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The Historical Geography of Rail and Highway Transport at Bemidji, Minnesota

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THE HISTORICAL GEOGRAPHY OF

RAIL AND HIGHWAY TRANSPORT

AT BEMIDJI, MINNESOTA

by

Billy D. Weis

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This thesis submitted by Billy D. Weis in partial fulfillment of the requirements for the Degree of Master of Science in the University of North Dakota is hereby approved by the Committee under whom the work has been done.

Dean of the Graduate School

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Billy D. Weis

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ABSTRACT

This thesis studies the geographic reasons for the
development of transportation at Bemidji, Minnesota. The
transportation types studied are railroads, trucking and
busses.

The physical setting is examined to determine the
basic reasons for settlement of the area. Physical aspects
examined are the geology, soils, climate, and watersheds.
Rural land use and reasons for the choice of the city site
are also studied.

In the presentation of railroad development, five
railroads are studied geographically. These include the
Red Lake Transportation Company; Wilton and Northern Rail-
road; Brainerd and Northern Railway Company; Great Northern
Railway; and the Minneapolis, St. Paul and Sault Ste. Marie
Railroad.

Development of trunk highways through Bemidji is
examined in the section on highway transport development.
In addition, the geographical reasons for the historical
development of dray lines, common carriers, contract carriers,
long distance trucking, and busses are studied.

The major changes that have occurred in each type of
transportation are analyzed. Included in this analysis are
possible future developments of the three major forms of
transportation.

CHAPTER I

INTRODUCTION

Purpose and Scope of the Study

This thesis was prompted first by a combination of
three interests of the author: geographic aspects of
transportation development; the history of north-central
Minnesota; and the development of north-central Minnesota.
A secondary consideration was to explore the reasons under-
lying Bemidji's growth as a long-distance trucking center.
To adequately judge the last point, it was felt that a
historical geography study of commercial transportation
would be necessary.

This paper introduces the geographic reasons for
change of transportation through time. The three major
types discussed are rail, truck, and bus transportation.
Each form is considered individually and an analysis of
the causes and effects of each is presented.

Methods Employed in the Study

To begin such a study one has to gain a broad under-
standing of the entire community and its development. This
was accomplished by reading through collections of the
Beltrami County Historical Society and by discussions with
its members. Papers of the Minnesota Historical Society

pertaining to the area were also studied thoroughly.

After the basic study, each aspect of the thesis was considered individually. Information for the several different areas was obtained through library research, further Historical Society research, research in county and state agencies, interviews with retired transportation workers, interviews with employees and operators of the various types of transportation, and personal observations.

The most vital source for the study was the Beltrami County Historical Society. With the information gained from the society's written resources and the individual interview sources recommended by its members, the author was able to compile much information pertaining to the study.

CHAPTER II

GEOGRAPHIC SETTING OF BEMIDJI

Physical Setting

Bemidji is located in north-central Minnesota at
the approximate northern edge of Minnesota's lake country.
Located in the southern extremity of Beltrami County, the
city serves as the county seat. Geographically, the city
is located at 47° 28' north latitude and 94° 54' west
longitude, which is approximately 225 miles north-northwest
of Minneapolis and St. Paul and 150 miles west of Duluth.
Grand Forks, North Dakota, is about 110 miles to the west.
Bemidji's relationship to major urban centers of Minnesota
is seen in Figure 1.

Geologic Formation

Bemidji is in an area forming a natural division
between the rocky, forested, iron-bearing region to the
northeast and the open fertile Red River Valley to the west.
Bemidji is in rolling lake country and to the north lie
Upper and Lower Red Lake and a large bog area.

The bog area is a product of Glacial Lake Agassiz
which covered the region following the retreat of the last

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BEMIDJI
IN RELATION TO
MAJOR CENTERS OF MINNESOTA
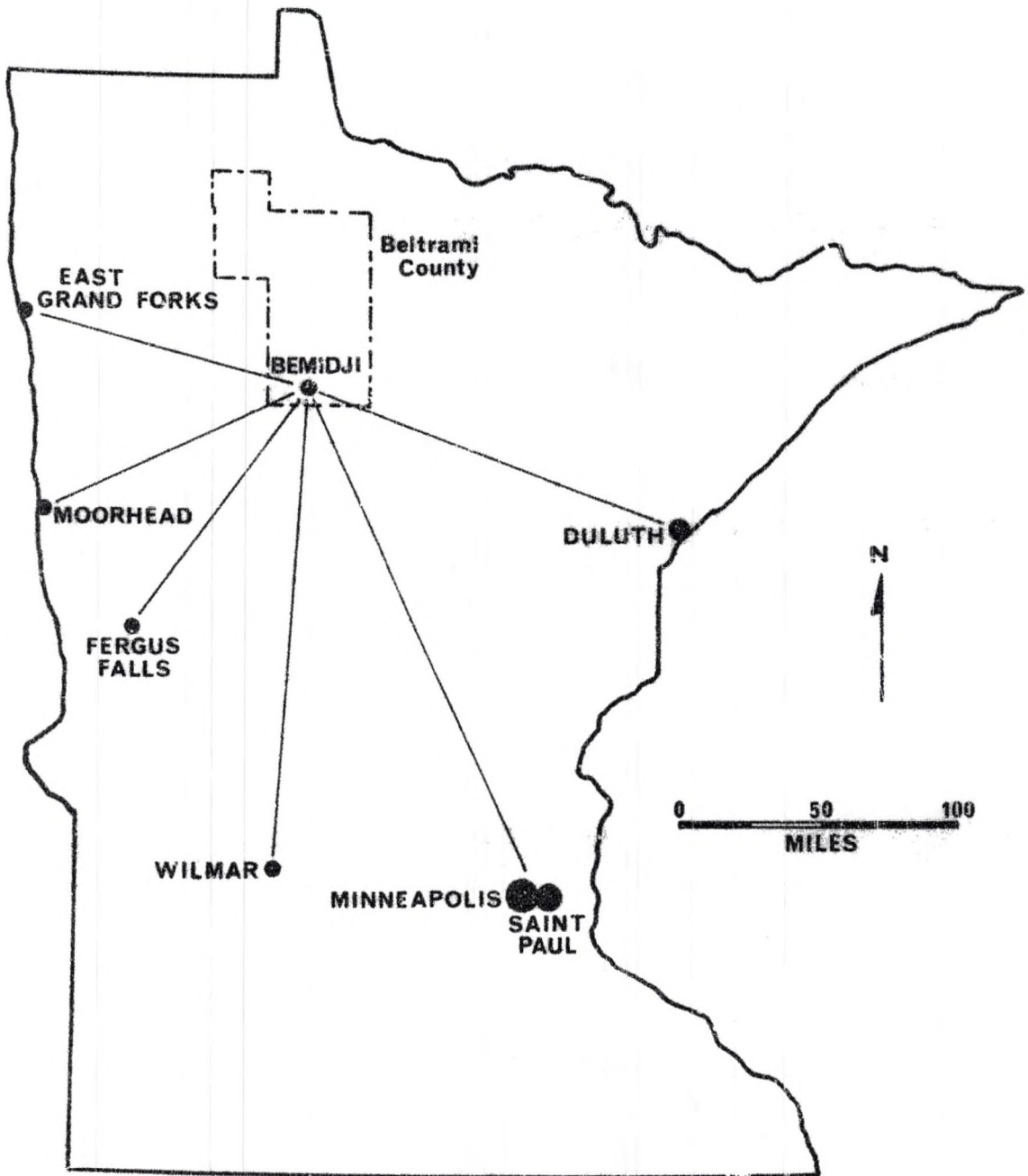
Figure 1

continental glacier that invaded Minnesota about 10,000 years ago. During the existence of the lake, clay and silt were deposited on the older land surface. The original surface was buried leaving a level swampy section usually referred to as Minnesota's Big Bog.[1] Much of Lake of the Woods, Beltrami, and Koochiching counties and small parts of nearby counties are covered by this extensive bog region. See Figures 2 and 3.

Although Red Lake covers about 440 square miles, it is very shallow with the deepest point of Upper Red Lake only slightly more than twenty feet.[2] The divide between the upper and lower parts of the lake is a terminal moraine, a ridge of earth material piled up at the front edge of a glacier during the Ice Age. This moraine rises more than 100 feet above the level of the water.[3] The south beach of Glacial Lake Agassiz runs in an east-west direction past the south side of Lower Red Lake. This beach ridge is partly responsible for holding the lake in the shallow depression to the north.[4]

[1]George M. Schwartz, "Geology," Gopher Historian, XV (Winter 1960-1961), p. 43.

[2]Ibid., p. 44.

[3]Ibid.

[4]Daniel E. Willard, The Story of the North Star State (St. Paul: Webb Publishing Co., 1922), p. 240.

BELTRAMI AND SURROUNDING COUNTY AREAS
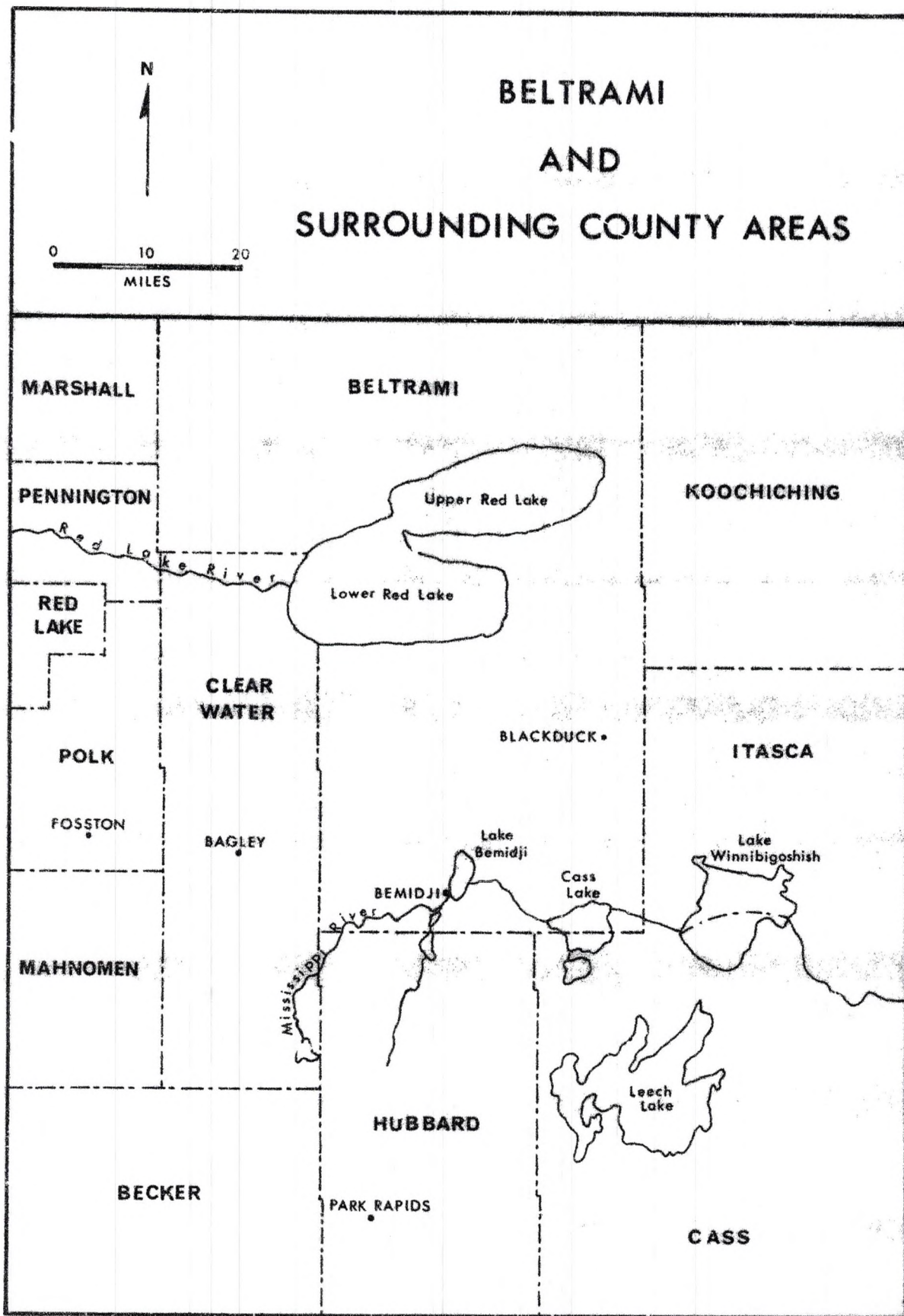
Figure 2

The last ice sheet to push into Minnesota covered all but a small portion of southern Cass County.[1] This glacier left a complicated mixture of terminal moraines, ground moraines, and outwash plains. Terminal moraines are characterized by a hilly topography with many lakes whereas ground moraines have more evenly distributed earth materials resulting in a gently rolling surface. Although lakes are present in ground moraines they are not so numerous as in the terminal moraine areas. Outwash, consisting of rocks and debris carried by glacial meltwater, usually forms nearly level land and is characterized by many lakes created by melting ice blocks. Leech Lake, with an area of 173 square miles, is located amid moraines; Bemidji, Cass, and Winnibigoshish lakes are mainly in the outwash plain areas.

The largest belt of terminal moraine stretches from southeast of Leech Lake, west across Hubbard, south Clearwater, and north Becker counties. It then angles north into Mahnomen County and doubles back across central Clearwater County. The moraine then extends north of Bagley and south of Red Lake to terminate southeast of Blackduck.[2] The main outwash area extends from west of Deer River past Cass and Bemidji lakes to the city of Bagley. Ground moraine occupies the area between the terminal moraine and the out-

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[1]Schwartz, Gopher Historian, XV (Winter 1960-1961), p. 44.

