's rail planning program is to provide long-term transportation solutions for its citizens without long-term debts. The State, while historically involved in transportation in the highway mode, has only recently addressed the needs of its citizens in the railroad mode. Through the development of the core system concept, key rail lines have been identified to assist in transportation decisions. As the transportation network is being recognized more and more as an interdependent and interacting system, these decisions have relied on interdisciplinary knowledge and expertise.

South Dakota has and will continue to support justified rail improvement projects on important lines. The State-owned core system, purchased to retain service on a minimum set of rail lines, will continue to be a main area of attention for improvements. Privately-owned lines that are important to the State are also an ongoing concern. If assistance is necessary to keep these lines operating in the private sector, the State will consider all potential alternatives, including the participation in rehabilitation. The State will work to minimize the abandonment impacts of lines for which no economic solution can be found. Solutions may include various combinations of the rail and highway modes.

As part of the long-term solution, the State-owned system will be returned to the private sector when it is most beneficial. The State Core system has a far better chance for survival now than when owned by the Milwaukee Road for the following reasons:

- o better track condition
- o less regulation in the industry
- o system sized according to potential traffic levels
- o better market access
- o located near the middle of the strong BN system.

South Dakota will continue to assist rail carriers in modernizing their operation in the State. The rail industry has been upgrading its system nationwide through improvements in equipment, trackage, and service. New marketing efforts focussed at contract rates and multiple car movements have helped to secure a more dependable traffic base. Flexibility through deregulation has enabled carriers to better respond to changing market conditions.

As the economy continues to change, the rail system must parallel these changes. Issues that will face South Dakota in the immediate future include:

- o Disposal of State-owned property - South Dakota may ultimately dispose of nonoperating rail property for which there is no justification for future service. Operating lines may be returned to the private sector if the best interests of the State is protected.

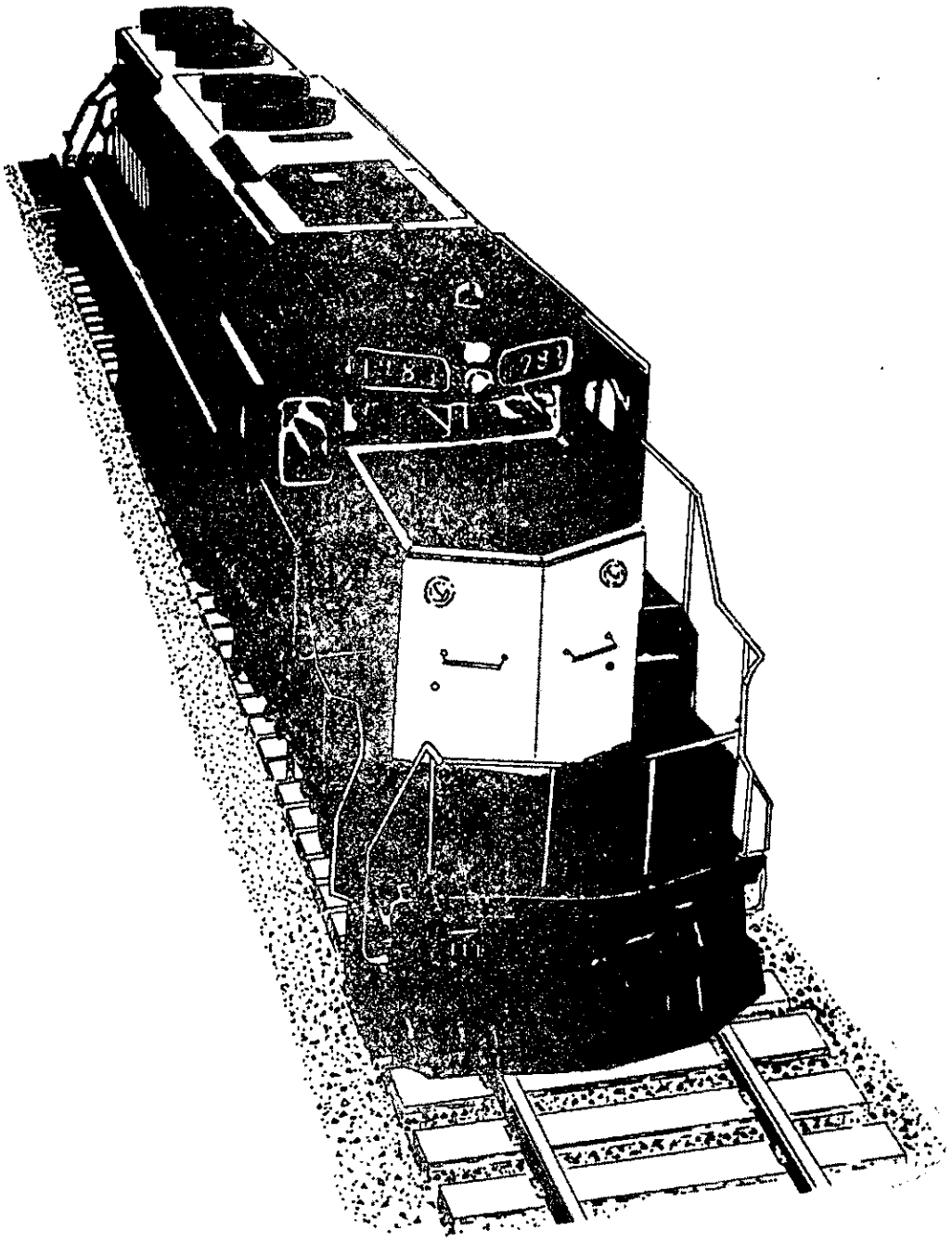
o Pierre to Rapid City - This Chicago & North Western line will probably be filed for abandonment during 1983. This is the last operating line connecting the eastern and western sections of the State. All conceivable alternatives are being studied in connection with this line to identify the need for this line and the alternatives available to satisfy transportation demand.

o Modal Relationship - As the railroad network becomes more permanently structured through the 1980's, the highway system must properly interact with it to provide a complete freight network. Suitably strong roads for access to grain subterminals and the improvement of rail/highway crossings are two primary concerns.

South Dakota continues to work to insure that these transportation changes meet the need of the users, the carriers, and the general public.

