

**GREAT NORTHERN
RAILWAY COMPANY**

63rd.
Annual Report
1951



GREAT NORTHERN RAILWAY HIGHLIGHTS OF 1951

ITEM	1951	1950	1949	1948	1947
Financial Data in Millions of Dollars:					
Net Income	\$ 23.9	\$ 28.2	\$ 18.7	\$ 27.6	\$ 22.5
Dividends Paid	12.4	10.8	12.4	10.8	9.3
Operating Revenues	248.0	227.5	212.3	216.3	193.8
Taxes	36.9	34.5	26.0	24.0	24.5
Fixed Charges	8.2	7.9	7.7	7.5	7.7
Rate of Return on Property Investment	3.7%	4.3%	3.4%	4.6%	4.1%

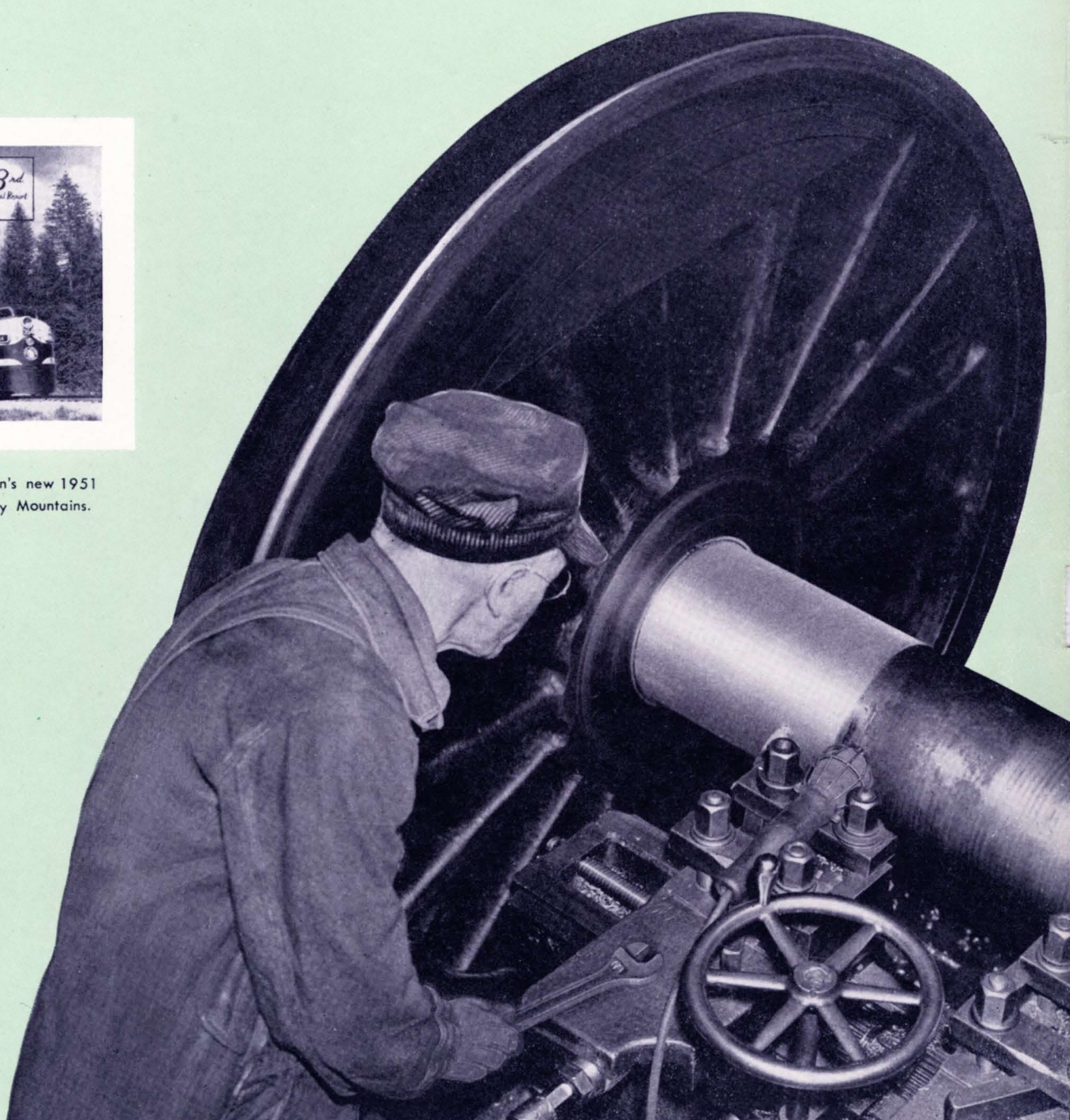
Averages:

Per Share (3,059,561 shares, 1951):

Net Income	\$ 7.83	\$ 9.11	\$ 6.05	\$ 8.91	\$ 7.28
Dividends Paid	4.00	3.50	4.00	3.50	3.00
Fixed Charges	2.68	2.57	2.49	2.43	2.49
Percent Operating Expenses to Revenues	74.3%	71.3%	76.3%	75.0%	74.1%
Times Fixed Charges Earned	3.9	4.6	3.4	4.7	3.9



Cover picture shows the Great Northern's new 1951 15 car train Empire Builder in the Rocky Mountains.



GREAT NORTHERN RAILWAY COMPANY
EXECUTIVE DEPARTMENT

J. M. BUDD
PRESIDENT

ST. PAUL 1, MINNESOTA

March 31, 1952

To Great Northern Shareholders:

The 63rd Annual Report of the Great Northern Railway Company, covering the year ended December 31, 1951, is herewith presented on behalf of the Board of Directors.

The most significant fact about the year's operations is the decrease in net income with a record dollar volume of traffic. Operating revenues totaled \$248 million, an increase of \$20 million over 1950. Substantially higher wage rates, coupled with increased prices for materials and supplies and higher taxes increased the cost of doing business some \$24 million. Net income for 1951 was nearly \$24 million, or \$4 million below the 1950 figure.

Dividends were increased from \$3.50 to \$4.00 per share in 1951 in spite of the decrease in net income from \$9.11 in 1950 to \$7.83 per share in 1951.

A modest increase in freight rates was authorized by the Interstate Commerce Commission during the year. This failed to offset costs which were higher throughout the year. Under more normal conditions the 12% increase in volume would have resulted in a substantial increase in net income.

Nearly \$30 million was spent in 1951 on property improvements, about \$20 million of which was for new diesel locomotives and other rolling stock.

\$11.7 million of General Mortgage 5½% Series B bonds due January 1, 1952 were purchased during the year and paid off at maturity. Additional equipment trusts issued during 1951 totaled over \$27 million, at an average net interest rate of 3.05%.

In April, 1951, the discovery oil well in the new Williston Basin in North Dakota was brought in some 8 miles south of the main line station of Tioga. Accelerated drilling activity has followed over a wide area in North Dakota and Montana apparently defining an important new oil field. Great Northern owns no substantial acreage from which royalties might be derived.

Industrial development is expanding in the territory served by your Company. Some 212 new industries were located along Great Northern tracks, including a new aluminum plant near Wenatchee, Wash., a second aluminum plant being planned for the west side of the Rocky Mountains in Montana, a new lead-zinc plant near Northport, Wash., and expansion of production at other aluminum plants. On the eastern part of the railroad new grain elevators, warehouses, lumber manufacturing plants, bulk oil and propane plants were located in Minnesota, North and South Dakota and Montana.

Work was continued in 1951 on the Columbia Basin irrigation project in central Washington, and some 40,000 acres adjacent to Great Northern line will be irrigated in 1952. Construction of the large power projects along the line was continued, including work on the Hungry Horse Dam in western Montana, the Albeni Falls Dam in Idaho and the Chief Joseph and Rock Island Dams in Washington.

The high standard of maintenance of the property was continued.

In June, 1951, double daily service by streamlined trains was inaugurated between Chicago and the Pacific Northwest. An entirely new set of equipment was put in service on the Empire Builder and the equipment formerly operating on that train is now in service on the Western Star. These trains have been well received by the traveling public and patronage has increased.

For 1952 there is prospect of a continuing high level of traffic volume. Moisture conditions in general are favorable for substantial crops and it is believed that the iron ore movement will reach a new high. Should an increase in volume be realized, it will not necessarily produce larger net income unless the regulating authorities permit prompt and substantial freight rate increases.


President.

GREAT NORTHERN RAILWAY COMPANY

STOCKHOLDERS

32,387 Stockholders, December 10, 1951.

BOARD OF DIRECTORS

Term Expires May 8, 1952.

JOHN M. BUDD St. Paul President, Great Northern Ry. Co.	WILLIAM L. McKNIGHT St. Paul Chairman of the Board, Minnesota Mining & Mfg. Co.
THOMAS L. DANIELS Minneapolis President, Archer-Daniels-Midland Co.	ARCHIBALD W. WITHERSPOON Spokane Chairman of the Board, Old National Bank of Spokane

Term Expires May 14, 1953

Term Expires May 13, 1954

F. PEAVEY HEFFELFINGER Minneapolis Executive Vice President, F. H. Peavey & Co.	J. STEWART BAKER New York Chairman, Bank of the Manhattan Co.
GRANT KEEHN New York Executive Vice President, The First National Bank of the City of New York	FRANK J. GAVIN St. Paul Chairman of the Board, Great Northern Ry. Co.
RICHARD C. LILLY St. Paul Chairman of the Board, First National Bank of St. Paul	JAMES F. OATES, JR. Chicago Chairman, The Peoples Gas Light and Coke Co.
WALTER G. SEEGER St. Paul Chairman of the Board, Seeger Refrigerator Co.	FREDERICK K. WEYERHAEUSER St. Paul President, Weyerhaeuser Sales Co.