[2]George M. Schwartz and George A. Thiel, Minnesota's Rocks and Waters (Minneapolis: The University of Minnesota Press, 1963), p. 256.

GLACIATION
SOUTH BELTRAMI COUNTY

LOWER RED LAKE

Moraine

Glacial Lake Basin

Outwash

Till Plain

Figure 3

OUTWASH   MORAINE   TILL PLAIN   LAKE PLAIN   UPPER RED LAKE

Continental Divide
1440' EL.

Mississippi
River
1360' EL.

Glacial Drift

Drift

1175' EL.

Drift

Bedrock

South
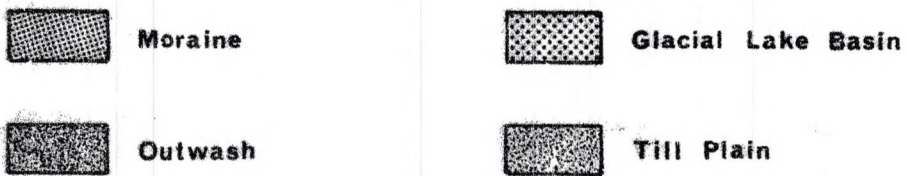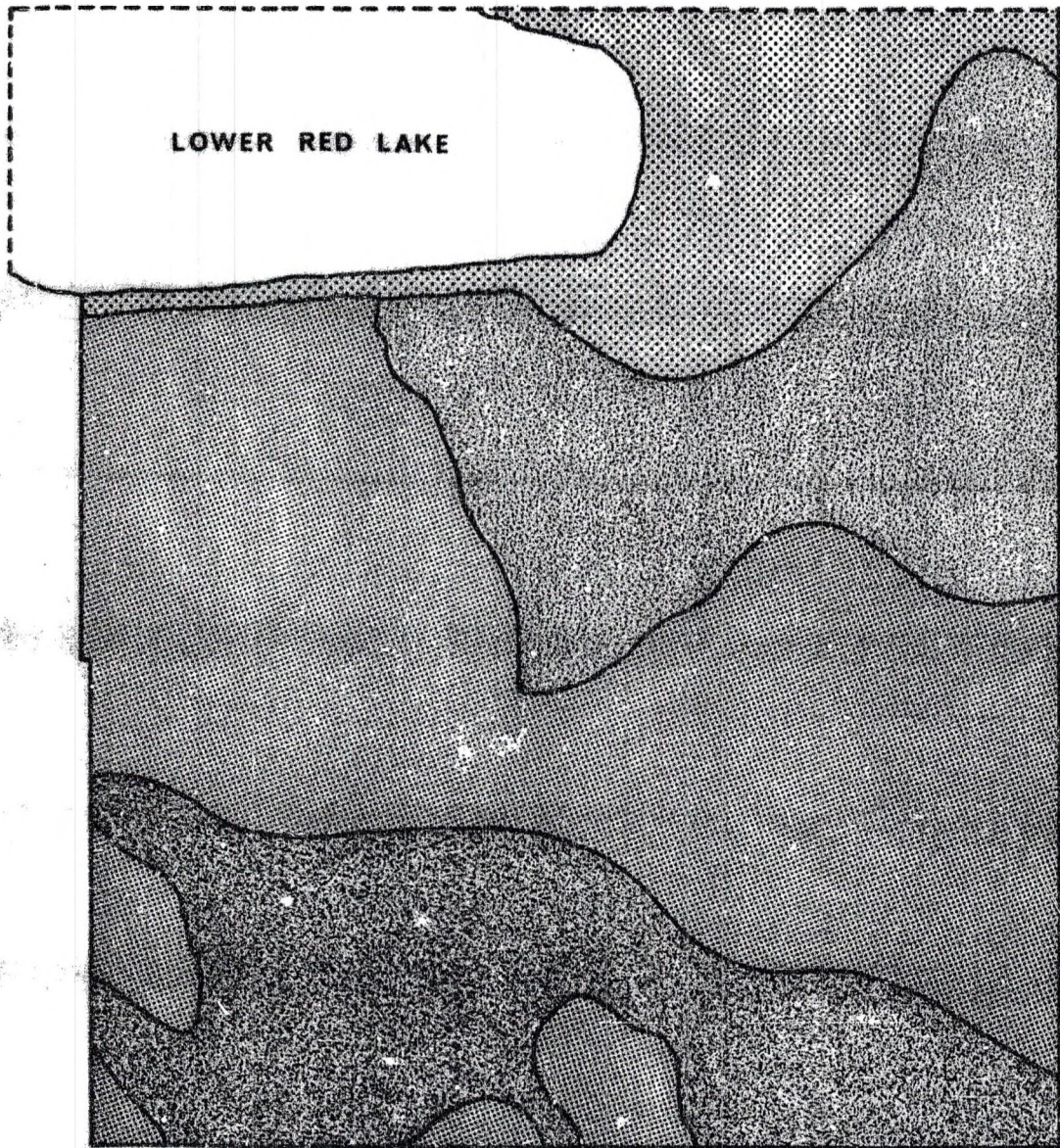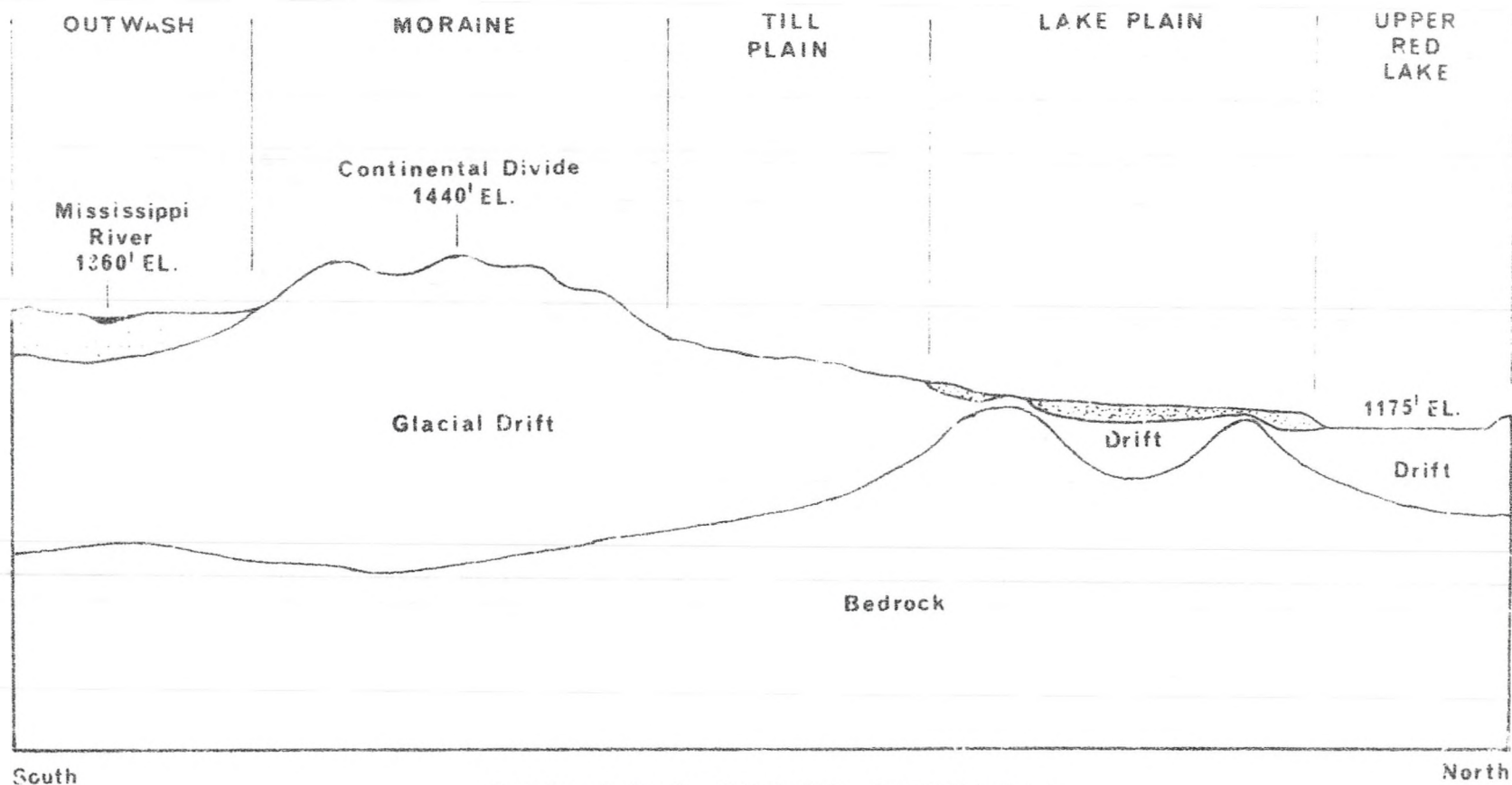
North

GEOLOGIC CROSS SECTION
EAST BELTRAMI COUNTY

Figure 4

wash belt. A large section of ground moraine is located
north of Lake Winnibigoshish and extends to the highest
beach of Glacial Lake Agassiz located in the east-central
portion of Beltrami County.

Glacial deposits completely hide the bedrock of
north-central Minnesota. George M. Schwartz, Director
for the Minnesota Geological Survey, reports that no rocks
or minerals of commercial value have been found in the
Bemidji area.[1]

Soils

The area north of Red Lake in the Minnesota Bog is
very poorly drained with large deposits of peat lying
close to the surface. As a result, the land is generally
unsuitable for farming or forest growth.[2] By contrast,
the area to the south offers much better conditions for
the growth of crops and forests. Drainage is better;
tributaries drain areas up to a mile or more on either
side of the main streams.[3] The area originally had a good
stand of coniferous forests. Forest growth created Grays
wooded soils on the clay loams, Podezals [sic] and Negosols
on the sands and gravels, and Low Humic clays in the wet
areas of clay loams and sands. These soils are not

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[1]Schwartz, Gopher Historian, XV (Winter 1960-1961),
p. 44.

[2]Ibid., p. 43.

[3]Ibid.

inherently fertile as are prairie soils because of their development. Although originally high in lime, the soil has been leached to the extent that lime is now in the subsoil.[1] The following is a soil classification determined by the United States Soil Conservation Service:

Nebish, Beltrami and Shooks soils
    Found on nearly level or gently sloping topography. Light colored, sandy loam and loam surface soils with heavy subsoil, some needing drainage but generally good farmland.

Nebish soils
    Found on rolling and hilly topography. Light colored soils with sandy loam and loam surfaces and heavy subsoils. Good farmland where not too hilly.

Menahga or Marquette soils
    Found on nearly level to hilly topography. Generally support Jack or Red Pine before clearing. Droughty and susceptible to wind erosion. Minor areas have bands of silt loam in the subsoil which makes them good to fair agriculture land but generally these areas are marginal.

Redby, Cormant, Gudrid and Grygla soils
    Found on level or nearly level topography. Sandy soils with a high water table, occurring in the northern part of the county. Improved drainage is necessary on most of the soils where used for farmland. When cultivated are susceptible to wind erosion.

Chilgren, Rocksbury and Barnett soils
    Found on level or nearly level topography. They are heavy soils occurring in the low, wet areas in the northern part of the county. Improved drainage is necessary when used for farmland. When drained they provide good cropland.

Peat areas
    These areas in the north have numerous islands of mineral soils. Smaller peat areas occur throughout the county.[2]

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[1] United States Soil Conservation Service, Beltrami County Soils Handbook, 1960, p. 1.

[2] Bemidji Chamber of Commerce, Study of Resources and Conservation Needs of Beltrami County. 1966, p. 1.

SOILS
SOUTH BELTRAMI COUNTY

Figure 5

Rural Land Use

When the white man first settled the Bemidji area
in the late 1800's, he found vast stands of red and white
pine. By the turn of the century some of the largest log-
ging camps in the state were operating in the area. Thousands
of lumberjacks were engaged in cutting the virgin timber as
rapidly as possible. The type of logging itself was destruc-
tive, but the logging companies' burning of the slash to
protect unharvested stands was the main cause of the elim-
ination of red and white pine stands.[1] Following logging
and fires, portions of the area were naturally reforested
with jack pine, aspen, and miscellaneous species.[2] Small
portions of the land were cleared for farming, and stands
of red and white pine were re-established to a limited
degree.

As Bemidji became part of the cutover area of
northern Minnesota and pulpwood replaced saw timber as the
major forest product, local residents expected that farming
would follow. The settlers previously worked winters in
the logging camps and helped harvest crops of the Red River
Valley during the summers, but as opportunities for outside
employment declined with the decrease of logging activities,
much more attention was given to farming.[3] Almost 1400 miles

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[1] Herbert Carlson (ed.), Beltrami County Resources
and Its People, (Bemidji: Beltrami County Area Development
Association, February, 1967), p. 29.

[2] Ibid.

[3] Ibid., p. 6.

of drainage ditches were dug to help reclaim areas of peat land and marsh.[1] Real estate promoters and lumber companies also made intense efforts to sell cutover lands.

Conversion of the cutover areas into good farmland was difficult because of poor quality soils. Lands that could have been used profitably for agriculture were overgrown with scrub or low-grade wood. Scattered settlements increased the costs of roads, schools and public services, and this problem was compounded as farms were abandoned and land became tax delinquent. In most cases the drainage ditches did not help reclaim the lands but created fire hazards and harmed natural resources.[2] On lands carrying ditching payment obligations, tax delinquency reached 15 per cent in 1918, 52 per cent by 1922, and 77 per cent by 1927.[3] The depression of the 1930's added to the burdens of agricultural development in the area. In 1939 a survey of land problems was begun to develop a sound land utilization program for the area.[4]

In spite of the many problems that agriculture encountered, Beltrami County had 100,000 acres of cultivated

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[1]Charles W. Vandersluis, A Brief History of Beltrami County 1963 (Bemidji: Beltrami County Historical Society, 1963), p. 13.