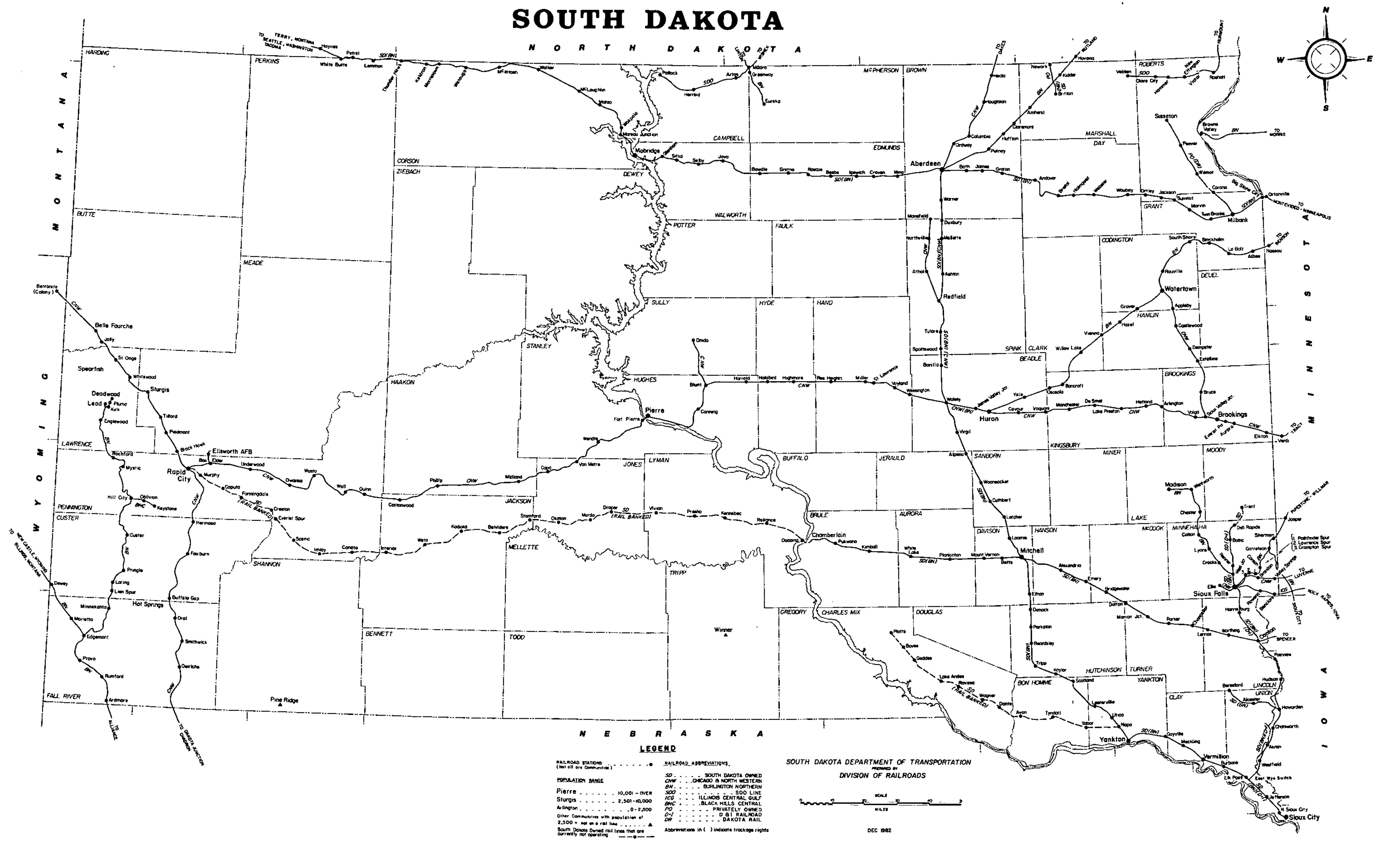
APPENDICES

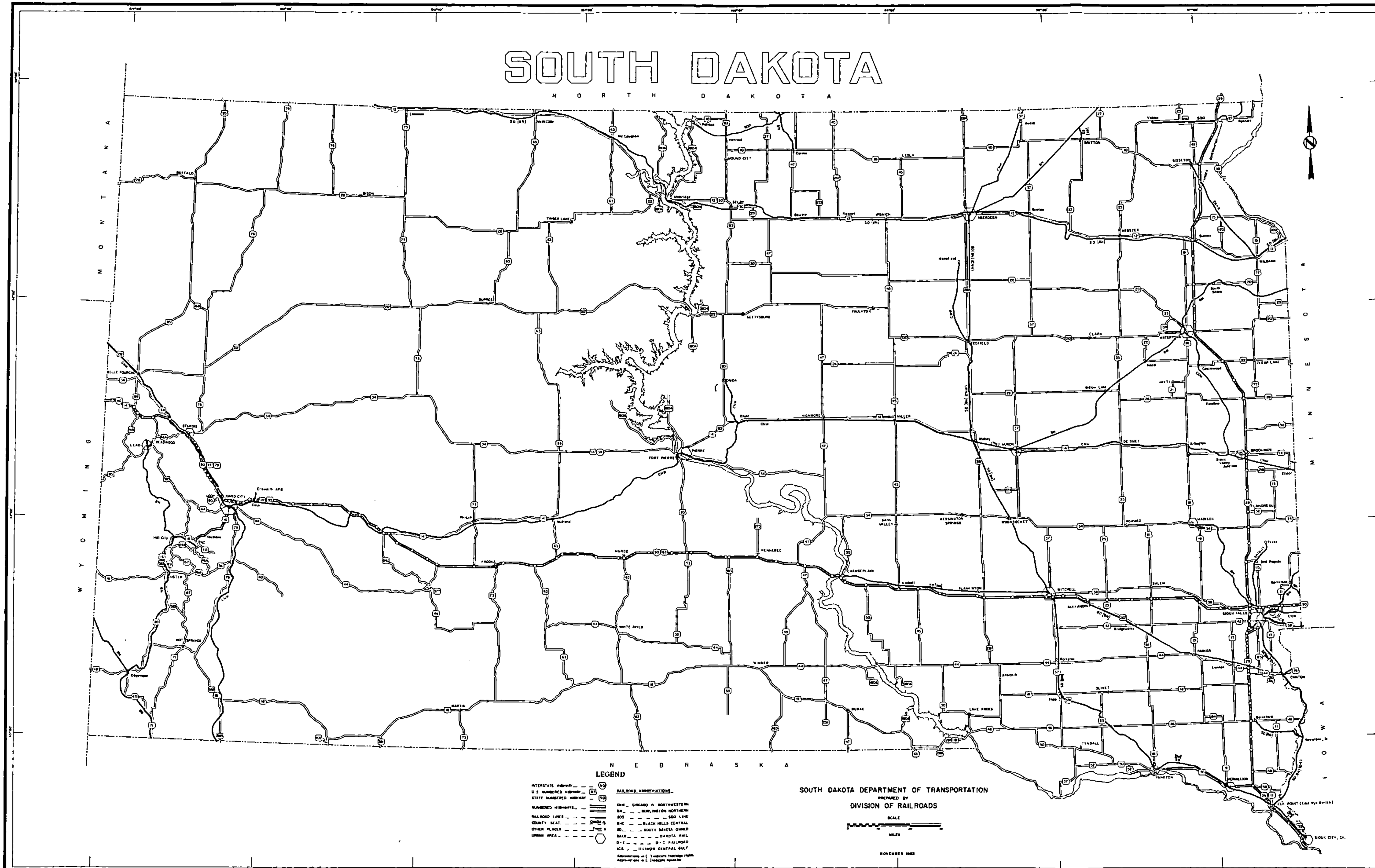
MAPS



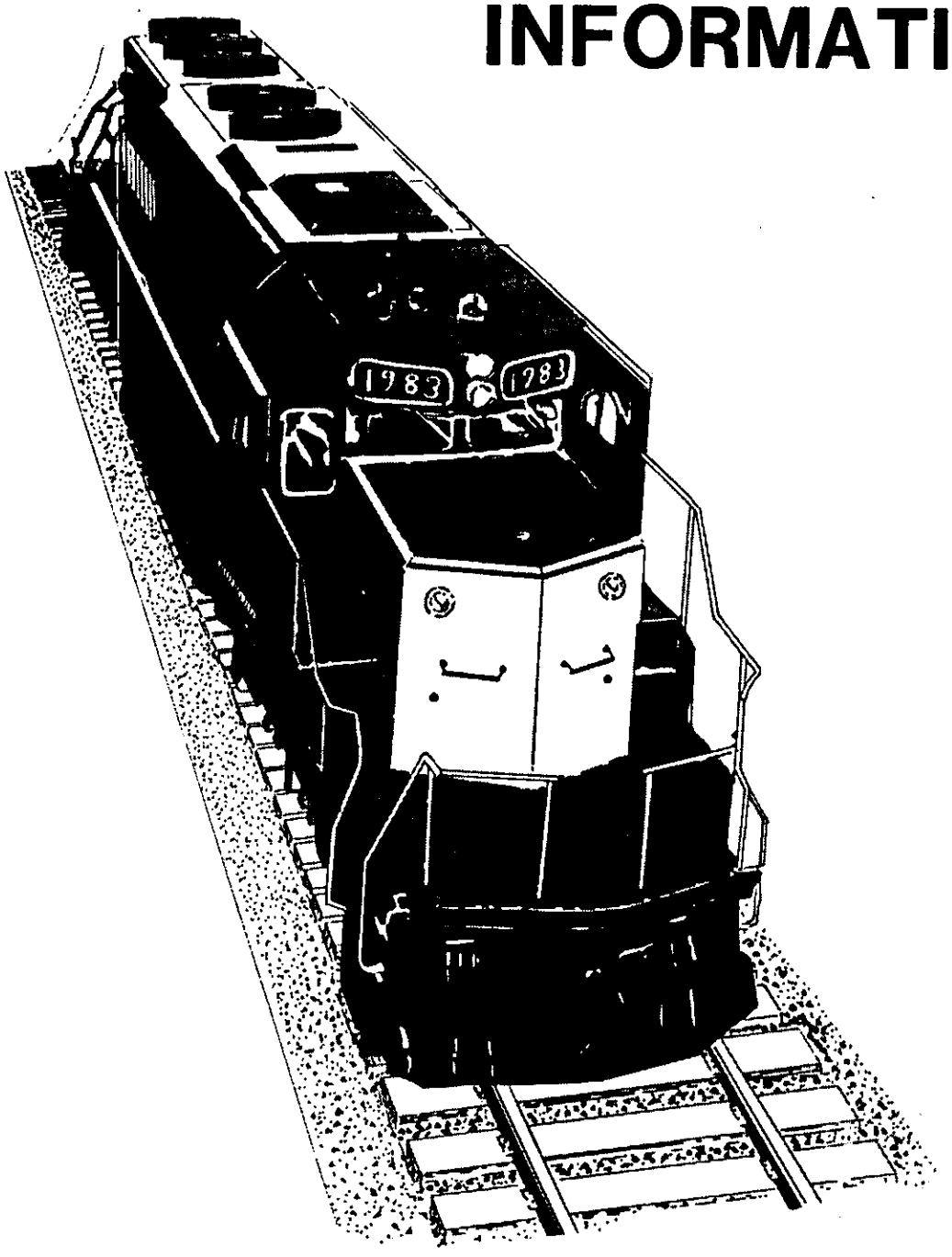
APPENDIX A

OFFICIAL RAILROAD MAP
SOUTH DAKOTA




SOUTH DAKOTA
NORTH DAKOTA
MONTANA
WYOMING
NEBRASKA
MINNESOTA
IOWA
LEGEND
INTERSTATE HIGHWAY
U S NUMBERED HIGHWAY
STATE NUMBERED HIGHWAY
NUMBERED HIGHWAYS
RAILROAD LINES
COUNTY SEAT
OTHER PLACES
URBAN AREA
RAILROAD ABBREVIATIONS
CNW CHICAGO & NORTHWESTERN
BN BURLINGTON NORTHERN
SOO SOO LINE
BHC BLACK HILLS CENTRAL
SD SOUTH DAKOTA OWNED
DAKR DAKOTA RAIL
D-I D-I RAILROAD
ICG ILLINOIS CENTRAL GULF
SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
PREPARED BY
DIVISION OF RAILROADS
SCALE
MILES
NOVEMBER

SOUTH DAKOTA RAIL SYSTEM INFORMATION



APPENDIX B

APPENDIX B

SOUTH DAKOTA RAIL SYSTEM INFORMATION

This Appendix contains a selection of tables and Figures depicting South Dakota rail traffic and operating characteristics. This data not only supports that found in the body of this report, but affords the reader with the tools to analyze certain rail characteristics in greater detail.

A following table illustrates the history of rail abandonments and operating miles in South Dakota. Also, a line-by-line listing of rail abandonments since October 1978 to the present is also shown. An historical perspective of rail traffic (carloadings, tons and commodity types) is presented in several tables to assist the reader in understanding the rail usage in this state. Data for individual rail carriers is listed to show the importance of each carrier to the movement of the State's total rail freight.

Rail traffic interaction between South Dakota and other states is presented to show where the important markets are located. This total traffic is broken down further to show just the grain marketed on rail between South Dakota and other states.

Most of the data contained herein only goes through 1980 or 1981 depending on the individual source. It is expected that 1982 and 1983 will be building years for South Dakota rail traffic. The Milwaukee Road restructuring, abandonments and the economy in general have all contributed to an unstable rail environment during the past few years. The State's program of rail line acquisition and restoration of rail service in 1980, 1981 and 1982 will continue to be responsible for improving rail traffic levels. Therefore, there is expected to be a turnaround in some of the downward or stable traffic trends.

