RAILPLAN

SOUTH DAKOTA

executive summary

S.D. DEPT. OF TRANSPORTATION

JANUARY 1978

RAILPLAN SOUTH DAKOTA
EXECUTIVE SUMMARY

PART A

INTRODUCTION

South Dakota was not densely built with rail lines like most of the States located east of it. The dynamic westward race by the railroad companies to reach the West Coast made the State of South Dakota look like a rock in the middle of a giant stream. Main lines were built westward through Nebraska and North Dakota, around the State of South Dakota. Railroads were built in this State, but the majority are classified as secondary main and branch lines. These lines are left to support themselves as bridge traffic is very small or non-existent on most South Dakota lines.

South Dakota has yet to become densely populated or industrialized like many of the eastern states. Today agriculture is the largest industry and there are fewer people living in the state now than was recorded in the 1925 State census. The western half of the state has historically been cattle grazing country and sparsely populated while the eastern half is dotted with small towns and consists mainly of diversified farming operations. Railroad service is supported in the western sector by the lumbering industry of the Black Hills area, bentonite exports from the area west of Belle Fourche and cars carrying cement from Rapid City to points east. Rail service in the eastern sector is hinged largely upon crop production for originating traffic and agriculture related products such as fertilizer and machinery for terminating traffic. Much of the traffic on eastern South Dakota branch lines has historically been seasonal and cyclical with drought the dominating factor.

Deferred maintenance, which has been practiced extensively in South Dakota, has dealt a severe blow to transportation in this state. Today we find many miles of light rail (60# - 65#), millions of rotted ties, ballast which has long been lost in the grade, and wooden structures which have been weakened with age. These conditions cause derailments, have caused speeds to drop sharpely, service to be irregular and slow and these conditions prohibit the use of the 100 ton covered hopper cars. Slow and irregular service has been stated by many as the reason for much of the shift of potential rail traffic from the rails to the highways.

This shift of transportation mode is of the utmost importance to the South Dakota Department of Transportation because most of the roads in the state are not structurally designed to safely accommodate a sudden influx of heavy truck traffic. Therefore, a significant increase in truck traffic will result in a noticeable need for increased highway maintenance and will ultimately necessitate the reconstruction of many South Dakota highways.

The abandonment of branch lines has been prevalent in South Dakota for many years. Currently over 30% of all railroad mileage ever constructed in this state has already been approved for abandonment. Additionally, about 50% of the existing miles of railroad are potentially subject to abandonment in the upcoming years.

The State of South Dakota became actively concerned with the railroad problem in 1973 with the appointment of a Task Force to study the problem. The Division of Railroads within the South Dakota Department of Transportation was organized in 1975 to further study the problem and to find some solutions. The Task Force

was instrumental in initiating timely studies to fully explore the effects of abandonment on the State, communities and areas, and also set the direction for this State Rail Plan. The Task Force was replaced on July 1, 1977 with a five (5) member Railroad Advisory Commission. This commission now has the advisory authority to the Division of Railroads to aid in the planning process and to be instrumental in plan implementation.

Governor Richard F. Kneip, in a letter dated June 22, 1976, to Mr. Asaph H. Hall, Administrator, Federal Railroad Administration, designated the South Dakota Department of Transportation, Division of Railroads, as the agency to manage the rail planning process and subsidy program under the Railroad Revitalization and Regulatory Reform Act of 1976 (4-R Act) in the State of South Dakota.

One of the first and major charges under the 4-R Act was the development of this document, Railplan South Dakota. This Plan represents South Dakota's most significant involvement in rail planning to date and is timely because of the National energy issues, the need for an integrated transportation system, abandonments and bankruptcies of railroad companies.

Railplan is important in that it:

1. Defines, discusses and makes recommendations to resolve South Dakota rail issues.
2. Analyzes rail transportation as one element of the statewide transportation system plan.
3. Attempts to meet federal requirements to establish eligibility to receive federal assistance.

Part D of this plan lists rail lines in the State by priority as to their importance to statewide transportation needs and demands as a whole. The top priority lines are ones which are the most important to the South Dakota transportation system and abandonment of these should not be permitted. If monies become available through any source, the lines in the first two priorities will be given first consideration for subsidy, rehabilitation or whatever is necessary to guarantee and insure continued rail service. Lower priority lines are not recommended for State financial assistance for continued rail service, but we will not discourage financial support from "other" areas to promote continued rail service.

There are provisions in the 4-R Act for the South Dakota Department of Transportation to receive federal grant funds to aid railroad lines and shippers on lines which have been approved for abandonment. These projects have to be a part of the Rail Plan, or its update, and have approval by the Federal Railroad Administration before they become eligible for federal assistance.

Currently the State of South Dakota does not have a program to give financial support to continue rail service on low density branch lines in the state. Help will have to come from the Federal Government, concerned local shippers or new legislation will have to be enacted to provide assistance through appropriated state funds. Some possible solutions to the branch line problem are discussed in Part E of this report.

The South Dakota Railplan is not considered complete with this first effort. It is not possible to address all of the important issues in the time frame available and some of the issues addressed will require refinement during the continuing planning process. Also, as conditions change and additional data and information are collected, we will update the plan to reflect changing conditions and needs. The list of projects will be updated as more lines become eligible for federal funding under the 4-R Act.

This summary presents highlights of the State Rail Plan which contains considerable detail. For additional information, reference should be made to the full Railplan which will be made available in the near future. Copies will be made available for review at the major libraries across the state or copies can be secured at the Division of Railroads office in Pierre.

PART B

PLANNING PROCESS

The South Dakota Department of Transportation, Division of Railroads, has been designated as the agency to manage the rail planning process and subsidy program under the Railroad Revitalization and Regulatory Reform Act of 1976 (4-R Act) in the State of South Dakota. A planning work statement was prepared and submitted to the Federal Railroad Administration on December 8, 1976. This document described the planning process by which the State Rail Plan would be developed.

One of the first steps in the planning process was to identify rail related issues and problems, to develop the goals and objectives of the Department of Transportation and to establish the State Policy towards railroads and railroad planning.

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. These goals are as follows:

1. To foster a rail transportation system that will dependably, efficiently, economically and profitably move South Dakota's agricultural, natural resources and industrial production to market in a manner which will maintain and improve the competitive position of the State, its farmers and its industry.

2. To encourage and develop a rail system that will provide adequate, dependable service for all freight and passengers.

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

4. To develop, in the rail system, flexibility and responsiveness to changing shipper requirements.

5. To develop, through Multi-Modal transportation arrangements, competitive transportation options for those communities which lose rail service.

6. To provide for the handling of unprofitable rail service where the loss of such service will cause severe economic or socio-economic hardship.

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

8. To develop, maintain and improve the institutional capability for implementing state railroad policy by legislation and funding.

The South Dakota Department of Transportation adheres to and conducts its operation with the following objectives:

1. To provide and maintain for the people of South Dakota an adequate, safe, efficient and economical transportation system for the movement of persons and goods.

2. 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 at the same time giving consideration to state and local needs, desires and the social, economic, environmental and land use impacts.