[2]Carlson, p. 6.

[3]Vandersluis, p. 13.

[4]Carlson, p. 7.

land in 1940.[1] Returns from the land were small, but effi-
cient farmers with fertile land near markets were able to
make a satisfactory living.

The general trend in the area's agriculture in
recent years is reflected by the decrease of rural popula-
tion, farms, cropland harvested, and dairy cattle. The
area shows an increase in beef cattle and in acres of crop-
land per farm. The statistics contained in Tables 1, 2,
and 3 indicate these trends.

TABLE 1

POPULATION TRENDS IN BELTRAMI COUNTY AND BEMIDJI[2]

Year	Beltrami County Total	Beltrami County Less Bemidji	City of Bemidji
1900	11,030	8,847	2,183
1910	19,337	14,238	5,099
1920	27,079	19,993	7,086
1930	20,707	13,505	7,202
1940	26,107	16,680	9,427
1950	24,962	15,262	9,700
1960	23,425	13,467	9,958

[1]Ibid.

[2]Beltrami County Planning Advisory Commission,
Economic Background, Land Use, and Zoning Regulations, A
Report Prepared by Harland Bartholomew and Associates
(Saint Louis: Harland Bartholomew and Associates, 1966),
p. 59.

TABLE 2

BELTRAMI COUNTY AGRICULTURE STATISTICS[a]

Year	1945	1954	1964
Land in Farms (acres)	335,657	323,596	268,187
Percentage of Land Area in Farms	20.8	20.1	16.6
Number of Farms	2,345	1,676	1,067
Commercial	+	1,152	680
Other	+	524	387
Average Farm Sizes (acres)	143.1	193.1	251.3
Cropland Harvested (acres)	99,026	99,509	77,536
Cropland Soil Banked (acres)			21,000
Types of Farms			
Grain	283	85	35
Dairy	605	766	321
Poultry	40	20	4
Other Livestock	198	96	176
General	604	170	109
Miscellaneous	615	539	422
Average Value of Land and Buildings	$2,836	$6,146	$11,837

+ Figures Not Available

[a]Herbert Carlson (ed.), Beltrami County Resources and Its People, (Bemidji: Beltrami County Area Development Association, February, 1967), p. 18.

TABLE 3

BELTRAMI COUNTY AGRICULTURE STATISTICS[a]
LIVESTOCK AND POULTRY ON FARMS

Year	1954	1964	Per Cent of Change
Cattle and Calves	24,629	23,771	-3%
Milk Cows	10,940	6,648	-39%
Beef Cattle	700	3,000	-329%
Hogs and Pigs	5,766	5,537	-4%
Sheep and Lambs	13,363	11,315	-15%
Chickens, 4 Months or Over	62,272	18,342	-71%
Turkeys	14,390	20,881	-45%

[a]Herbert Carlson (ed.), Beltrami County Resources and Its People, (Bemidji: Beltrami County Area Development Association, February, 1967), p. 18.

Although most of the vast stands of virgin timber had been removed by the mid-1920's, the replacement stands and less valuable trees have since bolstered the economy of the area. As roads into the timbered areas and technological advancements came about in the pulp and paper industry, the less valuable trees and replacement stands became increasingly important. In recent years, Federal, state, and county agencies as well as private land owners have been planting increasing numbers of trees. Since 1958 approximately one million trees have been planted annually.

While much of this planting has been on abandoned farm-
land, 750 to 1000 acres of marginal and submarginal farm-
land is planted to trees each year.[1]

Watersheds

The watersheds and associated rivers and lakes of
the Bemidji area played an important role in early logging
activities because logs were transported primarily by
water before the coming of railroads. Crookston had one
of the largest mills in northwestern Minnesota and much of
the timber to feed the mill was floated down the Red Lake
River. Because western Minnesota lumbermen had less avail-
able timber, they were the first to advance into the area
north of Bemidji. Although they were able to cut much of
the timber, their efforts were limited by the continental
divide running midway between Bemidji and Red Lake. Timber
north of Bemidji could be floated down the natural water-
ways which flowed into the Red River of the North. That
timber near Bemidji, on the other hand, was located in
the Mississippi River drainage basin. Thus the area south
of the divide awaited the advancement of the logging in-
dustry from central Minnesota. The result was that the
Bemidji area became one of the last logging frontiers in
Minnesota. The watershed areas of south Beltrami County
including the number of square miles drained are listed in
Table 4.

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[1]Carlson, p. 30.

TABLE 4

SOUTH BELTRAMI COUNTY WATERSHEDS[a]

Watershed Number	Local Watershed Name	Total Area square miles	Beltrami County square miles
	(Red River of the North Watershed)		
1	Battle River	269.1	204.7
2	Black Duck	304.3	271.0
3	Sandy River	285.3	260.3
4	Upper Clearwater River	311.9	52.0
	(Upper Mississippi Basin Watershed)		
5	Cass Lake	175.4	70.9
6	Schoolcraft River	180.2	5.8
7	Itasca	244.2	25.7
8	Bemidji	259.3	225.6
9	Turtle River	326.9	314.8

[a]Bemidji Chamber of Commerce, Study of Resources and Conservation Needs of Beltrami County. 1966, p. 10.

WATERSHEDS
SOUTH BELTRAMI COUNTY

LOWER RED LAKE

1

2

3

CONTINENTAL DIVIDE

4

9

8

7   6

5
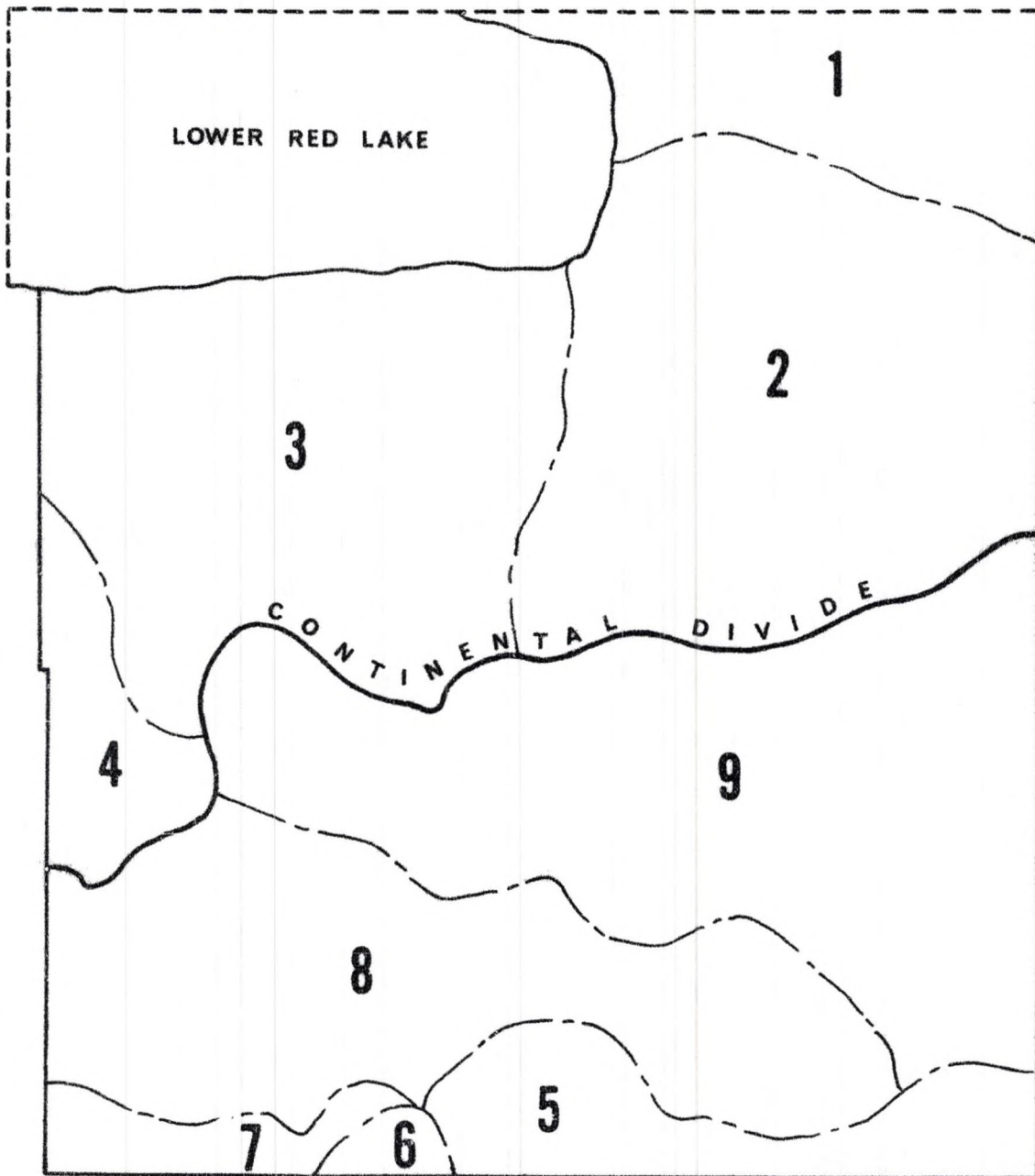
Numbers correspond to areas in TABLE 4

Figure 6

Climate

Bemidji has a continental climate with the resulting wide range between minimum and maximum temperatures. Winter precipitation is limited, but rainfall averages 16 inches during the warm season, April through September.[1] The average growing season at Bemidji is 115 days. The average date of the last killing frost in spring is May 25, and the average date of the first killing frost in fall is September 16.[2] Table 5 shows temperature and precipitation data for Bemidji, Minnesota.

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[1]*Beltrami County Soils Handbook*, Sec. 6.4, p. A-3.

[2]*Study of Resources and Conservation Needs of Beltrami County*, p. 6.

TABLE 5

CLIMATIC DATA OF BEMIDJI, MINNESOTA[a]

RECORD SINCE 1915

Month	Mean Temperature (in degrees Fahrenheit)	Mean Precipitation (in inches)
January	4.9	.70
February	8.6	.58
March	20.7	1.01
April	38.6	1.74
May	52.6	2.77
June	62.2	3.79
July	68.5	3.28
August	65.7	3.25
September	55.5	2.60
October	44.0	1.93
November	25.5	1.08
December	10.9	.73

Temperature at Bemidji

Average Annual 38.1° F.   Maximum 107° F.   Minimum -50° F.

Rainfall at Bemidji

Maximum 39.76 inches   Minimum 12.47 inches

Average Annual 22.0 inches

[a]United States Soil Conservation Service, Beltrami County Soils Handbook, 1960, p. A-3.

Establishment of Site

The area of the present city of Bemidji was origi-
nally occupied by the Dakota Sioux (known as the Nadouees-
sioux) and the Assiniboin Sioux (Stone Sioux).[1] The Sioux
lived peacefully in the area until shortly after 1700 when
the Ojibway pushed in from the Apostle Island area to the
east. In the resulting 100-year war (1735-1835) the
Ojibway, armed with weapons from the French, managed to
drive the Sioux westward.[2] Between 1755 and 1770 the
Ojibway occupied much of the timbered land of northern
Minnesota and constructed semi-permanent homes near many
of the lakes and streams.[3]

Before 1883 an Indian known as Shay-nou-ish-kung
had visited the Bemidji area and found that it contained
many of the natural resources essential in the day-to-day
life of the Indian.[4] At that time, neither farming nor
the lumber industry had invaded the area. The smell of
the "ish-ko-day-o-dah-baun" (fire wagon, meaning "train")[5]
had not been introduced into the area nor were there
landing docks on the rivers to indicate the presence of

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[1]Erwin F. Mittleholtz, "History of the Bemidji
Area," Beltrami County Historical Society, Collections,
Vol. I, p. 2.

[2]Ibid.

[3]Ibid., p. 3.

[4]Ibid.

[5]Ibid., p. 4.

the "ish-ko-day-ge-maun" (fire boat, meaning "steamboat").[1]

The area around Lake Bemidji provided most of the Indians' needs: birch bark for canoes and shelters; roots of balsam, spruce and tamarack for thongs and cords; cedar for canoe stays and rib supports; ash for snowshoes, and bows and arrows. Maple sugar sources were only one day's travel away and "Pim-me-kay-e-gun" (buffalo meat)[2] was only two days' travel to the west. Fur-bearing animals, fish, berries, and firewood were abundant in the Bemidji area.

After seeing the resources of the Bemidji area, Shay-nou-ish-kung in 1883 headed a small band of Indians that settled on the southwest shore of Lake Bemidji, or Bay-me-ji-ga-moug as it was then known. Bay-me-ji-ga-moug was the name given to the lake by previous Indian travelers to describe a lake lying crossways to the general route of travel or a lake having its larger portion on the side of the general route of travel.[3]

Shay-nou-ish-kung welcomed the first settlers into the area in 1888 and the Indian leader became known as both "chief" and "Bemidji." Neither were true interpretations, but Shay-nou-ish-kung was called "chief" because he was the only permanently-settled and highly-respected Ojibway on the

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[1]Ibid.

[2]Ibid.

[3]Ibid., p. 5.

shore of Lake Bemidji. He was called "Bemidji" because it
was believed that he was associated with the naming of the
lake.[1]

As early as 1785 explorers, traders, and travelers
passed through this forested area.[2] These men were primari-
ly in search of pelts and locations for trading posts as
well as the source of the Mississippi. Although there was
early movement through the Bemidji area, permanent settle-
ments were not established until a century later.