TABLE B-1

HISTORICAL RECORD OF SOUTH DAKOTA'S RAILROAD SYSTEM

Maximum rail miles constructed up to 1964 = 4,420.5
Maximum rail miles abandoned up to 1964 = 516.4
Miles operated at end of 1964 = 3,904.1

YEAR	MILES ABANDONED	MILES REINSTATED	MILES OPERATIONAL AT END OF YEAR
1964	-0-	-0-	3,904.1
1965	5.3	-0-	3,898.8
1966	35.4	-0-	3,863.4
1967	47.7	-0-	3,815.7
1968	60.1	-0-	3,755.6
1969	65.5	-0-	3,690.1
1970	128.5	-0-	3,561.6
1971	67.0	-0-	3,494.6
1972	122.9	-0-	3,371.7
1973	-0-	-0-	3,371.7
1974	26.0	-0-	3,345.7
1975	-0-	-0-	3,345.7
1976	4.1	-0-	3,341.6
1977	143.0	-0-	3,198.6
1978	210.2	-0-	2,988.4
1979	256.5	9.0	2,740.9
1980	1,089.0	108.3	1,760.2
1981	96.4	385.5	2,049.3
1982	401.1	341.2	1,989.4

TABLE B-2

RAIL ABANDONMENTS APPROVED
IN SOUTH DAKOTA OCTOBER 1978 THROUGH 1982

	YEAR ABANDONED		S.D. MILES	
Burlington Northern				
1. Wentworth to Hayti	1980		49.2	
2. Yankton to Irene	1981		17.1	
3. Hill City to Keystone	1981		8.8	
4. Sioux Falls to Irene	1981		41.0	
		Total	116.1	
Chicago & North Western				
1. Jolly to Jolly Dump	1979		3.7	
2. James Valley Jct. to Redfield	1979		33.8	
3. Gary, SD to Tracy, MN	1980		1.0	
4. Ellis to Mitchell	1980		65.2	
5. Redfield to Frankfort	1980		9.7	
6. Watertown to Clark	1981		29.5	
7. Onida to Gettysburg	1982		24.4	
8. Mansfield to Aberdeen	1982		15.9	
		Total	183.2	
Milwaukee Road				
1. Trail City to Faith	1979		106.5	
2. Woonsocket to Wessington Springs	1979		15.2	
3. Bristol to Garden City	1979		28.8	
4. Moreau Jct. to Isabel	1979		56.5	
5. Marion Jct. to Menno	1978		21.5	
6. Jackson, MN to Egan	1979		12.0	
7. Andover to Brampton, ND	1980		38.6	
8. Roscoe to Linton, ND	1980		40.7	
9. Aberdeen to Edgeley, ND	1980		31.8	
10. Ortonville, MN to Fargo, ND	1980		1.3	
11. Madison to Bryant	1980		47.3	
12. Napa to Platte	1980		82.9	
13. Mitchell to Rapid City	1980		286.0	
14. East Wye Switch to Mitchell	1980		116.5	
15. East Wye Switch to Canton	1980		14.1	
16. Canton to Mitchell	1980		79.2	
17. Sioux Falls to Sioux Falls Jct.	1980		32.3	
18. Egan to Madison	1980		26.0	
19. Mitchell to Wolsey	1980		54.6	
20. Wolsey to Aberdeen	1980		74.0	
21. Mason City, IA to Canton, SD	1980		3.0	
22. Sioux City to East Wye Switch	1980		13.7	
23. Canton to Sioux Falls	1980		21.9	
24. Milbank to Sisseton	1982		37.1	
25. McLaughlin to New England	1982		9.7	GRAND TOTAL
26. Ortonville, MN to Miles City, MT	1982		299.1	
		Total	1,550.3	1,849.6

TABLE B-3

NUMBER OF CARLOADS OF COMMODITIES ORIGINATING
AND TERMINATING IN SOUTH DAKOTA

RAILROADS	1975	1976	1977	1978	1979	1980	1981	1982
Milwaukee Road								
Originating	17,951	13,032	15,459	19,623	20,196	15,181	8,449	2,418
Terminating	26,492	30,861	30,728	36,823	34,081	28,483	26,081	8,083
Total	44,443	43,893	46,187	56,446	54,277	43,664	34,530	10,501
Chicago & North Western								
Originating	25,198	21,316	20,247	22,920	24,717	25,593	18,957	18,303
Terminating	13,352	11,679	11,184	9,654	9,421	7,779	7,879	3,965
Total	38,550	32,995	31,431	32,574	34,138	33,372	26,836	22,268
Burlington Northern								
Originating	6,589	5,781	5,355	7,013	7,458	14,542	10,629	18,378
Terminating	9,095	9,900	8,496	8,506	8,427	6,578	6,350	20,863
Total	15,684	15,681	13,851	15,519	15,885	21,120	16,979	39,241
Soo Line								
Originating	1,954	1,290	1,235	2,171	2,424	2,402	1,881	1,881
Terminating	106	106	107	109	213	157	99	70
Total	2,060	1,396	1,342	2,280	2,637	2,559	1,980	1,951
Other Companies								
Originating	2,316	1,891	1,346	74	112	74	66	12,565
Terminating	1,803	1,374	1,579	1,610	1,584	1,121	295	0
Total	4,119	3,265	2,925	1,684	1,696	1,195	361	12,565
TOTAL ALL COMPANIES								
Originating	54,008	43,310	43,642	51,801	54,907	57,792	39,982	53,545
Terminating	50,848	53,920	52,094	56,702	53,728	44,118	40,704	32,981
TOTAL	104,856	97,230	95,736	108,503	108,633	101,910	80,686	86,526

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

TABLE B-4

TONS OF COMMODITIES SHIPPED
BY CLASS 1 RAILROADS IN SOUTH DAKOTA

Commodity Code	Commodity Description	1977	1978	1979	1980	1981	1982
01	Farm Prod.	1,208,154	1,807,937	2,001,241	2,864,002	1,983,981	2,422,982
11	Coal	2,492,438	3,014,183	2,809,109	2,720,083	2,568,857	2,177,313
14	Non-Metallic Minerals	710,935	688,950	558,498	329,227	229,545	1,006,678
20	Food & Kindred Products	328,431	281,983	257,620	217,009	186,126	174,966
24	Lumber & Wood	348,549	367,285	365,738	226,825	209,017	193,518
28	Chemicals	232,958	257,030	271,912	175,672	173,073	114,626
32	Stone & Clay	860,782	751,616	909,660	538,261	461,051	420,272
33	Primary Metal	52,689	58,092	77,340	45,209	157,581	42,554
40	Waste & Scrap	44,148	52,672	60,858	64,598	46,702	20,450
	Sub-Total	6,279,084	7,279,748	7,311,976	7,180,886	6,015,933	6,573,359
	% of Total	97%	97%	96%	98%	98%	99%
	All Other	188,134	239,164	273,092	167,722	137,730	98,740
	GRAND TOTAL	6,467,218	7,518,912	7,585,068	7,348,608	6,153,663	6,672,099

SOURCE: Railroad R-1 Annual Reports

TABLE B-5

NUMBER OF TONS OF COMMODITIES
ORIGINATING AND TERMINATING IN SOUTH DAKOTA

RAILROAD	1975	1976	1977	1978	1979	1980	1981	1982
Milwaukee Road								
Originating	$ 1,158,810	835,594	1,009,925	1,245,047	1,287,898	990,330	591,585	155,446
Terminating	2,217,948	2,749,137	2,623,724	3,219,293	3,020,524	2,669,564	2,458,696	693,436
Total	3,376,758	3,584,731	3,633,649	4,464,340	4,308,422	3,659,894	3,050,281	848,882
Chicago & North Western								
Originating	1,492,034	1,301,184	1,249,067	1,374,570	1,499,200	1,585,425	1,249,992	1,253,931
Terminating	789,415	672,484	652,427	558,857	541,166	437,385	449,452	237,499
Total	2,281,449	1,973,668	1,901,494	1,933,427	2,040,366	2,022,810	1,699,444	1,491,430
Burlington Northern								
Originating	377,436	327,183	316,509	453,553	524,244	1,077,569	834,155	1,518,684
Terminating	533,478	568,312	474,879	483,073	494,032	371,562	393,987	1,782,931
Total	910,914	895,495	791,388	936,626	1,018,276	1,449,131	1,228,142	3,301,615
Soo Line								
Originating	125,988	83,796	82,745	150,515	174,387	188,660	162,326	167,265
Terminating	8,745	8,519	8,560	8,756	14,820	9,374	6,604	5,262
Total	134,733	92,315	91,305	159,271	189,207	198,034	168,930	172,527
Other Companies								
Originating	46,125	37,320	26,858	3,241	5,501	2,515	1,497	857,645
Terminating	31,623	22,612	22,524	22,007	23,296	16,224	5,369	0
Total	77,748	59,932	49,382	25,248	28,797	18,739	6,866	857,645
TOTAL ALL COMPANIES								
Originating	3,200,393	2,585,077	2,685,104	3,226,926	3,491,230	3,844,499	2,839,555	3,952,971
Terminating	3,581,209	4,021,064	3,782,114	4,291,986	4,093,838	3,504,109	3,314,108	2,719,128
Total	6,781,602	6,606,141	6,467,218	7,518,912	7,585,068	7,348,608	6,153,663	6,672,099

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

TABLE B-6

1982 RAIL TRAFFIC
ORIGINATING AND/OR TERMINATING
IN SOUTH DAKOTA

ORIGINATING TRAFFIC

COMMODITY	TONS	PERCENT OF TOTAL	ACCUMULATIVE PERCENT
Farm Products	2,409,730	61%	61%
Non-Metallic Min.	924,175	23	84
Stone, Clay & Glass	299,259	8	92
Lumber & Wood Prod.	170,790	4	96
Food & Kindred Prod.	116,967	3	99
All Others	32,050	1	100
Total	3,952,971	100%	

TERMINATING TRAFFIC

COMMODITY	TONS	PERCENT OF TOTAL	ACCUMULATIVE PERCENT
Coal	2,177,125	80%	80%
Stone, Clay & Glass	121,013	5	85
Chemicals	113,056	4	89
Food & Kindred Prod.	57,999	2	91
Non-Metallic Min.	82,503	3	94
All Others	167,432	6	100
Total	2,719,128	100%	