3. 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 South Dakota Department of Transportation's policy towards railroads and railroad planning is as follows:

1. The State's recommended policy toward rail transportation can best be described as one of cooperation. Rail users, railroad companies, local governments and the State need to cooperate their efforts to solve transportation problems in this State.

2. The State will not openly oppose all railroad abandonment applications, but will first consider the potential for the viable operation of the line, social and economic impacts caused by abandonment of a line, the determination of shipper and community interest in the effected area and other factors which may be unique to a given area or a given line.

3. The State will not advocate a subsidy for continued rail service unless it is for a short term in order to deter abandonment until other means of transportation are developed, to establish profitability of the line, or if it is found to be in the best interest of the State of South Dakota to foster such a program for a particular rail line.

Data of social and economic nature used to determine the effects of abandonment on an area were provided by the University of South Dakota, Business Research Bureau. The transportation users questionnaire was also conducted by them. Each rail line was assigned a study area and transportation demands were calculated for each of these study areas. Other calculations made by the Business Research Bureau included the cost and effects of transporting all commodities from each study area by trucks.

The 4-R Act required each railroad company to classify each of their rail segments into one of five categories. These classifications were designed to give a warning as to the railroads intention on each line in respect to possible future abandonment of each line. On May 1, 1977 when all lines were classified, it was found that about 51% of all rail lines in South Dakota were potentially subject to abandonment at some time in the future. This 51% represented

1,632 miles of track located in 32 rail segments. Twenty-five of these lines were studied in depth and were designated as "Intensive Study Lines." The intensive study lines were studied in great depth on the viability of each line and also the cost of discontinued service (economic factors) vs the cost of continued service, which are two of the criteria used to prioritize the rail lines.

Pertinent rail related data was collected on every rail segment in the state and includes: stations on each line, miles between stations, type of line, maximum weight limit, maximum speed limit, frequency of service, open agencies, yards, physical characteristics including rail weights, ballast information, steepest grade, sharpest curves and number of bridges and trestles. Also included are the number of cars originating and terminating on each line, revenue generated, commodities originating and terminating on each line and train schedules. Highways serving the area and rail connections on each line were identified. Also included in the line inventory is a summary of potential transportation demands in the area, names and locations of grain elevators and average bushels of grain sold from the area. Other information was added as was pertinent to each rail line.

Some basic overview data was collected to analyze the rail system on a statewide basis. The highlights of this can be found in Part C, following. This data consisted of identifying the rail system in the State, freight traffic density characteristics and carloads by commodity type.

Based upon all the data and analysis thus far performed, the thirty-two lines were grouped into one of four (4) priority groups. The impacts were measured against the State's goals and objectives and the lines were ranked in priority order in accordance with their contribution to achieving these goals and objectives. More explicitly, the following criteria were employed for prioritizing those rail lines:

1. Viability
2. Necessary connection for statewide system
3. Shipper Interest
4. Effects of Abandonment
   (a) large social and economic impact
   (b) number of people effected
   (c) additional travel - distance factor
   (d) additional truck traffic generated

The four (4) priority groups and the list of rail lines in each group is documented in Part D of this report.

Some conclusions and recommendations to help solve South Dakota's rail problems are detailed in Part E of this report.

PART C

SOUTH DAKOTA RAIL SYSTEM

The railroad system in South Dakota, which at one time totaled 4,420 miles, has dwindled to a 3,356 mile system. In May of 1977 the railroad companies collectively classified over 50% of the miles of track in South Dakota as in ICC categories 1, 2 and 3 - that they are potentially subject to abandonment. Of this total, 525.2 miles were classified as Category 1 (will be filed for abandonment within the upcoming 3 year period), 858.2 miles as Category 2 (they are under study by the railroad company for possible future abandonment), 135.0 miles have been approved for abandonment (Category 3 - abandonment applications pending at the time of designation), 188.5 miles have been approved for abandonment but are not final as of this date (Category 3 at time of designation), and 11.9 miles are currently pending an ICC decision (currently Category 3).

In December 1977, 234.2 miles, which were classified as Category 1 lines, were filed for abandonment with the ICC. Current pending abandonments now total 247.1 miles.

Pending Abandonments before the ICC

1.	Minnekahta to Hot Springs (Bn)	12.9 miles
2.	Trail City to Faith (Milw)	106.5 miles
3.	Marion Jct. to Menno (Milw)	21.5 miles
4.	Bristol to Garden City (Milw)	28.8 miles
5.	Madison to Bryant (Milw)	47.3 miles
6.	Woonsocket to Wessington Springs (Milw)	15.2 miles
7.	Cherokee, Iowa to Sioux Falls (ICG)	14.9 miles

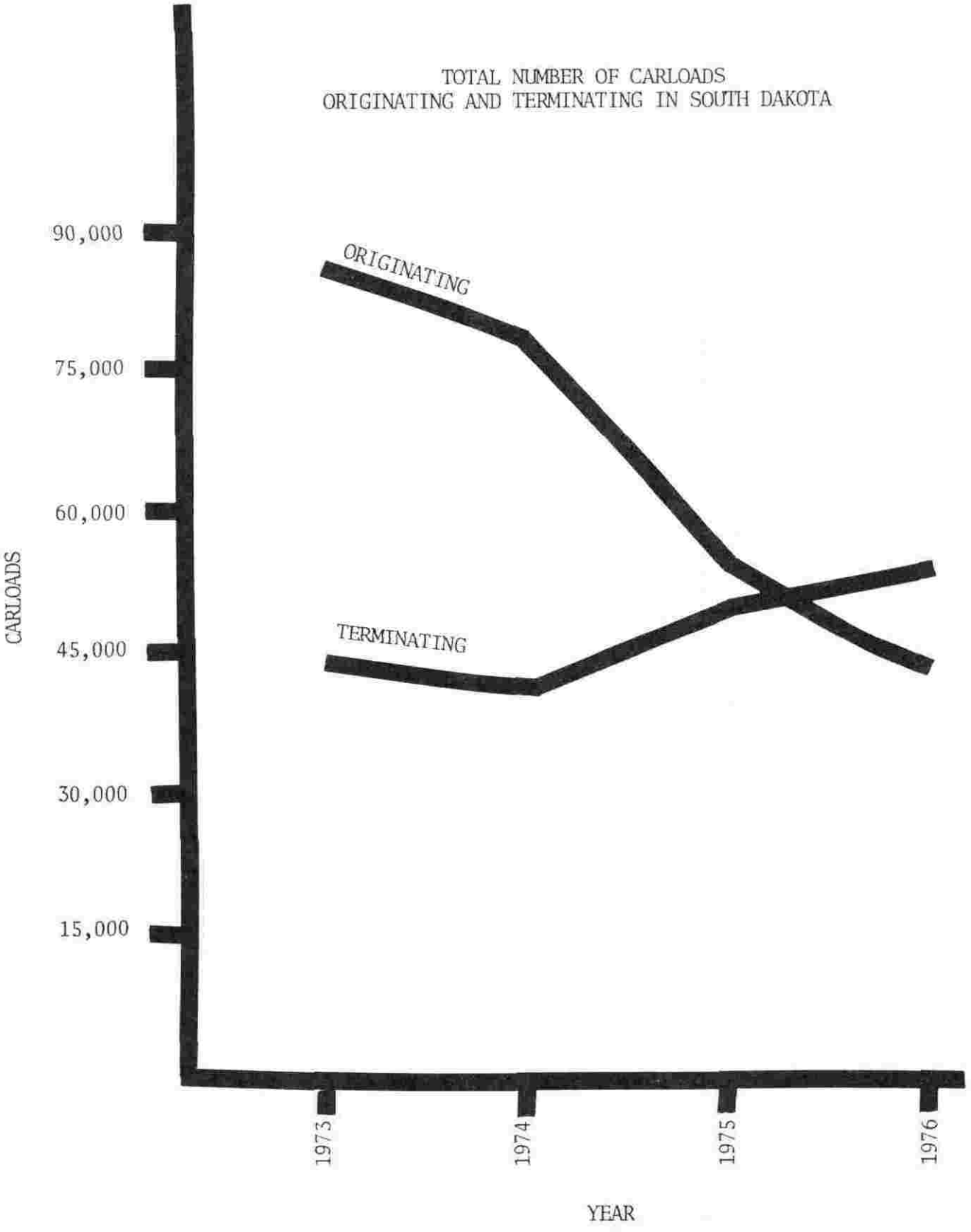
Over 80% of the current mileage is operated by two companies, the Milwaukee Road with 48% and the Chicago & North Western with 34% of the total mileage. Burlington Northern, Soo Line and Illinois Central Gulf Railroad Companies account for the remainder of the mileage.