The first white settlers that Chief Bemidji wel-
comed were M. E. and Earl Carson, originally from the Detroit
Lakes area.[3] In the spring of 1888 the Carson brothers
built a trading post on the south shore of Lake Bemidji and
soon after they persuaded their father "Pap" to join them.

A year after the Carson brothers opened their
trading post on Lake Bemidji, the first permanent settlers
filed their claims.[4] In 1894 the Carsons established a
stopping place which came to be called the "Bemidji House."[5]

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[1]Ibid.

[2]Ibid., p. 3.

[3]Harold T. Hagg, "Bemidji: A Pioneer Community of
the 1890's," Beltrami County Historical Society, Collections,
I, p. 4.

[4]Erwin F. Mittleholtz, "Chronological History of
Bemidji," Beltrami County Historical Society, Collections,
Vol. I, p. 1.

[5]Vandersluis, p. 6.

The Carsons had a diversified business with the Indians, hunters, loggers, timber cruisers, and scattered settlers that were coming into the area. Included in their business was the shipping of game, fish, furs, wild rice, and berries as well as the operating of a blacksmith shop and the selling of merchandise. Obtaining supplies for the post was difficult because they were hauled sixty miles from Fosston, the nearest railhead. The same route later became the main migration route (from the Dakotas and western Minnesota) into the area.[1]

In 1894 the first sawmill equipment was hauled into Bemidji from Eagle Bend by a tote team. The mill, owned by John and Joe Steidl began operating in 1895. The lumber was only used for buildings in the Bemidji area since there was no convenient way to transport the product to other markets.[2]

In 1894 a group of men headed by Tams Bixby purchased 160 acres of land for $1800 from the Martin Lumber Company.[3] Two years later the men organized the Bemidji Townsite and Development Company which proved to be a great factor in the development of the city. As president of the

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[1]Ibid.

[2]Mittleholtz, "History of the Bemidji Area," p. 4.

[3]Ibid., p. 5.

company, Bixby was prominent in the Republican party and
was secretary to David M. Clough, Governor of Minnesota.[1]
Bixby persuaded James J. Hill to route the Great Northern
railroad survey near his townsite. With the possibility
of a railroad running through the area, Bixby and his
followers saw the advantages that Bemidji had to offer
as a distribution point. The original townsite of
Bemidji was surveyed in 1895 by Charles A. Forbes of
St. Paul, and the plat dated March 4, 1896, contained
94 acres.[2] On May 20, 1896, the village incorporated with
200 residents.[3]

The region was one of the last frontiers in
Minnesota because of its relative isolation in the northern
part of the state. After settlement and logging operations
began, Bemidji grew rapidly and from 1898 to 1900, its
population increased from 500 to more than 2000.[4] In 1900
there were more than 4000 men employed in the woods within
10 miles of Bemidji.[5]

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[1]Hagg, "Bemidji: A Pioneer Community of the 1890's,"
p. 8.

[2]Mittleholtz, "Chronological History of Bemidji,"
p. 4.

[3]Ibid.

[4]"The Towns," Gopher Historian, Vol. XV No. 2,
p. 23.

[5]Ibid.

Bemidji was endowed with geographical advantages that destined it to be one of the nation's principal lumber centers. Great stands of pine kept the logging industry supplied until the 1920's, but when the lumber era ended Bemidji continued to prosper as a distribution and tourist center. Citizens of Bemidji hoped the area would grow into a great agricultural center. Willet H. Hays, U. S. Assistant Secretary of Agriculture, stated in 1914 that the Bemidji area was "destined to be the greatest dairy country in the world."[1] Even though the area didn't live up to his prophecy, Bemidji continues to be a commercial center for northern Minnesota.

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[1]Minnesota State Historical Society, Bemidji Collections--Bemidji: Magic City of the North, Bemidji, January, 1914, p. 7.

CHAPTER III

RAILROAD DEVELOPMENT

As the logging industry moved across the United
States from east to west, it stripped the forest areas of
billions of board feet of high grade timber. Minnesota
was no exception to the continuing depletion of high grade
forests. The "heyday" of lumbering in Minnesota forests
was from 1870 to 1910. In 1899 Minnesota ranked second
in the United States in logging with an output of over
two billion board feet of lumber. In that same year
Minnesota forests yielded a return of $42,689,000.[1]

As the superb timber stands disappeared from the
shores of lakes and streams, the lumber industry moved
inland. With the advent of logging railroads, Minnesota's
logging industry was able to make great advancements. Logs
that could not be floated to the mills because of their
distance from streams could now reach the mills by rail.
In the Bemidji area a network of railroads played the
role enacted by the Mississippi, St. Croix and Rum Rivers
in the earlier periods of the lumber industry.[2]

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[1]Bertha L. Heilbron, "The Thirty-Second State,"
Minnesota Historical Society, Collections, (1958), p. 177.

[2]Harold T. Hagg, "The Beltrami County Logging Frontier,"
Minnesota Historical Society, Collections, (June 1948), p. 4.

Railroad revenues swelled as supplies, equipment, freight and logs were transported for the timber companies. With the arrival of the logging season each fall, hordes of men arrived daily seeking work in the woods. At the same time horses were being shipped in from agricultural areas of Minnesota and the Dakotas to be used in logging. As spring thaws signaled the end of the logging season and the breakup of camps, horses were returned to their duties on farms and men scattered in all directions in search of other work until the next years logging season.

It was stated around 1910 that a "greater number of carloads of freight are shipped in and out of Bemidji than any other city except St. Paul, Minneapolis and Duluth."[1] Railroads grew with the lumber industry. When the logging era ended, through lines continued to rail less valuable forest products to other areas, but logging railroads died.

Red Lake Transportation Company

The first railroad in the area north of Bemidji was constructed to carry logs to Lower Red Lake. The logging railroad was built from Nebish (figure 7) to Redby and enabled the owners to cut timber that would have otherwise been almost inaccessible.

In 1896 the Halvorson Richards Company acquired a logging contract with the Crookston Lumber Company for

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[1]Bemidji: Magic City of the North, p. 11.

logging in the Nebish area. The company, having just fin-
ished work on the Chicago Drainage Canal, proceeded to move
equipment to Nebish from the canal site. Railroad car and
locomotive trucks were shipped to Thief River Falls and
then transported by boat to Redby located on Lower Red
Lake where they were then hauled overland to Nebish where
the cars were built. The rails and boilers came to
Walker on the Brainerd and Northern Railroad and were
transferred to barges and taken to Steamboat Landing on
Leech Lake. During the winter when the trail was frozen,
the equipment was hauled to Nebish over the old Red Lake-
Leech Lake trail. A trestle and hoist were constructed
over Nebish Lake so the logs that had been landed on the
lake could be hoisted into the cars and in 1899 the
company hauled its first load of logs to the shore of
Red Lake.[1] Three years after the railroad delivered its
first load of logs, the company shops at Nebish burned.
The following year, 1903, the railroad went into receiver-
ship.[2]

Great amounts of timber still remained to be cut
in the area so C. A. Smith, a Minneapolis lumberman, took
over the defunct line and organized it as the Minneapolis,
Red Lake and Manitoba Railway Company.[3] The new line was

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[1]Vandersluis, p. 6.

[2]Hagg, "The Beltrami County Logging Frontier," p. 121.

[3]Ibid.

organized as a common carrier in hopes of extending its potential services.

Smith planned to connect Nebish with the Minnesota and International Railway by extending the Whitefish Lake spur to Turtle River. Since Bemidji businessmen saw the economic advantage of the line coming directly into Bemidji, they helped to buy the right-of-way. Smith agreed and the depot and headquarters were erected in Bemidji. The railroad had 33.5 miles of track when it reached Bemidji in 1905.[1] When the road to Bemidji was completed, the Red Lake Indian Reservation had an outlet to other areas and the line began operating as a common carrier, offering freight and passenger service.

The Crookston Lumber Company greatly opposed the extension of this railroad because it tended to give Smith an advantage in bidding for reservation timber when it became available.[2] The line gave Smith a shorter route for his timber to Bemidji where it could be railed directly south to his mill at Brooklyn Center. Any advantage that Smith may have had with the railroad was nullified by poor management until 1910 when A. L. Mollander became superintendent of the line.[3]

Wherever it was practical, the railroad generally

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[1]Erwin F. Mittleholtz, Historical Review of the Red Lake Indian Reservation (Bemidji: Beltrami County Historical Society, 1957), p. 33.

[2]Hagg, "The Beltrami County Logging Frontier," p. 121.

[3]Vandersluis, p. 8.

built spur lines to pick up outlying timber. These lines were generally known by the name of the company or camp they served or by the nearest mile post number.

For the first few years after the line reached Bemidji, a great deal of timber was railed into the city to be sawed at the local mills or to be transferred to other lines for shipment out of the area. There was also a weekly load of fish from the fisheries on Red Lake. The fish were transferred to the Great Northern Railroad at Bemidji, and shipped to eastern markets.[1]

Prior to 1912 the Crookston Lumber Company was unwilling to ship logs on the Minneapolis, Red Lake and Manitoba Railroad, although it would have been economically feasible. In 1912 a reconciliation took place between the Crookston Company and the Red Lake line and a spur was laid to Island Lake.[2] This enabled the Crookston Company to ship logs directly to their mill in Bemidji.

In 1916 the International Lumber Company of International Falls, Minnesota, was the successful bidder on 50,000 acres of pine located on the Red Lake Reservation. All of this timber was railed to Bemidji over the Red Lake line for transfer to International Falls.[3] With this

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[1]Walter E. Paul, "Memories of the Minnesota and International Railway," Beltrami County Historical Society, Collections, Vol. II, p. 28.

[2]Vandersluis, p. 14.

[3]Ibid.

traffic, plus that of other logging companies along the
line, the Red Lake line was profitable.

Company profits became marginal by 1926 because
of the depletion of timber along its line and the closing
of the Crookston mill at Bemidji. The line struggled for
existence until 1939, at which time the rails were re-
moved and the right of way sold, thus ending the Minneapolis,
Red Lake and Manitoba Railroad.[1]

Wilton and Northern Railroad

To secure a rail outlet for its timber in the Bemidji
area, the Crookston Lumber Company surveyed a right of way
for its own logging railroad in 1904. The Red Lake line,
managed by the Smith Lumber Company, paralleled the new
route; but because of differences with the company, the
Crookston firm chose to build their own line.[2]

The Wilton and Northern Railroad (figure 7) of the
Crookston Lumber Company was constructed north from the
Great Northern tracks at Wilton. It began four miles west
of the Red Lake line and ran north for twenty-five miles
to Island Lake.[3] Near Campbell Lake the Wilton and
Northern line came within one and one-half miles of the
Red Lake line.[4]

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[1]Ibid.

[2]Ibid., p. 8.

[3]Kerr, p. 24.

[4]Vandersluis, p. 8.

A spur was build to Boston Lake where the company constructed a hoist to load logs that had been assembled on the lake. These and other logs that came down the line were transferred to the Great Northern railroad at Wilton and railed to the Crookston mill in Bemidji. The Wilton and Northern also carried freight and passengers.[1]

In 1912 a reconciliation occurred between the Crookston Lumber Company and the Minneapolis, Red Lake and Manitoba Railroad. The reconciliation came about largely through the efforts of A. L. Mollander of the Red Lake line. With the two companies in agreement, a track was laid from the Red Lake line to Island Lake and for a short time the Crookston Company railed logs over the Red Lake line to Bemidji. With this development and the depletion of timber along its line, traffic on the Wilton and Northern Railroad greatly diminished.[2] In 1914 the rails were taken up from the Wilton and Northern right-of-way. This event caused the decline of the settlements along the way and finally resulted in abandonment of most of them.[3]

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[1]Kerr, p. 24.

[2]Vandersluis, p. 14.

[3]Ibid.

Brainerd and Northern Railway Company

Probably the most important development of the lumber industry in the Bemidji area was the completion of the Brainerd and Northern Railroad to Bemidji. Had this railroad chosen to expand its rail lines along other surveys, Bemidji would probably have suffered the fate of many smaller towns in the area. After completion of this line to Bemidji, the area had access to the large markets and lumber mills of the Minneapolis and St. Paul area.

The first survey for the proposed Brainerd and Northwestern Railway Company was made in the spring of 1885. This survey route extended from Brainerd to Red Lake Falls by way of Walker and Fosston but the route was never built because it failed to get a land grant. At the time of the survey articles of incorporation had not been established by the surveying company.

On May 9, 1892, articles of incorporation were filed for the line. The articles for the Brainerd and Northern Railroad stated:

> Its line shall operate from a point in the city of Brainerd, thence in northerly cause to a point at the north line on the state of Minnesota between Rainy Lake and the Red River of the North.[1]

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[1]Carl Zapffe, Brainerd (Minneapolis: Colwell Press Inc., 1946), p. 62.

After incorporation the railroad built north, advancing
with the lumber industry. By 1895 the railroad extended
as far north as Walker.[1] In December 1898 construction
crews finally reached Bemidji giving the city an outlet
to the south and the population centers of the state.[2]

The original survey of the Brainerd and Northern
went through Bemidji along the west side of the lake. Be-
cause that route would have spoiled the residential areas
along the lake, the city required the rail line to follow
an alternate route along the east side of the lake. Re-
routing along the east short of Lake Bemidji established
the station of South Bemidji with a spur line going into
Bemidji.

When the Brainerd and Northern reached Bemidji,
it was operating solely as a logging railroad because the
stockholders of the company were afraid of the liabilities
involved in expanding passengers and freight service.[3]
A year after the line reached Bemidji, the company changed
its policy and became a common carrier so it could capi-
talize on the relatively large freight and passenger
business.[4] With this change, passenger service was extended
from Walker to Bemidji in 1899.