TOTAL TRAFFIC

COMMODITY	TONS	PERCENT OF TOTAL	ACCUMULATIVE PERCENT
Farm Products	2,422,982	36%	36%
Coal	2,177,313	33	69
Non-Metallic Min.	1,006,678	15	84
Stone, Clay & Glass	420,272	6	90
Lumber & Wood Prod.	193,518	3	93
Food & Kindred Prod.	174,966	3	96
Chemicals	114,626	2	98
All Others	161,744	2	100
Total	6,672,099	100%	

SOURCE: Railroad Annual Reports (R-1)

TABLE B-7

TONS OF GRAIN MOVED BY RAIL
WHICH ORIGINATED IN SOUTH DAKOTA

YEAR	C&NW	%	MILW	%	BN	%	SOO	%	TOTAL
1973	1,068,234	37	1,227,674	42	387,093	13	234,530	8	2,917,531
1974	939,842	36	1,196,977	46	294,181	11	156,524	6	2,587,524
1975	582,682	34	785,517	46	228,825	13	125,944	7	1,722,968
1976	281,732	28	474,198	47	175,256	17	83,796	8	1,014,982
1977	271,005	23	602,464	52	194,689	17	89,875	8	1,158,033
1978	446,703	25	858,419	48	320,153	18	150,493	9	1,775,768
1979	513,833	26	866,124	44	421,168	21	174,365	9	1,975,490
1980	753,606	26	906,719	32	992,919	35	188,490	7	2,841,734
1981	521,274	26	572,941	29	723,739	37	162,215	8	1,980,169
1982	627,664	26	149,216	6	1,349,716	56	167,192	7	2,409,730*

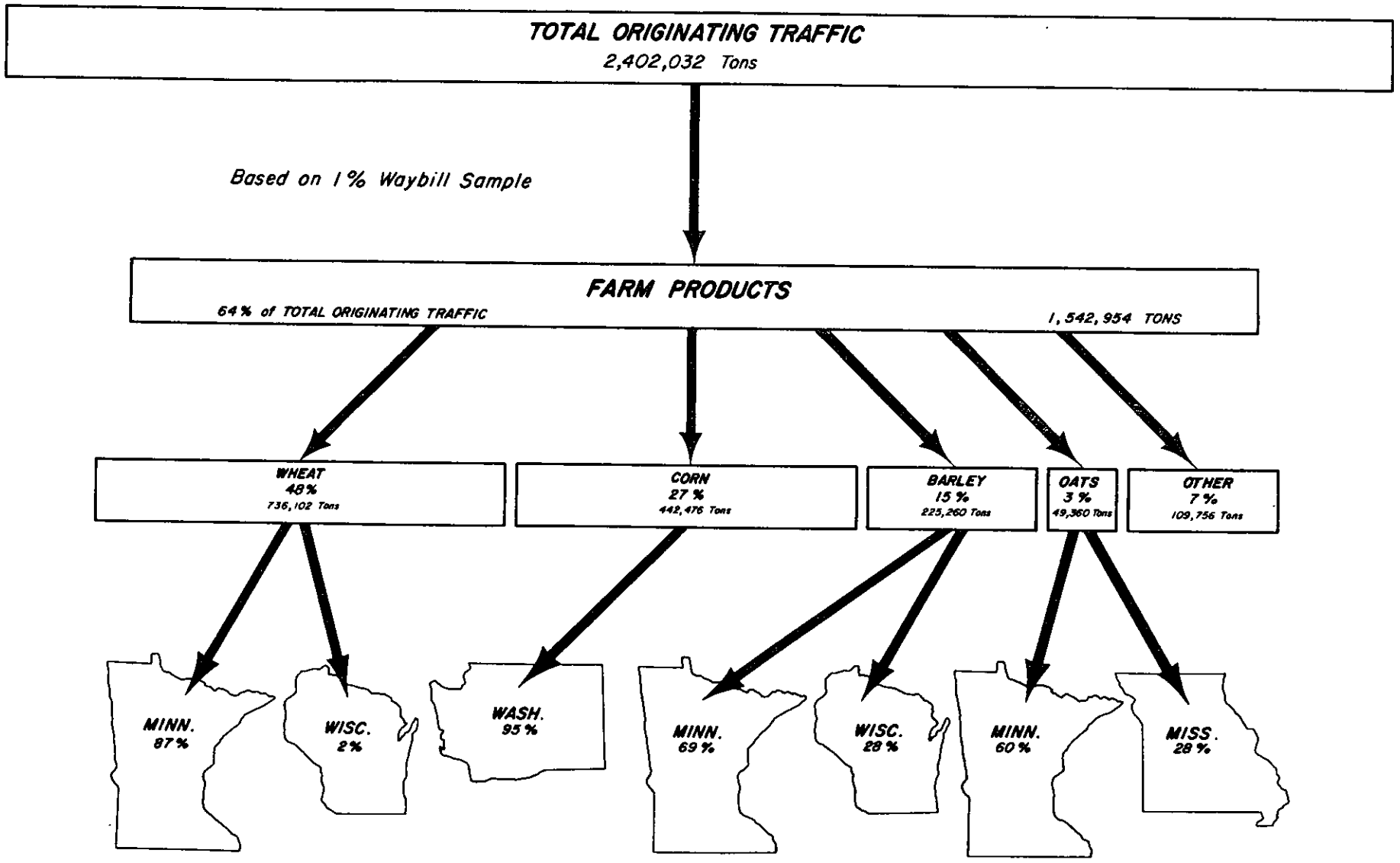
*Includes 115,942 tons originated by Dakota Rail

SOURCE: R-1 Annual Reports

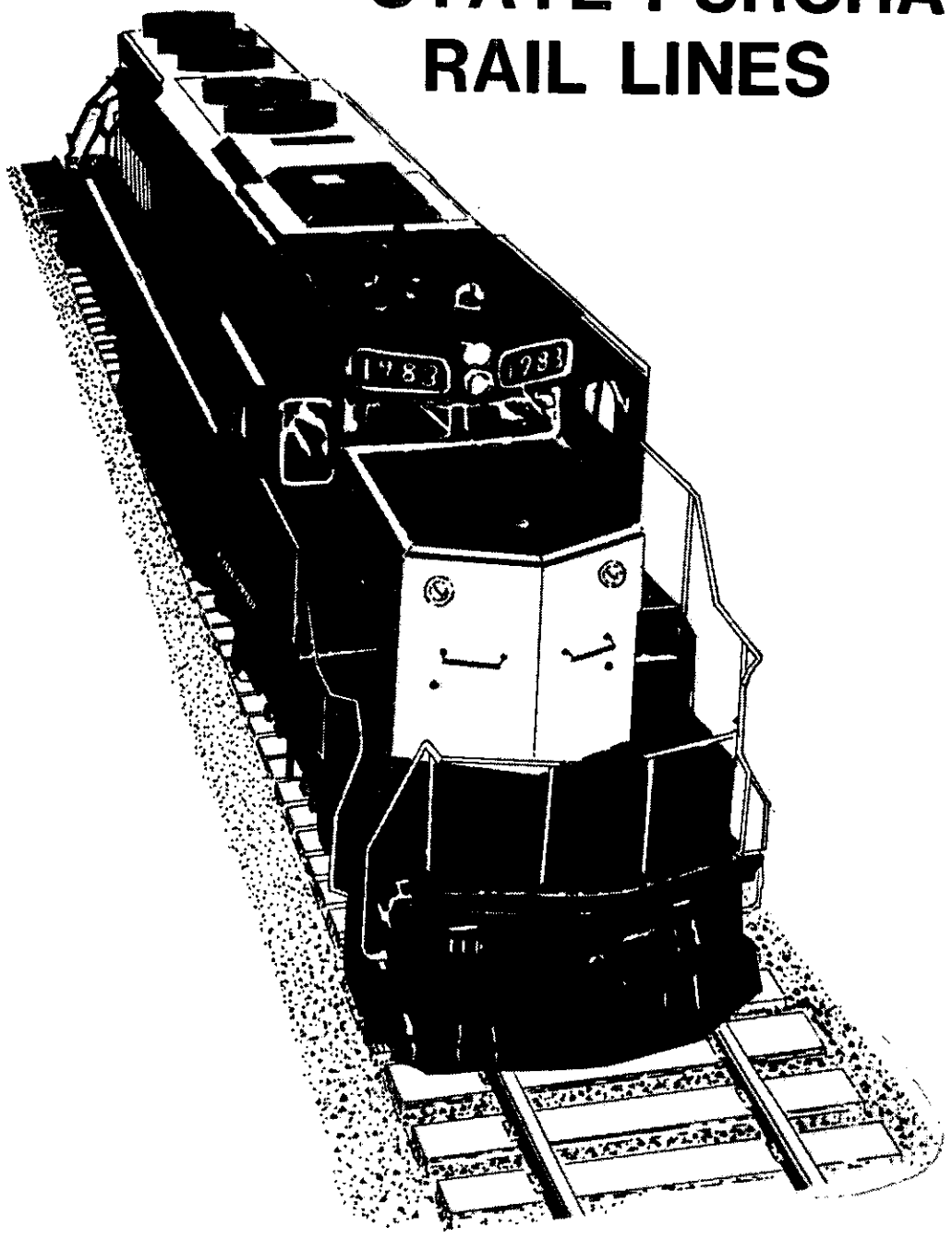
FIGURE B - 1

MAJOR MARKETS FOR FARM PRODUCTS ORIGINATING ON RAIL IN SOUTH DAKOTA

- 1981 -



SOUTH DAKOTA STATE PURCHASED RAIL LINES



APPENDIX C

APPENDIX C

SOUTH DAKOTA STATE PURCHASED RAIL LINES

The ownership, operation, and maintenance of railroad facilities have classically been a private sector enterprise. However, because of mounting problems in the rail industry, aggressive federal legislation dating back to 1973 was enacted to assist the private sector in the revitalization and stabilization of the nation's rail system. In recent years the federal government and a small number of state governments have become directly involved in railroad operations.

South Dakota was one of a few states that became directly involved because of the loss of critical rail service resulting from abandonment or bankruptcy. This appendix will address the following topics relative to the South Dakota ownership of rail lines.