RAILROAD	Total System Miles	Total S.D. Miles	% S.D. Miles of System
Milwaukee Road	10,074	1,596	15.8%
Chicago & North Western	9,977	1,150	11.5%
Burlington Northern	22,670	529	2.3%
Soo Line	4,590	66	1.4%
Illinois Central Gulf	9,159	15	0.1%
Total	56,470	3,356*	5.9%

*This mileage has decreased to 3,252 miles due to abandonments in 1977.

Total gross revenues for all railroad operations in South Dakota amounted to a little over $56 million in 1976 with about all of this originating from freight charges.

Railroad Company	Gross Revenues for SD Operations 1974	1975	1976
Milwaukee Road	$27,711,000	$28,507,000	$31,982,000
Chicago & North Western	12,325,595	11,829,515	12,433,000
Burlington Northern	8,804,353	9,850,000	11,745,000
Soo Line	73,579	61,583	49,363
Illinois Central Gulf	92,892	71,496	81,000
Total	$49,007,419	$50,319,594	$56,290,363


TOTAL NUMBER OF CARLOADS
ORIGINATING AND TERMINATING IN SOUTH DAKOTA
90,000
75,000
60,000
45,000
30,000
15,000
CARLOADS
ORIGINATING
TERMINATING
1973
1974
1975
1976
YEAR

Carloads of commodities originating and terminating in South Dakota totaled 97,230 in 1976, down from 128,776 in 1973. A large part of this decrease is attributable to the drought which occurred in 1975 and 1976. The number of cars originating in the State far outnumbered those terminating at one time, but this picture has gradually changed so that the two movements are nearly equal today. This is reflective of the fact that much of the exported grain is currently being transported by truck to the terminal markets located outside of South Dakota's borders. Also, the amount of inbound coal traffic has been increasing over the past few years.

NUMBER OF CARLOADS OF COMMODITIES ORIGINATING AND TERMINATING IN SOUTH DAKOTA

		1973	1974	1975	1976
Milwaukee Road					
Originating		29,360	27,360	17,951	13,032
Terminating		14,174	12,773	26,492	30,861
	Total	43,534	40,133	44,443	43,893
Chicago and North Western					
Originating		39,203	35,389	25,198	21,316
Terminating		17,045	15,829	13,352	11,679
	Total	56,248	51,218	38,550	32,995
Burlington Northern					
Originating		10,834	8,977	6,589	5,781
Terminating		10,877	10,419	9,095	9,900
	Total	21,711	19,396	15,684	15,681
Soo Line					
Originating		3,453	2,528	1,954	1,290
Terminating		211	95	106	106
	Total	3,664	2,623	2,060	1,396
Illinois Central Gulf					
Originating		1,816	3,625	2,316	1,891
Terminating		1,803	2,389	1,803	1,374
	Total	3,619	6,014	4,119	3,265
Total All Companies					
Originating		84,666	77,879	54,008	43,920
Terminating		44,110	41,505	50,848	53,920
	Total	128,776	119,384	104,856	97,230

Farm products which accounted for 38% of the total rail movement in 1973 has decreased to only 18% in 1976. Coal imports skyrocketed from 5% of the traffic in 1973 to 29% in 1976. Most of the other commodities transported remined fairly stable over the four year period 1973-1976. Non-metallic minerals, stone and clay, and primary metal products accounted for an additional 28% of the total rail traffic in 1973.

CARLOADS BY COMMODITY TYPE MOVED BY SD RAILROADS

COMMODITY	1973	1974	1975	1976
Farm Products	49,231	43,110	28,039	17,307
Forest Products	1	----	----	----
Fish & Marine Products	18	9	2	----
Metallic Ores	22	12	2	1
Coal	6,105	6,400	23,162	28,000
Crude Petroleum & Others	----	----	----	----
Non-Metallic Minerals	19,147	14,060	8,750	7,884
Ordnance & Acces.	78	30	15	16
Food & Kindred Products	11,761	13,019	10,043	9,305
Tobacco Products	8	8	12	17
Basic Textiles	43	64	65	79
Other Textiles	3	25	5	10
Lumber & Wood Products	7,078	6,934	5,792	7,025
Furniture	608	649	480	422
Pulp, Paper & Others	1,320	1,435	1,155	1,441
Printed Matter	2	2	1	4
Chemicals & Allied Products	4,862	4,701	4,041	3,074
Petroleum & Coal Products	3,398	2,174	1,601	1,494
Rubber & Misc.	412	361	273	342
Leather & Related Products	----	----	45	25
Stone, Clay & Others	15,251	16,586	14,753	14,458
Primary Metal	1,567	1,399	919	818
Fabr. Metal Products	1,933	1,343	630	637
Machinery	1,348	1,493	1,428	1,110
Electrical Machinery	468	564	220	203
Transportation Equipment	452	420	264	231
Instruments & Others	----	----	4	6
Misc. Products	52	49	31	22
Waste & Scrap Metal	1,236	1,617	839	1,287
Misc. Freight Shipments	143	197	76	44
Containers & Others	317	292	154	123
Freight Forwarder Traffic	145	75	274	111
Shipper Assoc.	110	217	205	312
Misc. Mixed Shipments	1,657	2,139	1,576	1,422
GRAND TOTAL	128,776	119,384	104,856	97,230

According to the 1972 1% Waybill Sample, 83% of the total rail movement was interstate in nature with only 17% both originating and terminating in South Dakota. Non-metallic minerals accounted for 73% of the intrastate carloads while clay, concrete and stone products accounting for an additional 21% of the carload. Carloads destined for the states of Minnesota, Iowa, Wisconsin and Nebraska accounted for 59% of the total outbound movement. Cars originating in Wyoming, Iowa, Minnesota and Illinois accounted for 50% of the inbound traffic.