Because the Brainerd and Northern was chiefly a

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[1]Hagg, "The Beltrami County Logging Frontier," p. 115.
[2]Bemidji: Magic City of the North, p. 7.
[3]Kerr, p. 8.
[4]Zapffe, p. 65.

logging railroad, most of the early descriptions tell of feverish logging activity. The railroad right-of-way south of Bemidji to LaPort was described as a log landing with logs decked everywhere. Three miles north of LaPort, spur seventy-five extended east of the main line. This spur had 18 miles of trackage that included the main spur and sidings. It was said that this spur ran through the finest stand of white and Norway pine in the northern part of the state.[1]

The railroad continued to expand its facilities in the Bemidji area to keep up with the rapidly expanding lumber industry. In the fall of 1898, the same year the railroad reached Bemidji, a five-stall roundhouse, a coal-lock, an elevated water tank, a sandhouse, an ice house, and a boarding house were built at South Bemidji.[2] To facilitate log loading, two steam hoists were built along the lake and worked around the clock, loading eighty carloads every twenty-four hours.[3]

With railroads and their facilities at Bemidji, the Brainerd Lumber Company prepared to supply its Brainerd mill with logs from Bemidji and during the summer of 1899 the company shipped forty million feet of logs to its mill over tne Brainerd and Northern Railroad. A year later seventy-five million feet were hoisted from Bemidji and Irving lakes

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[1]Kerr, p. 7.

[2]Ibid.

[3]Ibid., p. 8

and shipped to sawmill centers.[1] Log loading was at its peak in 1901 as Lake Irving was kept full by logs coming down the rivers.[2]

On July 17, 1900, the Minnesota and International Railway Company was organized.[3] Seventy percent of the stock was held by the Northern Pacific Railway Company and W. H. Gemmell was its president and general manager.[4] While the Brainerd and Northern extended its line to the northeast, the ownership was assumed by the new company and on July 1, 1901, the Brainerd and Northern officially became the Minnesota and International Railway Company.[5]

The Minnesota and International continued its extension to the northeast from Bemidji. The railroad reached Turtle River in 1901, Blackduck in 1902 and eventually the line completed its track to International Falls.[6] In 1903 a spur line was extended twenty miles north to Kelliher which soon became a logging center. A year later twenty logging camps were located on the Minnesota and International line north of Bemidji.[7] Spurs were built into the pine areas

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[1]Hagg, "The Beltrami County Logging Frontier," p. 116.

[2]Kerr, p. 16.

[3]Vandersluis, p. 7.

[4]Zapffe, p. 65.

[5]Vandersluis, p. 7.

[6]Hagg, "The Beltrami County Logging Frontier," p. 120.

[7]Ibid.

along the railroads, and from lakes and other landings millions of feet of logs were hauled to Bemidji to be sawed and sent to other mills. Some of these spur lines were so long that the logging companies used their own locomotives to bring the loads out to the main line.[1]

In 1909 the Minnesota and International moved its dispatchers from South to North Bemidji and the Minnesota and International, along with the other railroads serving Bemidji, built a new yard in North Bemidji. The Minnesota and International built an eight-stall roundhouse with a turntable and moved all their buildings to the new site. This move consolidated most of the railroad activities in one central area at North Bemidji.

The Minnesota and International Railway continued to prosper with the logging industry and in 1909 the company added passenger train facilities from St. Paul to International Falls through Bemidji. This service included a sleeping car, coaches, baggage, and mail cars.[2]

The prosperity of the Minnesota and International lasted until the end of the large logging operations. When logging slowed down in the 1920's, passenger and freight service did the same and by 1928 there were few logs coming down the line, although there was still some traffic in cedar post, poles, and pulpwood. The decline caused the management to transfer all accounting to St. Paul and to

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[1]Paul, p. 25.

[2]Kerr, p. 20.

turn the dispatching over to the Northern Pacific at Duluth. All remaining offices were consolidated in the North Bemidji yard in February 1928.[1]

In 1932 the Northern Pacific Railway assumed complete operation of the Minnesota and International Railway.[2] All way-freights were stopped, and the schedule was changed to have one freight each way, every day, to handle through business and local freight. Heavy repairs were also discontinued in Bemidji at that time.[3]

Proceedings began in 1942 to dissolve the Minnesota and International Railway Company. The Northern Pacific acquired the remaining stock on November 12, 1942 and assumed control of the entire company, thus ending a company that was instrumental in bringing the logging industry to Bemidji.[4]

Great Northern Railway

Although not as exciting nor as colorful as the logging railroads, the development of the Great Northern railroad was a significant factor in the growth of Bemidji. By the time Bemidji incorporated as a city, the great railroads of the United States had spanned the continent and most of the nations important cities were connected by these lines. Lines yet to be established would, in general,

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[1]Paul, p. 49.

[2]Kerr, p. 33.

[3]Paul, p. 50.

[4]Zapffe, p. 65.

offer better connections or service to rural and remote areas.

The necessity of a route from Duluth to Crookston was recognized early by the management of the Great Northern. There were existing lines from Duluth to Minneapolis and from Minneapolis to Crookston, thus a new line through Bemidji would appreciably shorten the rail distance from the Great Lakes to Crookston and the farming areas of the Red River Valley. The possibility of a great amount of log traffic in the area was also a contributing factor in the decision to establish the new route.

The route began in 1888 when a section of the road was built from Carmen, Minnesota east to Fosston. In 1897 the Eastern Railway Company, controlled by Great Northern, acquired the completed road of the Duluth, Superior and Western Railroad. This road extended west from the head of Lake Superior to Deer River, a distance of about 100 miles.[1] Several surveys were made for the proposed link in the railroad. The first in 1893, supposedly placed the line through present-day Bemidji and an 1896 survey placed the road two miles south of Bemidji.[2] Two other surveys were reported, one was fifteen miles south of Bemidji and the other was near Lake Plantagenette; however, the final survey brought the line through the city.[3]

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[1]Minnesota State Historical Society, Great Northern Railroad Collections--The Great Northern Railway System, St. Paul, March, 1906, p. 9.

[2]Ibid.

[3]Hagg, "Bemidji: A Pioneer Community of the 1890's," p. 33.

The road was completed by late summer in 1898 with the first carload of freight arriving August 13 and the first passenger train August 29, 1898.[1] With the arrival of the Great Northern, the pioneer period of Bemidji ended. Local citizens now had an outlet to other areas of the state and nation.

The Great Northern reached Bemidji four months earlier than the Brainerd and Northern Railroad, thus gaining an advantage concerning the crossing of the lines. The intersection of the lines, south of Bemidji, had to be "forever after" maintained by the Brainerd and Northern Railroad and its successors.[2]

The Great Northern constructed log hoists on Lake Irving similar to those of the Brainerd and Northern. The Crookston and Grand Forks lumber companies cut logs along the Mississippi and Schoolcraft rivers and floated them into Lake Irving. These logs were loaded from the west side of the lake and delivered to Crookston and East Grand Forks. Completion of the Great Northern line allowed the western Minnesota lumber companies access to timber that would otherwise have been shipped south.[3]

As a through railroad the Great Northern had a distinct advantage over the strictly logging railroads.

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[1] Ibid.

[2] Ibid.

[3] Ibid.

Although local business declined with logging activities, the railroad continued to receive considerable amounts of through traffic. The rise of shipping on the Great Lakes was greatly responsible for this. Through traffic at Bemidji consisted of raw materials going east and manufactured goods from Duluth going west. As county road mileage increased, scattered stands of timber became accessible for use as pulpwood. Pulpwood and other forest products constituted the bulk of shipments since the decline of large timber operations.

Minneapolis, St. Paul and Sault Ste. Marie Railroad
(Soo Line)

The Soo Line constructed its line through Bemidji for reasons similar to those of the Great Northern. Construction of a line from Duluth to Plummer would intersect the company's main line from Minneapolis and St. Paul to Winnipeg. The new line could pick up timber, freight, and passenger business along its right of way as well as create a shorter route from Duluth to Winnipeg. In 1909 the proposed line was built from Federal Dam in Cass County through Bemidji to Plummer, Minnesota. The original Soo Line roadbed paralleled the Great Northern track on its northern side from Schley to Wilton. The lines were close enough so that the Soo Line could take advantage of the Great Northern's roadbed fill in crossing some swampy areas.[1]

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[1] Ibid., p. 12.

When the Soo Line reached Bemidji, the Minnesota
and International Railroad agreed to build a union depot.[1]
The two companies shared the depot until 1959 when
passenger service was discontinued on the Soo Line, since
then the Northern Pacific has been the only occupant.

The Soo Line paralleled the Great Northern track
until 1961 when the Great Northern agreed to permit the
Soo Line to use its track between Schley and Wilton in
return for similar privileges in other areas. The dual
usage of track alleviated the costly maintenance of two
roadbeds through difficult terrain.[2]

When the Soo Line was completed through Bemidji,
railroad building in the area nearly ended. Although the
Minnesota and International expanded farther north and spur
lines extended into timbered areas, railroad mileage on the
major lines around Bemidji had reached its maximum by 1909.

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[1]Kerr, p. 26.

[2]Interview with Grover Hutchinson, Soo Line Agent,
Bemidji, April 24, 1967.

N

BEMIDJI

AREA RAILROADS

1914

0   5   10
MILES

Lower Red Lake

Kelliher

M. & I. R. R.

Redby

Island
Lake

Nebish

MINNEAPOLIS, RED LAKE & MANITOBA R. R.

Blackduck

WILTON & NORTHERN R. R.

Campbell Lake

MINNESOTA & INTERNATIONAL R. R.

SOO LINE R. R.

Turtle
River

Lake
Bemidji

GREAT NORTHERN R. R.

Miss. R.