- Need and Justification for State Ownership
- The Elements of the Acquisition
- Rail Operations
- Nonoperating Purchases
- Rehabilitation Accomplishments and Needs
- 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, 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.

The Milwaukee Road, then owner of 48% of the rail trackage within the State, filed a petition for bankruptcy on December 19, 1977. The railroad's objective was to determine if the company could be reorganized into a smaller profitable system. In order to accomplish this, many miles of light density lines that did not contribute substantially to the health of the company were to be embargoed and/or abandoned.

An embargo request by the Milwaukee Road was approved in March 1980 and the railroad ceased to operate all trackage in South Dakota except for the Northern Main line, the New England branch line and the Sisseton branch line. Further, the railroad ceased to operate all of its 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.

The Milwaukee Road's economic condition declined further, resulting in its filing to abandon the New England and Sisseton branch lines in March 1981. Subsequently, in May 1981, the Milwaukee Road filed to abandon the Northern Main line between Ortonville, Minnesota and Miles City, Montana. The latter action left an uncertain future for significant volumes of coal and other commodities moving on the line.

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 would have resulted in the closing of the Big Stone and Ortonville power plants. If the plants were to have ceased operations in 1982, the negative economic impact would have accumulated over $1.2 billion.

The most significant justification for continued 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. 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 offered by grain elevators to farmers can rise.

Without direct rail access, all industries using rail are severely limited in their shipping options. Alternate choices are to ship by truck, relocate to remaining rail-heads, or shut down altogether. A decrease in the number of 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 would be substantially reduced.

The State highway system was not designed for large volumes of truck traffic in most rural areas. As a result of loss of rail service and increased truck traffic, accelerated deterioration of the highways is likely to occur in these areas. This deterioration would cause a more frequent need for maintenance, and 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 and efficient 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.

As rail lines were shut down due to the embargo or abandonments, no Class I carrier indicated a willingness to own and operate critical lines. The State was faced with the very real possibility of having large areas without rail service and, as a result, elected to solve its own rail transportation problems for the benefit of 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 specific abandoned rail lines.

THE ELEMENTS OF THE ACQUISITION

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 which ones were essential. It was acknowledged and understood at the onset that not every line could be, or should be, saved.

The 1980 Legislature provided authority to purchase up to 1,254 miles of rail facilities. The legislation itself did not express authority to purchase in terms

of track miles but rather identified specific line segments which qualified for acquisition. It was also stipulated that the total purchase price could not exceed a maximum of $25 million.

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 one (1) cent sales tax increment on all items then 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 for other than rail purposes.

On October 24, 1980, the Railroad Authority approved a purchase agreement for 760.5 miles of Milwaukee property, including real property totalling approximately 13,830 acres for the sum of $18,750,000. Refer to Table C-1 for the line segments making up this and subsequent purchases. Also approved was an agreement to lease and/or purchase an additional 94 miles of Milwaukee property, including real property totalling approximately 1,240 acres. The price for this lease/option was $300,000. The purchase was closed in escrow on November 13, 1980.

On November 26, 1980, the Railroad Authority approved the purchase of the Big Sioux Bridge located on the Chicago & North Western (C&NW) line between Harwarden, Iowa and Beresford, South Dakota from a private party. Purchase price for the bridge and 88 acres of land was $141,000.

TABLE C-1
RAIL LINE PURCHASES
STATE OF SOUTH DAKOTA

LINE SEGMENT	MILES	PURCHASE PRICE
Sioux Falls - Canton*	24.0	$ 2,098,000
Canton - Mitchell*	82.8	2,485,000
Mitchell - Wolsey*	54.4	1,592,000
Wolsey - Aberdeen*	72.0	2,200,000
Mitchell - Sioux City*	130.8	4,825,000
Mitchell - Chamberlain*	67.5	1,000,000
Napa - Platte**	83.3	1,069,000
Britton - BN Jct.**	4.8	100,000
Chamberlain - Rapid City**	217.6	2,787,000
Sioux Falls - Trent**	23.3	594,000
Sub-Total	760.5	$18,750,000
Hawarden - Beresford**	18.6	1,418,860
Canton - Elk Point**	49.4	1,826,000
Track in Mitchell**	1.0	61,974
Track in Sioux City*	7.0	1,703,500
Ortonville - Terry***	479.9	30,400,000
GRAND TOTAL	1,316.4	$54,160,334

* Core System Lines
** Local Option Lines
*** Main Line Purchase

NOTE: Purchased mileages do not necessarily reflect current operating mileage.

On July 6, 1981, the Railroad Authority exercised its option to purchase the Canton to Elk Point line. The purchase price for the line was $1,826,000 minus a $50,000 option credit.

On July 28, 1981, the C&NW line from Hawarden, Iowa to Beresford, SD was purchased for $1,277,860. On August 3, 1981, property within the switching limits of Mitchell was approved for purchase from the C&NW for $61,974.

On August 20, 1981, the Railroad Authority exercised its option to purchase property in Sioux City, Iowa, plus approved the inclusion of additional property in the purchase. The purchase price was $1,703,500 less an option credit of $40,000.

On September 24, 1981, in Special Sessions, the Legislature authorized the Railroad Authority to issue bonds and/or notes to finance the purchase and rehabilitation of the Milwaukee Main Line from Ortonville, MN to Terry, MT (Main Line) and to take steps necessary to permit continued service on the line by private enterprise. The Railroad Authority, on April 15, 1982, approved the Purchase Agreement for the Main Line. The purchase amount was set at $30,400,000. The purchase was made contingent upon the Railroad Authority issuing bonds sufficient to cover that amount and any costs involved, as well as obtaining $30,000,000 in rehabilitation funds from the Federal Railroad Administration (FRA). The funds were approved on May 22, 1982. On July 16, 1982, the Railroad Authority took the final steps necessary to purchase the Milwaukee Main Line. At this time, a bond resolution was passed authorizing the issuance of bonds and the execution of Bond Purchase Agreements with the purchasers of the bonds. The Main Line purchase was closed on July 20, 1982.

The rail purchase program that was implemented by the State of South Dakota was carefully conceived to solve its transportation problems in a just manner. Purchases were either financed and paid for at the time of purchase or were purchased by bonds that will be repaid by the Burlington Northern with no capital outlay or debt incurred by the citizens of this State. The purchase program was designed to be a short term financial obligation by the State that would provide a transportation benefit now and for future generations.

Rail purchases fell into three (3) main categories of lines.

- Core System
- Local Option Lines
  - Operating
  - Nonoperating
- Main Line

The lines contained in each of the above categories along with the mileages are found in Table C-2. After the rail lines were purchased, the next task facing the State was obtaining an operator for the core system. For the nonoperating lines, the purpose was to preserve the rights-of-way for possible future use, so no operator was sought. Operations on the local option lines were the responsibility of local shipper groups or a Regional Railroad Authority.

CORE SYSTEM

The primary category of trackage in the original purchase was the 432.1 miles identified as being an essential part of the State's transportation system. This

TABLE C-2

CATEGORIES OF STATE PURCHASED LINES

CORE SYSTEM		
1. Sioux Falls to Canton		20.8 miles
2. Canton to Mitchell		79.2 miles
3. Mitchell to Aberdeen		128.6 miles
4. Mitchell to Sioux City		136.9 miles
5. Mitchell to Chamberlain		66.6 miles
	TOTAL	432.1 miles
NORTH MAIN LINE		
1. State Line to Aberdeen		105.7 miles
2. Aberdeen to Mobridge		98.6 miles
3. Mobridge to Terry, MT		275.6 miles
	TOTAL	479.9 miles
LOCAL OPTION LINES (Operating)		
1. Sioux Falls to Dell Rapids		19.5 miles
2. Britton to Jarrett Jct.		4.8 miles
3. Canton to East Wye Switch		49.1 miles
4. Hawarden, IA to Beresford		17.4 miles
	TOTAL	90.8 miles
NON OPERATING LINES		
1. Napa to Platte		82.4 miles
2. Chamberlain to Rapid City		219.7 miles
3. Dell Rapids to Trent		7.1 miles
	TOTAL	309.2 miles
	GRAND TOTAL	1,312.0 miles

SOUTH DAKOTA OWNED TRACK LOCATED IN:		
South Dakota		1,089.5 miles
North Dakota		102.5 miles
Montana		78.3 miles
Iowa		41.7 miles
	GRAND TOTAL	1,312.0 miles

"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 the modern rail equipment in general use today.

Initially, no Class I carrier expressed interest in operating the State core system. A short line operator was, therefore, sought for the system. However, after negotiations, an agreement was reached with the Burlington Northern to operate the system. The State estimated that an operating subsidy would be required by a short line operator for the first few years during the restructuring period. The Burlington Northern agreed to operate the system without a subsidy, but stipulated that the estimated subsidy amount instead be used to improve the track structure. The State, as partner to the operating agreement, pledged to provide rehabilitation assistance in order to bring the system up to Class II standards supporting 25 MPH service. The Burlington Northern began operating an initial segment of the core system on July 6, 1981. By November 1981, the entire core system was operational.

LOCAL OPTION LINES - OPERATING

The five (5) mile industrial spur into Britton from the Burlington Northern line was put back into service in June 1982. This former Milwaukee Road line was completely rehabilitated and an operating agreement entered into with the Burlington Northern.

The State-owned line from Sioux Falls to Dell Rapids has been operating as an industrial spur since the Milwaukee Road ceased service. The track is leased to the L. G. Everist Company which moves its quarried rock on the line. An agreement

was reached whereby the D & I Railroad, a company owned by the L. G. Everist Co., provides the service to move the quarried rock on the State-owned Sioux Falls to Sioux City, Iowa rail line. Local common carriage service on the line is provided by the Burlington Northern (the Canton to East Wye Switch segment is a local option line) which also serves the Beresford branch line.

LOCAL OPTION LINES - NONOPERATING

Of the purchased lines, some segments would not immediately, if ever, be put back into service. These segments were purchased because of strong local interest or the State's view that the corridor needed to be held intact during the rail restructuring process. These segments are:

Napa to Platte	-	82.4 Miles
Chamberlain to Rapid City	-	219.7 Miles
Dell Rapids to Trent	-	7.1 Miles
Total		309.2

These nonoperating lines all have light rail and generally are in poor physical condition. The cost to put them back into service and rehabilitate them would be extremely high. These lines were purchased at net liquidation value so therefore the investment would likely be returned if they were disposed of at some future date.