The following data is based upon the 1972 1% Waybill Sample of South Dakota originating and terminating rail freight carloads.

55,800	- number of outbound carloads
23,800	- number of inbound carloads
79,600	Total Interstate carloads = 83% of total
15,900	- Total Intrastate carloads = 17% of total
95,500	Total rail traffic

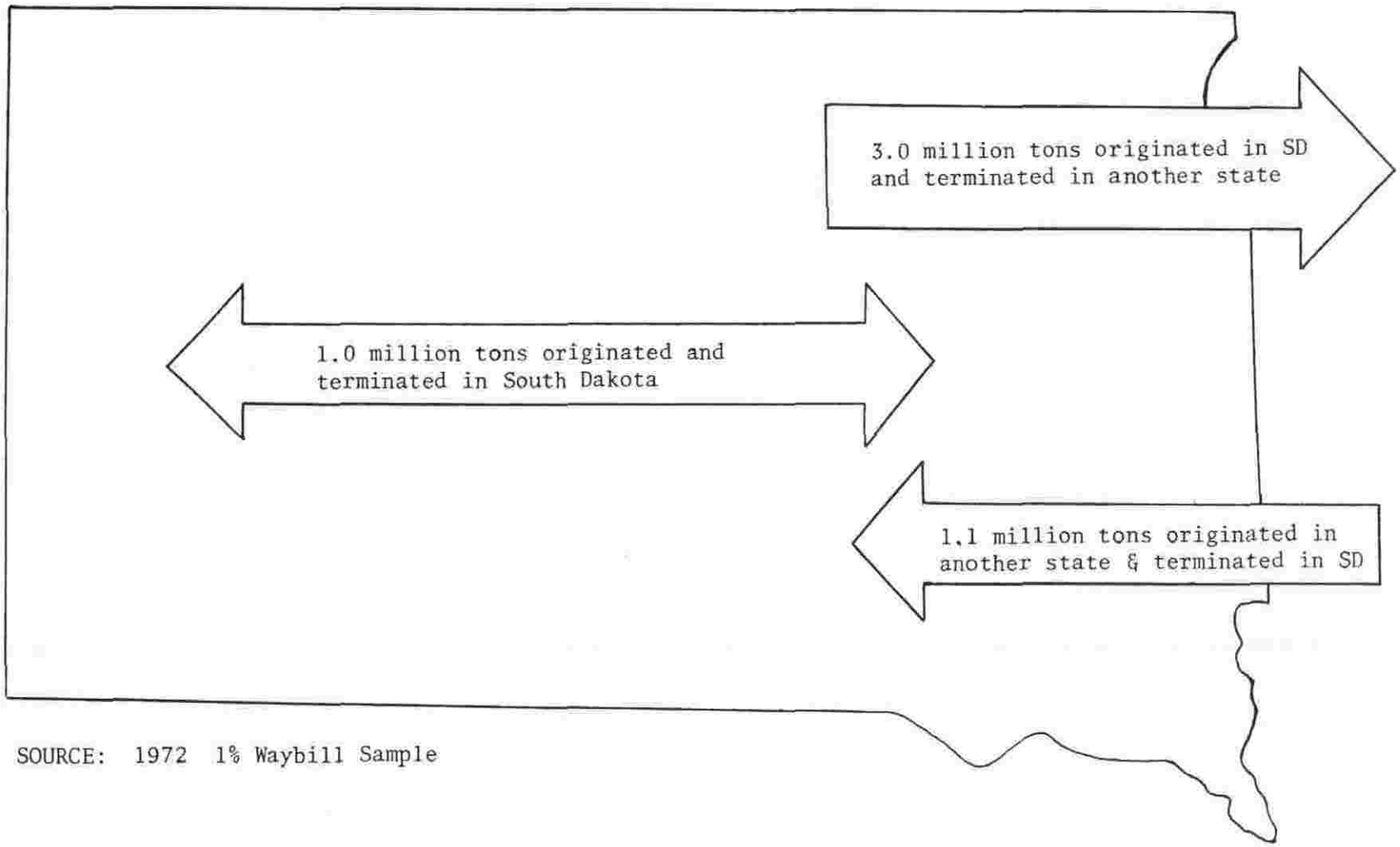
	Intrastate number of carloads
11,600	- non-metallic minerals
3,400	- clay, concrete or stone products
900	- Other products
15,900	Total

Outbound number of carloads (rail traffic)

15,400	SD to Minn.	28%
6,100	SD to Iowa	11%
5,900	SD to Wisc.	11%
5,100	SD to Neb.	9%
4,400	SD to MO	8%
4,000	SD to Texas	7%
2,800	SD to Kan.	5%
1,900	SD to Ill.	3%
1,900	SD to Wa.	3%
8,300	SD to all other	15%
55,800	TOTAL States	

Inbound number of carloads (rail traffic)

5,800	Wyo. to SD	24%
2,400	Iowa to SD	10%
1,800	Minn. to SD	8%
1,800	Ill. to SD	8%
1,500	Wisc. to SD	6%
1,400	Kan. to SD	6%
1,200	Neb. to SD	5%
1,000	Mo. to SD	4%
6,900	All other states	29%
23,800	TOTAL to SD	



SOURCE: 1972 1% Waybill Sample

SOUTH DAKOTA

RAIL FREIGHT TRAFFIC

One provision in the Railroad Revitalization and Regulatory Reform Act of 1976 (4-R Act) required each railroad company to classify each of their rail lines into one of five classifications. These classifications were designed to give the States, shippers and others an indication as to possible future plans (abandonment potential) the company had toward their branch lines. After these designations were made South Dakota had 32 lines totaling over 1,600 miles which were classified as potentially subject to abandonment.

The State of South Dakota, in order to determine which rail lines were vitally necessary to the statewide rail network and to single out those segments which had little effect upon the state transportation system as a whole, had to collect and analyze considerable data on rail lines which were subject to possible future abandonment. Of the 32 lines designated as potentially subject to abandonment, the following 25 lines were classified by the State as "Intensive Study Lines" and have undergone considerable analysis.