EXECUTIVE COMMITTEE

JOHN M. BUDD	FRANK J. GAVIN	F. PEAVEY HEFFELFINGER
RICHARD C. LILLY	WILLIAM L. McKNIGHT	WALTER G. SEEGER

OFFICERS

F. J. GAVIN, Chairman of the Board	St. Paul
J. M. BUDD, President	St. Paul
V. P. TURNBURKE, Vice President, Executive Department	St. Paul
T. BALMER, Vice President	Seattle
I. G. POOL, Vice President, Operating Department	St. Paul
E. C. MATTHIAS, Vice President and General Counsel	St. Paul
C. E. FINLEY, Vice President, Traffic Department	St. Paul
F. L. PAETZOLD, Secretary and Treasurer	St. Paul
J. A. TAUER, Comptroller	St. Paul
C. W. MOORE, Executive Assistant	St. Paul
V. N. WAHLBERG, General Auditor	St. Paul
T. A. JERROW, General Manager, Lines East of Williston	Duluth
I. E. MANION, General Manager, Lines West of Williston	Seattle
A. W. CAMPBELL, General Superintendent Transportation	St. Paul
J. L. ROBSON, General Superintendent Motive Power	St. Paul
H. J. SEYTON, Chief Engineer	St. Paul
A. N. CRENSHAW, Purchasing Agent	St. Paul
J. GARING, Right of Way, Land and Tax Commissioner	St. Paul
N. STOCKHAMMER, Assistant Secretary and Assistant Treasurer	New York
H. F. SMITH, Assistant Secretary and Assistant Treasurer	New York
C. F. ZIEGAHN, Assistant Secretary	St. Paul

EMPLOYES

29,907 Average Number for 1951

Principal Office: Great Northern Building, St. Paul (1), Minn.
Financial and Transfer Office: 2 Wall Street, New York (5), N. Y.
Annual Meeting of Stockholders, St. Paul, Minnesota, May 8, 1952

THE RAILROADS AND NATIONAL SECURITY

A strong, well-balanced national transportation system is needed to meet the needs of an expanding economy upon which our standards of living and the security of the Nation depend.

The American railroads have been and continue to be the backbone of our national transportation system. During World War II the railroads moved 97% of all military freight in addition to 70% of all other intercity freight.

Despite these well established facts, competing forms of transportation are being given support and encouragement through the grant of substantial subsidies and are seeking additional Federal and State assistance.

The increasing knowledge of these facts by the public is encouraging; and more important, a greater number of people realize that continuation of the government's paternalistic activities is giving certain public carriers unfair competitive advantages over the railroads.

A recent and encouraging development has been a complete study of the national transportation system under the authority of U. S. Senate Resolution 50. This was the first over-all study of domestic land and water transportation undertaken by either House of Congress in more than 10 years. A subcommittee of the Committee on Interstate and Foreign Commerce held hearings for a three year period, and issued a comprehensive progress report, Senate Report No. 1039, on October 19, 1951. Following are some significant excerpts from this heartening report:

"Regulation of the railroads at the present time is not uniform with that of competing carriers. The lack of uniformity is due primarily to the wide variance in time and concept among the legislative, administrative, and

judicial histories of the regulation of rails and the regulation of competing carriers.****

"Where the railroad is forced by competition to fight for a fair share of the traffic, that is, in a competitive area, it must contend against competing carriers under protective regulation, while the railroad itself, in the eyes of the regulatory authorities, is in the nature of a monopoly. The absurdity of such a situation is evident; the tragic consequence has been, and is, a serious crippling of the railroads and, therefore, of the national transportation system.****

"Four factors mainly have been responsible for the impoverishment of the railroads. First, competitors of the railroads are subject to a less restrictive type of regulation or exempted entirely from regulation. Second, the railroads have been prejudiced by the subsidization of many of their competitors. Third, railroads frequently have found it impossible to compete because, in the matter of rate determination, the exercise of managerial judgment and initiative has been curtailed unreasonably. Finally, the necessity and convenience provision of the law has been administered loosely, and as a result excessive facilities have been brought into existence through the issuance of excess certificates.****

"The recommendations contained herein are made for the purpose of correcting some of the more glaring defects in the application of our national transportation policy and to bring our transportation system to that state of health and strength which is admittedly so essential to the maintenance of a sound economy and to the very security of the Nation."

Diesel Locomotive Shop at Havre, Mont.



NET INCOME

Your Company's net income for 1951 amounted to \$23.9 million or \$7.83 per share. This was slightly more than the \$23.2 million earned from operating the property alone, as the outside income (largely interest and dividends received) more than offset the interest paid on Great Northern bonds outstanding and other corporate deductions. For 1950 the net income was nearly \$28.2 million or \$9.11 per share and over \$4.2 million above the 1951 figure.

Although the \$248.0 million of revenue in 1951 was at a new high and \$20.5 million above the revenues for 1950, this increase was entirely consumed by the \$22.1 million increase in Operating Expenses (higher wage rates, increased material costs and greater employment due to the increased volume), the \$2.4 million higher taxes (increase in Federal income taxes due to higher rates and larger payroll and State tax payments) and the \$200 thousand increase in payments for equipment rents largely due to an increase in use of freight cars required by the larger traffic in 1951.

DIVIDENDS

Four quarterly dividends of \$1 each per share were paid shareholders in 1951. The total dividends paid in 1950 amounted to \$3.50 per share.

OPERATING REVENUES

The \$248.0 million of railway operating revenues for 1951 were an all-time high for the second successive year. The increase over 1950 was \$20.5 million or 9.0%.

The increase during the first eight months of the year was exceptionally large. Traffic tapered off, however, and in each of the last four months of 1951 there was a decrease below the revenue for the corresponding month in 1950. The highest twelve-months' operating revenues ever earned by your Company was for the period ended August 31, 1951, and amounted to over \$260.7 million.

1. FREIGHT SERVICE

Freight revenue in 1951 was \$215.6 million—a new high, and an increase of \$20.0 million or 10.3% over 1950. Freight revenue by commodity groups for the past 5 years has been:

Commodity Group	Freight Revenue in Millions				
	1951	1950	1949	1948	1947
Manufactures and Miscellaneous.....	\$ 69.6	\$ 69.9	\$ 56.6	\$ 54.0	\$ 49.6
Products of Agriculture	62.7	51.7	58.4	54.8	49.1
Products of Mines....	42.6	35.9	33.7	39.4	32.8
Products of Forests...	29.6	27.5	24.3	25.8	21.2
All other.....	11.1	10.6	11.1	12.9	12.2
	<u>\$215.6</u>	<u>\$195.6</u>	<u>\$184.1</u>	<u>\$186.9</u>	<u>\$164.9</u>

INCREASE IN VOLUME

The revenue net ton miles handled in 1951 totaled 18.0 billion, the largest volume since 1944, and an increase of 12.4% over the 1950 movement of 16.0 billion net ton miles.

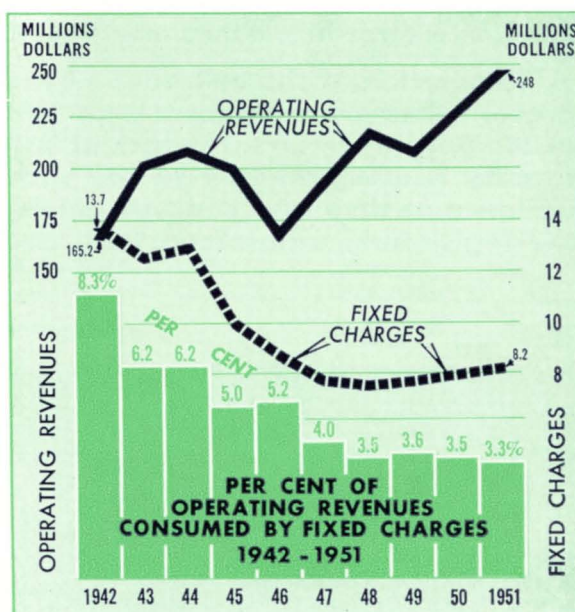
Lumber loadings in 1951 were approximately the same as for 1950. Loadings of logs, however, increased substantially.

A total of 235.3 million bushels of grain were transported in 1951, an increase of 27.5 million bushels over 1950.

The iron ore movement over the Allouez, Wis., docks in 1951 amounted to 28,550,903 long tons. In 1950 a total of 23,640,360 long tons were handled. The 1951 iron ore traffic was less than 1% below the all-time high movement of 28,717,689 long tons in 1942.

There was an increase in the carload movement of petroleum products, both crude and refined, from the Montana fields, the total being 22,852 carloads for 1951 and 18,382 carloads for 1950. Potato loadings were approximately the same in both years.

A freeze during the budding period in the Spring of 1951 substantially reduced the apple crop in the Wenatchee, Wash., territory. The previous crop totaled almost 20,000 cars while the crop maturing in the fall of 1951 was only slightly over 11,000 cars. The 1951 yield of pears and soft fruits was some 650 cars above the previous year.