MAIN LINE

On February 22, 1982, the Railroad Authority approved a lease and operating agreement with the Burlington Northern for operations on the Main Line. Under the terms of the agreement, the BN was made responsible for the retirement of all notes and/or bonds issued by the Railroad Authority related to the purchase and

rehabilitation of the Main Line. The Burlington Northern started serving the line on April 20, 1982 after the line was out of service for 20 days.

A total of 1,002.8 miles of South Dakota-owned track located in four (4) states is in some form of rail operations today. No other State-owned segments are currently scheduled to be put back into operation.

REHABILITATION ACCOMPLISHMENTS AND NEEDS

The State has assumed responsibility for providing Class II rehabilitation assistance on the core system. Initially Class I rehabilitation projects were performed on portions of this system under the Federal Directed Service Program. This program provided grant funds to the State that were specially designed to put abandoned Milwaukee Road track back into service. Funding was provided for start-up costs of operations and track work necessary to bring the condition up to Class I, 10 MPH standards. Work commenced in June 1981 and was completed by September 1, 1981.

As part of the operating agreement with the BN, the State agreed to provide rehabilitation assistance for the core system to bring the track up to Class II, 25 MPH conditions. The Mitchell to Chamberlain line is excluded from this rehabilitation clause because of very high costs due to the need for rail replacement. The objective of the rehabilitation plan was not only to improve operating efficiencies, but to put the track structure in a condition that would support unit grain train movements.

State assisted rehabilitation on the core started in the fall of 1981 on the Sioux Falls (West Jct.) to Canton and the Elk Point to Sioux City segment. This work was financed by the State through a gas tax mechanism authorized by the 1981 State Legislature. The funding is through a one cent per gallon tax on all fuel burned

in internal combustion engines for off highway use only. Rail improvement projects were initiated in the 1982 construction season on the Elk Point to Mitchell and Mitchell to Canton segments. This work was financed by State funds and federal pass-through funds.

The Main Line, during 1979, 1980 and 1981, was kept in service by the cooperative assistance of the states that it serves and the Big Stone Power Plant Partners. The States of North Dakota, Montana, Minnesota and South Dakota have each contributed some of their federal funds to support needed track improvements and the Big Stone Partners contributed private funds. In 1982 a $30 million federal loan was arranged that will be repaid by the BN to completely rehabilitate the line. This was initiated in 1982 and is estimated to be completed at the end of the 1983 construction season.

Rehabilitation assistance on the local option lines is largely the responsibility of the shippers or local units of government served by the rail line. The State did provide some federal funds to assist in the upgrading of the Britton spur, which was completed in 1982. The State is also participating in upgrading the Canton to East Wye Switch and Hawarden to Beresford lines.

CURRENT STATUS OF THE STATE-OWNED SYSTEM

The Burlington Northern is currently providing service on State-owned rail lines for which it has an operating agreement. The continuing upgrading on the core system enhances the ability of this system to support unit grain trains. The Mitchell to Chamberlain line is the weakest link of the core system. Because of the light rail it has a very large rehabilitation cost that currently cannot be justified because of the low rail usage. The BN is responsible for maintenance on the line, but the State currently doesn't have any funds for its rehabilitation.

The operating local option lines generally are light density and need traffic growth to be viable. These lines will continue to need rehabilitation assistance. The Northern Main Line is being operated, maintained and upgraded by the Burlington Northern. Its rehabilitation needs are being met and service is being provided to meet demand. Figure C-1 highlights the rail lines owned by the State of South Dakota and how they fit into four (4) distinct groups by method of ownership and/or operation.

OBJECTIVES FOR THE STATE-OWNED SYSTEM

The Main Line fits well into the current Burlington Northern system. It is being upgraded to handle traffic efficiently and safely. The BN is responsible for retiring the bonds used by the State to purchase the line and also for repaying the federal loan for its rehabilitation. Upon retirement of the bonds, and loan the BN has the option to purchase the line. It should not require any further action by the State of South Dakota for continued rail service.

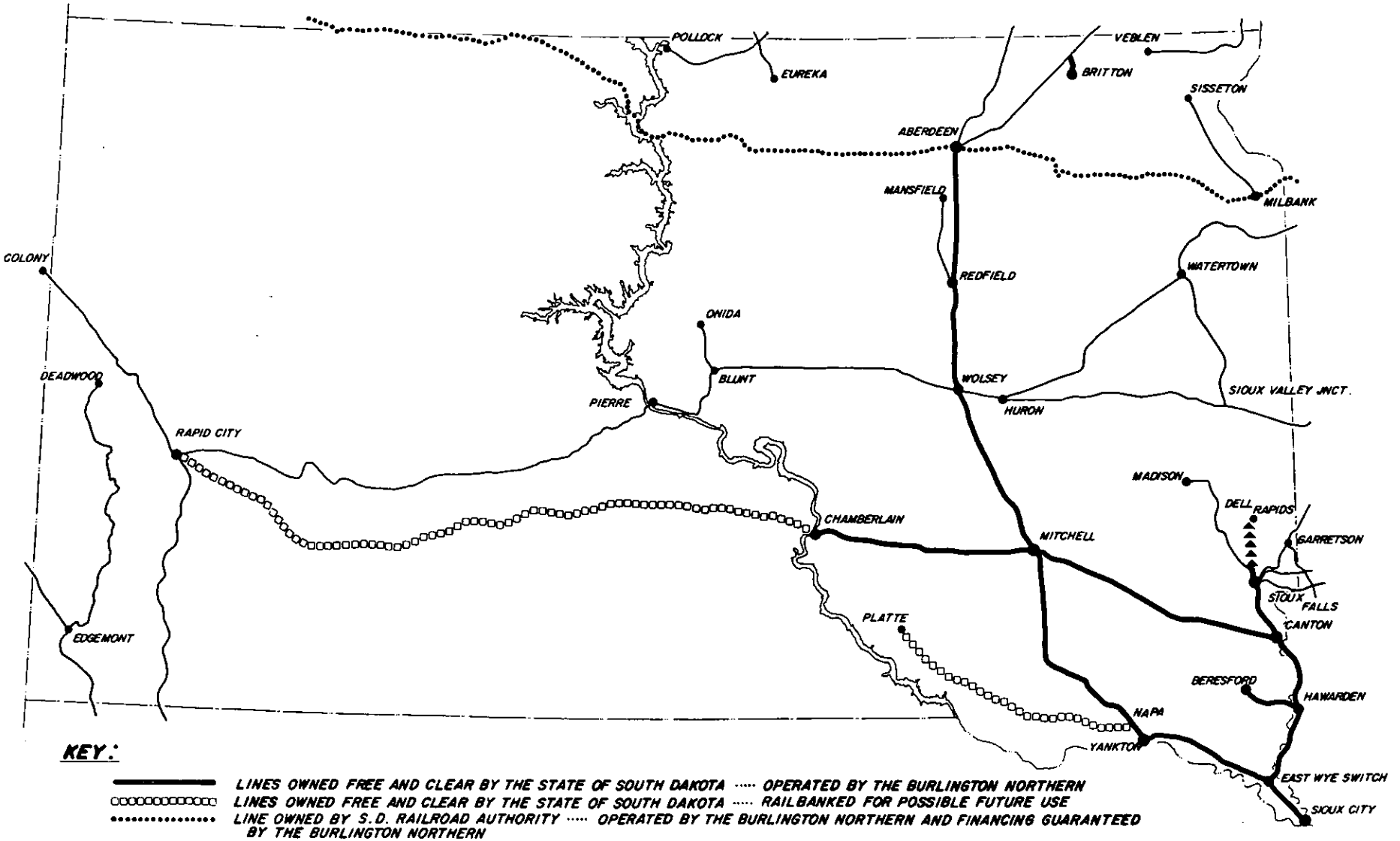
The core system, with the exception of the Mitchell to Chamberlain line also fits well into the BN system. For certain overhead movements, this system reduces distance traveled by several hundred miles. When upgrading is completed it should be a viable system and one that the BN may want to purchase. A State objective is to put rail lines back into private ownership if transportation needs are met and assured.

The local option lines will be monitored closely. The State will assist, if possible, those operating lines if strong local support is present. If service on those lines is not utilized, then they should not be operated.