INTENSIVE STUDY LINES

MILWAUKEE ROAD

1. Bristol - Garden City
2. Trail City - Faith
3. Marion - Menno
4. Woonsocket - Wessington Springs
5. Napa (near Yankton) - Platte
6. Madison - Bryant

7. Milbank - Sisseton
8. Andover, SD - Brampton, ND
9. Roscoe, SD - Linton, ND
10. Moreau Jct. (near Mobridge) - Isabel
11. Mitchell - Canton
12. Mitchell - Yankton - Elk Point
13. Sioux Falls - Sioux Falls Jct. (near Egan)
14. Egan - Madison
15. Aberdeen - Edgeley, ND
16. Mitchell - Rapid City

CHICAGO & NORTH WESTERN

17. Redfield - Frankfort

18. Ellis (6.8 miles west of Sioux Falls) - Mitchell
19. Gary, SD - Tracy, Minn.

20. Wren, Iowa - Iroquois, SD
21. Watertown - Clark

BURLINGTON NORTHERN

22. Sioux Falls - Yankton
23. Sioux Falls (West Jct.) - Hayti

SOO LINE

24. Pollock, SD - Wishek, ND

ILLINOIS CENTRAL GULF

25. Sioux Falls - Cherokee, Iowa

THE FOLLOWING SEVEN (7) RAIL LINES WERE DESIGNATED BY THE OWNING RAILROADS AS EITHER CATEGORY 1, 2 or 3 BUT FOR REASONS DOCUMENTED BELOW WERE OMITTED FROM INTENSIVE STUDY ANALYSIS IN THE STATE RAIL PLAN:

1. Elk Point to Canton (Milwaukee Road)
   The majority of the Stations on this line are located in the State of Iowa and traffic data was not available for Intensive Study at this time. It was assumed at this time that this rail line will be necessary for the railroads operation.

2. Winner to Norfolk, Neb. (Chicago & North Western)
   The majority of this line lies in the State of Nebraska and its fate rests with this states decision. This line is currently undergoing abandonment proceedings and from the data presented it does not appear that this could become a viable line.

3. James Valley Jct. to Redfield (Chicago & North Western)
   The railroads decision to abandon this line is hinged upon the railroad (Chicago & North Western) being granted operating rights over the parallel Milwaukee Road Route between these approximate two points. There is only one station on this line which has demonstrated any interest in rail transportation.

4. Ortonville, Minnesota to Fargo, North Dakota (Milwaukee Road)
   This line passes through the extreme northeastern tip of the State and serves only one station in South Dakota which does not use the railroad for transportation.

5. Hill City to Keystone (Burlington Northern)
   This is a one shipper line which moves mainly minerals which is a low generating revenue commodity. There has been shown interest by a local firm of acquiring the line if it were to be abandoned so that if this were the case the rail facilities would remain intact.

6. Minnekahta to Hot Springs (Burlington Northern)
   This is basically a one shipper line which transports aggregates. It is quite certain that this line will be abandoned and the shipper will convert to trucks.

7. Jolly to Jolly Dump (Chicago & North Western)
   This is a short segment of track which is used mainly as a loading point for wood products by two or three companies. These companies are currently moving to the nearby Chicago & North Western Rapid City to Bentonite line which will eliminate the need for this line.

The Intensive Study Lines were studied in great depth on the viability of each line and also the cost of discontinued service (economic factors) vs continued service, which are two of the criteria for prioritizing the rail lines. The ranking of these rail lines by viability and economic factors follows. Other factors besides these two were considered to arrive at the priority list found in Part D.

Group 1 lines on the following table are currently viewed as profitable. Group 2 lines do earn a small profit, but the return is not sufficient to cover anticipated capital improvements. Group 3 lines are not profitable, but if they were rehabilitated and traffic increased 10% and upwards, they could become marginally profitable. Group 4 lines are unprofitable under any reasonable assumption concerning traffic growth and upgrading. The lines are ranked within each group according to the cost of discontinued service (socio-economic factors of abandonment).

VIABILITY ANALYSIS

RANK	DESCRIPTION/RAILROAD		ESTIMATED TRACK CLASS	ESTIMATED TRACK SPEED	CURRENT PROFIT OR (LOSS)	MINIMUM REHAB EST (1)	MAXIMUM REHAB EST (2)	4 YEAR TOTAL COST OF DICONT. SERVICE
	GROUP 1							
1	Cherokee, Ia to Sioux Falls	(ICG)	3	40	1,477,647	540,000	NA	42,000
2	Mitchell to Rapid City	(MILW)	3	30	629,703	10,306,800	54,397,000	9,875,000
3	Andover to Brampton, ND	(MILW)	2	20	231,203	1,630,200	8,151,000	1,167,000
	GROUP 2							
4	Hawarden, IA to Salem	(CNW)	3	30	37,458	3,331,510	NA	2,916,000
5	Milbank to Sisseton	(MILW)	2	25	73,122	1,409,800	7,049,000	1,052,000
6	Woonsocket to Wessington Spg	(MILW)	2	20	20,423	573,800	2,869,000	450,000
7	Jackson, Minn to Madison	(MILW)	2	25	27,035	1,451,600	7,125,000	1,107,000
8	Sioux Falls to Yankton	(BN)	2	25	15,673	2,397,800	11,989,000	1,220,000
9	Roscoe to Linton, ND	(MILW)	2	25	14,544	1,531,400	14,307,000	883,000
	GROUP 3							
10	Watertown to Clark	(CNW)	1	10	4,060	204,000	5,909,000	1,263,000
11	Redfield to Frankfort	(CNW)	1	10	(18,510)	291,000	2,033,000	348,000
12	Sioux Falls to Hayti	(BN)	2	25	(181,898)	3,252,800	16,264,000	1,688,000
13	Wishek, ND to Pollock	(SOO)	2	20	(51,577)	1,246,400	6,232,000	287,000
14	Moreau Jct to Isabel	(MILW)	2	25	(147,488)	2,086,200	10,431,000	438,000
	GROUP 4							
15	Sioux Falls to S.F. Jct.	(MILW)	2	25	(208,616)	1,227,400	6,137,000	4,131,000
16	Sioux Falls to Mitchell	(CNW)	1	10	(146,022)	1,956,000	13,680,000	1,863,000
17	Marion Jct to Menno	(MILW)	1	10	(51,191)	639,000	4,084,280	569,000
18	Elk Point to Mitchell	(MILW)	3	40	(492,346)	4,201,200	NA	3,635,000
19	Canton to Mitchell	(MILW)	2	25	(245,214)	3,009,600	NA	1,822,000
20	Napa to Platte	(MILW)	2	25	(232,064)	3,131,200	15,656,000	1,586,000
21	Bristol to Garden City	(MILW)	2	20	(86,934)	1,102,000	5,378,862	311,000
22	Madison to Bryant	(MILW)	2	25	(211,414)	1,805,000	9,025,000	584,000
23	Aberdeen to Edgeley, ND	(MILW)	2	25	(115,847)	1,200,800	6,004,000	290,000
24	Trail City to Faith	(MILW)	2	25	(466,411)	4,031,800	21,004,297	436,000
25	Canby, Minn to Gary	(CNW)	1	5	27,460	30,000	190,000	125,000

(1) Estimates to perform minimum tie replacement and ballast addition to bring track up to existing classification.
(2) Estimates to perform maximum track restructuring including rail replacement to handle 263,000 # loads at 25 MPH.