Wilton

Cass
Lake

Bemidji

Lake
Irving

Mississippi River

S. L. R. R.

G. N. R. R.

M. & I. R. R.

Cass
Lake

Pike
Bay

Guthrie
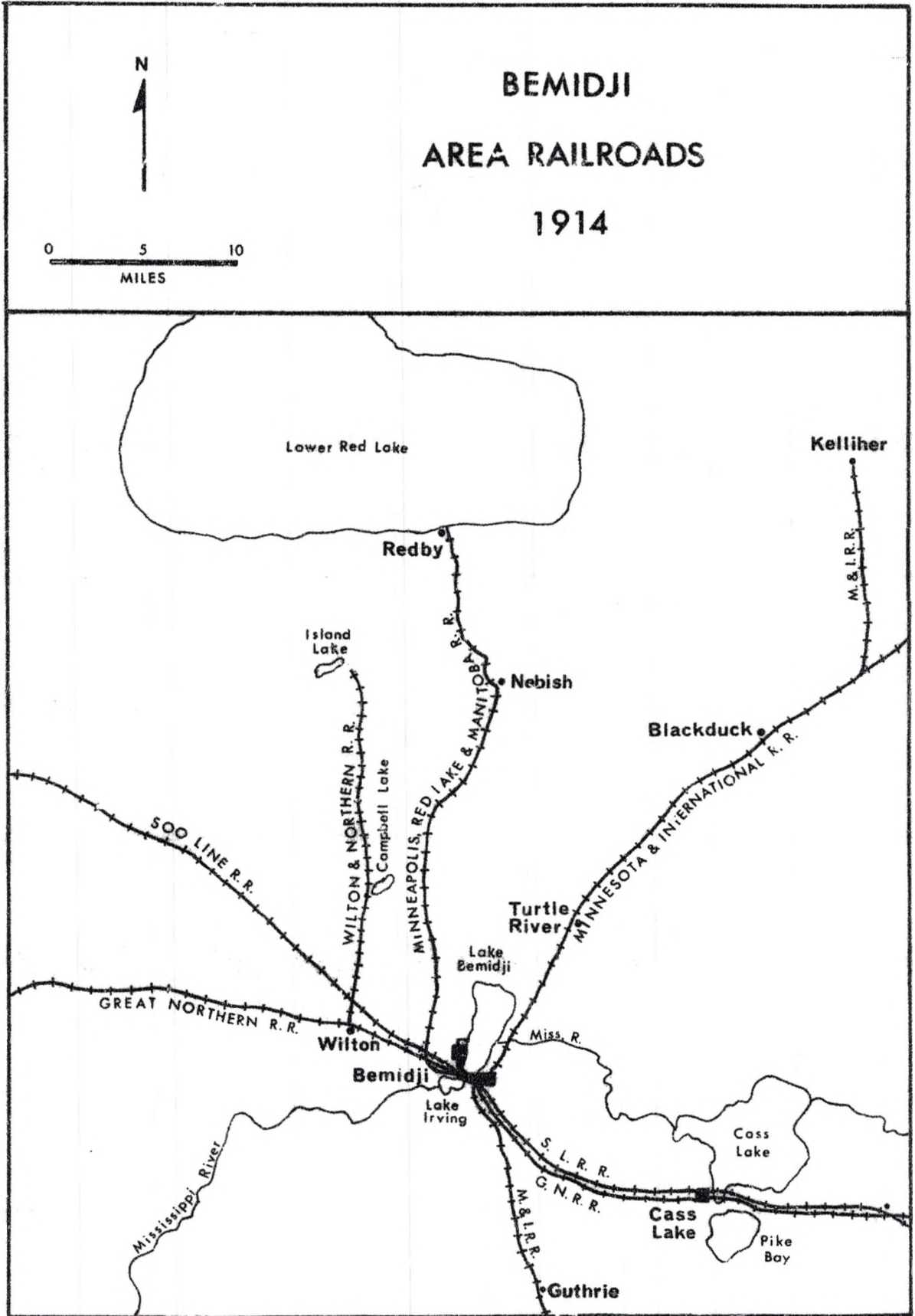
Figure 7

MAJOR MINNESOTA
RAILROADS 1914

Great Northern R.R.
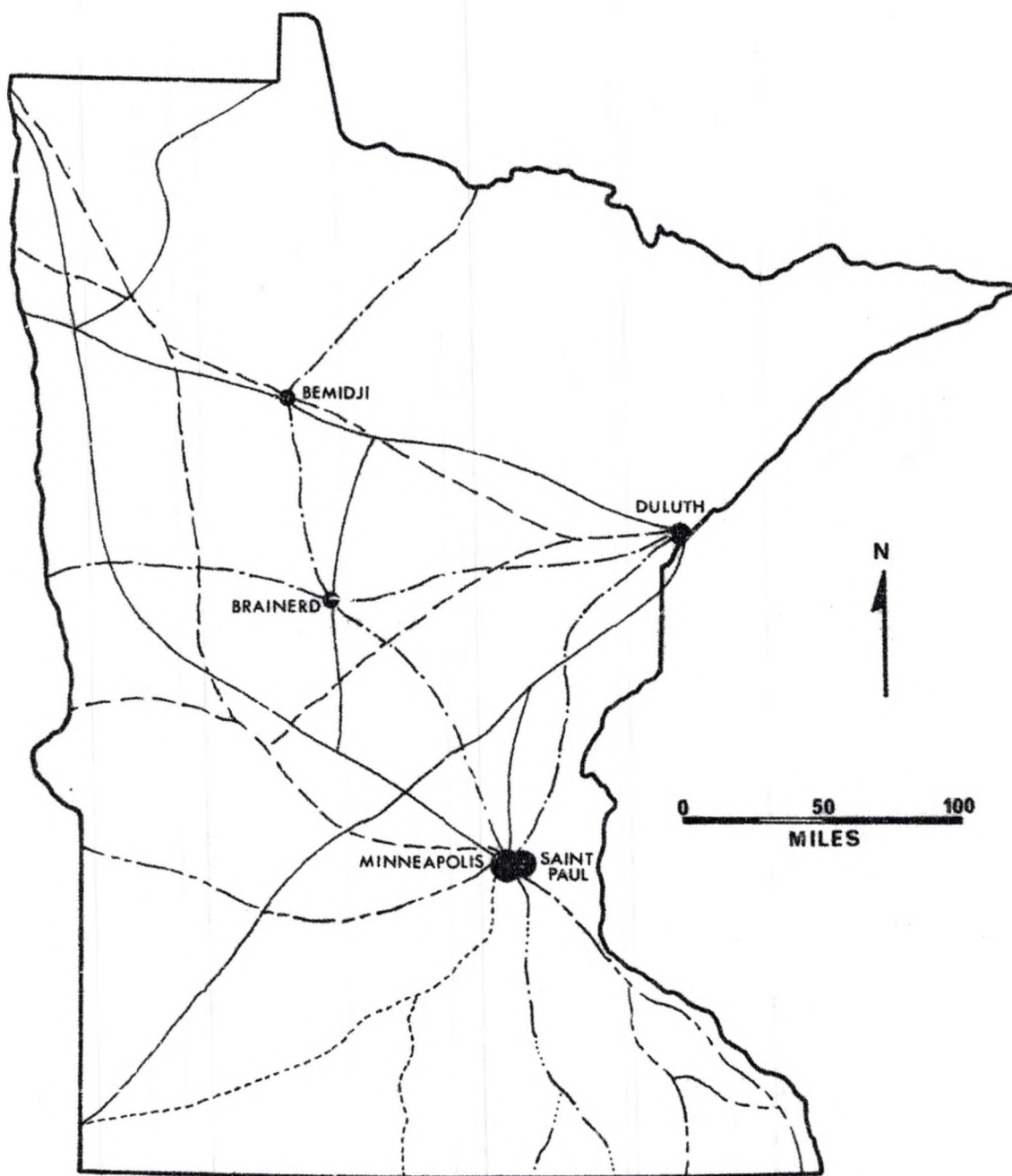
Soo Line R.R.

Northern Pacific R.R.

Chicago, Milwaukee & St Paul R.R.

Omaha R.R.

Minneapolis & St. Louis R.R.

Figure 8

CHAPTER IV

HIGHWAY TRANSPORT DEVELOPMENT

Highway Development into Bemidji

The first roads from the Bemidji area reached the
nearest railheads at Fosston and Park Rapids. The road to
Fosston opened in 1889 and the fifty-mile route to Park
Rapids five years later. The first supplies for the area
came over the sixty-mile Fosston route, destined to be the
major route of migration from the Dakotas and western
Minnesota.[1]

The early roads used by stagecoaches and freight
wagons or "tote teams" were little more than trails through
the woods. The trails followed high land when possible,
an some effort was made to bridge the swamps and streams.
Swamp crossings were made possible with a corduroy road
(discussed in highway construction methods) which worked
well; however, there weren't enough of them and in the
spring or during times of heavy precipitation the roads
were nearly impassable.

Two marked routes passed through the area prior to
1921 when the Minnesota Highway Department established a

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[1]Hagg, "Bemidji: A Pioneer Community of the 1890's,"
p. 35.

district headquarters at Bemidji. These were the Theodore
Roosevelt Highway and the Jefferson Highway, also known as
the "Pine to Palm" route. The Theodore Roosevelt Highway
ran from Duluth to Bismarck, North Dakota, and was desig-
nated by T. R. Markings along the way. Many of these marks
were found on trees, rocks, and other conspicuous places.
The Jefferson or "Old Jeff" Highway ran from Winnipeg to
Minneapolis and points south, passing west of Bemidji and
continuing south through Itasca State Park. Neither road
had been completely graded except where work was necessary
to make them passable.[1] Little progress in road building
had occurred by 1918, when railroad employees recalled
watching automobiles driving along railroad grades while
going from one town to another. Early busses and jitneys
also followed the railroad tracks.[2]

Early businessmen were eager to induce automobile
tourist travel to the area and in 1919 a Bemidji Commercial
Club pamphlet advertised three of the largest, most modern
garages in the state. These were the C. W. Jewett garage
(Ford), the Bemidji Auto Company (Buick and Dodge), and
the Lelford Auto Company (Overland).[3] Another pamphlet
published a few years later advertised the scenic highways

[1]Interview with David Rose, Maintenance Engineer,
Minnesota Highway Department, Bemidji District (retired),
March 15, 1967.

[2]Kerr, p. 28.

[3]Minnesota State Historical Society, Bemidji
Collections--The Messenger of the First National Bank,
Bemidji, Vol. II No. 6, June, 1912, p. 3.

of the area, the Mississippi River Scenic Highway, the
Minnesota Scenic Highway, and the Itasca Park Highway.
Although the highways ran through beautiful country,
traveling was often very difficult.

Although some of the first road building in the
area was carried on by the Beltrami County Highway Depart-
ment, the feeder routes constructed had little effect on
the growth of through transportation. For this reason,
secondary routes were not included in the study. A great
deal more emphasis was given to the trunk highway system
developed by the state of Minnesota because of the greater
contributions they made toward the development of the city.

Highway Legislation and Establishment of the Bemidji District

In 1910 the Elwell Road Act was passed by the Minne-
sota Legislature to improve roads of the state. Because
little had been done in the Bemidji area by 1912, aroused
citizens presented a petition before the state highway
commission asking for an east-west road from St. Vincent
to Duluth and a north-south road from the Twin Cities to
International Falls with a junction at Bemidji. The roads
were to be graded a full twenty feet wide, placed in the
best possible condition and maintained to a high standard.
The petitioners felt that with good engineering and large
contracts, railroad contractors would clamor for the jobs,

thus assuring minimum construction costs. Construction expenses, estimated at $1,000 per mile, were to be assumed one-half by the state and one-quarter each by the county and the property benefited. Each quarter section within a mile on either side of the highway would be assessed $31.25. Little action was taken on the petition until 1920 when the Minnesota State Highway Department was established.[1]

In 1906 the Minnesota Highway Commission was established to oversee highway routes and road building in the state and in the following year the state issued its first metal license plates to the 500 registered automobile owners in Minnesota. Licensed automobiles increased to 300,000 by 1920 and it was felt that the highway commission would be unable to handle the road building task that loomed ahead. In 1921 the commission was replaced by the State Highway Department with Charles M. Babcock as its first commissioner.[2] The establishment of the highway department included other issues important to the future growth of highways. It provided for a bond issue to finance road building and seventy routes were named to be developed into state highways. The routes were to connect county seats and the principal cities of Minnesota. With the establishment of the Highway Department the state was divided into districts

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[1]The Messenger of the First National Bank, p. 5.

[2]Heilbron, p. 193.

and Bemidji was designated as the head of its district.

The highway department established its district in Bemidji in the spring of 1921; however, Department equipment in the Bemidji maintenance section was non-existent at that time. All maintenance was done with hired equipment and men. The usual equipment was a horse team and a wagon and for five dollars per-day the man would furnish the team, wagon, and all the tools necessary to do the job.[1]

Grading of Trunk Highways

Soon after the establishment of highway department districts, the route west from Bagley to Clearbrook was graded. As the first official trunk highway grading in the area, the route brought a greatly needed improvement for travel to the west. The grade closely followed the old Bemidji-Fosston tote road.[2]

The route leading east out of Bemidji was graded in 1923 after completion of a bridge crossing the narrows between Cass Lake and Pike's Bay. The completed road helped to establish a route to Brainerd and the Twin Cities. Highway 71 which followed the old Theodore Roosevelt Highway opened to traffic in 1926, establishing a new route to Itasca Park and Park Rapids.[3]

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[1]Rose.

[2]Ibid.

[3]Ibid.

MAJOR HIGHWAYS
OF MINNESOTA
1950
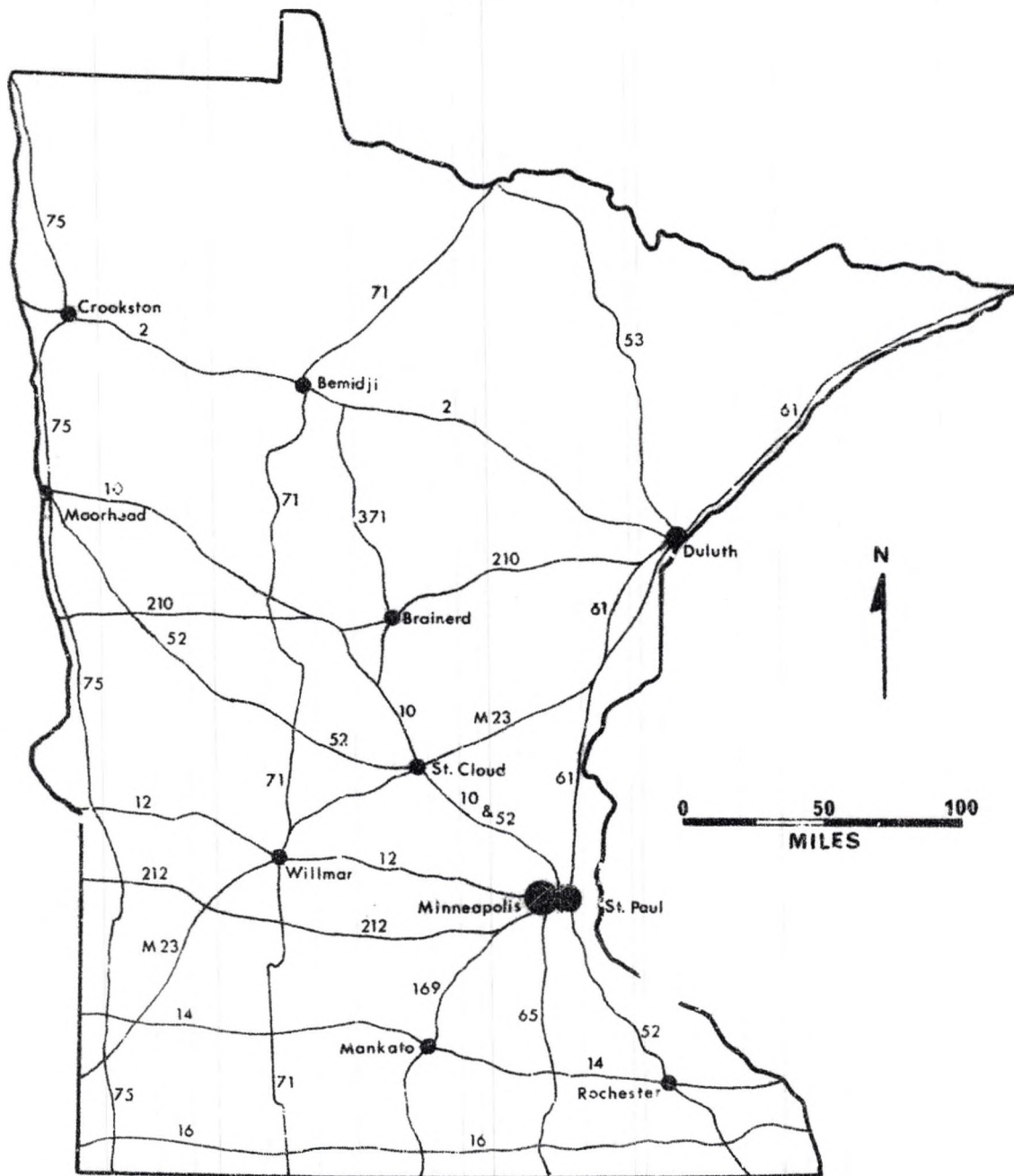
All highways are U. S. routes except Minnesota route 23.

Figure 9

With grading completed to the major service areas, Bemidji began a new era. Railroad men began to see a decline in their service because of the increasing use of motor vehicles.