FIGURE C - 1

STATE OF SOUTH DAKOTA

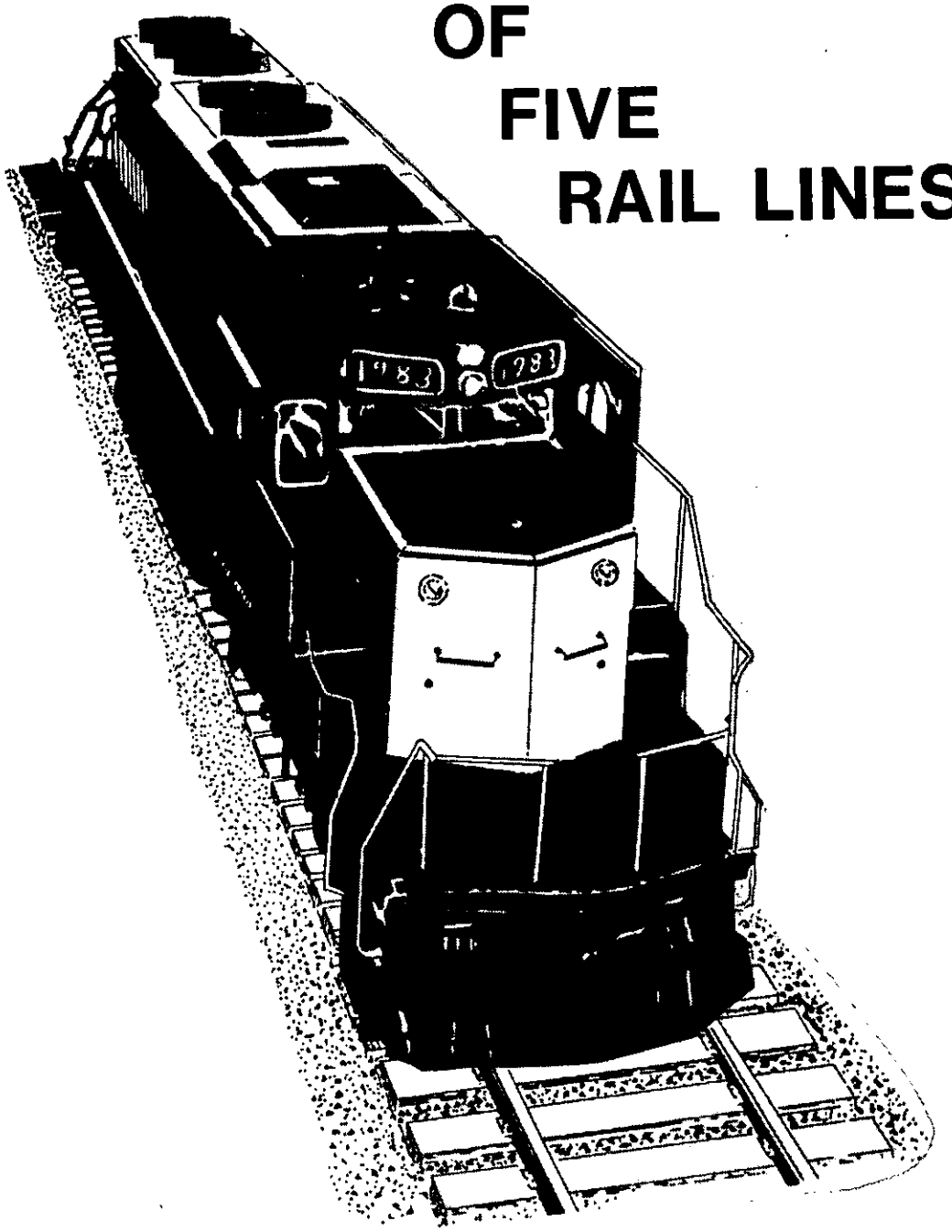
MAP HIGHLIGHTED TO SHOW STATE OWNED RAIL LINES



The nonoperating lines, because of high start up and rehabilitation needs, undoubtedly will not be reactivated under current conditions. The State would reconsider this decision if changing conditions would warrant rail service on these lines.

During the interim period, the State will strive to lease more land to private individuals. This will not only maximize revenue to the State, but will also help improve the appearance of the property. The decision at the present time is <u>not</u> to sell off rail property until transportation has been stabilized.

ECONOMIC ANALYSIS OF FIVE RAIL LINES



APPENDIX D

APPENDIX D
ECONOMIC ANALYSIS OF FIVE RAIL LINES

Coinciding with the development of the 1983 State Rail Plan, the South Dakota Division of Railroads, as part of the continuing planning process, directed an economic analysis of five rail lines. The specific lines were selected because they met prescribed tests that were applied to all lines. The primary purpose for the study was to identify all the facts about the rail lines. This information will be used by the State and shippers in the decision making process in light of rail abandonments or rehabilitation needs.

The following criteria were used as the basis to select rail lines for further study:

A - lines weak or threatened (see Figure IV-2)
B - lines in poor physical condition
C - lines that need upgrading to improve efficiencies
D - lines that need upgrading because the line directly affects other lines
E - lines with strong local interest

Based upon the above criteria five rail lines were selected for an in-depth analysis as follows:

1) Custer to Deadwood
2) Blunt to Onida
3) Mitchell to Aberdeen
4) Canton to East Wye Switch
5) Pierre to Rapid City

The main purpose for analyzing these lines was to study the effects of abandonment, alternatives to abandonment, or the justification for a rail improvement project.

The final report is a technical document designed to guide State and local citizens in making railroad related decisions. This appendix provides an overview of each line analyzed along with conclusions drawn from the analysis. Copies of the entire report can be obtained by contacting the State Division of Railroads.

CUSTER to DEADWOOD

LINE DESCRIPTION

The Burlington Northern is the owner and operator of this 62.4 mile branch line. The 3.2 mile branch line that extends to Lead from this line is also affected. High operating costs are encountered due to the grades and curves on the line.

LINE SELECTION CRITERIA

The criteria used to select this line for study are A and C, explained on Page D-1. The railroad has indicated that they will file this line for abandonment.

TRAFFIC CHARACTERISTICS

Coal is the predominant traffic on this line. The coal originates at the Wyodak Mine (near Gillette, WY) and terminates at the Black Hills Power and Light Generating Plant at Kirk (near Deadwood). Total rail traffic in 1981 was 1,718 revenue carloads (145,420 tons).

ALTERNATIVES STUDIED

There were two (2) alternatives studied:

1. The cost associated with continued rail service on the entire line.
2. The costs associated with trucking the coal from the mine directly to the power plant.

SIGNIFICANT FINDINGS

The railroad has stated that rehabilitation and maintenance needs of the line are estimated at $5 million over the next five (5) years and the salvage value of the line is estimated at $420,000. Independent study calculated the operating loss to be an estimated $284,000/year to the railroad.

Closing the power plant is not considered feasible on the basis of safety factors at the Homestake Mine (the main user of the electricity).

Trucking was studied as an alternative to rail with the following findings:

- -107 highway miles vs 213 rail miles
- -18 to 23 loaded trucks per day to move the coal
- -highway needs to support the truck movement would require $482,400 in immediate improvements, plus additional yearly maintenance costs would be generated
- -loading and unloading improvements would be needed at the mine and power plant, totaling $1,200,000

Total cost for continued rail service was estimated to be $5.960 million when computed over a 10 year period, at a five percent discount rate. This includes capital costs for rehabilitation and operating shortfalls.

Total cost for trucking the coal from the mine to the generating plant was estimated to be $3.780 million and $0.994 million when computed over a 10 year period, at a five percent discount rate figured at $11.94 per ton and $9.18 per ton, respectively. These figures reflect the additional cost to shippers due to higher transportation rates, capital cost for highway improvements, capital costs for loading and unloading improvements, less the cost of the salvage value of the line.

CONCLUSIONS/ RECOMMENDATIONS

The trucking option was found to be more cost effective than continued rail operations under the assumptions used in the analysis when computed over a 10 year period, at a five percent discount rate.

BLUNT to ONIDA

LINE DESCRIPTION

The Chicago and North Western is the owner and operator of this 15.3 mile branch line. Light rail and bridge conditions are factors responsible for the 178,000 pound load restriction on the line. This restriction limits the line to box and small hopper cars. The entire line is in deteriorated condition.

LINE SELECTION CRITERIA

The criteria used to select this line for study are A, B, C and E. The line is currently under study by the railroad for possible abandonment.

TRAFFIC CHARACTERISTICS

There are two (2) major shippers on the line at Onida, the only station on the line. The shippers are grain elevators, which ship mainly wheat and sunflower seeds to markets located to the east of this line. The traffic base used for this analysis is 103,797 tons, equivalent to 1,789 cars, per year.

ALTERNATIVES STUDIED

The major emphasis of this analysis was to document the effect of improving the condition of this line through a line rehabilitation project that would improve efficiencies of operation through increased speed and heavier car loadings.

SIGNIFICANT FINDINGS

This branch line has an estimated $2.7 million rehabilitation need to bring it up to Class II conditions. This would include replacing the rail, bridge repair, tie replacement, addition of ballast and surfacing. This level of work would allow speeds up to 25 mph and loads to a maximum of 251,000 pounds.

The rail improvement would clear the way for the railroad to be competitive in the corn market due to the ability of the line to be served by covered hopper cars which are mandated to access export markets.

The study was based on the existing traffic, plus a projected increase to a total of 2,211 cars due to the expansion into the corn market.

Additional benefits attributable to the project are:

- -Traffic would help support the connecting Pierre to Huron line.
- -Primary efficiency benefits of $3,240,000 over a 10 year period would be realized by the railroad.
- -Secondary efficiency benefits of $460,000 would be distributed to the State in the form of reduced impact of trucking on highway maintenance.
- -Benefit/cost ratio of +1.37 would result in a payback period of 7.3 years.

CONCLUSIONS/ RECOMMENDATIONS

The rehabilitation of this branch line would accrue benefits to the railroad, state, elevators and shippers with the most significant direct benefit to the railroad in the form of more traffic and revenue. Funding sources are the remaining obstacle to the implementation of a project.

MITCHELL to ABERDEEN

LINE DESCRIPTION

The State of South Dakota is the owner of this 128.6 mile line and the Burlington Northern provides local freight service. The Chicago and North Western has trackage rights on the segment from Wolsey to Aberdeen. The line needs ties, ballast and surfacing for the efficient operation of local and overhead traffic. This is a part of the State-owned Core System.

LINE SELECTION CRITERIA

The criteria used to select this line for study are C, D and E.

TRAFFIC CHARACTERISTICS

Rail traffic on this segment has historically been light and has predominately been grain. The major importance of this line is not to serve local traffic but to function as a bridge route to serve traffic originating on the Core System which has a West Coast destination. Traffic volumes used in this analysis were 247 cars annually (24,100 tons) originating on the line and 4,735 cars annually (417,300 tons) originating on other parts of the Core using this line as a bridge to reach the Aberdeen gateway.

ALTERNATIVES STUDIED

The only alternative studied was to upgrade the track to Class 2 standards which would allow 25 mph speeds and unit train volumes.

SIGNIFICANT FINDINGS

This line has rehabilitation needs of $8.07 million to bring it up to Class 2 conditions. This would include ties, ballast and surfacing to permit 25 mph speeds and unit train movements.

The rail improvement would permit faster speeds resulting in greater efficiencies. It would also permit rail movements through the Aberdeen gateway from other legs of the State-owned Core System. This capability would reduce the one-way mileage by 69 miles over other gateways. This path could also be used by Burlington Northern traffic which has neither an origin nor destination in South Dakota.