SOUTH DAKOTA INTENSIVE STUDY BRANCH LINES

SEGMENT	RR CO.	SD MILES	1974 SD DATA CARS	C/M	REVENUE	GTM	SPEED LIMIT	RAIL WT.#	WEIGHT LIMIT
Milbank - Sisseton	MILW	37.1	1,121	30	843,562	120,000	25	60	220,000
Bristol - Garden City	MILW	29.0	238	8	146,499		20	56	220,000
Andover - Brampton, ND	MILW	42.9	1,103	26	662,696	100,000	20	56	220,000
Roscoe - Linton, ND	MILW	75.3	499	12	352,408	70,000	25	56	220,000
Moreau Jct. - Isabel	MILW	54.9	330	6	239,514	40,000	25	65-100	220,000
Trail City - Faith	MILW	106.1	310	3	235,408	40,000	25	65	220,000
Canton - Mitchell	MILW	79.2	2,830	36	1,359,814	710,000	25	75-100	263,000
Aberdeen - Edgeley, ND	MILW	31.6	236	9	120,445	100,000	25	56- 65	220,000
Marion - Menno	MILW	21.3	429	20	169,270	40,000	10	60	220,000
Woonsocket - Wess.Spgs.	MILW	15.1	314	21	165,179	40,000	20	60	220,000
Mitchell - Rapid City	MILW	286.3	8,454	30	4,702,063	640,000	30	65	220,000
Sioux Falls - S.F.Jct.	MILW	32.3	2,994	93	669,447	890,000	25	65	220,000
Elk Point - Mitchell	MILW	116.7	2,105	18	940,985	1,330,000	40	85-112	263,000
Napa - Platte	MILW	82.4	1,136	14	441,172	110,000	25	60	220,000
Madison - Jackson, Minn.	MILW	37.5	896	24	452,282	190,000	25	65	220,000
Madison - Bryant	MILW	47.5	501	10	204,624	40,000	25	65	220,000
Sioux Falls - Mitchell	CNW	72.0	1,543	24	559,385	140,000	10	80- 90	210,000
Iroquois - Wren, Iowa	CNW	125.5	2,424	28	961,350	80,000	30	80-112	251,000
Watertown - Clark	CNW	31.1	409	13		20,000	10	72	210,000
Redfield - Frankfort	CNW	10.7	289	27	153,008	20,000	10	72	210,000
Gary - Canby, Minn.	CNW	1.0	139		54,194	60,000	5	65	210,000
Sioux Falls - Yankton	BN	63.1	1,425	23	607,864	147,900	25		220,000
Sioux Falls - Hayti	BN	85.6	1,384	16	606,775	119,400	25	60	220,000
Pollock - Wishek, ND	SOO	32.8	220	7	139,647	42,000	20		
Sioux Falls-Cherokee, Ia	ICG	14.9	7,491	78	3,389,612	610,000	40	90	177,000

PART D

STATE PRIORITY CLASSIFICATION

The State of South Dakota has ranked all of its rail lines as to their general importance to statewide transportation needs. This ranking is essential because of the large number of abandonment applications which have been filed or will be filed in the very near future. This ranking is also important because the limited resources readily available are not anywhere near the amount necessary to aid those lines which the State recommends should not be abandoned. The priority classification is the result of analyzing each rail line in the state against the goals and objectives of the South Dakota Department of Transportation and the following criteria:

1. Viability
2. Necessary connection for statewide system
3. Shipper interest
4. Effects of abandonment
   (a) large social and economic impact
   (b) number of people effected
   (c) additional travel - distance factor
   (d) additional truck traffic generated

The South Dakota statewide priority classification of rail lines consists of the following five (5) parts:

1. Basic System - This category contains those rail lines classified in ICC Category 5. This category means that if traffic holds up on the lines they are not in immediate danger of being abandoned. These lines generally carry considerable tonnage and continued rail service on these lines is vitally important as long as existing traffic is maintained. This list of rail lines is not the basic skeletal system recommended for the statewide network, but is the basic starting point on which to build the system. There are strategic areas void of rail service in this basic system which the first and second priorities will satisfy. This system totals, 1,578.8 miles.

2. First Priority - These rail lines have been designated by the railroad companies as in ICC Categories 1, 2 or 3, that they are potentially subject to abandonment. These lines are necessary to complement the Basic System to form the skeletal statewide rail system. Each has met two or more of the criteria for prioritization. This priority totals 758.5 miles.

3. Second Priority - This group of lines also contains positive factors which warrant their inclusion in the plan as lines on which rail service should be retained if at all possible after the first priority lines are satisfied. These lines may have the potential for a viable operation, may have a significant impact if abandoned and may have shipper support for continued rail service which are three of the criteria considered. This priority contains 249.3 miles.

4. Third Priority - This group of lines do carry some traffic, but it is generally insufficient to have a potential for a viable operation. They may have some economic impacts if abandoned, but generally smaller impacts than those lines in the second priority. There has been, up to this point, less shipper interest for continued rail service. Also included in this group are four lines which have their connections outside of South Dakota borders. Although they carry South Dakota traffic they apparently do not generate sufficient traffic in the neighboring state to warrant a high priority. This priority totals 543.7 miles.

5. Fourth Priority - This group of lines generally carry little or no South Dakota traffic, have little shipper interest in rail service retention, have no potential for a viable operation and will result in small impacts if abandoned. The line, CN04 (Part), generates little traffic and the bridge traffic will be carried by the Chicago & North Western on the Milwaukee Road tracks between Wolsey and Redfield if the line is abandoned. There is little chance that any of these lines will be recommended for State or Federal financial support for continued service with the exception that we will cooperate with North Dakota and Minnesota on line MW13. This priority totals 121.3 miles.

The rail lines within each priority are not ranked in any form of priority.

STATEWIDE RAIL PLAN

SEGMENT NO (1)	MILES (2)	LIMITS OF SEGMENT
BASIC SYSTEM - LINES CLASSIFIED AS CATEGORY 5		
BN01	4.6	Willmar, Minn. to Garretson, SD
BN02	8.1	Garretson, SD to Sioux City, IA
BN03	18.5	Garretson to Sioux Falls
BN06	45.1	Benson, Minn. to Watertown, SD
BN07	69.8	Watertown to Huron
BN08	53.6	Geneseo Jct. to Aberdeen, SD
BN09	27.4	Alliance, Neb. to Edgemont, SD
BN10	21.4	Edgemont, SD to Gillette, Wyo.
BN11	106.9	Edgemont to Deadwood
BN14	3.2	Kirk to Lead
SL01	33.5	Veblen Jct., ND to Veblen, SD
CN01	90.2	Tracy, Minn. to Huron, SD
CN02	117.7	Huron to Pierre
CN03	170.8	Pierre to Rapid City
CN05	38.6	Aberdeen to Oakes, ND

STATEWIDE RAIL PLAN (Cont'd)

SEGMENT NO (1)	MILES (2)	LIMITS OF SEGMENT
BASIC SYSTEM - LINES CLASSIFIED AS CATEGORY 5		
CN06	84.0	Chadron, Neb. to Rapid City, SD
CN07	71.0	Rapid City, SD to Bentonite, Wyo.
CN09	15.8	Worthington, Minn. to Sioux Falls, SD
CN10 (Part)	6.7	Sioux Falls to Ellis
CN12	44.2	Sioux Valley Jct. to Watertown
CN13	31.1	Watertown to Clark
CN16	40.3	Blunt to Gettysburg
CN19		Box Elder to Ellsworth AFB
MW01	109.3	Montevideo, Minn. to Aberdeen, SD
MW02	98.2	Aberdeen to Mobridge
MW03	92.0	Mobridge, SD to Marmarth, ND
MW12	9.7	McLaughlin, SD to New England, ND
MW14	3.0	Mason City, IA to Canton, SD
MW16	54.6	Mitchell to Wolsey
MW17	74.0	Wolsey to Aberdeen
MW22 (Part)	14.7	Sioux City to East Wye Switch (Elk Point)
MW22 (Part)	20.8	Canton to Sioux Falls
TOTAL MILES	1,578.8	

(1) CN (Chicago & North Western), MW (Milwaukee Road), BN (Burlington Northern), and SL (Soo Line)
(2) Figures shown are South Dakota mileage only.