GREAT NORTHERN RAILWAY COMPANY

YEAR 1951

SIMPLIFIED INCOME STATEMENT

GREAT NORTHERN TOOK IN:

For transportation of:	
FREIGHT.....	\$215,627,820
PASSENGERS.....	13,497,834
For other services.....	18,913,037
Total for services rendered..	\$248,038,691
From dividends, interest, etc..	9,399,394

TOTAL INCOME.....	\$257,438,085	100%
	(1950-\$236,720,271)	

IT COST GREAT NORTHERN:

For materials, rentals and other expenses for maintaining properties and conducting transportation.....	\$58,469,627
For replacement of properties as old wears out.....	10,779,127
For taxes.....	30,176,111
For interest on long-term debt	8,081,493
For employe benefits.....	7,310,765

THESE ITEMS TOTAL.....	\$114,817,123	45%
	(1950-106,646,892)	

LEAVING FOR EMPLOYEES, SHAREHOLDERS AND REINVESTMENT.....	\$142,620,962	55%
	(1950-130,073,379)	

FOR EMPLOYEES, SHAREHOLDERS AND REINVESTMENT..	\$142,620,962	100%
	(1950-130,073,379)	

GREAT NORTHERN DISTRIBUTED:

TO EMPLOYEES FOR WAGES AND SALARIES.....	\$118,674,762	83%
	(1950-101,888,440)	

TO SHAREHOLDERS FOR USE OF THEIR MONEY.....	\$12,360,044	9%
	(1950-10,823,964)	

THERE REMAINED:

TO RETIRE DEBT AND TO BE REINVESTED IN THE BUSINESS..	\$11,586,156	8%
	(1950-17,360,975)	

INCREASE IN FREIGHT RATES

Hearings were begun before the Interstate Commerce Commission in February, 1951, for an increase in freight rates to meet mounting costs. Effective April 4, an interim increase was granted amounting to approximately 1.7% for Great Northern, which was superseded on August 28 by an increase of 5.8%, estimated to produce additional revenue on an annual basis of \$11.6 million. In October the railroads renewed their request for the full 15% increase. A decision was announced on April 14, 1952, granting a general increase of 15% over the rates in effect January 1, 1951, with a limit of 12% on the rates on grain and grain products, iron ore, coal, coke, etc., and certain maxima limitations on many specific commodities. The net result for Great Northern is estimated as an average increase of 13.9% over the rates in effect January 1, 1951, and 7.5% over the rates in effect after the August, 1951, increase. This last increase is estimated to raise freight revenues \$16 million for a full year, of which \$11.7 million should be included in 1952 accounts. The increased rates will be effective May 17, 1952, on grain and May 2, 1952, on all other commodities except intrastate traffic which must be authorized later by the various state railroad commissions. The increases are in the form of surcharges which expire on February 28, 1954, unless further changed by order of the Commission.

2. PASSENGER SERVICE

Revenue from passenger service in 1951 amounted to \$13.5 million, as compared with less than \$11.1 million for 1950, an increase of \$2.4 million or 22%. This is a reversal of the downward trend in passenger earnings which began after the peak war year of 1945. For the ten pre-war years — 1932 to 1941 — yearly passenger revenues varied between \$3.8 million and \$5.1 million with an average of \$4.4 million. Some of this increase in passenger traffic in 1951 was due to heavy military travel. However, if this business is eliminated, the remaining civilian passenger revenue increased \$1.6 million from 1950 to 1951, or 15%.

Elimination of unprofitable branch line trains has been made where authority could be obtained. These reductions were at the annual rate of over 220,000 passenger train miles in both 1950 and 1951, with yearly savings for the future aggregating nearly \$500,000.

There was no general increase in passenger fares during 1951, although your Company participated in an increase of 10% on round-trip transcontinental passenger fares to and from California, effective June 1. The Pullman Company made a general increase of 15% in sleeping car charges on the same date.

3. MAIL SERVICE

Revenue from mail service for 1951 was \$8.6 million compared with \$11.7 million for 1950, a decrease of \$3.1 million.

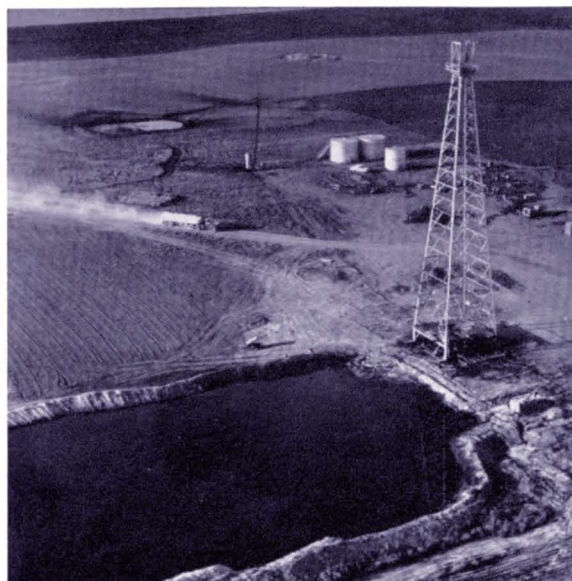
For 1948 and 1949 mail revenues averaged \$6.5 million, and for the 1941 to 1946 period they varied between \$3.3 million per year and \$4.0 million.

The 1950 figures were augmented by the inclusion of \$3.3 million in back mail pay applicable to the period from February 19, 1947, to December 31, 1949, due to a delayed decision on an application for increase in mail pay rates by the Interstate Commerce Commission. If the revenues not applicable to 1950 be eliminated from the revenues for that year, an increase of \$200 thousand in mail service revenue is indicated for 1951 over 1950.

Late in 1951 new rates for railway mail pay were authorized by the Interstate Commerce Commission which will raise Great Northern's annual mail revenue by some \$400 thousand or 5%.

The Post Office Department is exploring the possibility of handling short haul (up to 200 miles) mail out of important city terminals by truck.

*North Dakota's First Oil Well
Near Tioga on Great Northern Main Line.*



WILLISTON BASIN OIL DISCOVERY

In 1951 oil was discovered in Great Northern territory in North Dakota. The first well was developed in April, 1951, 8 miles south of Tioga in Western North Dakota. A second well was brought in northwest of Richey in Eastern Montana. Later a well was established northeast of Poplar in Eastern Montana, and since then several other wells have been brought in, mostly in the vicinity of Tioga. Short pipelines have been constructed bringing the oil to the railhead at Tioga.

These wells seem to establish a new oil field known as the Williston Basin, with potential additional freight traffic to be handled over Great Northern rails. New trackage has been constructed and loading racks, oil storage tanks, etc., are being built.

Much of Great Northern's original right-of-way in this vicinity was obtained under Act of Congress, the Company acquiring the land for railway trackage purposes only, and without rights to the minerals underlying. Fee title has been obtained at scattered locations for line changes, snow protection, reservoir and gravel pit property, etc. There is no substantial acreage from which royalties might be derived because Great Northern received no grants of public land in this area other than surface rights for its trackage.

TACONITE DEVELOPMENT

Following years of laboratory, pilot and preliminary plant development, plans have been completed for two large commercial plants for processing taconite — low-grade iron bearing material, available in enormous quantities on the Mesabi iron range in Northern Minnesota.

Three problems had to be solved:

(1) A cheaper method of removing the ore

from the ground. Most of the high grade iron ore is soft enough to be dug out of open pits with mechanical shovels, while taconite is a hard rock that must be blasted. Former drilling methods were too slow and costly, but a new process has been developed of burning holes for explosives with kerosene and oxygen at the rapid rate of 30 feet per hour.

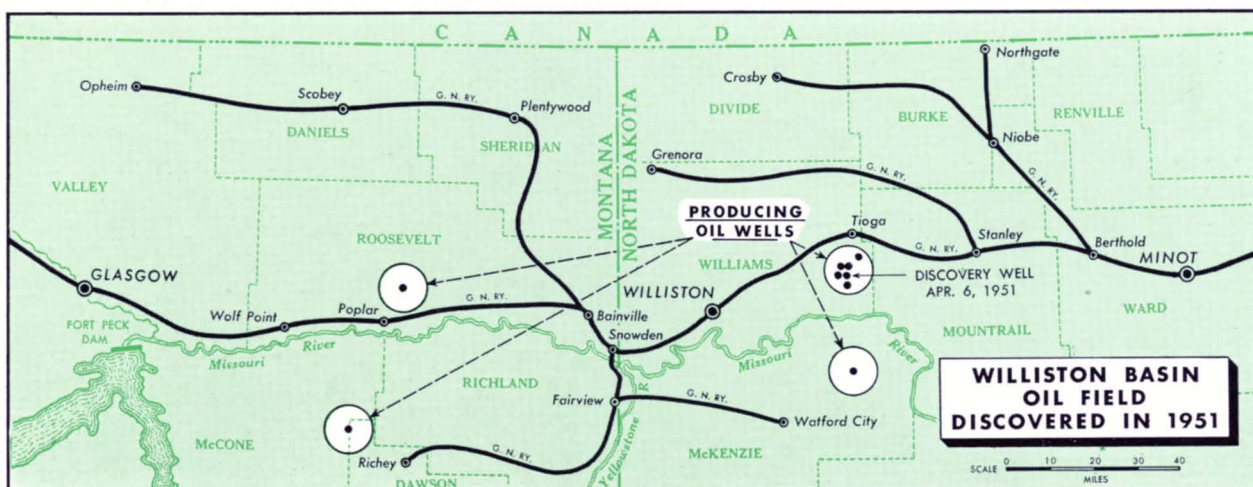
(2) Crushing and fine grinding of the ore. This problem has been solved by the use of modern machinery and huge quantities of water. The proposed location of the reduction plants at Lake Superior points will give access to the needed water. Removal of the iron particles from the crushed ore magnetically presented no difficulty.

(3) Agglomeration, or forming the powder-like taconite concentrate into large chunks so the ore will not be lost in transportation, or shot out of the blast furnaces.

Two large developments now are under way, one near Babbitt, Minn., and the other near Aurora, Minn., with construction of short rail lines to Lake Superior. Both of these locations are east of the territory served by Great Northern. The total investment for the two projects is reported as about \$500 million, and production will ultimately reach nearly 15 million tons per year of concentrate with some 60% iron content.

A third development of a 500,000-ton annual capacity taconite beneficiation plant has been started at Mountain Iron, Minn., in Great Northern territory. A part of the taconite in this territory is non-magnetic and separation of the iron may be made by magnetizing or by a flotation process.