Construction Methods

Road building in the area was doubly difficult because of the terrain. Poorly-drained moraines and outwash plains, inconsistent soil types and numerous lakes and rivers complicated the task. Road builders knew little about construction of roadbeds that would hold up in this type of soil. Many of the first roads were stabilized with clay, which, after building, was hard and smooth but in the spring or in periods of heavy rain, the clay soaked up water and caused roads to become impassable. Because frost heaves were a major problem in the spring, roads had to be posted for maximum load weights during this period. When the spring thaw began, many of the roads became impassable because of the spongy areas. With continuous experimentation the highway department had nearly solved the problem by 1940.[1]

Building of early roads was done with one or one-and-one-half-yard bottom dump wagons pulled by a team of horses. Wagons were loaded in several ways; in deep cuts a steam shovel was generally used, while on level ground

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[1]Ibid.

contractors used a mucker, an elevating device pulled by
eight or ten horses. Another horse-drawn machine was a
type of plow that would force earth material onto the
wagons. Rocks, boulders, roots, and stumps often caused
loading problems.[1] Swamps were generally crossed by the
building of a corduroy road. Successive layers of criss-
crossed logs were placed over the area to be crossed with
the number of layers required depending on the condition
of the area. Material for the corduroy, in most cases,
was obtained from clearing the right-of-way.[2]

Construction camps of the era, generally consisted
of a horse corral and a tent used as a shed or barn. Me-
chanics in the camp were called horse tenders or harness
makers. Although hay could be bought locally, feeding the
horses was a problem because feed grains had to be brought
in from outside the area.[3] Horses were generally owned by
the contractor, as in the case of Zontelli Brothers Company
of Crosby, Minnesota, builders of Highway 71 south of
Bemidji. Men and teams were also hired from the surrounding
area because there was usually an excess of both since
logging operations were usually at a standstill during the
summer period.[4]

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[1]Interview with Arthur A. Weis, sawmill operator in
the Bemidji area in the 1920's. March 25, 1967.

[2]Ibid.

[3]Ibid.

[4]Ibid.

Snow Removal

One of the major problems in road maintenance was winter snow accumulation. Before wheeled vehicles came into use, this problem was solved by the use of sleighs; however, in the early days of the automobile, the first snow would cause them to be put into storage for the winter. As the number of automobiles and trucks increased, so did demands for plowed roads.

In the early 1920's the Bemidji district hired plows for most snow removal while groups of shovelers cleared areas that plows couldn't penetrate. Highway department equipment was first used in the winter of 1926-1927 when two snow plows were brought in from another area of the state. The following winter the district acquired larger snow plows that were better able to cope with the problem and in the following years, the district added newer model truck plows, motor patrols, and rotary blowers. During severe winters the district was able to draw extra plows out of the general highway shop in St. Paul.[1]

Early plows couldn't throw the snow entirely clear of the right-of-way and this caused multiple problems during winter drifting and spring thaws. After winter storms, plowing left high banks on either side of the roadway and after each successive storm the problem grew worse as banks became higher. During spring thaws melted water would run

[1]Rose.

back into the roadway causing them to become soft and muddy.
In later years, with better road building methods and plowing
equipment, this problem was almost entirely eliminated.

Surfacing of Trunk Highways

The first all-weather surfaced road from Bemidji was
Highway 2 which ran east to Cass Lake. Bituminous surfacing
of this highway was completed in 1928 and until the early
1950's, sections of the road were improved and resurfaced.
In the 1950's the highway was rebuilt along a shorter route,
using the latest in engineering techniques. With the im-
provement of this highway and Highway 371 from Cass Lake to
Brainerd, it was possible to haul loads from Bemidji to
Minneapolis without spring weight restrictions.[1]

Highway 2 west of Bemidji was paved with concrete
in 1932, thus eliminating the need for normal spring weight
restrictions. In the same year concrete paving was com-
pleted on Highway 71 as far north as Birchmont and neither
of these roads approaching Bemidji has since been resurfaced.
All-weather bituminous surfacing of Highway 71 to the south
of Bemidji began in 1930. The road was resurfaced twice on
the original roadbed and, in the late 1950's, it was im-
proved further with the elimination of frost heaves and a
wider roadbed. With all-weather surfacing of highways
leading out of Bemidji in four directions, the city had almost
unlimited access to any area of the state or nation.[2]

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[1]Ibid.

[2]Ibid.

Development of Truck Transport

Dray Lines

As the railroads entered Bemidji, auxiliary services
rapidly developed. The most important of these was the dray-
age of freight to and from the railroad depots. One of the
first and most successful men in this business was Joe
McTaggert. Before the railroad entered Bemidji, McTaggert
hauled goods and passengers from Park Rapids and Walker by
stage. With hauling experience and a job jeopardized by
the railroad, it was only natural that he turn to drayage.
McTaggert entered the dray business with one team of horses
and a lumber wagon fitted with a flat bed. As Bemidji be-
came a bustling log town, McTaggert's business continued to
grow and at times he used up to five teams and wagons to
move the increasing amount of freight.[1]

In 1917 McTaggert put his first motorized vehicle
into service, a 1917 Model T Ford truck with solid rubber
tires. During good summer weather much of the freight
could be carried by truck, but in long periods of wet
weather and during the winter the truck was useless.
McTaggert relied on horses during the winter until mechan-
ical improvements made trucks more reliable and snow plow-
ing became more commonplace. Horse drawn wagons continued
to be an import means of transport for McTaggert until
about 1935 when he switched completely to trucks. During

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[1]Interview with Bert McTaggert, son of the origi-
nator of the McTaggert Dray Line. April 4, 1967.

peak freight movements on the railroads, McTaggert operated
five trucks in dray service.[1]

McTaggert competed with many other drays in the boom
days of Bemidji. Most competition lasted only a short time
because the earlier competitors generally were men looking
for a quick way to make money. As Bemidji settled down
after the great logging period, another reason for competi-
tion became evident. That is, the economy of the Bemidji
area, based on forest products, was subject to sharp price
fluctuations in prices. Such unpredictability caused men
to try new ventures.

H. D. Aylesworth bought the McTaggert Dray Line in
1945; however, by this time railroad freight movement had
declined because of increasing competition from trucks. In
succeeding years Aylesworth normally used three trucks for
freight delivery and other local service.[2] Although a
number of dray lines were actively competing, only three,
Marion Dray, Seidl Dray, and the Tom Smart Dray stayed on
to compete with McTaggert. His company changed hands in
later years and eventually became Bemidji Transfer, a small
operation, using only one wagon or truck to move freight.[3]

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[1]Ibid.

[2]Interview with Roby Aylesworth, one of the owners
and operators of Merchants Transfer and Storage of Bemidji.
April 3, 1967.

[3]McTaggert.

As truck common carriers increased the quality of
service, railroad freight declined and dray lines reflected
this decline. In the last several years, three or four
trucks have easily moved all the Bemidji railroad freight.

Common and Contract Carriers

As farm production increased after the logging boom,
farmers looked farther for markets. Produce was consumed
locally while grain was sold to local elevators and railed
to milling points. Cattle that weren't consumed locally
were generally marketed in South St. Paul.

A local cattle shipping association was established
to market cattle. Members listed their cattle with the
association so that when a carload could be filled, the
association would ship. This method was very inefficient
because the farmer would often miss the prime market as a
result of delays in filling a car. Poor communication with
members in announcing shipping dates also created a serious
problem. Thus with the many problems involved the associa-
tion began to investigate new methods for transporting
cattle to market.

In 1930 the cattle shipping association asked for
bids to truck cattle to South St. Paul. Because of economic
conditions of the time, many were interested in the contract.
Included in the bidders were unemployed, farmers looking for
additional income and men who were making a living from the

woods. Of the many bidders, few had the equipment to fulfill the contract. The original contract winner couldn't furnish the equipment so the contract went to Floyd Hirt, the next highest bidder. Hirt accepted the contract to haul cattle between Bemidji and South St. Paul.[1]

Cattle were picked up within a thirty mile radius of Bemidji and assembled in the association yard, and twice-weekly they were trucked to South St. Paul.[2] This system was more convenient for the farmer and it gave him a better opportunity to sell when prices were high.

During the first few months of operation Hirt hauled cattle only, with no return loads. After it was proven that a twice-weekly schedule could be maintained, local businessmen became interested in truck delivery from the Twin cities. Railroads were serving this need but their service involved multiple handling of the freight and frequent delays. Trucks could offer two day service with a minimum of handling.

The state of Minnesota adopted laws regulating the trucking industry in 1933 and these laws regulated the number and type of carriers between points. The regulating agency was the Minnesota Railroad and Warehouse Commission.[3] Common carrier applications to serve Bemidji were called for in 1933. Although Hirt was the principal trucker

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[1] Interview with Floyd Hirt, originator of Hirt Transfer. March 14, 1967.

[2] Ibid.

[3] Ibid.

serving Bemidji, the rights were awarded to Midnight Motor Express of Fargo. Midnight Express could give Bemidji service to more points while Hirt could continue to serve the city because of a "Grandfather Clause" which allowed those serving an area before enactment of the regulation, to continue service.[1]

Hirt continued to haul cattle to South St. Paul until 1948 when he switched completely to other commodities. The change enabled Hirt to haul edible commodities in return because Railroad and Warehouse regulations would not permit the same truck to be used for cattle and edible commodities.[2] This change in operation showed the increasing importance of Bemidji as a distribution center. There were now enough large movements of goods to enable a trucker to concentrate solely on the freight business.

After receiving the common carrier rights, Midnight Express served Bemidji for several years. The company stopped operations in the late 1930's when they were unable to make the Bemidji run profitable. Glendenning Motorways of St. Paul bought the Midnight Express rights in 1945 and resumed Bemidji service that same year. The company served a number of areas to the west of Bemidji, notably Grand Forks and Crookston, and wanted to expand services to other

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[1]Ibid.

[2]Ibid.

parts of the state.[1]

Glendenning's first operation consisted of service from a through truck. As business increased, a terminal was established in Bemidji and by the early 1960's company facilities included the terminal building and three local delivery trucks, all served by a five-man crew. Freight volume increased from a few thousand pounds weekly to two semi-trailers daily.[2]

Bemidji is currently served by two common carrier truck lines, Glendenning and Century Motor Freight. Century Motor Freight's expansion in the area was similar to that of Glendenning's. Predecessors to the company started serving Bemidji in the 1930's. Early freight volume was very small but increased steadily after World War II. Century's volume of freight and equipment is now similar to that of its competition.[3]

The growth of motorized common carriers in the Bemidji area was partially due to Bemidji's growing importance as a distribution center. Tourism and summer home ownership in the area has added to the demand for trucking. While railroads eventually plan to discontinue less than carload lot shipments, trucking companies are giving better and faster service.

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[1]Interview with the Terminal Manager, Glendenning Motorways, Bemidji. April 4, 1967.

[2]Ibid.

[3]Interview with Richard Erickson, Terminal Manager, Century Motor Freight Inc., Bemidji. April 4, 1967.

Long Distance Trucking

Since the early 1950's Bemidji has grown as a long
distance trucking center. Grain is the primary commodity
moved in this growing segment of transportation. Among
primary reasons responsible for the growth are: (1) improve-
ment of roads in the area, (2) Bemidji's central location
between Duluth and the Red River Valley, (3) the number of
small timber truckers in the area, (4) high unemployment
in the area (5) opening of the St. Lawrence Seaway in
1959, and (6) growth of the C. D. Haugen Trucking Company.

Development of highways in the area contributed
greatly to the growth of long distance trucking in Bemidji.
Statewide development of arteries leading through Bemidji
was also very important. The most recent improvement has
been the opening of a four-lane divided highway from Fosston
to Bagley on Highway 2 west of Bemidji. Resurfacing was
completed in 1963 on sections of this same highway east of
Grand Rapids. The Bemidji-Duluth section of Highway 2,
although only two lanes, is an excellent highway. In the
opinion of David Rose, a former highway department mainten-
ance engineer, the improvement of roads in the area brought
about trucking more than any other factor.[1]

Increasing use of highways through the Bemidji area
can be seen in Table 7, showing the average annual daily
volume of traffic.

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[1]Rose.

TABLE 6

AVERAGE DAILY VOLUME OF TRAFFIC[a]
(IN NUMBER OF VEHICLES)

Year	Hwy. 2 west	Hwy. 2 east	Hwy. 71 north	Hwy. 71 south
(Total Traffic Volume)				
1951	1922	1648	1732	1311
1955	2350	1940	2300	1580
1959	2800	1960	2400	1500
1964	3670	2590	3000	2010
(Commercial Traffic Volume)				
1951	392	295	384	325
1955	470	380	430	300
1959	620	440	440	290
1964	840	610	500	360

[a]Minnesota Department of Highways, Diagramatic Traffic Flow Map, Maps for years 1951, 1955, 1959 and 1964.

It has been estimated that sixty to seventy per cent of the commercial traffic going east out of Bemidji consists of long distance transports.[1] Bemidji's central location between Duluth and the Red River Valley is also of prime importance. As a midway point the city is a convenient place to refuel and change drivers. Several self-employed truckers have established residence in Bemidji for these reasons.

[1]Interview with Herbert Dale, Engineer, Minnesota Highway Department, Bemidji District. March 14, 1967.

Bemidji is also the crossing point of two major trunk highways. Highway 2 leading from Duluth to the North Dakota border intersects with Highway 71, a statewide artery from Canada to the Iowa border. In addition, many important trunk highways intersect the two roads throughout the state. Another important route, Highway 371, terminates fourteen miles east of Bemidji. This highway leads to Brainerd and Little Falls with excellent connections to St. Cloud and the Twin Cities.