RAILROAD	SD MILES	CATEGORY	LIMITS OF SEGMENT
FIRST PRIORITY RAIL LINES			
MILW	37.1	2	Milbank to Sisseton
MILW	42.9	2	Andover, SD to Brampton, ND
MILW	40.3	2	Roscoe, SD to Linton, ND
MILW	79.2	2	Canton to Mitchell
MILW	286.3	2	Mitchell to Rapid City
MILW	49.1	2	Elk Point to Canton
MILW	32.3	2	Sioux Falls to Sioux Falls Jct.
MILW	116.7	2	Elk Point to Mitchell
MILW	25.1	2	Egan to Madison
C & NW	49.5	3	Hawarden, IA to Parker, SD
TOTAL MILES	758.5		
SECOND PRIORITY RAIL LINES			
MILW	54.9	2	Moreau Jct. to Isabel
MILW	31.6	2	Aberdeen to Edgeley, ND

RAILROAD	SD MILES	CATEGORY	LIMITS OF SEGMENT
SECOND PRIORITY RAIL LINES (Cont'd)			
MILW	15.1	1	Woonsocket to Wessington Springs
MILW	82.4	1	Napa to Platte
C & NW	65.3	2	Ellis to Mitchell
TOTAL MILES	249.3		
THIRD PRIORITY RAIL LINES			
BN	63.1	1	Sioux Falls to Yankton
BN	85.6	1	Sioux Falls to Hayti
ICG	14.9	1	Cherokee, IA to Sioux Falls, SD
SOO	32.8	2	Wishek, ND to Pollock, SD
CNW	42.2	5	Redfield to Aberdeen
CNW	26.3	3	Parker to Salem
CNW	10.7	1	Redfield to Frankfort
CNW	1.0	2	Canby, Minn. to Gary, SD
CNW	63.2	3	Winner, SD to Norfolk, Neb.
MILW	29.0	1	Bristol to Garden City
MILW	106.1	1	Trail City to Faith
MILW	21.3	1	Marion Jct. to Menno
MILW	47.5	1	Madison to Bryant
TOTAL MILES	543.7		
FOURTH PRIORITY RAIL LINES			
BN	12.9	3	Minnekahta to Hot Springs
BN	8.8	1	Hill City to Keystone
CNW	36.2	1	James Valley Jct. to Redfield
CNW	3.7	1	Jolly to Jolly Dump
CNW	50.4	3	Salem to Iroquois
MILW	1.3	2	Ortonville, Minn. to Fargo, ND
MILW	8.0	1	Jackson, Minn. to Egan, SD
TOTAL MILES	121.3		

The Chicago & North Western and the Milwaukee Road closely parallel each other between Redfield and Aberdeen. This corridor is a necessary link in the South Dakota rail network. If operating rights can be secured by either company, one line between these points would be all that is necessary to serve the statewide needs. The Milwaukee Road line was given a higher priority between these two points because it is in better physical shape and we knew what traffic originated and terminated on the Milwaukee Road segment whereas we were not supplied this type data on the Chicago & North Western line.

The Chicago & North Western line from James Valley Jct. to Redfield was given a low priority because it generated little traffic and it is assumed that the Chicago & North Western will obtain operating rights on the Milwaukee Road from Wolsey to Redfield before they file for abandonment on their line.

The South Dakota part of the Winner to Norfolk, Nebraska Chicago & North Western line was given a low priority because it is unlikely that service will be retained on the Nebraska part of this line where the rail connection is located.

LINE DESCRIPTION	STATE PRIORITY	CRITERIA FOR PRIORITIZATION						
		VIABILITY	NECESSARY CONNECTION	SHIPPER INTEREST	EFFECTS OF ABANDONMENT			
					ECONOMIC IMPACT	PEOPLE EFFECTED	ADDITIONAL TRAVEL	ADDITIONAL TRUCKS
MILBANK TO SISSETON	1	X			L	L	L	L
ANDOVER TO BRAMPTON,ND	1	X		X	L	S	S	L
ROSCOE TO LINTON,ND	1	X		X	S	S	L	S
CANTON TO MITCHELL	1		X		L	L	L	L
MITCHELL TO RAPID CITY	1	X		X	L	L	L	L
ELK POINT TO CANTON	1		X		S	S	L	
SIOUX FALLS TO SIOUX FALLS JCT.	1		X	X	L	L	L	L
ELK POINT TO MITCHELL	1		X	X	L	L	L	L
EGAN TO MADISON	1	X		X	L	L	S	S
PARKER TO HAWARDEN,IOWA	1	X		X	L	L	S	L
MOREAU JCT. TO ISABEL	2				S	S	L	S
ABERDEEN TO EDGELEY,ND	2				S	S	S	S
WOONSOCKET TO WESSINGTON SPRINGS	2	X		X	S	S	S	S
NAPA TO PLATTE	2			X	L	L	L	L
ELLIS TO MITCHELL	2				L	L	S	L
SIOUX FALLS TO YANKTON	3	X			L	L	S	L
SIOUX FALLS TO HAYTI	3				L	L	S	L
SIOUX FALLS TO CHEROKEE,IA.	3	X			L	S	S	L
POLLOCK TO WISHEK,ND	3				S	S	S	S
REDFIELD TO ABERDEEN	3					S	S	
PARKER TO SALEM	3				S	S	S	S
REDFIELD TO FRANKFORT	3	X			S	S	S	S
GARY TO CANBY,MINN.	3				S	S	L	S
WINNER TO NORFOLK,NEB.	3				L	L	L	L
BRISTOL TO GARDEN CITY	3				S	S	S	S
TRAIL CITY TO FAITH	3				S	L	L	S
MARION JCT. TO MENNO	3				S	L	S	S
MADISON TO BRYANT	3				S	S	S	S
MINNEKAHTA TO HOT SPRINGS	4				S	S	S	S
HILL CITY TO KEYSTONE	4				S	S	S	S
JAMES VALLEY JCT. TO REDFIELD	4				S	S	S	S
JOLLY TO JOLLY DUMP	4				S	S	S	S
SALEM TO IROQUOIS	4				S	S	L	S
ORTONVILLE,MINN. TO FARGO,ND	4				S	S	S	S
EAGON TO JACKSON,MINN.	4				S	S	S	S

NOTE: Large economic impact is one over $1,000,000 for a 4 year total = L
Large number of people effected is 5,000 and over = L
Large additional travel is over 25 miles of distance to nearest rail line with service = L
Large additional number of trucks is equal to 1,000 or more rail cars moved on the line during the 1974 season = L

IMPLEMENTATION

The 4-R Act makes provisions for federal assistance on rail lines which have been approved by the ICC for abandonment, providing they are projects included in the State Rail Plan. These projects then have to be approved by the Federal Railroad Administration. Rail lines which have been approved for abandonment by the ICC and so are technically eligible to become projects in this State Rail Plan are as follows:

1. Roscoe to Orient (Milw.) 40.8 miles. This was a light density line and commodities are now moving by truck substitute service to Aberdeen. There was no shipper interest on this line. Abandonment approved 1977.