None of these operations affects Great Northern directly at the present time, but they give an indication of the advancement in the science of treating low-grade taconite. It seems only a question of time before the taconite in the territory served by Great Northern also will come under treatment and your railway should benefit by this development.



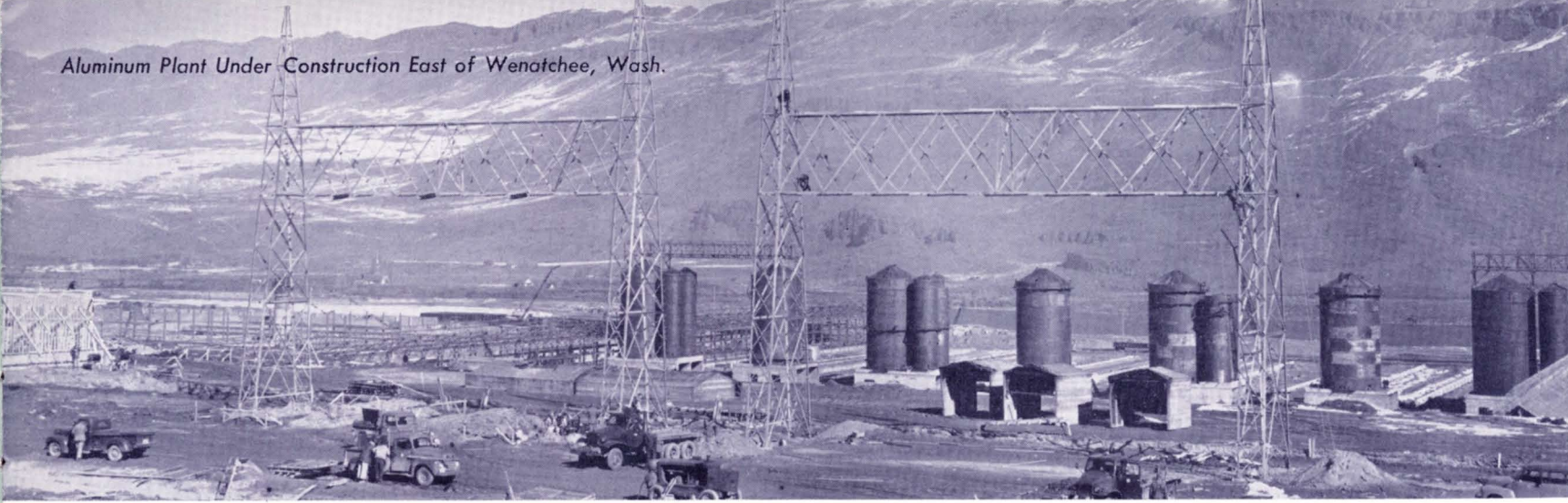
SIMPLIFIED BALANCE SHEET

GREAT NORTHERN'S FINANCIAL POSITION AT END OF YEAR

	December 31, 1951	December 31, 1950	Increase— Decrease—D
QUICK ASSETS:			
Cash and special deposits.....	\$ 61,669,126	\$ 53,653,566	\$ 8,015,560 I
Due from agents, conductors and others.....	16,916,664	21,467,513	4,550,849 D
Material and supplies on hand.....	30,285,878	27,720,595	2,565,283 I
Total quick assets, readily convertible into cash.....	\$108,871,668	\$102,841,674	\$ 6,029,994 I
CURRENT LIABILITIES:			
Employees' pay checks outstanding.....	\$ 5,999,539	\$ 5,480,634	\$ 518,905 I
Taxes not yet due.....	26,452,765	26,418,397	34,368 I
Bond interest due and paid following January 1.....	3,452,402	3,464,777	12,375 D
Bonds due and paid January 1, 1952.....	11,250,900	11,250,900 I
Other current liabilities.....	17,495,031	17,504,858	9,827 D
Total current liabilities.....	\$ 64,650,637	\$ 52,868,666	\$11,781,971 I
"WORKING CAPITAL":			
The excess of quick assets over current liabilities.....	\$ 44,221,031	\$ 49,973,008	\$ 5,751,977 D
GREAT NORTHERN'S INVESTMENTS:			
Road, equipment and other property, less depreciation.....	\$583,328,112	\$566,141,127	\$17,186,985 I
48.59% of Chicago, Burlington & Quincy R. R. Co. stock.....	109,245,456	109,245,456
50% of Spokane, Portland and Seattle Ry. Co. stock and bonds.....	45,798,500	45,798,500
Unexpended proceeds from sale of equipment trusts ..	20,752,820	4,823,980	15,928,840 I
Other stocks, bonds, etc.....	17,575,817	16,186,918	1,388,899 I
Deferred and unadjusted items.....	11,431,855	13,333,346	1,901,491 D
Total investments.....	\$788,132,560	\$755,529,327	\$32,603,233 I
GREAT NORTHERN'S OTHER OBLIGATIONS:			
To investors for bonds and notes outstanding.....	\$275,488,640	\$264,020,188	\$11,468,452 I
To all others.....	5,047,690	3,454,487	1,593,203 I
Total owed in addition to current liabilities.....	\$280,536,330	\$267,474,675	\$13,061,655 I
NET WORTH:			
"Working Capital" plus "Investments" minus "Other Obligations".....	\$551,817,261	\$538,027,660	\$13,789,601 I
CAPITAL STOCK.....	269,927,176	272,838,550	2,911,374 D
RETAINED EARNINGS:			
"Net Worth" minus "Capital Stock"—largely invested in the property.....	\$281,890,085	\$265,189,110	\$16,700,975 I

Eastbound Empire Builder at Havre, Mont.





INDUSTRIAL DEVELOPMENT

Although the uncertain foreign situation and controls on construction materials have retarded normal industrial expansion, a total of 212 new industries were located on Great Northern property in 1951. New industries include grain elevators, bulk oil and propane facilities, an oil refinery, fruit, vegetable and grocery warehouses, and various other distributing businesses. Additional industries were located on privately-owned property served by your Company's trackage.

A new 1,000-ton-per-day lead-zinc plant is being built near Northport in Northeastern Washington. This area, extending north into Canada, gives promise of becoming one of the major lead-zinc areas of the world.

Construction of an important aluminum plant was begun near Wenatchee, Wash., and plans were completed for another aluminum development near the Hungry Horse Dam in Northwestern Montana. Additional construction at the aluminum plants at Mead and Tacoma, Wash., will substantially increase their capacity.

Planting of sugar beets along Great Northern's lines was increased by 8,000 acres or over 10%, in 1951. Livestock on feed throughout the territory served has increased 10% to 15%.

POWER AND IRRIGATION PROJECTS

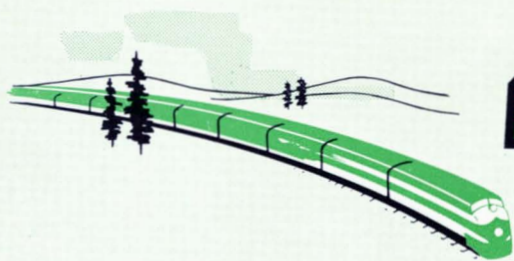
Work continued during 1951 on power and irrigation projects in Great Northern territory. (These installations are described in the 1950 report on page 16.) Following is an outline of the progress on the more important projects:

On June 14, 1951, the world's largest water pumps began raising water from behind Grand Coulee dam in Northeastern Washington 280 feet to a gravity canal whence it flows to a large reservoir, which ultimately will supply irrigation water to the Columbia Basin Project. The principal structures, including four large dams, concrete-lined portions of the main canals, the Soap Lake siphon and other essential features of the system already have been completed. Construction continued during 1951 on the main drains, canals and laterals for final distribution of the water, and farmers began moving onto the project. It is planned to have some 65,000 acres under irrigation in 1952, and approximately 40,000 acres of this area will be adjacent to Great Northern lines.

At Hungry Horse Dam in Northwestern Montana, nearly 1.4 million cubic yards of concrete were poured in 1951. About 700 thousand cubic yards remain to be placed in 1952 to complete the concrete work on the power house and 564-foot dam. At the end of 1951 the installation of turbines and other electrical equipment was one-third completed. The installation of two generators is scheduled for completion in 1952. The ultimate power capacity will be 285 thousand kilowatts.

In Northwestern Idaho construction was continued on the Albeni Falls Dam, a multi-purpose project for power, flood control and irrigation. Installation of the spillway gates has begun, and bids for the next stage of construction were opened on March 6, 1952.

The Chief Joseph Dam in North Central Washington was begun in 1950 and continued throughout 1951. It will be the second largest hydro-electric plant in the world, with an ultimate generating capacity of over 1.7 million kilowatts, and is estimated to cost over \$200 million. The construction program calls for placing the first four generators in service in 1955. These generators will develop 256 thousand kilowatts.