When the large timber and railroad logging operations ended in the 1920's, trucks were used increasingly to haul logs from the scattered areas of lesser value timber. As advancement in mechanical log loading and larger trucks came about, only the most efficient operators were able to make a profitable living. With the possibility of greater profits, many of these small operators turned to long distance hauling in the 1950's. When the owners were able to secure hauling contracts, they equipped their trucks with semi-trailers and began operation. As they progressed, they were able to invest in bigger equipment. In recent years many operators have advanced to tandem diesel tractors and trailers hauling payloads of 50,000 pounds or more.

In expansion movements the availability of drivers has never been a problem for the trucking industry in Bemidji. Although the rate of pay is low, there is an abundance of drivers because of chronic unemployment conditions of the

area. The wage scale for long distance drivers in the area is normally about 5¢ per mile as compared to unionized drivers from metropolitan areas who receive over 10¢ per mile.[1]

Table 8 shows the changes in distribution of employment in Beltrami County since 1940. Table 9 shows the number of employed persons in the county and the per cent of unemployment by month. Average unemployment for 1965 was eight per cent. This average has fluctuated with the economy, but since the end of large-scale logging the Bemidji area has been plagued with this problem. Beltrami County has been designated a redevelopment area by the Area Redevelopment Administration, and it has also qualified under the Public Works and Economic Development Act of 1965 for designation as a redevelopment area because of unemployment.[2]

Opening of the St. Lawrence Seaway in April 1959 was another factor in area trucking development. The seaway project made it possible for ocean-going vessels to come into the Great Lakes thus giving Duluth an outlet to the sea. The port of Duluth is icebound during the winter months but large storage facilities enable overland transporters to move grain to market throughout the year. Duluth

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[1]Erickson.

[2]Carlson, p. 1.

elevators have storage space for more than 46,000,000 bushels
and the port annually clears more than 100,000,000 bushels
of grain.[1]

TABLE 7

BELTRAMI COUNTY DISTRIBUTION OF EMPLOYMENT[2]

Type of Employment	Number 1940 Employed	Per Cent	Number 1960 Employed	Per Cent
Agriculture	2,655	39.2	1,245	18.1
Mining	3	-	25	0.4
Construction	249	3.7	459	6.7
Manufacturing	735	10.9	764	11.1
Transportation, Communication, and Utilities	353	5.2	484	7.0
Trade	1,089	16.1	1,503	21.9
Finance, Insurance, and Real Estate	82	1.2	38	0.6
Services	926	13.7	1,855	27.0
Public Administration	611	9.0	308	4.5
Other	68	1.0	195	2.8
Total	6,771	100.0	6,876	100.0

[1]Ronald L. Chathan, Paul F. Griffin, and Robert N.
Young, Anglo-America (San Francisco: Fearon Publishers,
1962), p. 201.

[2]Beltrami County Planning Advisory Commission,
Economic Background, Land Use, and Zoning Regulations, A
Report Prepared by Harland Bartholomew and Associates (Saint
Louis: Harland Bartholomew and Associates, 1966), p. 53.

TABLE 8

COUNTY WORK FORCE ESTIMATES - 1965[a]

Month	Work Force	Total Employment	Unemployment Rate
January	7,754	6,832	11.9
February	7,642	6,646	13.0
March	7,640	6,664	12.8
April	7,972	7,095	11.0
May	8,678	7,956	8.3
June	8,833	8,209	7.1
July	9,173	8,659	5.6
August	8,959	8,529	4.8
September	8,264	7,894	4.5
October	7,944	7,609	4.2
November	8,070	7,526	6.1
December	7,550	6,968	7.7
Annual Average	8,161	7,511	8.0

[a]Herbert Carlson (ed.), Beltrami County Resources and Its People, (Bemidji: Beltrami County Area Development Association, February, 1967), p. 52.

In 1955 C. D. Haugen moved his trucking operation to Bemidji from Kelliher, Minnesota where he had operated two long-distance grain trucks. Haugen continued to expand as the need for grain transporters grew and eventually became the largest long-distance grain trucker in Bemidji. Besides adding his own units, he also leased trucks to haul for him so that by 1960, forty-four drivers were under contract to Haugen. Because of marginal profits and the great amount of bookkeeping involved, Haugen gradually quit leasing trucks. By 1965 he was operating seventeen trucks, all owned by his company.[1]

Many of the drivers who had leased to Haugen kept operating as self-employed truckers. Most still operate only one or two trucks, although Robert Benson--who started with Haugen in 1960--now operates six units.[2]

Because of marginal profits in grain hauling, there is a substantial turnover in ownership of units. This is expected to be the case unless hauling rates are raised. Since railroads are competing for the same business, it seems improbable that rates will increase.

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[1]Interview with C. D. Haugen, owner and operator of C. D. Haugen Trucking, Bemidji. April 24, 1967.

[2]Ibid.

Development of Bus Transport

Intra City Service

The start of local service bus transportation in
Bemidji closely resembled the beginning of dray lines.
During the boom period of the city, many people started
service but few lasted long enough to realize a profit.
Service was very haphazard with no scheduled stops or routes.

Early jitneys, as passenger-carrying vehicles were
called, first operated between the Nymore area of south
Bemidji and downtown Bemidji. Most of the large lumber
mills were located in Nymore thus creating a need for
transportation between the major areas of the city.

Kiehl Brothers were among the first to start local
service in 1914 and continued until 1918. Soon after, two
companies that were predecessors of today's line, began
operating. The Wold-Erickson line started in 1920 and the
Olson-Westnes line one year later. In 1926 both companies
sold to D. J. Masterson whose family continued to operate
the city bus line until the early 1960's when it was sold
to the Aylesworth Brothers.[1] The company continued to
operate the line using two busses on local service
schedules.[2]

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[1] Interview with C. J. Olson, original owner of the
Olson-Westnes Bus Line. April 4, 1967.

[2] Aylesworth.

Bus scheduling was non-existent until the early 1920's when companies started limited schedules. When D. J. Masterson took over as the major operator, all trips were run on a schedule basis.[1]

The growth and decline of the city bus line closely followed the growth of the city and the use of automobiles. Many of the early riders were employees of the lumber mills but, as the timber source ran out and the mills began closing, the number of passengers from the Nymore area declined. The decrease in this area was partially off-set by an increasing number of student riders from the growing normal school. As the use of automobiles increased, the number of bus riders declined. Without the use of bus service by college students, the present line would be unable to operate profitably.

Inter City Bus Service

Brainerd was the first city to have connecting bus service with Bemidji. Before this service was started by the Olson-Westnes Company in 1923, a hearing was held to determine if service was necessary. The Northern Pacific Railway, which served both cities, fought the service but the court determined that there was a need for it.[2] Service on the run was originally every other day. Soon after operation began, Anton Wold started serving the route on

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[1] Olson.

[2] Ibid.

the other days. When Olson-Westnes changed to daily service in 1924, Wold discontinued service entirely. An early bus of the Olson-Westnes Company was a modern twenty-one passenger White which included a smoking compartment and was called the "Big Chief." The name supposedly encouraged use by Indian passengers.[1]

In July 1927 the Northland Transportation Company took an option to purchase the company. The following fall the company bought the rights and have continued its operation.[2] The story of the growth of the Northland Transportation Company is legendary. From its early start in Hibbing, Minnesota, it became a cross continent bus line. As it expanded in the early 1920's, it extended service to Bemidji from the east. Greyhound Lines, as the company is now called, served the city from the east until 1963. At that time the rights were sold to Triangle lines of Crookston, Minnesota. This acquisition by Triangle gave it exclusive service on Highway 2 across the entire state. Triangle started serving Bemidji from the west in 1924.[3]

Bus service north from Bemidji has carried few passengers in recent years. From the start of daily service

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[1]Ibid.

[2]Ibid.

[3]Interview with Grover Kalbfleisch, owner of Triangle Lines, Crookston, Minnesota. April 4, 1967.

in the 1930's by D. J. Masterson, the schedule of trips
has declined to one round trip weekly. The several owners
through the years included Phelps, Webster, and Northern
Transit and in 1966, Bemidji Bus Lines, owned by the
Aylesworth Brothers bought rights to the route. Since
assuming ownership, the Bemidji Bus Line has provided
only token service in order to maintain the operating
rights.[1]

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[1]*Ibid.*

CHAPTER V

TRANSPORT CHANGES

Railroads

Railroad growth in Bemidji was a result both of the advancement of the logging industry and its situation on cross-country lines. The growth and decline of railroad activity paralleled that of the timber industry. Logging railroads were profitable only while there were large stands of timber available. As the stands of timber disappeared, road building and trucking became more prevalent. Eventually spur lines disappeared from the woods, and trucks moved the available logs to main lines.

From a low period in the late 1920's when the stands of saw-timber were depleted, rail shipment of forest products has increased. Because of technological advancements in the paper making industry, pulpwood from the area has become more important. The most recent innovation is a chipping plant of the Corcoran Timber Company. Several boxcars of log chips are shipped to mills in Wisconsin every week.[1] Railroads in Bemidji normally ship from 100 to

[1]Interview with Charles Lyons, manager Corcoran Timber Company, Bemidji. April 24, 1967.

75

150 carloads of pulpwood per month.[1] Shipment of forest products remains the largest share of railroad business in Bemidji.

Unlike carload shipments, passengers and freight have declined steadily since the boom days. Railroads enjoyed a great amount of freight and passenger business as the city was growing. Since the 1930's, railroads have gradually lost these types of business because of the development of good roads and reliable motor vehicles. Only one railroad, the Northern Pacific, offers passenger service to Bemidji. Service ended on the Soo Line in 1959[2] and on the Great Northern in 1961.[3] It appears that less-than-carload freight shipments will also follow this trend as the Northern Pacific and the Soo Line both hope to discontinue this service in the future. In addition, the Northern Pacific is trying to end passenger service to the city. The line carries thirty to forty passengers on its daily route through the city.[4]

The use of railroad lands and facilities is also changing. In many cases, railroad log loading areas along

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[1] Interview with John J. McGee, cashier, Great Northern Railway, Bemidji. April 24, 1967.

[2] Interview with Grover Hutchinson, agent, Soo Line Railroad, Bemidji. April 24, 1967.

[3] McGee.

[4] Interview with N. L. Collins, agent, Northern Pacific Railway, Bemidji. April 24, 1967.

lakes have been left idle while others have become sites for recreation and summer homes. The union depot, formerly used by the Soo Line and the Northern Pacific as a passenger terminal, is now used only a few hours a day by the Northern Pacific. There is no full-time passenger agent in the depot as this service is now handled by freight agents. Unused railroad roadbeds are now used for varied purposes. County and township roads follow some spur routes while others are used as forest service fire-watch roads. The bed of the former Minneapolis, Red Lake and Manitoba Railroad is now used by snowmobiles and hunters.

Future railroad activities will likely center around the movement of carload lots of forest products. It seems probable that passenger and less-than-carload shipments will be dropped from Bemidji service in the future.

Trucking

With the exception of dray lines, trucking in the Bemidji area has continually increased. Dray lines are linked with the railroads and declines in railroad freight shipments have been felt by the drays. Dray line service has greatly declined from the high points of service in the 1930's and 1940's. Presently, three trucks can normally handle all drayage in the Bemidji area. If the railroads are successful in eliminating less-than-carload shipments, this number will decrease even more.

Common and contract carrier service has continued to rise since its inception. Growth before World War II was slow, but has increased greatly since. This growth was partially caused by the change from railroad shipping. In addition, the overall growth of the city and the increasing number of summer homes has added to truck freight movements.

Future growth of long distance hauling in the area is speculative. The growth or decline depends primarily on competitive freight rates. Since trucking companies can't afford to lower prices to compete with railroads, rising costs may cause this segment of transportation to decline.

The number of service stations in the area has always been large because of the great amount of tourism. In some cases, stations have expanded their facilities to serve trucks. One truck stop offering bunks, showers, fuel, and a restaurant started in the late 1950's, but in general, the increase in trucking has had little effect on local service stations.

Busses

Local bus service has greatly declined since the thriving days of the 1920's. With the closing of the lumber mills and the combining of business functions in the central business district, use of local bus service has continually declined. Most of the passengers are students from Bemidji

State College, located approximately twenty blocks from downtown. The increasing use of automobiles may eventually cause bus service to be discontinued.

Inter city bus service has also declined in recent years. The bus lines grew steadily until after World War II, but since then have declined because of road improvements and the increasing use of the automobile.

If service on the lines remains good, busses are expected to carry many passengers, but fluctuations in service and rates could cause sharp declines.

CHAPTER VI

CONCLUSION

The physical setting and the development of roads
in the Bemidji area has been emphasized to show the signif-
icance of these aspects in the development of transporta-
tion.

Cutting of forests in the area was delayed by the
orientation of the waterways. Lands north of Bemidji,
drained by the Red River of the North, were the most acces-
sible and consequently were the first to be logged. Those
lands in the Mississippi watershed area awaited the move-
ment of the logging industry upstream. Before this movement
reached Bemidji, the use of logging railroads had become
more practical. As logging railroads and thru lines
penetrated the area, Bemidji became an important lumber and
transportation center.

By the early 1920's when the end of the available
saw timber was near, many area residents turned to agricul-
ture. Because of soil types, terrain, and distance to
markets, agriculture did not develop to any great extent.
Since the 1920's, however, second growth and lesser value
timber has become increasingly important to the area.

Road development was of prime importance because it formed the basis for the development of truck and bus transportation. Early development of good roads enabled Bemidji to grow into a major distribution center for northern Minnesota. Also important to Bemidji's growth as a transportation center has been the city's location midway between Duluth, Minnesota, and Grand Forks, North Dakota, as well as the crossing point of two major highways.

Although county population has been declining, the number of people in Bemidji has remained relatively constant. The city will continue to follow this trend because of the transportation facilities offered and the fact that location guarantees its importance as a collection center for the shipment of raw materials and as a distribution center for foodstuffs and manufactured goods.

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