2. Watertown to Stratford (C & Nw) 71.4 miles. This was a light density line with little shipper interest. Abandonment approved in February 1977.

3. Clark to Doland (C & Nw) This 18.7 mile segment of the Watertown to Doland line was approved for abandonment in 1977 due to light usage. The Watertown to Clark part was denied abandonment by the ICC.

4. Yankton to 4.1 miles Northeast. (Bn) This segment was approved for abandonment in June 1976. Service on this branch line which connects Sioux Falls to Yankton was not impaired because operating rights were secured from the Milwaukee Road on a parallel four mile segment.

5. Wren, Iowa to Iroquois, SD (C & Nw). Abandonment of this 155.7 mile segment was approved in 1977.

6. Winner, SD to Norfolk, Neb. (C & Nw) Abandonment of this 174.9 mile segment was approved in 1977. Financial assistance on this line is dependent upon what action is taken on that part of the line located in Nebraska. If service is maintained in Nebraska the State of South Dakota will study this in more detail for a possible project under the 4-R Act.

The only rail line which is eligible to receive rail service continuation assistance under the 4-R Act at this time which the State endorses is part of the Wren, Iowa to Iroquois, SD line. It would be desirable to maintain service on the Hawarden (SD border) to Parker part of this line which is 49.5 miles long. It is recommended to use 4-R Act funding to purchase all or a part of the 49.5 miles and allow another carrier to operate on and serve the shippers along this line.

There are other financial assistance provisions under the 4-R Act other than continued rail service assistance which the State will investigate as lines are approved for abandonment. We will be looking into the possibility of aiding in shipper relocation from an abandoned line to one with rail service. These projects initially may effect shippers on that part of the Wren, Iowa to Iroquois, South Dakota line that will loose rail service and the South Dakota part of the Winner line if abandonment is permitted.

Because we do not know which lines will first become eligible for funding under the 4-R Act, we feel it a waste of time to try to guess and prioritize lines not yet eligible. Rather we prefer to list lines by the four priority groups of which the first group consists of the top priority lines according

to the State's goals and criteria for line selection. These first priority lines will be projects for first consideration for any type of financial assistance and they will be dealt with individually. The abandonment of one line or financial assistance to one line may well create a shift in line priority and each action will be analyzed and weighed individually as happenings occur. The only logical approach to today's problem is to have a living, ongoing, responsive continuing planning process and periodic plan updates. This approach will be the most effective in the overall long range planning and will also be a method of having continual shipper and citizen input and review of the plan. Shipper relocation assistance will also be investigated for those rail lines in Priority 3 and Priority 4 as they become eligible providing that the assistance is available.

The State of South Dakota does not at this time have any means of financially aiding rail segments except through the 4-R Act. This source of funding will be largely inadequate to solve the rail problem in this state. There are several possible funding sources and schemes that the State will explore to provide assistance to rail lines in the future. Part E following will outline some possible ways to help solve the branch line problem in South Dakota

The first priority lines outlined previously will be projects for first consideration for any type of State involvement in financial assistance to rail lines.

PART E

CONCLUSIONS AND RECOMMENDATIONS

South Dakota will be faced with numerous abandonment applications within the upcoming three year period. The railroads have indicated that about one half of the statewide existing trackage is under study for possible abandonment. The wholesale outright loss of this amount of rail lines in this state would put a crippling blow on the highways of this state and the leading industry - agriculture.

Historically the railroads have won their abandonment appeals and have, without regard to the State or its shippers, been permitted to discontinue service and remove their track and dispose of their property.

With this Statewide Rail Plan the State of South Dakota has studied and analyzed the rail system and the transportation needs to a degree whereby it is documented which rail lines are important to the State. The problem becomes complex at this point in that the ICC may, and probably will, rule in favor of the railroad abandonment put before them. This being the rule, the State and/or local entities will have to be prepared to put forth some financial aid and support to maintain continued rail service on those lines which are determined necessary.

The practice of deferred maintenance over the years has taken the toll on most rail lines in the state. Most lines are railed with old obsolete light rail and have a high percentage of deficient ties. The service has become slower and less reliable and many shippers have switched to the highway mode to satisfy their transportation demands. It has been determined that on certain rail lines in the state where shipper interest is present and that considerable traffic is currently moving on the highways that if a dependable rail service were provided additional rail traffic would be generated. Additional traffic would make some lines viable which currently loose money. The railroad practice has largely been to abandon those lines which are currently loosing money. Therefore it is very unlikely that any railroad company will rehabilitate a line which is currently loosing money or even marginal without a firm commitment on the shippers to guarantee a given number of shipments each year. This is impossible with agriculture products except in certain areas which are highly intensified with irrigation projects. The only other alternative is for someone besides the railroad to furnish the capital to rehabilitate a line and then to subsidize the operation if sufficient traffic is not generated to return a profit on the railroad's transportation investment.

The State of South Dakota anticipates many changes in the status of rail line classifications during the upcoming year. The State will continually monitor the rail industry in this state and as conditions change and additional data and information are collected, we will update the State Rail Plan to reflect these changes. We will perform an overview of the statewide rail system and will collect and analyze specific traffic characteristics on those rail lines which require special analysis. We will explore ways to continue rail service on some lines and to aid shippers located on lines which have been approved for abandonment by the ICC.

The State of South Dakota is currently under contract with Integrated Logistics Consultants, Inc., to perform a "Marketing and Operating Alternatives and Coordination Study" of railroad lines in the southeastern part of the state. This

study was initiated because all rail lines in this part of the state are potentially subject to abandonment.

Work will continue in the area of federal legislation. The State of South Dakota has expressed its views that the 4-R Act should be changed to allow more flexibility in choosing projects for federal assistance. The current Act specifies that a rail line has to be approved for abandonment before it becomes eligible for federal assistance. The State would like to assist lines before they are abandoned because many times the traffic is lost to the highways by this time and converting it back to rails has been difficult in the past.

The State will also explore ways to aid branch lines on the State and local level. The following areas will be explored for possible introduction in the 1978 legislative session:

1. Regional - local (multi-county) bonding authority
2. Creation of a State bonding authority
3. State - Shipper - Railroad sharing program for rail improvements
4. State acquisition of rail property
5. Shipper loans to railroads for rail improvements