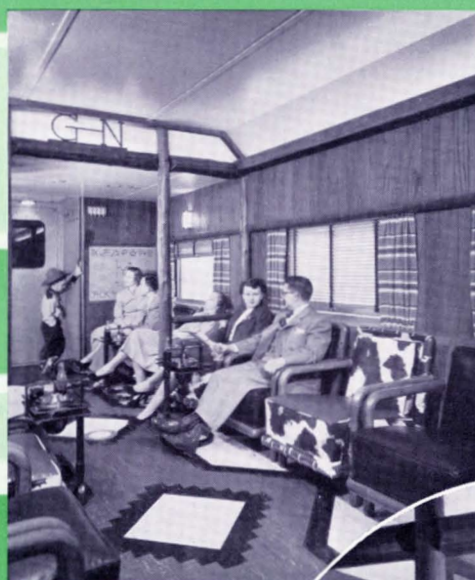


*The 1951 completely new
15 car Empire Builder has been
enthusiastically received and well patronized.*

GREAT NORTHERN



OBSERVATION LOUNGE CAR



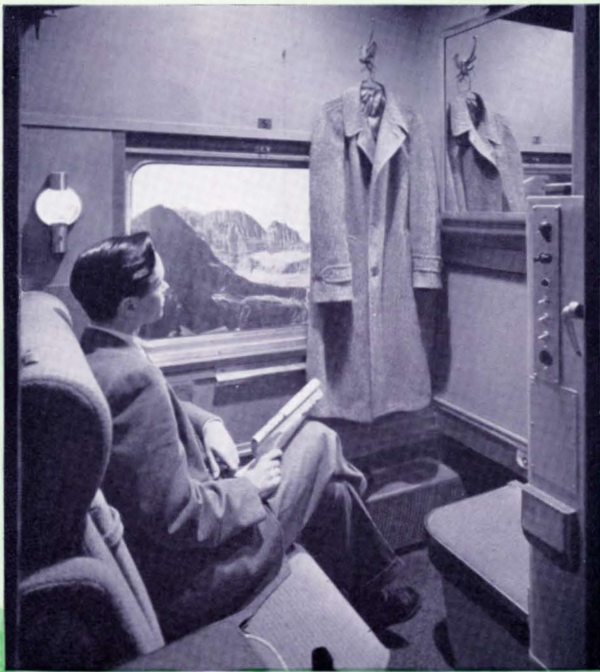
G BAR N
WESTERN
RANCH CAR



DINING CAR



COFFEE SHOP
LOUNGE CAR



DUPLEX ROOMETTE



DOUBLE BEDROOM

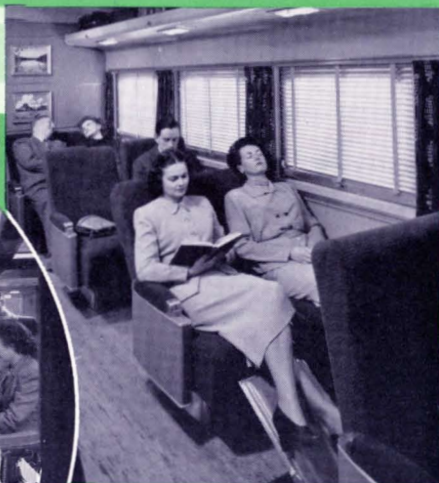
COMPARTMENT



EMPIRE BUILDER

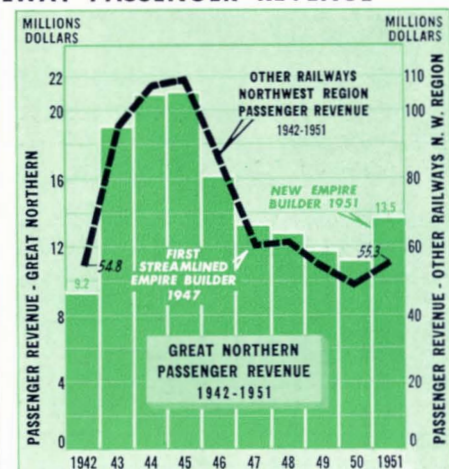
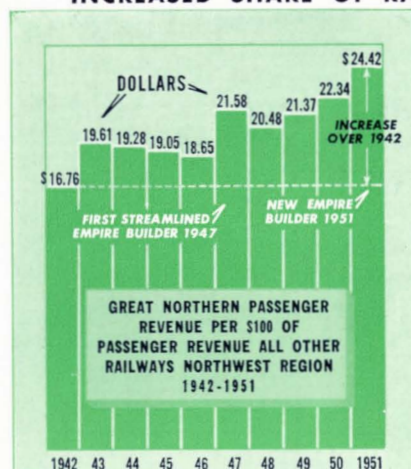
ROGERS PASS

1370 PULLMAN



RECLINING SEAT COACH

NEW STREAMLINER SERVICE BRINGS GREAT NORTHERN INCREASED SHARE OF RAILWAY PASSENGER REVENUE



NEW EMPIRE BUILDER PASSENGER TRAINS

A completely new fleet of 15-car Empire Builder trains, operating through service between Chicago and Seattle and Portland, was placed in operation early in June, 1951. Featured in this newest train are six sleeping cars with seven types of ultra-modern Pullman accommodations — upper and lower berths, duplex roomettes, roomettes, bedrooms, compartments and drawing rooms. The four coaches have reclining leg-rest seats, extra wide windows and spacious lounges. Attractive dining and lounge observation cars are also included. A special feature is the Ranch Car "G-Bar-N", a combined coffee shop and lounge unit, decorated to resemble a typical Western dude ranch house. Illustrations of the services provided on the Empire Builder are shown on pages 10 and 11 of this report.

The equipment formerly in service on this train has been transferred to the Western Star, making Great Northern the only line offering streamlined service twice daily between Chicago and Seattle-Portland. The cars released by the new streamlined equipment are used to improve service on other important passenger trains, such as Seattle—Portland, the Twin Cities — Winnipeg, Man., service and the Twin Cities — Duluth trains. Thus a general improvement in passenger equipment was effected over most of the system lines as a result of acquiring the new Empire Builder equipment.

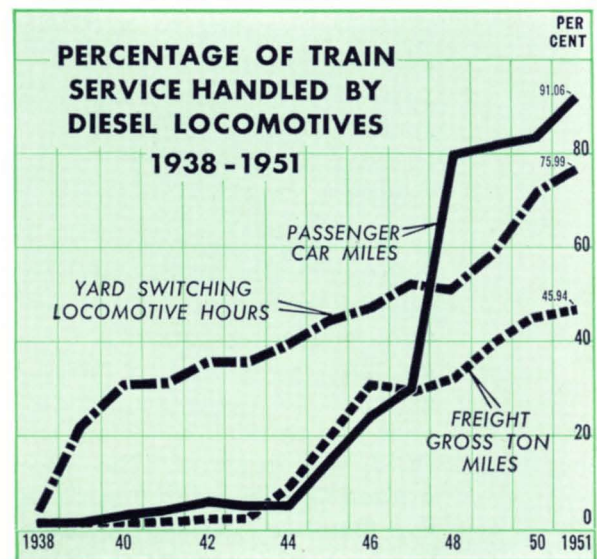
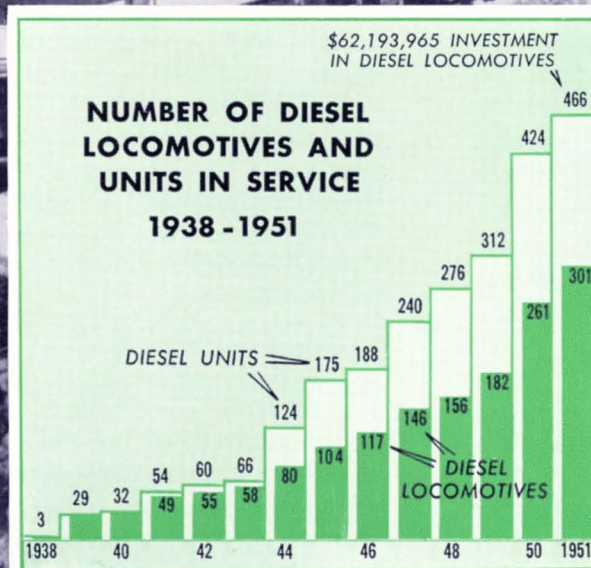
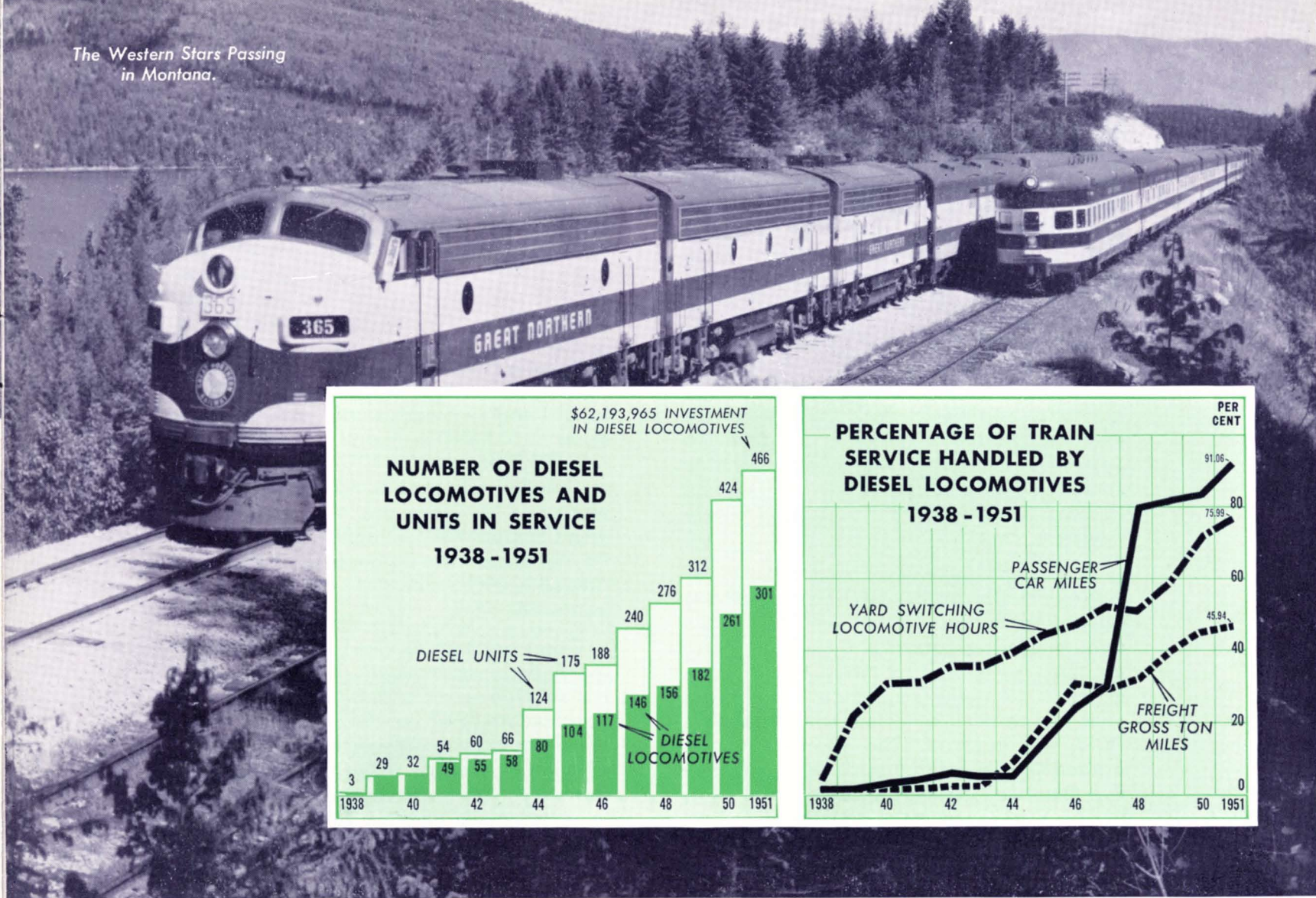
Shareholders, in their journeys to and from the Pacific Northwest and California, will receive the ultimate in travel comfort, relaxation, convenience and enjoyment by patronizing Great Northern's splendid trains.