Primary efficiency benefits (annual benefits) due to track rehabilitation are:

-On-line shipper savings by rail vs truck	$428,000
-Savings by other Core System shippers to reach Aberdeen gateway	1,109,000
-Savings by use of line for other BN bridge traffic (1 train/day/direction)	1,090,000
-Savings by elimination of Way Train Service by use of BN through trains	268,000
Total Yearly Savings	$2,895,000

Benefits over a ten year period discounted at 5 percent are:

$11,870,000 without Burlington Northern bridge traffic
$22,350,000 with Burlington Northern bridge traffic

Distributional benefits over a ten year period are:

$3,303,000 savings to SD shippers
$8,563,000 to $19,051,000 net revenue to BN depending on level of overhead traffic
$86,000 savings to the State because of reduced highway maintenance

CONCLUSIONS/ RECOMMENDATIONS

The benefits and importance of this proposed rehabilitation project are substantial. The benefit/cost ratios were computed to be 1.48 without bridge traffic (6.8 years payback period) and 2.78 with bridge traffic (3.6 year payback period). The State will initially implement a program for part of the project in 1983, but a funding source for the entire project has not been identified.

CANTON to EAST WYE SWITCH

LINE DESCRIPTION

The State of South Dakota is the owner of this 49.1 mile line and the Burlington Northern provides local freight service. The D&I Railroad has overhead trackage rights on the line plus serves the rock quarry at Hawarden. The line is classified as a Local Option Line. Also a part of this analysis is the connecting Beresford to Hawarden branch line.

LINE SELECTION CRITERIA

The criteria used to select this line for study are A, B and E.

TRAFFIC CHARACTERISTICS

Traffic on the line is comprised of originating corn, soybeans and rock. A large volume of crushed stone originating at Dell Rapids is overhead traffic on this line. The traffic level used for this analysis is 2,230 carloads of grain annually and two round trips per week of crushed stone by the D&I Railroad for a six-month period with less frequent service the remaining six months.

ALTERNATIVES STUDIED

The only alternative studied was upgrading the entire line from Class 1 to Class 2 conditions. This $2,461,921 project would consist of tie renewal, ballast, surfacing and aligning to achieve a maximum operating speed of 25 mph.

SIGNIFICANT FINDINGS

The rail improvement project would have its greatest impact on the time required to provide local service on the line in the case of the BN and the time required to run over the line in the case of the D&I Railroad. The major grain shipper on the line is at Hawarden which is served from Sioux City. Running time on this line under Class 1 conditions from Sioux City to Hawarden is eight (8) hours for the round trip movement. If this line was imporved to Class 2 condintion, the round trip running time would be reduced to between 4½ to 5 hours. The D&I would experience a 7 hour round trip savings in their operation.

The beneficiaries of upgrading the line to Class 2 condition are the two operating railroads. Since the proposed improvement is not expected to result in increased rail traffic nor any change in existing rate structures, there are no benefits or disbenefits to shippers, the community, other modes or the state.

Annual benefits are calculated to be $21,600 per year to the BN and $13,500 per year to the D&I for a total of $35,100. Using a five percent discount rate, the savings result in benefits of $271,000 over a ten-year period.

Cost of the proposed project was estimated at $2,461,921.

CONCLUSIONS / RECOMMENDATIONS

The benefit/cost ratio for a Class 2 project was calculated to be 0.11. This finding concludes that the cost of the project exceeds the benefits to be gained. Therefore, a Class 2 project is not warranted under the premises used in the study.

PIERRE to RAPID CITY

LINE DESCRIPTION

The Chicago and North Western is the owner and operator of this 170.8 mile rail line. This line connects with their north-south line through Rapid City and with their line extending from Pierre into Minnesota. The line has a 210,000 pound weight limit due to the bridge condition on the line. The railroad has indicated that they will file the line for abandonment in 1983.

LINE SELECTION CRITERIA

The criteria used to select this line for study are A, B, C, D and E.

TRAFFIC CHARACTERISTICS

Total traffic on the line used for this analysis was 5,455 cars annually. Only 17 percent of this total (924 cars) actually originates on the line while the remaining 83 percent originates off-line and uses this path as a bridge. The originating traffic is all wheat. The overhead traffic consists of 2,280 cars of cement, 1,786 cars of wood products, 261 cars of flour, 144 cars of lime and 60 cars of wheat. Ft. Pierre and Ellsworth Air Force Base traffic were not included in this analysis.

ALTERNATIVES STUDIED

There were five (5) major alternatives studied which were divided into a number of sub-alternatives. In total, 28 sub-alternatives were analyzed based on operator, traffic assumptions, abandonment and reinstatement of State-owned rail line from Chamberlain to Rapid City.

SIGNIFICANT FINDINGS

It was estimated that the C&NW accrued net yearly revenues of $659,000 on this line's operations. This calculates to be $5.09 million discounted at 5 percent over a ten year period. This level of revenue would not return the capital investment for a $7.8 million rehabilitation project deemed necessary by the railroad. Total cost, or net revenue short-fall would be $2.71 million.

Basic assumptions on the traffic base are:

- -Wood chips and pulpwood logs would cease to move without the C&NW as operator of this line due to either the circuity of alternate rail routes or the division of rate disadvantage of two line hauls if another carrier was involved.
- -The cement would shift to a truck haul without the C&NW as the operator of this line due to circuity or division of the line haul rate.
- -Other commodities would be split between truck and rail depending on specific alternative.

There would result a severe traffic decrease without the C&NW as operator on the Pierre to Rapid City line. This conclusion means that there would be significantly less rail traffic for BN or short line alternatives and for the reinstatement of the Chamberlain to Rapid City line alternative.

Rehabilitation of the Pierre to Rapid City line is estimated at $7.8 million. This project would increase the load limit on the line to 251,000 pounds and allow 25 mph speeds.

Rehabilitation of the Mitchell to Rapid City line is estimated at $12.5 million. This project would leave the line with a 220,000 pound weight limit, but would allow 25 mph speeds. (It would cost over $35 million to increase the weight limit to 263,000 pounds.)

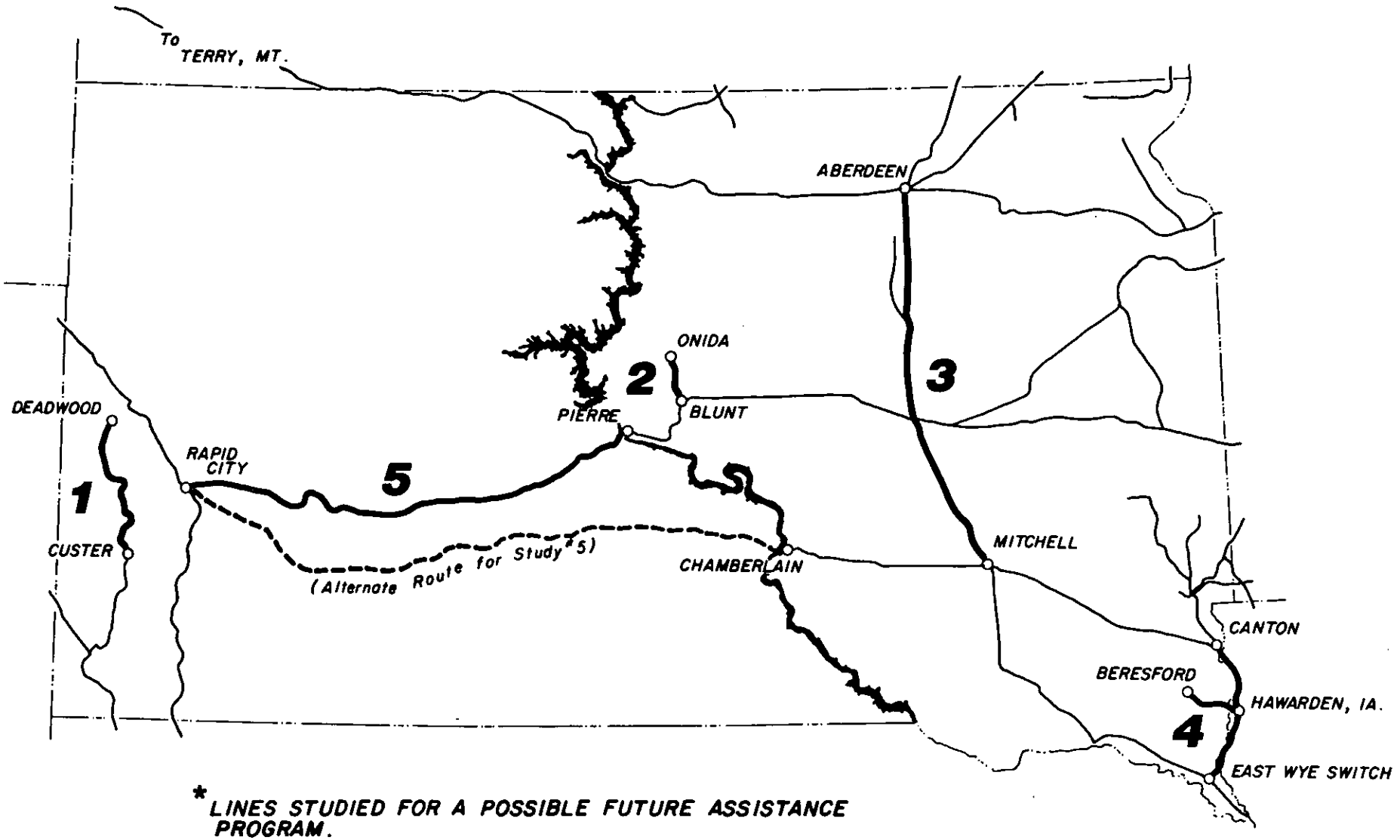
The railroad has filed an abandonment application on this line. This indicates they have no intention of providing the necessary rehabilitation funds for this line. If the decision were made to rehabilitate the line, funds would have to be acquired from sources other than the railroad. The remaining question is under what conditions the railroad would be willing to continue operations on this line.

CONCLUSIONS/ RECOMMENDATIONS

The analysis led to the conclusion that no practical alternative has been found. However, the lowest cost alternatives are those which involve continued C&NW operations.

FIGURE D - I

ECONOMIC EVALUATIONS OF FIVE(5) SOUTH DAKOTA RAIL LINES*



*LINES STUDIED FOR A POSSIBLE FUTURE ASSISTANCE PROGRAM.