The Red River and International streamliners, placed in operation in June, 1950, are being well received by the public and contributing to system passenger revenues. The Internationals, operating three round trips daily between Seattle, Wash., and Vancouver, B. C., are proving excellent feeders for the transcontinental trains.

There is no question but that the new Empire Builder equipment has secured for Great Northern a larger share of the railway passenger traffic in its territory. For the five years prior to 1947 Great Northern took in from passenger revenues less than \$19 for each \$100 of passenger revenue taken in by other Northwest Region railroads. Beginning in 1947, when the first streamlined Empire Builder went in service, this increased to around \$21 and for 1951, with the new Empire Builder equipment in service less than seven months, Great Northern's passenger revenues increased to \$24.42 for each \$100 of passenger revenue of all other Northwest Region railways. The details are shown by the chart on page 11.

VOLUME OF TRAFFIC AND OPERATING AVERAGES

ITEM	1951	1950	1949	1948	1947
REVENUE NET TON MILES (1000's).....	18,041,425	16,047,498	15,380,005	16,399,435	16,276,479
PASSENGERS CARRIED ONE MILE (1000's).....	589,519	494,307	501,964	542,792	630,362
TRAIN LOAD—NET TONS ALL FREIGHT.....	1,426	1,364	1,333	1,345	1,284
REVENUE PER NET TON MILE (cents).....	1.195	1.219	1.197	1.140	1.013
REVENUE PER PASSENGER MILE (cents).....	2.290	2.239	2.328	2.331	2.076
NET TON MILES PER TRAIN HOUR.....	22,578	21,150	20,621	21,072	19,991
FREIGHT LOCOMOTIVE MILES PER LOCOMOTIVE DAY	83.2	82.6	82.7	84.4	89.8
FREIGHT CAR MILES PER CAR DAY.....	51.6	47.0	45.7	48.6	48.5
NET TON MILES PER FREIGHT CAR DAY.....	1,234	1,074	1,010	1,092	1,074



OPERATING EXPENSES

The 1951 operating expenses of \$184.2 million were the largest on record, exceeding the 1950 figures by \$22.1 million.

Charges to Operating Expenses are shown in detail on pages 8 and 9 of the "Statistical Supplement" to this report.

The larger portion of the 1951 increase in Operating Expenses was due to higher wage rates, discussed more fully under "Wage Increases" on page 14 of this report. In addition, the cost of materials and supplies continued higher in 1951, and, of course, the larger volume of freight traffic handled in 1951 required an increase in freight train miles.

New highs in operating performance were recorded during 1951. The average train load of 1,330 tons of revenue freight exceeded the previous peak of 1,275 tons in 1944. As the average speed of freight trains increased, the 22,578 net ton miles per train hour was also at a new high, breaking the 1950 record of 21,150. The all-inclusive measure of freight car efficiency, the net ton miles per car day, for 1951 of 1,234 exceeded that for 1950 by

15%, although somewhat below the record of 1,302 established in 1944 when a 9% larger volume of traffic was available.

The Interstate Commerce Commission, in its annual report to Congress dated November 1, 1951, stated in part:

"We also have pointed out that large expenditures for new equipment and improvements in fixed properties have been beneficial, as have other efforts of the carriers. The commonly used indicators of operating efficiency show, in general, continued advances throughout the year, and some of these indicators are at record levels."

The high standard of maintenance of the property was continued in 1951. New 115-lb. per yard steel rail was applied to 182 track miles. Over 1 million new treated ties were installed, and 768 thousand cubic yards of crushed rock and stone ballast were placed on 313 miles of main track. Unserviceable equipment by the end of 1951 had been reduced to slightly over 3% for freight cars, 4% for passenger cars and 10% for locomotives.

WAGE INCREASES

As reported in last year's statement, the Nation's railroads were taken over by an Executive Order of the President of the United States on August 27, 1950, with operation controlled by the Secretary of the Army. This condition still continues.

The non-operating unions were granted a 12½-cent per hour increase on February 1, 1951, and under the quarterly cost-of-living adjustment agreement, further increases were made of 4 cents per hour on April 1, 1 cent on July 1, and an additional 4 cents per hour on January 1, 1952. These increases will amount to some \$12.0 million per year for the non-operating employees only.

Settlement has been made with the Trainmen's union on practically the same basis agreed to by carriers and officials of the operating organizations in December, 1950, but later repudiated by their General Committee. A moratorium on changes in pay rates, rules and working conditions until October 1, 1953, was included. The increases in pay agreed upon included 5 cents per hour, effective October 1, 1950, an additional 5 cents per hour on January 1, 1951, and 2½ cents per hour on March 1, 1951, with cost-of-living adjustments identical to those already outlined above for non-operating employees. On an annual basis, including the 4 cents per hour increase on January 1, 1952, the total additional payment to the trainmen will be approximately \$1.3 million.

No wage agreement has been reached with the engineers, firemen and conductors, but assuming it will follow the pattern of the settlement with the trainmen, the annual in-

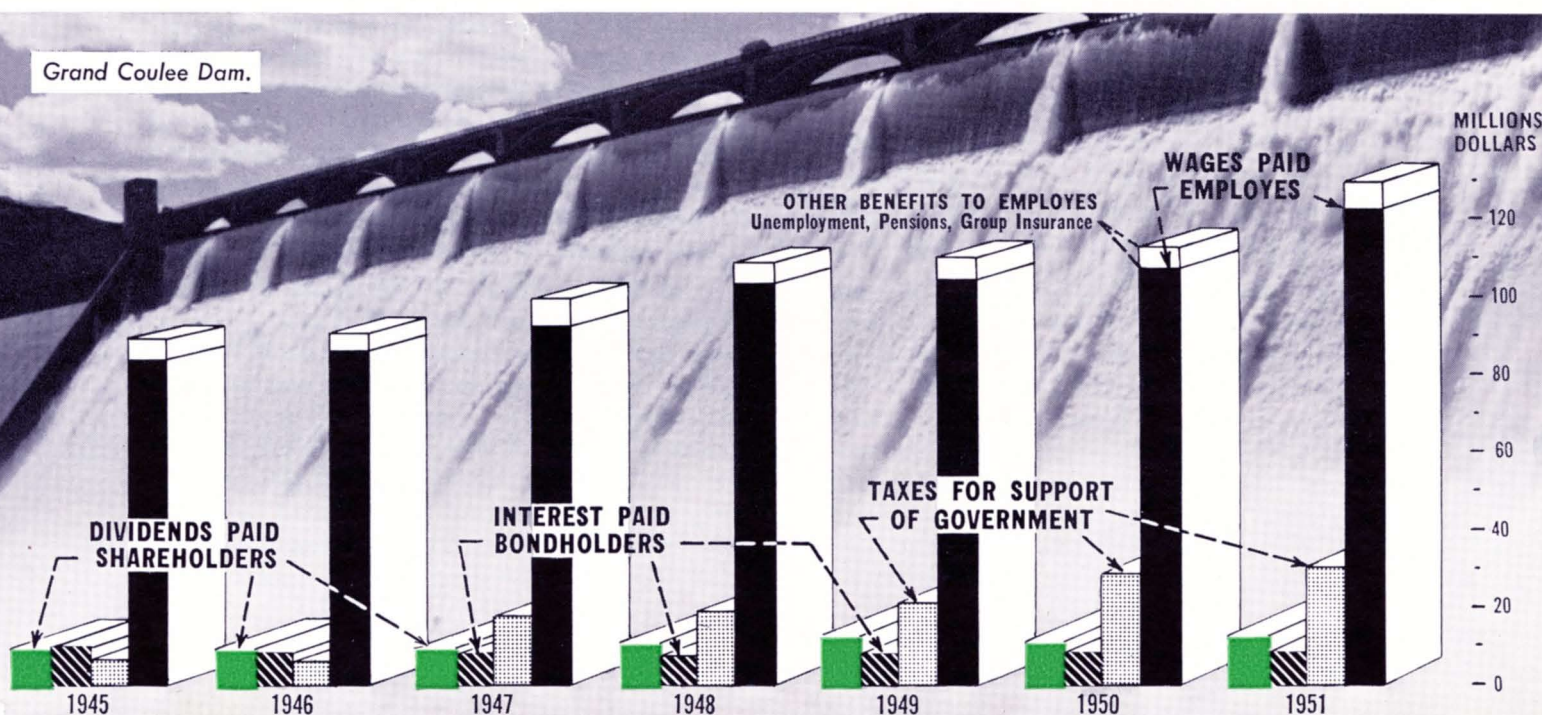
crease in wage bill up to now will amount to some \$2.9 million. Accruals have been made in the accounts for anticipated wage increases for these crafts so that at the time of final settlement retroactive payments will not distort the accounts.

TAXES

Railway taxes for 1951 were \$36.9 million as compared with \$34.4 million for 1950. The largest single increase was in Federal income taxes — \$1.1 million — due to the higher tax rate (50.75% in 1951, 42% in 1950) despite the smaller net taxable income. No accrual was made for excess profits taxes in 1951 as your Company had no liability on this account. Payroll taxes were up because of the larger payroll in 1951 while state tax accruals also increased.

Great Northern received \$8,741,994 from the Federal government in August, which is a delayed refund of income taxes overpaid in six years 1942 to 1947. During World War II, the railway transported a large volume of military traffic. Adjustments in freight charges for this traffic necessitated a recalculation of taxes and this refund is the final result. Other industries were permitted to renegotiate war contracts on a net settlement basis including income tax adjustment, but government procedure prevented simultaneous handling for railway companies.

A portion of this refund previously was accounted for as the transactions extended back as far as nine years. The unaccounted balance of \$5,910,388 was credited to Profit and Loss in 1951 accounts with the permission of the Interstate Commerce Commission.



DIVIDENDS AND INTEREST RECEIVED

In 1951 dividends received by your Company from its ownership of 48.59% of the stock of Chicago, Burlington & Quincy Railroad Company amounted to \$7 per share or \$5.8 million, and Spokane, Portland and Seattle Railway Company paid \$2.0 million as interest on the 50% of its bonds owned by Great Northern. The same payments were made in 1950.

PROPERTY IMPROVEMENTS

During 1951 cash expenditures for fixed property totaled \$10.7 million, and \$19.2 million was invested in equipment, a combined total of \$29.9 million. In 1950 the total cash expenditure for property improvements was \$34.8 million.

1. FIXED PROPERTY IMPROVEMENTS

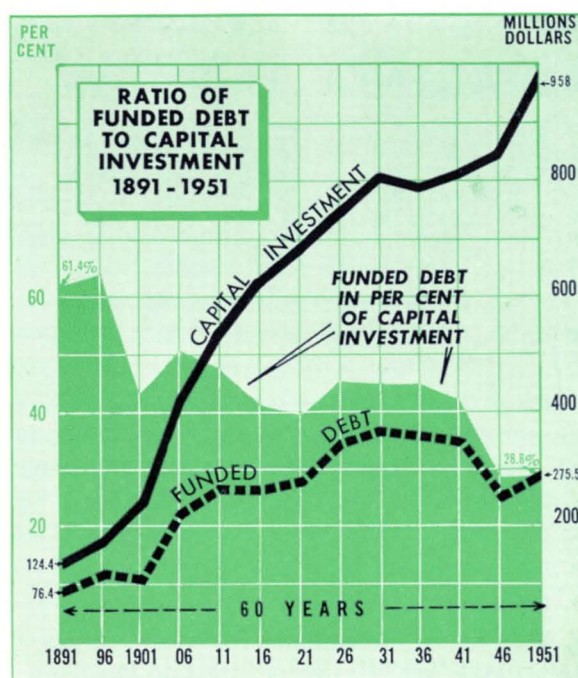
During 1951 the ore steaming lines at Allouez, Wis., were rearranged and progress made in extending the ore steaming plant. All grading was completed for a change of line east of Glacier Park, Mont., and another small line relocation was completed between Oswego and Fraser, in Eastern Montana. Enlargement of terminal tracks and facilities in Sioux City, Ia., was completed, and a new freight station there was half finished at the year's end.

2. NEW EQUIPMENT

Included in the new equipment received in 1951 were 28 passenger cars, 100 seventy-ton covered hopper cars, 665 fifty-ton all-steel box cars built in Company shops (335 completed in January, 1952) and 40 diesel electric locomotives (43 units). Twenty modern cabooses also were constructed.

In 1952, in addition to the 335 box cars built to complete the 1951 order, 950 fifty-ton all-steel box cars and 50 fifty-foot passenger box cars will be constructed. Cars on order for 1952 delivery include 250 seventy-ton, solid bottom and end gondola cars, 300 hopper cars, 700 ore cars and 50 fifty-foot express refrigerator cars. Twenty-five diesel locomotives comprising 43 units are on order for delivery during the second quarter of 1952.

Western Fruit Express Company, a wholly-owned subsidiary of Great Northern, pur-



chased 400 new all-steel refrigerator cars in 1951, and 300 additional refrigerator cars are scheduled for 1952 delivery.

REDUCTION IN DEBT

Great Northern's General Mortgage 5½% Bonds were issued as of January 1, 1922, maturing January 1, 1952, in amount of \$30.0 million. Although these bonds were not callable your Company began purchasing them in substantial quantities in the open market, beginning in 1944, because of the approaching maturity date. At the beginning of 1951 the amount outstanding had been reduced to \$11,700,900. A small amount was acquired in 1951, and the balance was paid off at their due date, January 1, 1952. This will reduce the interest on funded debt by \$643,550 per year.

The retirement of these bonds, together with others previously acquired, provides for sinking fund requirements until 1963.

During 1951 two 1- to 15-year equipment trusts were sold by competitive bidding. The first one, amounting to \$10,740,000, was sold on March 28, with a 2⅞% coupon at a net interest cost of 2.95%; the second one, for \$16,950,000, was sold on November 13, with a 3% coupon at a net interest cost of 3.12%. The proceeds are to be used in paying part of the cost of new freight cars and diesel locomotives constructed or purchased for delivery in 1951 and 1952. This completes financing the cost of all equipment now on order.

AMORTIZATION OF EMERGENCY FACILITIES

The Internal Revenue Code now permits amortization over 60 months, of a portion of the cost of facilities necessary in the interest of National Defense, in lieu of normal depreciation, thus reducing Federal income taxes during that period. The effect of this provision was to reduce 1951 income taxes by over \$500 thousand.

After the 5 year period, however, income taxes will be increased as the taxable income will no longer have the benefit of even normal depreciation charges on these facilities. Up to the end of 1951 your Company had obtained approval for amortizing a total of \$12,265,582.

Heretofore the charges for amortization of emergency facilities were included in railway accounts. Late in 1951 the Interstate Commerce Commission issued an order permitting only normal depreciation charges rather than amortization charges in the accounts. As a result, there was included in the 1951 depreciation accounts for these facilities over \$300 thousand while the amortization charges on which the income taxes were based amounted to \$1.4 million.

GLACIER NATIONAL PARK

A long term lease and concession contract with the Federal Government for operation of

hotels, chalets and automobile camps in Glacier National Park in Montana expired on December 31, 1951. As the standard contract contains provisions objectionable to your Company's management — particularly the requirement that the lessee make capital expenditures for such improved or additional facilities as the Secretary of the Interior may regard necessary — the Board of Directors decided not to renew the former contract. While willing to make reasonable expenditures for maintenance, the directors felt that the Company should not be required to make large scale capital expenditures.

Agreement which has been made to extend the old contract through December 31, 1952, eliminates the objectionable provision which permitted the Secretary to require the rehabilitation of the properties without consent of Great Northern.

PACIFIC COAST R. R. CO.

The Interstate Commerce Commission approved and authorized on August 31, 1951, the acquisition by Great Northern of control of Pacific Coast R. R. Co. through ownership of its capital stock. The purchase price of this 32-mile line in and near Seattle, Wash., was \$1,700,000. Included are some well-located terminal tracks in Seattle and important industrial property in Renton, Wash. Management and operation of the new line was begun by Great Northern on November 1, 1951.

SOME NEW EQUIPMENT 1951

Construction under way on 400 refrigerator cars.



100 seventy-ton covered hoppers.

30—1500 Horse Power Road-Switch Diesel Locomotives
Total of 40 Diesel Electric Locomotives Received — 43 units.



665 fifty-ton box cars built in Company shops.

SAFETY RECORD

The improved safety record on your railroad in 1951 was in contrast with a slight increase in employee casualties for the total of all railroads. During 1951, among the sixteen railroads with more than 50 million man hours of labor, Great Northern ranked third in casualty ratio while in 1950 it was in eighth place, slightly better than the average for the sixteen railroads. The employee casualty ratio per million man hours for Great Northern was 4.47 in 1951 and 6.35 in 1950. The Safety Department constantly is trying to improve this showing by holding frequent meetings with operating personnel, pointing out unsafe practices, acting on employee suggestions, etc. Great Northern conducted a special "No Accident Month" in May and while this goal was not achieved, the casualty ratio for that month was less than half of that for the year. Renewed efforts are being made to improve the 1951 performance in 1952.

COMPANY PENSION PLAN

On October 12, 1916, the shareholders approved an employee Pension Plan which has been in effect ever since. Prior to January 1, 1951, it was voluntary, unfunded, and subject to modification or termination at any time.

Effective January 1, 1951, the Board of Directors amended the Pension Plan by:

- (1) Limiting it to those salaried employees paid on a monthly basis and not regularly compensated for overtime;
- (2) Providing for funding the plan by creating Great Northern Railway Company Pension Trust with The First Trust Company of Saint Paul as Trustee;
- (3) Limiting the maximum amount payable to a participant to \$15,000 per year, and,
- (4) Providing for the widow of a deceased participant a benefit equal to one-half of her husband's pension.

Contributions to the Trust are allowable as deductions from gross income for Federal tax purposes.

Payments to the Pension Trust for 1951 totaled \$2,510,450, including the liquidation of 25% of the prior service liability. This will decrease future annual interest payments on the unfunded liability. Earnings on the de-

posited funds are tax exempt and will further reduce subsequent contributions. Charges to the income account for 1951 (account "Pensions and gratuities" under "Operating Expenses") amounted to \$245,000 and covered normal liability for the year, the additional payment of \$2,265,450 being charged to Profit and Loss, "Miscellaneous debits".

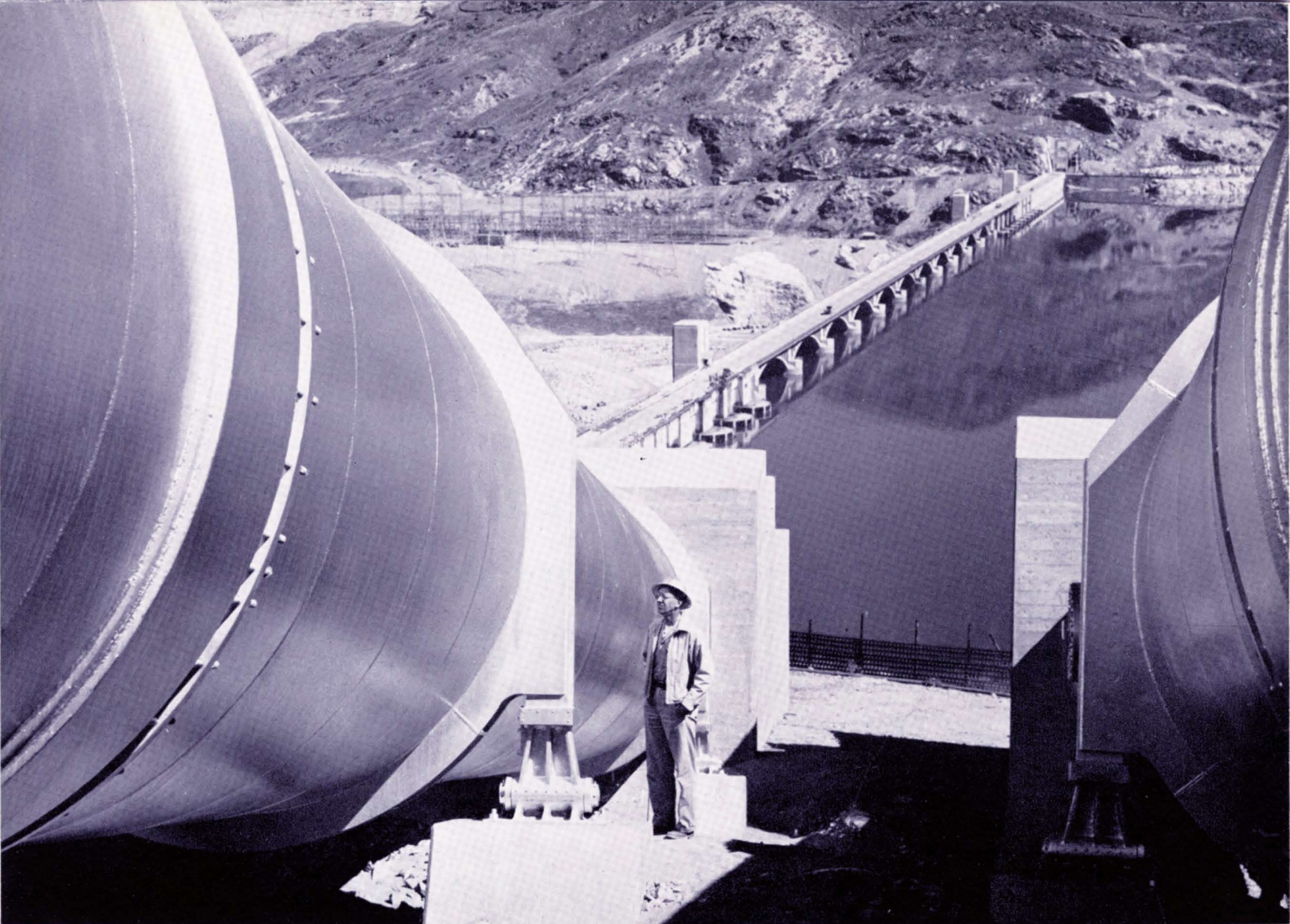
Pension payments are made according to a formula after deducting the allowance made under the Railroad Retirement Act. Late in 1951 the Federal government increased its payments, and this will result in a corresponding decrease in the Company's future payments under Great Northern Railway Company Pension Trust.

STOCK OPTION PLAN

Believing that greater ownership of the Company's stock by its officers and key employees would serve as a further incentive, induce continuity of service and generally be in the interest of Great Northern and its shareholders, the Board of Directors adopted a Restricted Stock Option Plan in late 1951. This plan, recommended by the Directors after extended investigation and consideration, was approved by shareholders at a special meeting held on January 17, 1952. Nearly 62% of all stock eligible voted in favor of the plan and approximately 3% voted against it. Full details were contained in the notice of that meeting and Proxy Statement sent shareholders December 10, 1951.

The plan provides for its administration by a special committee of Directors, and the option and sale of not to exceed 150,000 shares in the aggregate of the Capital Stock of the Company. Participation is limited to officers and key employees with the maximum number of shares which may be allotted to any participant limited to 15,000. The options are granted for a 10-year period but with restrictions on the amount that may be exercised during the first 4 years.

In anticipation of making the initial allotment of stock options, 50,000 shares of Great Northern Capital Stock were purchased on the New York Stock Exchange at an average cost of 50.74 plus regular stock exchange commissions. Options were issued on February 26, 1952, covering 48,550 shares at a price of 47⁵/₈, the highest price at which shares were sold on the New York Stock Exchange on that date.



Water from Columbia River at Grand Coulee Dam is pumped through these 12-foot diameter pipes en route to Columbia Basin Irrigation Project.

LITIGATION

Litigation follows the usual railroad pattern except for the War Materials Reparation Cases which have been pending for several years, and the Montgomery Ward case at Portland, Oregon.

In the reparation cases the government seeks refunds from all of the railroads on government traffic that moved during World War II. The hearings have now been completed and the cases will soon be argued before the Interstate Commerce Commission.

In the Montgomery Ward case, that company seeks recovery from all railroads and several truck lines operating into Portland, Oregon, for damages alleged to have been sustained by Montgomery Ward when their plant in Portland was closed for several months because of a strike and the resulting inability of the railroads to give common carrier service. The case has been tried and is awaiting decision of the trial court.

SHAREHOLDERS

As of December 10, 1951, there were 32,387 owners of Great Northern stock, holdings averaging 95 shares per shareholder. The chart on page 19 shows the number of these shareholders residing in each state.

EMPLOYEES

The average number of employees in service during the year 1951 was 29,907 compared with 28,490 employees during 1950 when a smaller volume of business was transacted.

The Directors and management are deeply appreciative of the loyalty of the officers and employees and the skill and energy with which the entire organization worked throughout the year.

NUMBER OF SHAREHOLDERS BY STATES



OFFICIAL CHANGES

In May, 1951, Mr. Frank J. Gavin, who had served as President since 1939, was elected Chairman of the Board, Mr. John M. Budd, formerly Vice President, Operating Department, was elected President, and Mr. Ira G. Pool was named Vice President, Operating Department.

Mr. Gavin's service with Great Northern began as office boy in 1897, and after promotion to various positions in the Operating Department, he became General Manager of the lines east of Williston, N. D., in 1926, and ten years later was elected Assistant to the President.

Mr. Budd started his Great Northern service as an engineering chain man in 1926, and later became trainmaster and division superintendent. He served with the Military Railway Service overseas during World War II as a Colonel. He returned to Great Northern in 1945 as Assistant General Manager of lines east, leaving in 1947 as President of the Chicago & Eastern Illinois R. R. and returning to Great Northern in 1949 as Vice President, Operating Department.

Mr. Pool served in the Mechanical Department, joining Great Northern in 1920 as a locomotive designer, and after holding various positions became General Superintendent of Motive Power in 1942 and General Manager in 1949.

On August 1, Mr. J. B. Smith, General Superintendent of Transportation retired because of illness after forty-two years of faithful service and was succeeded by Mr. A. W. Campbell. Mr. Campbell began Great Northern service in 1909 and has held various positions in the Transportation Department, being appointed Assistant to General Superintendent of Transportation in 1935. He

served his country in both World Wars, with the rank of Colonel in the Military Railway Service overseas during World War II.

FUTURE PROSPECTS

For the immediate future, the outlook for your railroad is for a continuing large volume of traffic. Moisture conditions are good to excellent throughout the territory, with good Fall rains and snow coverage, which should give the coming crops a good start. There is every prospect of a record-breaking iron ore movement. Population and industrial activity is increasing throughout the area.

With postwar earnings declining the railroad industry has turned to improving operating efficiency by instituting a large-scale major rehabilitation program, with special emphasis on the substitution of economical diesel locomotive power for more costly steam power.

Substantial capital expenditures must be continued to:

1. Preserve the competitive position of your railroad,
2. Improve the economy and efficiency of operations,
3. Meet the demands for more transportation in a growing territory, and,
4. Provide for the higher price level during this inflationary period.

While the recent increase in freight rates granted by the Interstate Commerce Commission, in recognition of the higher cost of doing business, will be translated into higher net earnings for 1952, the result will still be an inadequate return on the investment used in transportation service.

70-foot timbers for Boston Harbor dredge en route from Puget Sound to Twin Cities.

